



CITY OF CORCORAN

Corcoran City Council Agenda January 11, 2024 - 7:00 pm

1. **Call to Order / Roll Call**
2. **Pledge of Allegiance**
3. **Agenda Approval**
4. **Commission Representatives***
5. **Open Forum – Public Comment Opportunity**
6. **Presentations/Recognitions**
7. **Consent Agenda**
 - a. January 3, 2024 Goal Setting Session Minutes*
 - b. Financial Claims December 29, 2023*
 - c. Financial Claims January 11, 2024*
 - d. Resolution 2024-001 Annual Appointments*
 - e. Water Treatment Plant – Pay Request 8*
 - f. City Center Drive and 79th Place Utility and Street Improvements – Pay Request 2*
 - g. Resolution 2024-002 Approving Election Judges for 2024*
 - h. Resolution 2024-003 Establishing Absentee Ballot Board*
 - i. 2023-24 CIP Equipment Order Cost Over*
 - j. Minnesota Clean Energy Bill Communication (HERC)*
8. **Planning Business**
9. **Unfinished Business – Public Comment Opportunity**
 - a. 2022 Audit (Send to Council Jan 8, 2024)*
10. **New Business – Public Comment Opportunity**
 - a. City Park Ice Rink Direction*
 - b. North Pioneer Society Request for Assistance – Burschville School*
 - c. 2023 Year in Review*
 - d. 2024 Core Strategies, Goals, and Measurables*
11. **Staff Reports**
12. **City Council Schedule**
13. **Adjournment**

HYBRID MEETING OPTION AVAILABLE

The public is invited to attend the regular Council meetings at City Hall.

Meeting Via Telephone/Other Electronic Means

Call-in Instructions:

+1 312 626 6799 US

Enter Meeting ID: 895 0577 4944

Video Link and Instructions:

<https://us02web.zoom.us/j/89505774944>

visit <http://www.zoom.us> and enter

Meeting ID: 895 0577 4944

**Please note in-person comments will be taken at the scheduled meeting where noted.*

Comments received via email to City Clerk Friedrich at mfriedrich@corcoranmn.gov or via public comment cards will also be accepted. All email and public comment cards must be received by the Wednesday prior to scheduled Council meeting.

For more information on options to provide public comment visit:

www.corcoranmn.gov

**Includes Materials - Materials relating to these agenda items can be found in the Council Chambers Agenda Packet book located by the entrance. The complete Council Agenda Packet is available electronically on the City website at www.corcoranmn.gov.*

STAFF REPORT**Agenda Item: 4.**

Council Meeting January 11, 2024	Prepared By Michelle Friedrich
Topic Commission Representatives	Action Required Informational

Summary

The advisory commission representatives for the January 11, 2024, Council meeting are as follows:

- Planning Commission: Corrine Brummond
- Parks and Trails Commission: Michelle Friedrich

Financial/Budget

N/A

Council Action

N/A

Attachments

N/A



CITY OF CORCORAN
City Council Goal Setting Work Session Minutes
January 3, 2024 – 5:30 pm

The Corcoran City Council met on January 3, 2024, in Corcoran, Minnesota. The City Council work session meeting was held in person and remotely through electronic means using the audio and video conferencing platform Zoom.

Mayor McKee, Councilor Bottema, Councilor Nichols, Councilor Schultz, and Councilor Vehrenkamp were present.

City Administrator Tobin, City Clerk Friedrich, Director of Public Safety Gottschalk, Public Works Director Mattson, and Administrative Services Director Hughes were present.

1. Call to Order / Roll Call

Mayor McKee called the work session to order at 5:30 pm.

2. Goal Setting 2024

City Administrator Tobin reviewed Core Strategies 1-5 with Council. Council discussed opportunities for Bellwether boardwalk, and development of a park plan for 2025, making progress with the boardwalk and setting a measurable for item. City Administrator Tobin noted Parks and Trails Commission indicated working with the Three Rivers Park District for additional trails, space definitions, and updating park standards. Council questioned priority including Three River Park District trails as a goal, when Three Rivers Park District is separate entity. Council noted as trails come in, prioritizing the space and trails as they are brought in for improvement and is more of an opportunistic objective. Council noted including a measurable on the open space park behind the Ravinia neighborhood, noted possible parking and access from the neighborhood. Council noted support of development of open space parks and noted not waiting until the development is complete before parks are constructed. City Administrator Tobin noted discussion of trails as essential component before housing is built and eliminates the surprise of having a trail constructed once the neighborhood is constructed. City Administrator Tobin noted encouraging developers to have the trails built prior to, or as the development is being constructed. Council discussed including park development within PUDs and as a contingency requirement. Public Works Director Mattson noted it is important to have a policy decision, and a shift could be implemented but needs. Council noted difficulty of incorporating elements after the development is completed and resident perception of non-existent trails when trails, parks, boardwalks, etc., are in proximity to their houses. City Administrator Tobin noted Parks and Trails Commission's request for review of updated Parks and Trails standards. Council noted including paths from existing trails to auxiliary trails. Council and staff discussed following a plan for park locations, intention of establishing parks, and establishing parks earlier in the development process. City Administrator Tobin noted including clarifying expectations of parks standards. Council requested an updated draft to Council by the end of the first quarter of 2024. City Administrator Tobin noted City Park, Bellwether boardwalk, and the open space park near Ravinia and Old Sturbridge neighborhoods and including a progress status report to Council. Council requested on update on Park Fund balance. Council discussed MET Council language on density requirements and review initial development requirements for Corcoran. Council noted original density of the MET Council sewer system as 3 houses per acre. Council discussed density of 3 houses per acre, and that Corcoran can bank higher density areas against lower density areas and updating the City Code. Council noted example of high-rise apartment buildings and low-density residential area. Council reviewed enhancing Corcoran's sense of identity and out how to develop and use higher density areas against lower density areas. Council noted moving away from 3-5 houses per acre density and balancing housing with parks areas dependent upon neighborhood or development needs. Council noted the open space and the new PUD ordinance feature, with limiting factor to sustain infrastructure. Council noted review of the Hope Concept Plan to review high-density and low-density areas of the project. City Administrator Tobin noted Planning Commission and Council training would be beneficial for a better understanding of MET Council workings in a joint work session and could be a measurable for policies and planning for the future. Council noted scheduling joint work sessions with both commissions. Council discussed including a caveat with the joint session with the MET Council of

knowledge of information for insight of what is possible, and not a requirement for what the City can do. Council and staff noted including the MET Council but making sure there is a separation of thought. Council discussed Code should be rewritten to allow Council to utilize density numbers less than 3 houses per acre and include only under PUD agreements. Council discussed developer likelihood of building with 2 homes or less per acre. Council noted including the Bellwether boardwalk as a measurable, along with City Park. PW Director Mattson noted HKGi was hired to review City Park and boardwalk. Council noted a plan creation goal of City Park and Bellwether boardwalk. Council noted open space parks could include standard templates as a goal. Public Works Director Mattson noted the difference between the Ravinia open space park and the Bellwether boardwalk open space park with trails.

Core Strategy 2

Council and staff discussed City implementing a goal plan for trails maintenance in 2024. Council noted calculating the cost for each mile of maintenance and creating a plan for long-term trail maintenance. Public Works Director Mattson noted identifying which trails are priorities and including flexibility in policy. Council noted trails clearing would be a lower priority item under snow removal. Public Works Director Mattson noted trail maintenance should be reviewed annually regarding priority, and population. Council requested draft policy be sent to Council on trails snow removal. Council discussed need for a simple trail snow removal policy. City Administrator Tobin reviewed examples of snow removal budget being over budget with no trails being maintained on staff overtime. City Administrator Tobin noted ice on trails may be a potential liability and budgeting is very difficult with equipment and staffing. City Administrator Tobin noted setting precedence of expectations regarding trails. Public Works Director Mattson noted the complexity of maintenance with paved and gravel roads. Council discussed language change including implementing plan of winter trail maintenance by the third quarter of 2024. Public Works Director Mattson will resend draft of policy.

Core Strategy 3

Staff reviewed measurable of crosswalks standards policy and noted the measurables have been met regarding crosswalk at Bellwether. Director of Public Safety Gottschalk reviewed measurables of license plate readers. Council noted future work session on the LPR cameras. Council and staff discussed action steps of phase 1 of fire service action plan. Director of Public Safety Gottschalk reviewed need for a work session topic on fire service. Director of Public Safety Gottschalk reviewed tasks of longer-term planning and technical needs of fire safety personnel. Council noted adding a measurable on call volume and not property value and reorienting boundaries with the Rogers Fire Department. Director of Public Safety Gottschalk noted West Metro Fire Department and union of Loretto and Hamel fire departments. Council noted correspondence with Maple Grove of a change in status regarding providing fire services to Corcoran. Council noted interviewing, analysis, and discovery of options for fire services in Corcoran and developing a comprehensive review of fire services. Councilor Bottema noted he would like to research and bring options back to staff and Council regarding fire services. Council noted review of standards and criteria for fire services benefits and coverage and how it will be implemented, and noted an example of response time to calls. City Administrator Tobin noted including planning (under goal 3) to include a measurable as a needs and capabilities research study to review with Council. Council noted review of a perception change for type of injuries for response time, and from a patient perception and time response of non-emergency or emergency calls. Director of Public Safety Gottschalk noted service expectations at a community level and clarifying Council direction on policy. Council noted including medical ambulatory service providers in the area in fire services discussions. Council noted providing data and effort info future fire service planning. Council and staff discussed updating measurable to include in quarter three, a review of recent fire services data options. Director of Public Safety Gottschalk noted review of subcommittee standards and what is changing, and analyzing what is being reexamined to avoid duplication. Council noted review of coverage of medical with additional data provided by Councilor Bottema at a work session in quarter three and include as a measurable. Council and staff discussed changing goal 3 to intentional planning for fire and rescue, and first responder services, and add to measurables Reviewing and reassessing in quarter three.

Council briefly discussed short-term goals for K9 officer. Director of Public Safety Gottschalk noted the political aspect of Council to continue with the K9 unit. Council and staff discussed risks and benefits of a K9 unit. Council noted a measurable for second or third quarter. City Administrator Tobin noted cost of K9 unit and difference in services provided. Director of Public Safety Gottschalk noted 45 percent of deployments were in Corcoran for the K9 unit, and further clarified other crime prevention utilization of the K9 unit. Council noted effective use of time and clarification for separate positions within the City substantiated by data by City Administrator Tobin. Council discussed possibility of dual training, a long-term staff handler, and reviewing later in the 2024 fiscal year.

Core Strategy 4

Council noted ongoing commercial/industrial work. Council noted discussion of home occupation and restrictive code regarding qualifying factors for a home occupation license. Council noted a work session to review what should be included within a home occupation license. City Administrator Tobin noted on January 25, planning will be providing information on planning process. City Administrator Tobin noted

escrow review processes and contracts, to ensure efficient and effective processes, zoning, and financial and development modeling update to comp plan. Council noted Strong Towns as a possible vendor to provide financial and development modeling. Council and staff discussed fiscal disparities, managed growth, and diversity in terms of tax base. City Administrator Tobin noted financial modeling and then nuances of character that Corcoran desires in the future comp plan to attract businesses to contribute to the tax base while maintaining the rural character. Council discussed setting a goal of establishing financial modeling. Council and staff discussed continued review of zoning around commercial/industrial. City Administrator Tobin noted researching market for financial modeling and reporting to Council as a goal for the first quarter.

Core Strategy 5

Council goal noted maximizing interest income and discussing at the March 14 work session. City Administrator Tobin and Mayor McKee will schedule a meeting and reach out to existing properties on land acquisitions. Council noted land acquisition of net building of 30 acres or more for expansion. Council noted a space needs study will need to be completed at some point. Council and staff discussed internal engineering for project management and oversight as a goal. Council discussed unintentional bias of our contracted planner advocating for the building industry and acceptance of building projects within the City. City Administrator Tobin noted time to review current staffing and future staffing needs so present staffing model aligns with Council's perception. Council noted bringing engineering, building inspections, code inspections, planning internally, and review of budget priorities regarding staff implementations in second quarter. Council and staff discussed goals for municipal services.

Council and staff discussed adopting the modified goals and strategies at the January 11, 2024, Council meeting. Council noted review of strategies in September of each year rather than later in the year. City Administrator Tobin noted immediate action in 2024 would be the best time to reflect on 2025 goals, rather than setting the budget in the prior year and then strategies in the following year. Council was open to a 2-year planning cycle.

3. **Unscheduled Items**

No unscheduled business was heard.

4. **Adjournment**

MOTION: made by Nichols, seconded by Vehrenkamp to adjourn.

Voting Aye: McKee, Bottema, Nichols, Schultz, and Vehrenkamp

(Motion carried 5:0)

Meeting adjourned at 8:08 pm.

Michelle Friedrich – City Clerk

FINANCIAL CLAIMS

CHECK RANGE

FUND #500 ESCROW CLAIMS

Paid to	Amount	Project name
SEE THE REGISTER FOR #500 CLAIMS		

Total	\$0.00	
Total Fund #500 =		\$ -
(See attached Payments Detail)		

ALL OTHER FINANCIAL CLAIMS

Check Register		\$3,794,385.42
(See attached Check Detail Registers)		
Total Checks	\$	3,794,385.42
Total of Auto Deductions	\$	201,603.44

TOTAL EXPENDITURES FOR APPROVAL	\$	3,995,988.86
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Auto Deductions / Electronic Fund Transfer / Other Disbursements

Date	Paid to	Amount	Description
12/15/2023	MN PERA	\$ 24,310.92	Employee Pension
12/18/2023	EMPOWER	\$ 14,098.84	Employee Deferred Comp/Healthcare Savings
12/20/2023	MN DEPT OF REVEN	\$ 48.74	Fuel Tax
12/20/2023	EMPOWER	\$ 684.48	Employee Deferred Comp/Healthcare Savings
12/22/2023	ADP PAYROLL FEES	\$ 570.64	Payroll Processing Fee
12/28/2023	ADP Wage Pay	\$ 131,728.94	Net Payroll and Taxes
12/29/2023	Optum Bank	\$ 4,183.76	Employee HSA
12/29/2023	MN PERA	\$ 25,865.08	Employee Pension
12/29/2023	ADP PAYROLL FEES	\$ 112.04	Payroll Processing Fee
Total		\$ 201,603.44	

GL Number	Invoice Date	Vendor	Invoice Desc.	Invoice	Chk Date	Amount	Check
Check 34796							
100-43100-50220	12/21/23	ACME TOOLS	SADDLE BOX	12200943	12/29/23	820.00	34796
100-43100-50225	12/21/23	ACME TOOLS	CHAINSAW	12199276	12/29/23	379.99	34796
100-45200-50210	12/14/23	ACME TOOLS	RATCHETING WRENCH & COMBINATION	12162147	12/29/23	937.99	34796
						2,137.98	
Total For Check 34796							
Check 34797							
100-42100-50200	12/07/23	ALTA	SUBLIMATED PLATES	17141	12/29/23	27.00	34797
						27.00	
Total For Check 34797							
Check 34798							
100-00000-21710	12/05/23	AMELIA FADDEN	DEPENDENT CARE REIMBURSEMENT	12052023	12/29/23	4,000.10	34798
						4,000.10	
Total For Check 34798							
Check 34799							
100-00000-22205-130	12/20/23	AMERICAN ENGINEERING TESTING	CITY CENTER DRIVE & 79TH PLACE	INV-169496	12/29/23	1,818.00	34799
408-48010-50300	12/20/23	AMERICAN ENGINEERING TESTING	CITY CENTER DRIVE & 79TH PLACE	INV-169496	12/29/23	1,180.00	34799
						2,998.00	
Total For Check 34799							
Check 34800							
100-43100-50223	12/08/23	AMERICAN PRESSURE	LANDA VHG SERVICE CALL	138626	12/29/23	338.85	34800
						338.85	
Total For Check 34800							
Check 34801							
100-43121-50224	04/06/23	ASPEN EQUIPMENT COMPANY	HEADLAMP MODULE	10247895	12/29/23	260.02	34801
						260.02	
Total For Check 34801							
Check 34802							
100-41900-50210	12/19/23	BEAUDRY OIL COMPANY	CITY HALL PROPANE REFILL	2498286	12/29/23	159.91	34802
100-41900-50212	12/08/23	BEAUDRY OIL COMPANY	UNLEADED 87	2505417	12/29/23	30.05	34802
100-42100-50212	12/08/23	BEAUDRY OIL COMPANY	UNLEADED 87	2505417	12/29/23	1,367.30	34802
100-43100-50210	12/11/23	BEAUDRY OIL COMPANY	PROPANE	2498287	12/29/23	248.49	34802
100-43100-50210	12/18/23	BEAUDRY OIL COMPANY	PROPANE FILL	2512406	12/29/23	288.00	34802
100-43100-50212	08/15/23	BEAUDRY OIL COMPANY	DYED FUEL	2399064-2	12/29/23	119.80	34802
100-43100-50212	12/08/23	BEAUDRY OIL COMPANY	UNLEADED 87	2505417	12/29/23	105.18	34802
100-43100-50212	12/15/23	BEAUDRY OIL COMPANY	CYLINDER FILL	2512405	12/29/23	308.00	34802
						2,626.73	
Total For Check 34802							
Check 34803							
100-43100-50210	12/21/23	BOYER FORD TRUCKS INC	SPOT REMOVER	093P6968	12/29/23	54.72	34803
						54.72	
Total For Check 34803							
Check 34804							
100-41900-50381	12/06/23	CENTERPOINT ENERGY	GAS BILL NOVEMBER 2023	12062023	12/29/23	15.00	34804
100-43100-50381	12/06/23	CENTERPOINT ENERGY	GAS BILL NOVEMBER 2023	12062023	12/29/23	100.90	34804
						115.90	
Total For Check 34804							
Check 34805							
100-43100-50400	12/13/23	CINTAS - 470	UNIFORM/DISPOSABLE BATHROOM MATS	4176965828	12/29/23	6.60	34805
100-43100-50400	12/13/23	CINTAS - 470	CRT CABINET/DISPOSABLE BATHROOM MA	4176965849	12/29/23	9.45	34805
100-43100-50400	12/20/23	CINTAS - 470	DISPOSABLE BATHROOM MATS/UNIFORM	4177695592	12/29/23	30.09	34805
100-43100-50400	12/20/23	CINTAS - 470	SMALL SHOP TOWELS	4177695595	12/29/23	83.70	34805
100-43100-50417	12/13/23	CINTAS - 470	UNIFORM/DISPOSABLE BATHROOM MATS	4176965828	12/29/23	35.27	34805
100-43100-50417	12/13/23	CINTAS - 470	UNIFORMS	4176965967	12/29/23	212.99	34805
100-43100-50417	12/20/23	CINTAS - 470	DISPOSABLE BATHROOM MATS/UNIFORM	4177695592	12/29/23	35.27	34805
100-43100-50417	12/20/23	CINTAS - 470	UNIFORMS	4177695647	12/29/23	212.99	34805

GL Number	Invoice Date	Vendor	Invoice Desc.	Invoice	Chk Date	Amount	Check
Check 34805							
Total For Check 34805						626.36	
Check 34806							
100-43100-50210	12/15/23	CINTAS	SURFACE DISINFECTANT/SMALL ELECTRI	5188751283	12/29/23	23.31	34806
Total For Check 34806						23.31	
Check 34807							
100-00000-22205-024	11/30/23	CITY OF CORCORAN	STAFF ENGINEER TIME - D&D SERVICE	11.30.2023	12/29/23	45.00	34807
100-00000-22205-076	11/27/23	CITY OF CORCORAN	STAFF ENGINEER TIME - NELSON 11/23	112723	12/29/23	45.00	34807
100-00000-22205-087	11/27/23	CITY OF CORCORAN	STAFF ENGINEER TIME - BELLWETHER 1	11.27.2023	12/29/23	45.00	34807
100-00000-22205-111	11/27/23	CITY OF CORCORAN	STAFF ENGINEER TIME - GARAGES TOO	11272023	12/29/23	45.00	34807
100-00000-22205-130	11/27/23	CITY OF CORCORAN	STAFF ENGINEER TIME - CITY CENTER	11/27/2023	12/29/23	45.00	34807
100-45200-50382	11/30/23	CITY OF CORCORAN	6620 CO RD 116 WATER BILL	11/2023	12/29/23	21.84	34807
100-45200-50382	11/30/23	CITY OF CORCORAN	20200 CO RD 50 WATER BILL	11-2023	12/29/23	26.73	34807
Total For Check 34807						273.57	
Check 34808							
100-41900-50403	11/21/23	CITY OF DELANO	CHEV TRAVERSE VEHICLE REGISTRATION	970010	12/29/23	21.25	34808
100-41900-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2016 FORD EXPLORER	975957	12/29/23	21.25	34808
100-41900-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2017 FORD EXPLORER	970009	12/29/23	21.25	34808
100-41900-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2014 FORD EXPLORER	968358	12/29/23	21.25	34808
100-42100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2021 CHEV SILVERADO	967565	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	RENEWAL TAB FOR 2021 ALUM TRAILER	201480	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2011 GMC SIERRA	936687	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2019 MACK GRANITE	963996	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2017 MACK 700	957069	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2018 CHEV SILVERADO	961824	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2005 TRAILER	186505	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2023 GMC SIERRA	971269	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2022 MISN TRAILER	201696	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2016 TRAILER	189228	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2011 FORD VIC	953689	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2024 GMC SIERRA	974165	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2011 FELLING TRAILER	187655	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2021 FELLING FT50	201481	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2002 H&H TRAILER	971270	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2008 DODGE DURANGO	949372	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2021 MACK GRANITE	975949	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2021 GMC SIERRA	970837	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2011 GMC	934047	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2015 GMC SIERRA	949095	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2001 FELLING	184884	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2007 TRAILER	186850	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2023 MACK GRANITE	971268	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2021 MACK GRANITE	970830	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2009 CARR	187390	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2013 MACK 700	938428	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 2010 MACK	934017	12/29/23	21.25	34808
100-43100-50403	11/21/23	CITY OF DELANO	TAB RENEWAL 1984 MACK	926907	12/29/23	21.25	34808
416-43100-50550	12/31/23	CITY OF DELANO	2024 GMC SIERRA VEHICLE REGISTRATI	121820023	12/29/23	3,831.09	34808
Total For Check 34808						4,511.09	
Check 34809							
100-00000-15500	12/15/23	COMPUTER INTEGRATION TECH	AGREEMENT MANAGED SERVICES JANUARY	364950	12/29/23	3,816.00	34809

INVOICE GL DISTRIBUTION REPORT FOR CITY OF CORCORAN
 EXP CHECK RUN DATES 12/19/2023 - 12/29/2023
 JOURNALIZED
 PAID - CHECK TYPE: PAPER CHECK
 CHECK REGISTER - COUNCIL

GL Number	Invoice Date	Vendor	Invoice Desc.	Invoice	Chk Date	Amount	Check
Check 34809							
100-41920-50210	12/19/23	COMPUTER INTEGRATION TECH	WIRELESS PRESENTATION GATEWAY	365248	12/29/23	2,397.00	34809
100-41920-50300	12/20/23	COMPUTER INTEGRATION TECH	MONTHLY MANAGED SERVICES	365310	12/29/23	1,151.00	34809
100-41920-50300	12/15/23	COMPUTER INTEGRATION TECH	MONTHLY BILLING FOR DECEMBER 2023	364018	12/29/23	1,856.30	34809
100-41920-50300	12/15/23	COMPUTER INTEGRATION TECH	MONTHLY BILLING FOR DECEMBER 2023	364600	12/29/23	885.00	34809
100-41920-50300	12/11/23	COMPUTER INTEGRATION TECH	MANAGED SERVICES MONTHLY BILLING F	364370	12/29/23	2,600.00	34809
			Total For Check 34809			12,705.30	
Check 34810							
100-45200-50221	12/21/23	DAKOTA SUPPLY GROUP	VENT	S103358601.001	12/29/23	182.96	34810
			Total For Check 34810			182.96	
Check 34811							
601-49400-50210	12/18/23	FERGUSON WATERWORKS #2518	WATER METERS	0523818	12/29/23	4,327.50	34811
			Total For Check 34811			4,327.50	
Check 34812							
100-41900-50322	12/04/23	FP MAILING SOLUTIONS	QUARTERLY MAIL METER	RI106017374	12/29/23	128.85	34812
			Total For Check 34812			128.85	
Check 34813							
100-43100-50220	08/19/23	GAYLE MILLER	TRAILER	08192023	12/29/23	500.00	34813
			Total For Check 34813			500.00	
Check 34814							
100-45200-50221	12/15/23	GRAINGER	EAR PLUGS/WATER SOFTNER CLEANER	9936950089	12/29/23	224.28	34814
			Total For Check 34814			224.28	
Check 34815							
100-43100-50417	12/21/23	ERIC GREGORY	2023 BOOT REIMBURSEMENT	12212023	12/29/23	292.98	34815
			Total For Check 34815			292.98	
Check 34816							
100-43100-50417	12/22/23	BRANDON HEINZ	2023 BOOT REIMBURSEMENT	12222023	12/29/23	279.98	34816
			Total For Check 34816			279.98	
Check 34817							
100-42100-50323	12/05/23	HENNEPIN COUNTY INFO TECH	PD RADIO FLEET/MESB FEE BILILNG NO	1000215616	12/29/23	1,442.97	34817
			Total For Check 34817			1,442.97	
Check 34818							
100-43100-50323	12/05/23	HENNEPIN COUNTY INFO TECH	PW RADIO FLEET/MESB FEE NOVEMBER 2	1000215683	12/29/23	323.88	34818
			Total For Check 34818			323.88	
Check 34819							
100-42100-50300	12/20/23	HUMANITY LLC	SHIFT PLANNING 12/20/23-01/19/24	INV00316961	12/29/23	80.00	34819
			Total For Check 34819			80.00	
Check 34820							
100-43100-50220	12/18/23	KENTCO SIGNS	CITY DECALS	27466	12/29/23	270.00	34820
			Total For Check 34820			270.00	
Check 34821							
100-43100-50417	12/21/23	ROBBIE KOTTKE,	2023 BOOT REIMBURSEMENT	12212023	12/29/23	225.06	34821
			Total For Check 34821			225.06	

GL Number	Invoice Date	Vendor	Invoice Desc.	Invoice	Chk Date	Amount	Check
Check 34822 100-42100-50207	12/13/23	LAWSON, JOSH	TUITION REIMBURSEMENT	12132023	12/29/23	725.94	34822
			Total For Check 34822			<u>725.94</u>	
Check 34823 100-41900-50433	09/01/23	LEAGUE OF MINNESOTA CITIES	2023/2024 LMC MEMBERSHIP DUES	388827	12/29/23	8,438.00	34823
			Total For Check 34823			<u>8,438.00</u>	
Check 34824 100-42100-50220	11/30/23	LUBE-TECH & PARTNERS, LLC	MOBILE OIL 15W-40	3367099	12/29/23	1,612.82	34824
			Total For Check 34824			<u>1,612.82</u>	
Check 34825 100-43100-50226	12/20/23	M-R SIGN CO., INC.	STREET SIGNS	13694	12/29/23	5,999.50	34825
			Total For Check 34825			<u>5,999.50</u>	
Check 34826 100-43100-50417	12/21/23	MACKENZIE ALGER	2023 BOOT REIMBURSEMENT	12212023	12/29/23	237.99	34826
			Total For Check 34826			<u>237.99</u>	
Check 34827 100-41600-50300	12/08/23	MADDEN, GALANTER, HANSEN LLP	LABOR RELATION SERVICES NOVEMBER 2	12082023	12/29/23	4,512.61	34827
			Total For Check 34827			<u>4,512.61</u>	
Check 34828 601-49400-50310	12/19/23	CITY OF MAPLE GROVE	SEMI ANNUAL WATER SERVICE CONTRACT	21869	12/29/23	19,702.00	34828
			Total For Check 34828			<u>19,702.00</u>	
Check 34829 100-00000-21710	12/21/23	MATTSON, KEVIN	DEPENDENT CARE REIMBURSEMENT	12212023	12/29/23	2,000.06	34829
			Total For Check 34829			<u>2,000.06</u>	
Check 34830 100-42400-50433	12/15/23	MBPTA	2024 MBPTA MEMBERSHIP RENEWAL	2024	12/29/23	100.00	34830
			Total For Check 34830			<u>100.00</u>	
Check 34831 100-42100-50200	12/05/23	MENARDS MAPLE GROVE	STORAGE BOX	26057	12/29/23	11.92	34831
100-42100-50210	11/29/23	MENARDS MAPLE GROVE	MOUNTING PUTTY/TOOLBOX TOWELS	25800	12/29/23	64.56	34831
100-45200-50210	12/11/23	MENARDS MAPLE GROVE	MASKING TAPE/WINTERTRAX TRACTION A	26291	12/29/23	23.98	34831
202-42100-50210	12/11/23	MENARDS MAPLE GROVE	MASKING TAPE/WINTERTRAX TRACTION A	26291	12/29/23	5.98	34831
			Total For Check 34831			<u>106.44</u>	
Check 34832 100-00000-20205	12/01/23	METLIFE	DECEMBER 2023 DENTAL INSURANCE	12012023	12/29/23	89.02	34832
100-00000-20205	01/01/24	METLIFE	JAN 2024 DENTAL INSURANCE	01-2024	12/29/23	89.02	34832
100-41320-50130	12/01/23	METLIFE	DECEMBER 2023 DENTAL INSURANCE	12012023	12/29/23	96.28	34832
100-41320-50130	01/01/24	METLIFE	JAN 2024 DENTAL INSURANCE	01-2024	12/29/23	(192.56)	34832
100-41400-50130	12/01/23	METLIFE	DECEMBER 2023 DENTAL INSURANCE	12012023	12/29/23	58.34	34832
100-41400-50130	01/01/24	METLIFE	JAN 2024 DENTAL INSURANCE	01-2024	12/29/23	58.34	34832
100-41500-50130	12/01/23	METLIFE	DECEMBER 2023 DENTAL INSURANCE	12012023	12/29/23	58.34	34832
100-41500-50130	01/01/24	METLIFE	JAN 2024 DENTAL INSURANCE	01-2024	12/29/23	58.34	34832
100-41910-50130	12/01/23	METLIFE	DECEMBER 2023 DENTAL INSURANCE	12012023	12/29/23	89.02	34832
100-41910-50130	01/01/24	METLIFE	JAN 2024 DENTAL INSURANCE	01-2024	12/29/23	89.02	34832
100-42100-50130	12/01/23	METLIFE	DECEMBER 2023 DENTAL INSURANCE	12012023	12/29/23	310.75	34832
100-42100-50130	01/01/24	METLIFE	JAN 2024 DENTAL INSURANCE	01-2024	12/29/23	407.03	34832

GL Number	Invoice Date	Vendor	Invoice Desc.	Invoice	Chk Date	Amount	Check
Check 34832							
100-42102-50130	12/01/23	METLIFE	DECEMBER 2023 DENTAL INSURANCE	12012023	12/29/23	59.85	34832
100-42102-50130	01/01/24	METLIFE	JAN 2024 DENTAL INSURANCE	01-2024	12/29/23	59.85	34832
100-42400-50130	12/01/23	METLIFE	DECEMBER 2023 DENTAL INSURANCE	12012023	12/29/23	59.85	34832
100-42400-50130	01/01/24	METLIFE	JAN 2024 DENTAL INSURANCE	01-2024	12/29/23	59.85	34832
100-43100-50130	12/01/23	METLIFE	DECEMBER 2023 DENTAL INSURANCE	12012023	12/29/23	148.87	34832
100-43100-50130	01/01/24	METLIFE	JAN 2024 DENTAL INSURANCE	01-2024	12/29/23	245.15	34832
100-45100-50130	12/01/23	METLIFE	DECEMBER 2023 DENTAL INSURANCE	12012023	12/29/23	14.59	34832
100-45100-50130	01/01/24	METLIFE	JAN 2024 DENTAL INSURANCE	01-2024	12/29/23	14.59	34832
100-45200-50130	12/01/23	METLIFE	DECEMBER 2023 DENTAL INSURANCE	12012023	12/29/23	14.58	34832
100-45200-50130	01/01/24	METLIFE	JAN 2024 DENTAL INSURANCE	01-2024	12/29/23	14.58	34832
			Total For Check 34832			<u>1,902.70</u>	
Check 34833							
100-43100-50212	12/21/23	MIDWEST MACHINERY CO.	70 GALLON TANK	9890134	12/29/23	513.50	34833
			Total For Check 34833			<u>513.50</u>	
Check 34834							
100-43100-50210	12/21/23	MILLER CHEVROLET	MAT PACKAGE	182009	12/29/23	182.75	34834
100-45200-50210	11/03/23	MILLER CHEVROLET	MAT PACKAGE/STEP PACKAGE	181376	12/29/23	710.00	34834
			Total For Check 34834			<u>892.75</u>	
Check 34835							
100-45200-50221	12/13/23	MINNESOTA EQUIPMENT, INC.	BALL JOINT	P11273	12/29/23	41.75	34835
			Total For Check 34835			<u>41.75</u>	
Check 34836							
601-49400-50433	12/14/23	MINNESOTA RURAL WATER ASSOC	2024 MEMBERSHIP RENEWAL	12142023	12/29/23	604.68	34836
602-49450-50433	12/14/23	MINNESOTA RURAL WATER ASSOC	2024 MEMBERSHIP RENEWAL	12142023	12/29/23	604.67	34836
			Total For Check 34836			<u>1,209.35</u>	
Check 34837							
100-00000-15500	12/01/23	MN CHIEFS OF POLICE ASSOC	2024 MEMBERSHIP RENEWAL - EKENBERG	14809	12/29/23	212.00	34837
			Total For Check 34837			<u>212.00</u>	
Check 34838							
100-42100-50207	12/08/23	MN CHIEFS OF POLICE ASSOC	MCPA 2024 CONFERENCE	15291	12/29/23	2,200.00	34838
			Total For Check 34838			<u>2,200.00</u>	
Check 34839							
100-45100-50433	12/19/23	MN RECREATION/PARK ASSOC	2024 PARK/REC MEMBERSHIP DUES	2024	12/29/23	310.00	34839
			Total For Check 34839			<u>310.00</u>	
Check 34840							
100-42100-50207	12/08/23	MSCIC	2024 MSCIC CONFERENCE	0065	12/29/23	900.00	34840
			Total For Check 34840			<u>900.00</u>	
Check 34841							
100-42100-50220	12/12/23	NAPA AUTO PARTS - Corcoran	HARNES	511173	12/29/23	28.79	34841
100-42100-50220	12/19/23	NAPA AUTO PARTS - Corcoran	HARNES RETURN	512306	12/29/23	(28.79)	34841
100-43100-50220	12/08/23	NAPA AUTO PARTS - Corcoran	PURGE VALVE	510468	12/29/23	39.78	34841
100-43100-50220	12/21/23	NAPA AUTO PARTS - Corcoran	50 TON AIR JACK	512761	12/29/23	1,500.00	34841
100-45200-50221	12/21/23	NAPA AUTO PARTS - Corcoran	TIRE VALVE CAPS/WHEEL WEIGHT	512766	12/29/23	928.47	34841
100-45200-50221	12/21/23	NAPA AUTO PARTS - Corcoran	COATS BALANCER	512759	12/29/23	4,800.00	34841
			Total For Check 34841			<u>7,268.25</u>	

INVOICE GL DISTRIBUTION REPORT FOR CITY OF CORCORAN
 EXP CHECK RUN DATES 12/19/2023 - 12/29/2023
 JOURNALIZED
 PAID - CHECK TYPE: PAPER CHECK
 CHECK REGISTER - COUNCIL

GL Number	Invoice Date	Vendor	Invoice Desc.	Invoice	Chk Date	Amount	Check
Check 34842							
100-00000-21710	12/31/23	NATALIE DAVIS MCKEOWN	DEPENDENT CARE REIMBURSEMENT	12312023	12/29/23	192.31	34842
			Total For Check 34842			192.31	
Check 34843							
416-43100-50550	12/18/23	NORTH COUNTRY CHEVROLET	2024 GMC SIERRA VIN 6201	CORCORAN 23-102	12/29/23	54,694.00	34843
			Total For Check 34843			54,694.00	
Check 34844							
100-43100-50220	08/31/23	NORTHERN TOOL & EQUIPMENT	GLOVES/TRAILER HUB	540502243230557	12/29/23	114.76	34844
			Total For Check 34844			114.76	
Check 34845							
100-41900-50300	12/06/23	NORTHLAND TRUST SERVICES	CORCO16A PRINCIPAL AND INTEREST PA	CORCO16A 01-202	12/29/23	495.00	34845
309-47000-50600	12/06/23	NORTHLAND TRUST SERVICES	CORCO16A PRINCIPAL AND INTEREST PA	CORCO16A 01-202	12/29/23	35,000.00	34845
309-47000-50610	12/06/23	NORTHLAND TRUST SERVICES	CORCO16A PRINCIPAL AND INTEREST PA	CORCO16A 01-202	12/29/23	1,050.00	34845
312-47000-50600	12/06/23	NORTHLAND TRUST SERVICES	CORCO16A PRINCIPAL AND INTEREST PA	CORCO16A 01-202	12/29/23	240,000.00	34845
312-47000-50610	12/06/23	NORTHLAND TRUST SERVICES	CORCO16A PRINCIPAL AND INTEREST PA	CORCO16A 01-202	12/29/23	13,290.00	34845
			Total For Check 34845			289,835.00	
Check 34846							
309-47000-50600	12/06/23	NORTHLAND TRUST SERVICES	CORCO18A PRINCIPAL & INTEREST PAYM	CORCO18A 01-202	12/29/23	65,000.00	34846
309-47000-50610	12/06/23	NORTHLAND TRUST SERVICES	CORCO18A PRINCIPAL & INTEREST PAYM	CORCO18A 01-202	12/29/23	5,250.00	34846
313-47000-50600	12/06/23	NORTHLAND TRUST SERVICES	CORCO18A PRINCIPAL & INTEREST PAYM	CORCO18A 01-202	12/29/23	75,000.00	34846
313-47000-50610	12/06/23	NORTHLAND TRUST SERVICES	CORCO18A PRINCIPAL & INTEREST PAYM	CORCO18A 01-202	12/29/23	14,587.50	34846
			Total For Check 34846			159,837.50	
Check 34847							
309-47000-50600	12/06/23	NORTHLAND TRUST SERVICES	CORCO20A PRINCIPAL & INTEREST PAYM	CORCO20A 01-202	12/29/23	85,000.00	34847
309-47000-50610	12/06/23	NORTHLAND TRUST SERVICES	CORCO20A PRINCIPAL & INTEREST PAYM	CORCO20A 01-202	12/29/23	6,400.00	34847
601-49400-50600	12/06/23	NORTHLAND TRUST SERVICES	CORCO20A PRINCIPAL & INTEREST PAYM	CORCO20A 01-202	12/29/23	110,000.00	34847
601-49400-50610	12/06/23	NORTHLAND TRUST SERVICES	CORCO20A PRINCIPAL & INTEREST PAYM	CORCO20A 01-202	12/29/23	9,350.00	34847
			Total For Check 34847			210,750.00	
Check 34848							
100-43100-50300	12/06/23	NORTHLAND TRUST SERVICES	CORCO20B PRINCIPAL & INTEREST	CORCO20B 01-202	12/29/23	495.00	34848
309-47000-50600	12/06/23	NORTHLAND TRUST SERVICES	CORCO20B PRINCIPAL & INTEREST	CORCO20B 01-202	12/29/23	165,000.00	34848
309-47000-50610	12/06/23	NORTHLAND TRUST SERVICES	CORCO20B PRINCIPAL & INTEREST	CORCO20B 01-202	12/29/23	24,345.00	34848
			Total For Check 34848			189,840.00	
Check 34849							
314-47000-50600	12/06/23	NORTHLAND TRUST SERVICES	CORCORAN23A BOND PRICIPAL & INTERE	CORCORAN23A 01-	12/29/23	595,000.00	34849
314-47000-50610	12/06/23	NORTHLAND TRUST SERVICES	CORCORAN23A BOND PRICIPAL & INTERE	CORCORAN23A 01-	12/29/23	786,500.00	34849
314-47000-50620	12/06/23	NORTHLAND TRUST SERVICES	CORCORAN23A BOND PRICIPAL & INTERE	CORCORAN23A 01-	12/29/23	495.00	34849
			Total For Check 34849			1,381,995.00	
Check 34850							
416-47000-50600	12/06/23	NORTHLAND TRUST SERVICES	CORCO22A PRINCIPAL & INTEREST PAYM	CORCO22A 01-24	12/29/23	170,000.00	34850
416-47000-50610	12/06/23	NORTHLAND TRUST SERVICES	CORCO22A PRINCIPAL & INTEREST PAYM	CORCO22A 01-24	12/29/23	33,868.75	34850
			Total For Check 34850			203,868.75	
Check 34851							
601-49400-50300	12/06/23	NORTHLAND TRUST SERVICES	CORCO14B PRINCIPAL & INTEREST PAYM	CORCO14B 01-24	12/29/23	247.50	34851
601-49400-50600	12/06/23	NORTHLAND TRUST SERVICES	CORCO14B PRINCIPAL & INTEREST PAYM	CORCO14B 01-24	12/29/23	69,400.00	34851
601-49400-50610	12/06/23	NORTHLAND TRUST SERVICES	CORCO14B PRINCIPAL & INTEREST PAYM	CORCO14B 01-24	12/29/23	15,034.00	34851
602-49450-50300	12/06/23	NORTHLAND TRUST SERVICES	CORCO14B PRINCIPAL & INTEREST PAYM	CORCO14B 01-24	12/29/23	247.50	34851

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Check 34851							
602-49450-50600	12/06/23	NORTHLAND TRUST SERVICES	CORCO14B PRINCIPAL & INTEREST PAYM	CORCO14B 01-24	12/29/23	85,600.00	34851
602-49450-50610	12/06/23	NORTHLAND TRUST SERVICES	CORCO14B PRINCIPAL & INTEREST PAYM	CORCO14B 01-24	12/29/23	18,841.01	34851
						<u>189,370.01</u>	
Total For Check 34851							
Check 34852							
100-45200-50210	12/20/23	OLSEN CHAIN & CABLE, INC.	POLY SLING REPLACEMENT	709753	12/29/23	611.36	34852
						<u>611.36</u>	
Total For Check 34852							
Check 34853							
100-43100-50417	12/27/23	PAT MEISTER	2023 BOOT REIMBURSEMENT	122723	12/29/23	269.99	34853
						<u>269.99</u>	
Total For Check 34853							
Check 34854							
100-41130-50350	12/14/23	POSTMASTER	FALL/WINTER NEWSLETTER	12142023	12/29/23	2,300.00	34854
						<u>2,300.00</u>	
Total For Check 34854							
Check 34855							
100-00000-21710	12/31/23	MIKE PRITCHARD	FSA REIMBURSEMENT	12312023	12/29/23	82.69	34855
						<u>82.69</u>	
Total For Check 34855							
Check 34856							
100-00000-22205	12/19/23	READY WATT ELECTRIC	OUTDOOR EMERGENCY WARINING SYSTEM	2216078	12/29/23	2,765.33	34856
416-42100-50210	12/19/23	READY WATT ELECTRIC	OUTDOOR EMERGENCY WARINING SYSTEM	2216078	12/29/23	5,531.09	34856
						<u>8,296.42</u>	
Total For Check 34856							
Check 34857							
100-43100-50417	12/21/23	MARK REINKING	2023 BOOT REIMBURSEMENT	199322	12/29/23	285.98	34857
						<u>285.98</u>	
Total For Check 34857							
Check 34858							
100-41900-50380	11/30/23	REPUBLIC SERVICES	CITY HALL GARBAGE NOVEMBER 2023	0894006474092	12/29/23	263.20	34858
100-43100-50380	11/30/23	REPUBLIC SERVICES	PUBLIC WORKS GARBAGE NOVEMBER 2023	0894-006474918	12/29/23	141.72	34858
100-45200-50380	11/30/23	REPUBLIC SERVICES	WILDFLOWER PARK GARBAGE NOVEMBER 2	0894-006476046	12/29/23	70.86	34858
100-45200-50380	11/30/23	REPUBLIC SERVICES	CITY PARK GARBAGE NOVEMBER 2023	0894-006473942	12/29/23	184.39	34858
						<u>660.17</u>	
Total For Check 34858							
Check 34859							
601-00000-16500	12/13/23	RICE LAKE CONSTRUCTION GROUP	NE WATER SUPPLY - WATER TREATMENT	227704426 PAY 7	12/29/23	765,000.00	34859
601-00000-20610	12/13/23	RICE LAKE CONSTRUCTION GROUP	NE WATER SUPPLY - WATER TREATMENT	227704426 PAY 7	12/29/23	(38,250.00)	34859
						<u>726,750.00</u>	
Total For Check 34859							
Check 34860							
100-00000-21709	01/01/24	STANDARD INSURANCE COMPANY	JANUARY 2024 LIFE INSURANCE PREMIU	01-2024	12/29/23	2,205.45	34860
						<u>2,205.45</u>	
Total For Check 34860							
Check 34861							
100-00000-22205	12/08/23	STANTEC CONSULTING SERVICES	WCA PROJECTS	2167816	12/29/23	2,578.50	34861
100-00000-22205	12/08/23	STANTEC CONSULTING SERVICES	SUNRAM PROJECT	2167815	12/29/23	475.00	34861
100-00000-22205	12/08/23	STANTEC CONSULTING SERVICES	SOUTH FORK VILLAGE PROJECT	2167814	12/29/23	734.50	34861
100-00000-22205	12/08/23	STANTEC CONSULTING SERVICES	HEIDECKER GARAGE CUP	2167813	12/29/23	111.00	34861
100-00000-22205	12/08/23	STANTEC CONSULTING SERVICES	HACKAMORE CR 116	2167807	12/29/23	5,464.50	34861
100-00000-22205	12/08/23	STANTEC CONSULTING SERVICES	CORCORAN STORAGE II	2167806	12/29/23	1,456.00	34861
100-00000-22205	12/08/23	STANTEC CONSULTING SERVICES	KARINIEMI JENSEN	2167805	12/29/23	222.00	34861
100-00000-22205	12/08/23	STANTEC CONSULTING SERVICES	SCHERBER COUNTY ROAD 30	2167804	12/29/23	145.00	34861
100-00000-22205	12/08/23	STANTEC CONSULTING SERVICES	AMIRA VILLAGE	2167803	12/29/23	1,875.00	34861

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Check 34861							
100-00000-22205	12/08/23	STANTEC CONSULTING SERVICES	KARINIEMI-MEADOWS	2167801	12/29/23	262.61	34861
100-00000-22205	12/08/23	STANTEC CONSULTING SERVICES	HOPE COMMUNITY	2167798	12/29/23	3,237.50	34861
100-00000-22205	12/08/23	STANTEC CONSULTING SERVICES	BELLWETHER DEVELOPMENT PROJECT	2167792	12/29/23	11,344.19	34861
100-00000-22205-008	12/08/23	STANTEC CONSULTING SERVICES	BASS LAKE CROSSINGS	2167809	12/29/23	46.80	34861
100-00000-22205-013	12/08/23	STANTEC CONSULTING SERVICES	BECHTOLD FARM	2167802	12/29/23	304.20	34861
100-00000-22205-017	12/08/23	STANTEC CONSULTING SERVICES	COOK LAKE HIGHLANDS	2167793	12/29/23	1,184.75	34861
100-00000-22205-024	12/08/23	STANTEC CONSULTING SERVICES	D&D	2167811	12/29/23	389.55	34861
100-00000-22205-056	12/08/23	STANTEC CONSULTING SERVICES	TAVERA	2167794	12/29/23	10,378.05	34861
100-00000-22205-058	12/08/23	STANTEC CONSULTING SERVICES	RAVINIA DEVELOPMENT PROJECT	2167791	12/29/23	1,219.14	34861
100-00000-22205-075	12/08/23	STANTEC CONSULTING SERVICES	NAPA	2167810	12/29/23	176.80	34861
100-00000-22205-076	12/08/23	STANTEC CONSULTING SERVICES	NELSON TRUCKING	2167808	12/29/23	106.50	34861
100-00000-22205-087	12/08/23	STANTEC CONSULTING SERVICES	STIEG ROAD IMPROVEMENTS	2167822	12/29/23	7,045.60	34861
100-00000-22205-087	12/08/23	STANTEC CONSULTING SERVICES	AMBERLY (1,2) BELLWETHER (6,7,9)	2167797	12/29/23	5,902.94	34861
100-00000-22205-098	12/08/23	STANTEC CONSULTING SERVICES	RUSH CREEK RESERVE TURN LANES	2167818	12/29/23	430.75	34861
100-00000-22205-098	12/08/23	STANTEC CONSULTING SERVICES	RUSH CREEK RESERVE	2167795	12/29/23	9,633.08	34861
100-00000-22205-111	12/08/23	STANTEC CONSULTING SERVICES	GARAGES TOO	2167800	12/29/23	3,543.10	34861
100-00000-22205-117	12/08/23	STANTEC CONSULTING SERVICES	ST THERESE SENIOR LIVING	2167799	12/29/23	2,376.03	34861
100-00000-22205-127	12/08/23	STANTEC CONSULTING SERVICES	WESTSIDE ESCROW	2167812	12/29/23	111.00	34861
100-00000-22205-130	12/08/23	STANTEC CONSULTING SERVICES	CITY CENTER DRIVE & 79TH PLACE STR	2167824	12/29/23	48,659.55	34861
100-00000-22205-132	12/08/23	STANTEC CONSULTING SERVICES	WALCOTT GLENN	2167796	12/29/23	3,043.12	34861
100-41910-50300	12/08/23	STANTEC CONSULTING SERVICES	GENERAL ENGINEERING SERVICES FOR C	2169201	12/29/23	516.00	34861
100-42400-50303	12/11/23	STANTEC CONSULTING SERVICES	NEW CONSTRUCTION INSPECTIONS	2169230	12/29/23	4,002.50	34861
100-43121-50400	12/08/23	STANTEC CONSULTING SERVICES	GENERAL ENGINEERING SERVICES FOR C	2169201	12/29/23	5,164.20	34861
100-43170-50300	12/08/23	STANTEC CONSULTING SERVICES	HORSESHOE BEND IMPROVEMENT PROJECT	2167823	12/29/23	11,773.75	34861
100-43170-50300	12/08/23	STANTEC CONSULTING SERVICES	GENERAL ENGINEERING SERVICES FOR C	2169201	12/29/23	14,107.10	34861
100-43170-50309	12/08/23	STANTEC CONSULTING SERVICES	GENERAL ENGINEERING SERVICES FOR C	2169201	12/29/23	796.00	34861
408-48005-50530	12/08/23	STANTEC CONSULTING SERVICES	66TH STREET DESIGN & CONSTRUCTION	2167817	12/29/23	807.00	34861
408-48009-50303	12/08/23	STANTEC CONSULTING SERVICES	BRIDGE REPLACEMENT DESIGN - TRAIL	2167819	12/29/23	2,000.00	34861
408-48010-50303	12/08/23	STANTEC CONSULTING SERVICES	CITY CENTER DRIVE & 79TH PLACE	2167821	12/29/23	643.25	34861
419-43100-50303	12/08/23	STANTEC CONSULTING SERVICES	HACKAMORE ROAD ASSISTANCE	2167789	12/29/23	74.00	34861
601-00000-16500	12/08/23	STANTEC CONSULTING SERVICES	WATER SUPPLY, TREATMENT & STORAGE	2167820	12/29/23	54,165.40	34861
601-49400-50300	12/08/23	STANTEC CONSULTING SERVICES	NE CORCORAN TRUNK INFRASTRUCTURE	2167826	12/29/23	22,931.00	34861
601-49400-50300	12/08/23	STANTEC CONSULTING SERVICES	NE CORCORAN WATER TOWER	2167825	12/29/23	6,194.00	34861
601-49400-50303	12/11/23	STANTEC CONSULTING SERVICES	NEW CONSTRUCTION INSPECTIONS	2169230	12/29/23	1,384.37	34861
602-49450-50303	12/11/23	STANTEC CONSULTING SERVICES	NEW CONSTRUCTION INSPECTIONS	2169230	12/29/23	1,384.38	34861
			Total For Check 34861			<u>248,399.71</u>	
Check 34862							
100-42100-50417	12/14/23	STREICHER'S POLICE EQUIPMENT	NEW HIRE UNIFORM - WILCOX	11671176	12/29/23	901.86	34862
			Total For Check 34862			<u>901.86</u>	
Check 34863							
100-43100-50220	12/12/23	SUBURBAN TIRE WHOLESALE INC	TIRES	10198476	12/29/23	787.40	34863
			Total For Check 34863			<u>787.40</u>	
Check 34864							
100-43100-50321	12/16/23	T-MOBILE	CELL SERVICES 11/16/23-12/15/23	12162023	12/29/23	142.97	34864
			Total For Check 34864			<u>142.97</u>	
Check 34865							
100-00000-21707	01/01/24	TEAMSTER LOCAL 320	UNION DUES/TLDF JANUARY 2024	01012024	12/29/23	400.68	34865
			Total For Check 34865			<u>400.68</u>	
Check 34866							

GL Number	Invoice Date	Vendor	Invoice Desc.	Invoice	Chk Date	Amount	Check
Check 34866							
100-43100-50210	12/18/23	TERMINAL SUPPLY CO	VORTEX DRILL SET	91898-00	12/29/23	294.84	34866
100-43100-50210	12/04/23	TERMINAL SUPPLY CO	PACKARD CONNECTORS/PIN CLIP	88909-00	12/29/23	846.88	34866
100-43100-50210	12/06/23	TERMINAL SUPPLY CO	1/2' SHANK	89302-00	12/29/23	184.41	34866
100-43100-50210	12/05/23	TERMINAL SUPPLY CO	SHOP SUPPLIES - LOCK/ROCKER SWITCH	89579-00	12/29/23	1,795.83	34866
Total For Check 34866						3,121.96	
Check 34867							
100-42100-50417	12/01/23	TIDE CLEANERS	PD UNIFORM CLEANING NOV. 2023	11-2023	12/29/23	385.05	34867
Total For Check 34867						385.05	
Check 34868							
100-42100-50433	12/08/23	TRI-COUNTY LAW ENFORCEMENT	2024 ANNUAL DUES TRI COUNTY LAW EN	12202024	12/29/23	90.00	34868
Total For Check 34868						90.00	
Check 34869							
202-42100-50210	12/04/23	UNTIEDT'S VEGETABLE FARM, IN	NIGHT TO UNITE CORN RENTAL	92842	12/29/23	1,200.00	34869
Total For Check 34869						1,200.00	
Check 34870							
100-41900-50210	12/19/23	CREDIT CARD PURCHASES	EMPLOYEE APPRECIATION SUPPLIES	021857	12/29/23	73.05	34870
100-41900-50210	12/20/23	CREDIT CARD PURCHASES	EMPLOYEE APPRECIATION EVENT	12202023	12/29/23	70.33	34870
100-41910-50210	12/21/23	CREDIT CARD PURCHASES	SHOE COVERS FOR RENTAL INSPECTIONS	12212023	12/29/23	17.81	34870
100-42100-50207	11/22/23	BCA TRAINING	TRAINING - WILCOX	45052-2	12/29/23	75.00	34870
100-42100-50207	12/22/23	CREDIT CARD PURCHASES	PEER SUPPORT TRAINING - WILCOX	12678	12/29/23	450.00	34870
100-42100-50300	12/09/23	FLEETIO	FLEET MANAGEMENT SOFTWARE 12/09/23	660786	12/29/23	60.00	34870
100-43100-50220	12/12/23	CREDIT CARD PURCHASES	PITMAN ARM SEPARATOR	100277819	12/29/23	174.87	34870
100-43100-50220	12/19/23	CREDIT CARD PURCHASES	CLUTCH, BEARINGS, WASHER	562646436	12/29/23	1,898.75	34870
202-42100-50210	12/12/23	CREDIT CARD PURCHASES	SHOP WITH A COP EVENT	2023 SHOP	12/29/23	1,625.42	34870
Total For Check 34870						4,445.23	
Check 34871							
100-41920-50210	12/19/23	US BANKCORP EQUIPMENT FINANC	COPIER LEASE	518203955	12/29/23	424.46	34871
Total For Check 34871						424.46	
Check 34872							
601-49400-50300	12/08/23	WATER LABORATORIES, INC.	COLIFORM TEST	85192	12/29/23	36.00	34872
Total For Check 34872						36.00	
Check 34873							
100-43100-50210	12/14/23	WESTSIDE WHOLESALE TIRE	SWING ARM/CHANGER/ADAPTER	938239	12/29/23	7,280.00	34873
100-43100-50210	12/15/23	WESTSIDE WHOLESALE TIRE	DISPOSAL OF 18 TIRES	938336	12/29/23	72.00	34873
100-43100-50220	12/12/23	WESTSIDE WHOLESALE TIRE	TIRE MOUNT	938119	12/29/23	34.00	34873
Total For Check 34873						7,386.00	
Check 34874							
100-00000-22205	12/11/23	WRIGHT-HENNEPIN COOP ELECT	UTILITY SERVICES	35030969722	12/29/23	300.87	34874
100-00000-22205-007	12/11/23	WRIGHT-HENNEPIN COOP ELECT	UTILITY SERVICES	35030969722	12/29/23	262.43	34874
100-00000-22205-056	12/11/23	WRIGHT-HENNEPIN COOP ELECT	UTILITY SERVICES	35030969722	12/29/23	756.87	34874
100-00000-22205-065	12/11/23	WRIGHT-HENNEPIN COOP ELECT	UTILITY SERVICES	35030969722	12/29/23	1,517.67	34874
100-00000-22205-087	12/11/23	WRIGHT-HENNEPIN COOP ELECT	UTILITY SERVICES	35030969722	12/29/23	518.60	34874
100-00000-22205-098	12/11/23	WRIGHT-HENNEPIN COOP ELECT	UTILITY SERVICES	35030969722	12/29/23	204.89	34874
100-00000-22205-132	12/11/23	WRIGHT-HENNEPIN COOP ELECT	UTILITY SERVICES	35030969722	12/29/23	90.48	34874
100-41900-50381	12/11/23	WRIGHT-HENNEPIN COOP ELECT	UTILITY SERVICES	35030969722	12/29/23	2,048.84	34874
100-42151-50381	12/11/23	WRIGHT-HENNEPIN COOP ELECT	UTILITY SERVICES	35030969722	12/29/23	59.95	34874
100-43100-50381	12/11/23	WRIGHT-HENNEPIN COOP ELECT	UTILITY SERVICES	35030969722	12/29/23	198.19	34874

GL Number	Invoice Date	Vendor	Invoice Desc.	Invoice	Chk Date	Amount	Check
Check 34874							
100-45200-50381	12/11/23	WRIGHT-HENNEPIN COOP ELECT	UTILITY SERVICES	35030969722	12/29/23	88.74	34874
601-49400-50380	12/11/23	WRIGHT-HENNEPIN COOP ELECT	UTILITY SERVICES	35030969722	12/29/23	71.79	34874
602-49450-50380	12/11/23	WRIGHT-HENNEPIN COOP ELECT	UTILITY SERVICES	35030969722	12/29/23	324.89	34874
						6,444.21	
Total For Check 34874							
Check 34875							
100-45200-50210	12/08/23	WRUCK SEWER & PORTABLE RENTA	PARK PORTABLE RENTAL NOV 2023	I19714	12/29/23	326.00	34875
						326.00	
Total For Check 34875							
Check 34876							
100-43100-50381	12/06/23	XCEL ENERGY	9700 CTY RD 19 STREET LIGHT	855975202	12/29/23	33.46	34876
						33.46	
Total For Check 34876							
Check 34877							
100-42400-50207	12/15/23	SHAWNA ZUTHER	MILEAGE REIMBURSEMENT	12152023	12/29/23	37.99	34877
						37.99	
Total For Check 34877							

GL Number	Invoice Date	Vendor	Invoice Desc.	Invoice	Chk Date	Amount	Check
Fund Totals:							
			Fund 100 GENERAL FUND			259,806.65	
			Fund 202 CITY COMMUNITY EVENTS			2,831.40	
			Fund 309 D/S-EQUIPMENT CERTS			387,045.00	
			Fund 312 2016A DOWNTOWN IMPROVEMENT			253,290.00	
			Fund 313 ROCKFORD SCHOOL LAND 2018A			89,587.50	
			Fund 314 2023A DEBT SERVICE			1,381,995.00	
			Fund 408 PAVEMENT MANAGEMENT			4,630.25	
			Fund 416 CAPITAL-EQUIPMENT CERTS			267,924.93	
			Fund 419 HACKAMORE UPGRADE (LENNAR)			74.00	
			Fund 601 WATER			1,040,198.24	
			Fund 602 SEWER			107,002.45	
			Total For All Funds:			<u>3,794,385.42</u>	

FINANCIAL CLAIMS

CHECK RANGE

FUND #500 ESCROW CLAIMS

Paid to	Amount	Project name
SEE THE REGISTER FOR #500 CLAIMS		

Total	\$0.00	
Total Fund #500 =		\$ -
(See attached Payments Detail)		

ALL OTHER FINANCIAL CLAIMS

Check Register		\$2,442,250.78
(See attached Check Detail Registers)		
Total Checks	\$	2,442,250.78
Total of Auto Deductions	\$	35,002.66

TOTAL EXPENDITURES FOR APPROVAL	\$	2,477,253.44
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Auto Deductions / Electronic Fund Transfer / Other Disbursements

Date	Paid to	Amount	Description
1/2/2024	EMPOWER	\$ 5,649.31	Employee Deferred Comp/Healthcare Savings
1/3/2024	HealthPartners	\$ 29,353.35	Employee Health Insurance Premium
Total		\$ 35,002.66	

GL Number	Invoice Date	Vendor	Invoice Desc.	Invoice	Chk Date	Amount	Check
Check 34878							
100-41900-50430	02/23/23	HENNEPIN COUNTY GOVERNMENT C	DOCUMENT FILING FEE	02232023	01/11/24	46.00	34878
			Total For Check 34878			<u>46.00</u>	
Check 34879							
100-41900-50430	02/23/23	HENNEPIN COUNTY GOVERNMENT C	DOCUMENT FILING FEE	02/23/2023	01/11/24	46.00	34879
			Total For Check 34879			<u>46.00</u>	
Check 34880							
100-41900-50430	02/23/23	HENNEPIN COUNTY GOVERNMENT C	DOCUMENT FILING FEE	2.23.23	01/11/24	46.00	34880
			Total For Check 34880			<u>46.00</u>	
Check 34881							
100-00000-22205	01/04/24	LANDFORM PROFESSIONAL SERVIC	BP22-0021 7400 CO RD 116	35052	01/11/24	449.00	34881
100-00000-22205	01/04/24	LANDFORM PROFESSIONAL SERVIC	BP22-0026 20130 LARKIN RD	35053	01/11/24	79.00	34881
100-00000-22205	01/04/24	LANDFORM PROFESSIONAL SERVIC	BP23-0003 7600 MAPLE HILL RD	35055	01/11/24	158.00	34881
100-00000-22205	01/04/24	LANDFORM PROFESSIONAL SERVIC	BP23-0014 ADDRESS PENDING	35056	01/11/24	118.50	34881
100-00000-22205	01/04/24	LANDFORM PROFESSIONAL SERVIC	BP23-0045 19904 OSWALD FARM RD	35057	01/11/24	553.00	34881
100-00000-22205	01/04/24	LANDFORM PROFESSIONAL SERVIC	BP23-0048 23360 OAKDALE DR	35058	01/11/24	39.50	34881
100-00000-22205	01/04/24	LANDFORM PROFESSIONAL SERVIC	BP23-0053 19800 HACKAMORE RD	35061	01/11/24	39.50	34881
			Total For Check 34881			<u>1,436.50</u>	
Check 34882							
602-00000-20800	12/31/23	METROPOLITAN COUNCIL	DECEMBER 2023 SAC CHARGES	12312023	01/11/24	34,790.00	34882
602-00000-36200	12/31/23	METROPOLITAN COUNCIL	DECEMBER 2023 SAC CHARGES	12312023	01/11/24	(347.90)	34882
			Total For Check 34882			<u>34,442.10</u>	
Check 34883							
601-00000-16500	01/03/24	RICE LAKE CONSTRUCTION GROUP	NE WATER SUPPLY - WATER TREATMENT	227704426 PAY 8	01/11/24	(45,300.00)	34883
601-00000-20610	01/03/24	RICE LAKE CONSTRUCTION GROUP	NE WATER SUPPLY - WATER TREATMENT	227704426 PAY 8	01/11/24	906,000.00	34883
			Total For Check 34883			<u>860,700.00</u>	
Check 34884							
100-00000-22205-130	01/03/24	S.M. HENTGES & SONS, INC.	CITY CENTER DRIVE AND 79TH PLACE P	227705033 PAY 2	01/11/24	355,268.85	34884
408-00000-20610	01/03/24	S.M. HENTGES & SONS, INC.	CITY CENTER DRIVE AND 79TH PLACE P	227705033 PAY 2	01/11/24	(81,198.37)	34884
408-48010-50530	01/03/24	S.M. HENTGES & SONS, INC.	CITY CENTER DRIVE AND 79TH PLACE P	227705033 PAY 2	01/11/24	1,268,698.69	34884
			Total For Check 34884			<u>1,542,769.17</u>	
Check 34885							
100-00000-22205	11/08/23	SHAWN THARP	BP22-033 20420 DUFFNEY CIR ESCROW	4838	01/11/24	2,360.65	34885
			Total For Check 34885			<u>2,360.65</u>	
Check 34886							
100-41320-50210	12/06/23	CREDIT CARD PURCHASES	WHITE BOARD	5725479	01/11/24	404.36	34886
			Total For Check 34886			<u>404.36</u>	

GL Number	Invoice Date	Vendor	Invoice Desc.	Invoice	Chk Date	Amount Check
Fund Totals:						
			Fund 100 GENERAL FUND			359,608.36
			Fund 408 PAVEMENT MANAGEMENT			1,187,500.32
			Fund 601 WATER			860,700.00
			Fund 602 SEWER			34,442.10
			Total For All Funds:			<u>2,442,250.78</u>

RESOLUTION NO. 2024-01

Motion By:
Seconded By:

**RESOLUTION ESTABLISHING ANNUAL APPOINTMENTS FOR
THE CITY OF CORCORAN FOR 2024**

WHEREAS, the City of Corcoran (City) is required to designate the official newspaper, official depositories and signatories, make annual appointments within the organization of the City, as well as other defined organizational items as defined by State Statute and City Codes.

NOW THEREFORE, BE IT RESOLVED that the City hereby makes the following appointments for the year 2024.

1. **Official Newspaper**
Crow River News, (aka Sun Media) 10917 Valley View Road, Eden Prairie MN 55344
2. **Acting Mayor**
The Acting Mayor shall be Jonathan Bottema.
3. **Planning Consultant**
Landform, 105 S. Fifth Avenue, # 513 Minneapolis, MN 55401
4. **Engineer**
Stantec Consulting Services, Inc., One Carlson Parkway, Suite 100, Plymouth, MN 55447
5. **Attorney – Civil and Criminal**
John Thames - Carson, Clelland & Schreder, 6300 Shingle Creek Parkway, Suite 305, Minneapolis, MN 55430-2190
6. **Parks Planning Consultant**
Hoisington, Koegler, Group Inc., DBA: HKGi, 800 North Washington Avenue, Minneapolis, MN 55401
7. **Auditor and Auditing Services**
Auditor
Abdo, 5201 Eden Avenue #250, Edina, MN 55436

Audit Prep Services
BergenKDV Ltd., 220 Park Avenue South, Saint Cloud, MN 56302
AEM Abdo, 5201 Eden Avenue #250, Edina, MN 55436

Auditor Assistance for OPEB Reporting
Gallagher Benefit Services, Inc., 3600 American Blvd. West, Suite 500, Bloomington, MN 55431
8. **Assistant Weed Inspector**
City Administrator and the Public Works Department

RESOLUTION NO. 2024-01

- 9. **Elm Creek Watershed Management Commission Representative**
Ken Guenthner – Commissioner
Tom Anderson – Alternate Commissioner

- 10. **Insurance Agent**
Associated Benefits and Risk Consulting, 6000 Clearwater Drive | Minnetonka, MN 55343

- 11. **Animal Control Officer**
Monticello Animal Facility, 203 Chelsea Road, Monticello, MN 55362.

- 12. **Official Depositories**
Farmers State Bank of Hamel
Northland Securities
4M Fund

- 13. **Official Signatory**
The following individuals are hereby authorized as official signatories for the City:
 - a. Mayor/Tom McKee
 - b. City Administrator/Jason Tobin
 - c. City Clerk/Michelle Friedrich

- 14. **Authorized for funds transfer and inquiry at Farmers State Bank of Hamel**
The following individuals are hereby authorized for funds transfer and inquiry for the City checking and savings accounts at Farmers State Bank of Hamel:
 - a. City Administrator/Jason Tobin
 - b. Administrative Services Director/Kathy Hughes
 - c. Finance Manager/TBD

VOTING AYE

- McKee, Tom
- Bottema, Jon
- Nichols, Jeremy
- Schultz, Alan
- Vehrenkamp, Dean

VOTING NAY

- McKee, Tom
- Bottema, Jon
- Nichols, Jeremy
- Schultz, Alan
- Vehrenkamp, Dean

Whereupon, said Resolution is hereby declared adopted on this 11th day of January, 2024.

Tom McKee – Mayor

ATTEST:

Michelle Friedrich – City Clerk

City Seal



105 South Fifth Avenue
Suite 513
Minneapolis, MN 55401

Tel: 612-252-9070
Web: landform.net

December 12, 2023

Jay Tobin
City of Corcoran
8200 County Road 116
Corcoran, MN 55340

RE: 2024 Landform Rate Schedule

Dear Mr. Tobin,

Thank you for utilizing Landform to provide planning services for the City. Our firm is dedicated to our values of quality, leadership, relationships, mentorship and enthusiasm. We appreciate the opportunity to continue to bring thoughtful planning solutions and add value for you and the community. With the addition of the staff planner in 2021, the City has been able to focus our work efforts on supporting staff in response to development applications and Council direction on ordinance and policy changes. We look forward to working with your team to continue to provide planning and code enforcement services in support of City staff efforts.

As you know, employee recruitment and retention are the greatest challenges facing businesses and cities right now. We are committed to providing the highest quality of client service and our rate schedule allows us to be competitive with other firms and provide a comprehensive range of services through retention of our most talented employees. Our 2024 rates are attached and continue to deeply discount the principal planner rate from our standard municipal rates.

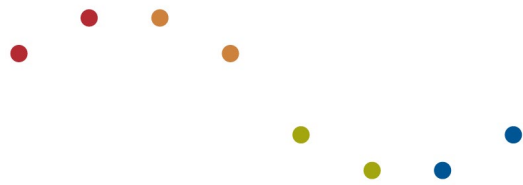
We deeply value our 20+ year relationship with the City of Corcoran and look forward to continuing to provide professional planning services to assist your staff. Landform has a full-time staff of professionals, all of whom are committed to providing services that are truly tailored to the communities we serve and helping our clients plan great places.

If you have any questions or comments, please do not hesitate to call me at 612.638.0225.

Sincerely,
Landform

A handwritten signature in black ink that reads "Kendra Lindahl". The signature is written in a cursive, flowing style.

Kendra Lindahl, AICP
Principal Planner



2024 Corcoran Municipal Rate Schedule

Professional Services Title	Hourly Rates
Senior Principal	\$256
Principal	\$209
<i>Principal Planner*</i>	\$160
Associate	\$165
Studio Lead	\$172
Project Lead/Senior Designer/Senior CAD Manager	\$160
Planning Lead/Senior Planner	\$160
Planner III/Designer III/Survey Technician III	\$122
Planner II/Designer II/Survey Technician II	\$102
Planner I/Designer I/Survey Technician I	\$90
Code Enforcement Services*	\$90
Survey Lead	\$165
Senior Surveyor	\$165
Crew Chief	\$160
Survey Coordinator	\$140
Field Technician	\$75
Construction Administrator III	\$175
Construction Administrator II	\$125
Construction Administrator I	\$105
Accounting/Business/Office Lead	\$105
Office Coordinator	\$100
Administrative Assistant	\$80

**Reduced Principal Planner rate*

1. Attendance at regularly scheduled Planning Commission and City Council meetings will be billed at a flat rate of \$200.00 per meeting.
2. Standard Internal reimbursable expenses associated with prints, plots, scanning and mileage are included in our hourly rates. Deliverable plots and prints will be charged at internal rate.
3. External reimbursable expenses shall be billed at cost plus 15%.



January 3, 2024

Jay Tobin

City Administrator
City of Corcoran
8200 County Road 116
Corcoran, MN 55340

RE: 2024 Letter of Engagement for City Engineering Services

Dear Jay:

We have appreciated the opportunity to serve as the City Engineer since 2009 and we look forward to continuing in that role in 2024. Our engineering team has provided the flexibility, depth and expertise to serve the City on day-to-day engineering services such as development plan review, designing infrastructure improvements, significant water treatment and storage projects, State mandated wetland and stormwater regulations, construction management and trunk system planning along with the other needs of a rapidly growing community. In 2024 we look forward to continuing in those roles as well as provide additional expertise as needed to the City.

Business Model

Our pricing model provides discounted hourly rates while still using experienced municipal and construction engineers and eliminating some charges for City Council meetings, mileage costs, and other miscellaneous items. We are proud of our ability to provide this local service while keeping the cost competitive with other metro firms.

The fee schedule provides a discount of approximately 20% from our standard fee schedule and this can be achieved due to the reliable, steady nature of municipal work combined with our west metro staff that allows for travel and response time efficiency. The model also benefits developers, since they also receive the discounted rate. Some cities prefer a split fee structure which could be discussed in the future.

Hourly Rates

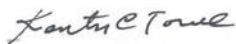
The fees for engineering work is billed on an hourly basis and categories include the range shown on the following list. Our City Engineer rate for 2024 is proposed at \$150 with other key engineering staff billed in accordance with experience and technical skills. The rates in each category are discussed with Corcoran staff for agreement on costs that results in a higher quality of budget management. The monthly billing breakdown ranges from City to developer escrow at 30/70 percentage basis for busy construction months and approximately 50/50 during higher City project design periods. The day-to-day work in Corcoran is typically development driven and Stantec adjusts its staff accordingly.

Category	Typical Hourly Rate
Intern / Clerical	\$85
Field/Technician/ Junior Engineer	\$106-\$130
Project Engineer/ Scientist	\$130-\$158
City Engineer	\$150
Senior Construction Engineer / Manager	\$160
LGU Wetland Specialist	\$150
Senior Principal / Technical Specialist	\$180
Other	
One Person Survey Team with Equipment	\$155
Two Person Survey Team with Equipment	\$215
Specialty Staff and (Structural, electrical/controls, chemical, etc.)	By Project

We look forward to discussing this letter of engagement and another productive year in 2024.

Sincerely,

Stantec Consulting Services Inc.



Kent Torve PE (MN, TX, SD), LEED AP
City Engineer
Phone: 612.209.7919
Kent.torve@stantec.com



Steve Hegland, PE (MN)
Client Manager
Phone: 612-741-6548
steven.hegland@stantec.com

2023 HOURLY RATES for Assigned Staff

Gabrielle Grinde	\$185/hr
Rita Trapp	\$195/hr
Kevin Clarke, Jody Rader	\$135/hr
Tim Solomonson.....	\$125/hr
Hannah Schmitz.....	\$110/hr
Hannah Jonasson, Josiah Clarke	\$90/hr

General rate schedule per job classification and incidental expenses schedule are included on the following page.

HKGi 2023 HOURLY RATES

Principal.....	\$200-290/hr
Associate.....	\$150-200/hr
Senior Professional.....	\$110-160/hr
Professional II.....	\$90-135/hr
Professional I.....	\$50-90/hr
Technical.....	\$50-90/hr
Litigation Services.....	\$250-350/hr
Testimony.....	\$275-375/hr

Incidental Expenses:

Mileage.....	current federal rate/mile
Photocopying BW.....	5¢/page
Photocopying Color.....	25¢/page
Outside Printing.....	Actual Cost
Large Format Scanning.....	Actual Cost
Lodging and meals.....	Actual Cost

ENGAGEMENT LETTER

The Law Firm of Carson, Clelland & Schreder agrees to represent the City of Corcoran for civil legal services and for municipal prosecution services in 2024.

Civil services include meeting attendance, staff consultation and the production of work relating to ordinances, zoning, special assessments, development contracts and other contractual matters. In addition to the before mentioned subjects, any other services as needed and directed by the City Council will be gladly performed. Charges for the civil work will be \$72.50 per hour for paralegal assistant and \$145.00 per hour for attorney.

The criminal prosecution services include the prosecution of petty misdemeanors, misdemeanors and gross misdemeanors as they occur; review and preparation of criminal complaints and consultation and advice with officers and police administration. The prosecution services include vehicle forfeitures. The prosecution services are billed at \$100.00 per hour for attorney and \$40.00 per hour for legal assistant.

The firm will also provide human resources and labor consultation and representation if desired by the City. These services will be billed at the civil rate.

Sincerely,



John J. Thames
on behalf of Carson, Clelland & Schreder

APPROVED BY CITY OF CORCORAN

By: _____
Its Mayor

By: _____
Its Clerk

APPLICATION AND CERTIFICATION FOR PAYMENT

AIA DOCUMENT G702

PAGE ONE OF 10 PAGES

TO OWNER: City of Corcoran
8200 County Road 116
Corcoran, MN 55340

PROJECT: WTP

APPLICATION NO: 8

Distribution to:

- OWNER
- ENGINEER
- CONTRACTOR
- RURAL DEVELOPMENT

FROM CONTRACTOR: Rice Lake
Construction Group

VIA ENGINEER: Stantec

PERIOD TO: 12/31/23

PROJECT NOS: 227704426

CONTRACT FOR: City of Corcoran WTP

CONTRACT DATE: 01.26.23

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract. Continuation Sheet, AIA Document G703, is attached.

1. ORIGINAL CONTRACT SUM	\$	16,728,200.00
2. Net change by Change Orders	\$	0.00
3. CONTRACT SUM TO DATE (Line 1 ± 2)	\$	16,728,200.00
4. TOTAL COMPLETED & STORED TO DATE (Column G on G703)	\$	4,508,352.64
5. RETAINAGE:		
a. 5 % of Completed Work (Column D + E on G703)	\$	225,417.63
Total in Column I of G703)	\$	225,417.63
6. TOTAL EARNED LESS RETAINAGE (Line 4 Less Line 5 Total)	\$	4,282,935.01
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 5+6 from prior Certificate)	\$	3,422,235.01
8. CURRENT PAYMENT DUE	\$	860,700.00
9. BALANCE TO FINISH, NOT INCLUDING RETAINAGE (Line 3 less Line 4)	\$	12,219,847.36

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner		
Total approved this Month		
TOTALS	\$0.00	\$0.00
NET CHANGES by Change Order	\$0.00	

APPROVED BY OWNER _____

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR:

By: **Mark Hinsz** Date: _____
Digitally signed by Mark Hinsz
 DN: C=US, E=mark_hinsz@ricelake.org,
 O=Rice Lake Construction Group,
 CN=Mark Hinsz
 Date: 2023.12.27 13:09:16-06'00'

State of: _____ County of: _____
 Subscribed and sworn to before me this _____ day of _____
 Notary Public:
 My Commission expires:

ENGINEER'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising the application, the Engineer certifies to the Owner that to the best of the Engineer's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED \$ 860,700.00

(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)

ENGINEER:

By: _____ Date: _____

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

ACCEPTED BY AGENCY _____

CONTINUATION SHEET			AIA DOCUMENT G703								
AIA Document G702, APPLICATION AND CERTIFICATION FOR PAYMENT, containing Contractor's signed certification is attached.							APPLICATION NO:		8		
In tabulations below, amounts are stated to the nearest dollar.							APPLICATION DATE:		12/27/23		
Use Column I on Contracts where variable retainage for line items may apply.							PERIOD TO:		12/31/23		
							ENGINEER'S PROJECT NO:		173420014		
A	B	C	D		E	F		G		H	I
ITEM NO.	DESCRIPTION OF WORK	SCHEDULED VALUE	WORK COMPLETED		THIS PERIOD	MATERIALS PRESENTLY STORED	TOTAL COMPLETED AND STORED	% (G ÷ C)	BALANCE TO FINISH (C - G)	RETAINAGE (IF VARIABLE RATE)	
			FROM PREVIOUS APPLICATION	(D + E)		(NOT IN D OR E)	TO DATE (D+E+F)				
1	Insurance	\$100,000.00	\$100,000.00				\$100,000.00	100.00%			
2	Bonds	\$100,000.00	\$100,000.00				\$100,000.00	100.00%			
3	Mobilization	\$350,000.00	\$350,000.00				\$350,000.00	100.00%			
4	Demobilization	\$50,000.00							\$50,000.00		
5	Supervision	\$220,000.00	\$100,000.00	\$10,000.00			\$110,000.00	50.00%	\$110,000.00		
6	Layout/Surveying	\$15,000.00	\$7,000.00	\$500.00			\$7,500.00	50.00%	\$7,500.00		
7	Testing	\$25,000.00	\$10,000.00	\$2,000.00			\$12,000.00	48.00%	\$13,000.00		
8	Temporary Facilities	\$20,000.00	\$7,000.00	\$1,000.00			\$8,000.00	40.00%	\$12,000.00		
9	Winter Conditions	\$50,000.00	\$5,000.00	\$5,000.00			\$10,000.00	20.00%	\$40,000.00		
10	Safety	\$10,000.00	\$3,000.00	\$500.00			\$3,500.00	35.00%	\$6,500.00		
11	Weekly Cleanup (Labor)	\$10,000.00	\$3,000.00	\$500.00			\$3,500.00	35.00%	\$6,500.00		
12	Weekly Cleanup (Material)	\$10,000.00	\$3,000.00	\$500.00			\$3,500.00	35.00%	\$6,500.00		
13	Final Facility Cleaning (L & M)	\$5,000.00							\$5,000.00		
14	Disinfection (L & M)	\$15,000.00							\$15,000.00		
15	Final System Startup	\$5,000.00							\$5,000.00		
16	Allowances	\$50,000.00							\$50,000.00		
17	Capital Purchase Agency Agreement Compliance	\$1,000.00							\$1,000.00		
18	Facility Record Documents	\$500.00							\$500.00		
19	Building Earthwork (L & M)	\$450,000.00	\$375,000.00				\$375,000.00	83.33%	\$75,000.00		
20	Watertightness Testing (L&M)	\$20,000.00	\$6,000.00	\$6,000.00			\$12,000.00	60.00%	\$8,000.00		
21	Structural Testing & Special Inspections (L&M)	\$25,000.00	\$9,000.00	\$2,000.00			\$11,000.00	44.00%	\$14,000.00		
22	Concrete: General Conditions (L)	\$100,000.00	\$65,000.00	\$10,000.00			\$75,000.00	75.00%	\$25,000.00		
23	Concrete: General Conditions (M)	\$100,000.00	\$65,000.00	\$10,000.00			\$75,000.00	75.00%	\$25,000.00		
24	Footings (L)	\$15,000.00							\$15,000.00		
25	Footings (M)	\$25,000.00							\$25,000.00		
26	Waterstop (L)	\$20,000.00	\$12,500.00	\$2,000.00			\$14,500.00	72.50%	\$5,500.00		
27	Waterstop (M)	\$20,000.00	\$15,500.00	\$2,000.00			\$17,500.00	87.50%	\$2,500.00		
28	Detention Tank Walls (L)	\$80,000.00		\$20,000.00			\$20,000.00	25.00%	\$60,000.00		
29	Detention Tank Walls (M)	\$80,000.00		\$20,000.00			\$20,000.00	25.00%	\$60,000.00		
30	Detention Tank Base Slab (L)	\$70,000.00	\$20,000.00	\$50,000.00			\$70,000.00	100.00%			
31	Detention Tank Base Slab (M)	\$70,000.00	\$20,000.00	\$50,000.00			\$70,000.00	100.00%			
32	Filter Room Base Slab (L)	\$90,000.00	\$90,000.00				\$90,000.00	100.00%			
33	Filter Room Base Slab (M)	\$90,000.00	\$90,000.00				\$90,000.00	100.00%			
34	Filter Room Walls (L)	\$70,000.00	\$70,000.00				\$70,000.00	100.00%			
35	Filter Room Walls (M)	\$70,000.00	\$70,000.00				\$70,000.00	100.00%			
36	Lower Level Base Slab (L)	\$130,000.00	\$130,000.00				\$130,000.00	100.00%			
37	Lower Level Base Slab (M)	\$130,000.00	\$130,000.00				\$130,000.00	100.00%			

CONTINUATION SHEET

AIA DOCUMENT G703

AIA Document G702, APPLICATION AND CERTIFICATION FOR PAYMENT, containing Contractor's signed certification is attached.
 In tabulations below, amounts are stated to the nearest dollar.
 Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO: 8
 APPLICATION DATE: 12/27/23
 PERIOD TO: 12/31/23
 ENGINEER'S PROJECT NO: 173420014

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		F MATERIALS PRESENTLY STORED (NOT IN D OR E)	G TOTAL COMPLETED AND STORED TO DATE (D+E+F)		H BALANCE TO FINISH (C - G)	I RETAINAGE (IF VARIABLE RATE)
			FROM PREVIOUS APPLICATION (D + E)	THIS PERIOD		% (G ÷ C)	%		
38	Main Level Base Slab (L)	\$90,000.00	\$20,000.00	\$50,000.00		\$70,000.00	77.78%	\$20,000.00	
39	Main Level Base Slab (M)	\$90,000.00	\$20,000.00	\$50,000.00		\$70,000.00	77.78%	\$20,000.00	
40	Main Level Walls (L)	\$80,000.00						\$80,000.00	
41	Main Level Walls (M)	\$80,000.00						\$80,000.00	
42	Upper Level Concrete Decks (L)	\$130,000.00						\$130,000.00	
43	Upper Level Concrete Decks (M)	\$130,000.00						\$130,000.00	
44	Topping Slabs (L)	\$40,000.00						\$40,000.00	
45	Topping Slabs (M)	\$40,000.00						\$40,000.00	
46	Sidewalks (L & M)	\$10,000.00						\$10,000.00	
47	Misc. Walls (L)	\$5,000.00						\$5,000.00	
48	Misc. Walls (M)	\$5,000.00						\$5,000.00	
49	Building Reinforcing Steel (L)	\$60,000.00	\$20,000.00	\$20,000.00		\$40,000.00	66.67%	\$20,000.00	
50	Building Reinforcing Steel (M)	\$60,000.00	\$40,000.00	\$10,000.00		\$50,000.00	83.33%	\$10,000.00	
51	Precast Plank -- (L)	\$25,000.00						\$25,000.00	
52	Precast Plank -- (M)	\$100,000.00						\$100,000.00	
53	Rub/Patch Walls (L & M)	\$40,000.00	\$4,000.00			\$4,000.00	10.00%	\$36,000.00	
54	Misc. Concrete (L & M)	\$5,000.00						\$5,000.00	
55	Water Cure (L & M)	\$5,000.00	\$2,500.00	\$500.00		\$3,000.00	60.00%	\$2,000.00	
56	Clearwell Bottom Slab (L)	\$80,000.00	\$80,000.00			\$80,000.00	100.00%		
57	Clearwell Bottom Slab (M)	\$80,000.00	\$80,000.00			\$80,000.00	100.00%		
58	Clearwell Walls (L)	\$80,000.00	\$80,000.00			\$80,000.00	100.00%		
59	Clearwell Walls (M)	\$80,000.00	\$80,000.00			\$80,000.00	100.00%		
60	Clearwell Deck (L)	\$80,000.00	\$20,000.00	\$30,000.00		\$50,000.00	62.50%	\$30,000.00	
61	Clearwell Deck (M)	\$80,000.00	\$20,000.00	\$30,000.00		\$50,000.00	62.50%	\$30,000.00	
62	Clearwell Reinforcing Steel (L)	\$60,000.00	\$60,000.00			\$60,000.00	100.00%		
63	Clearwell Reinforcing Steel (M)	\$60,000.00	\$60,000.00			\$60,000.00	100.00%		
64	Backwash Tank Bottom Slab (L)	\$60,000.00	\$60,000.00			\$60,000.00	100.00%		
65	Backwash Tank Bottom Slab (M)	\$60,000.00	\$60,000.00			\$60,000.00	100.00%		
66	Backwash Tank Walls (L)	\$70,000.00	\$70,000.00			\$70,000.00	100.00%		
67	Backwash Tank Walls (M)	\$70,000.00	\$70,000.00			\$70,000.00	100.00%		
68	Backwash Tank Deck (L)	\$50,000.00	\$15,000.00	\$35,000.00		\$50,000.00	100.00%		
69	Backwash Tank Deck (M)	\$50,000.00	\$30,000.00	\$20,000.00		\$50,000.00	100.00%		
70	Backwash Tank Reinforce Steel (L)	\$40,000.00	\$40,000.00			\$40,000.00	100.00%		
71	Backwash Tank Reinforce Steel(M)	\$40,000.00	\$40,000.00			\$40,000.00	100.00%		
72	Concrete Outfall Structure (L)	\$5,000.00						\$5,000.00	
73	Concrete Outfall Structure (M)	\$5,000.00						\$5,000.00	
74	Masonry: General Conditions (L)	\$15,000.00						\$15,000.00	

CONTINUATION SHEET

AIA DOCUMENT G703

AIA Document G702, APPLICATION AND CERTIFICATION FOR PAYMENT, containing Contractor's signed certification is attached.
 In tabulations below, amounts are stated to the nearest dollar.
 Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO: 8
 APPLICATION DATE: 12/27/23
 PERIOD TO: 12/31/23
 ENGINEER'S PROJECT NO: 173420014

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		F MATERIALS PRESENTLY STORED (NOT IN D OR E)	G		H BALANCE TO FINISH (C - G)	I RETAINAGE (IF VARIABLE RATE)
			FROM PREVIOUS APPLICATION (D + E)	THIS PERIOD		TOTAL COMPLETED AND STORED TO DATE (D+E+F)	% (G ÷ C)		
75	Masonry: General Conditions (M)	\$125,000.00						\$125,000.00	
76	Masonry: Exterior (L)	\$225,000.00						\$225,000.00	
77	Masonry: Exterior (M)	\$150,000.00						\$150,000.00	
78	Cavity Wall Insulation (L)	\$10,000.00						\$10,000.00	
79	Cavity Wall Insulation (M)	\$10,000.00						\$10,000.00	
80	Masonry: Interior (L)	\$65,000.00						\$65,000.00	
81	Masonry: Interior (M)	\$65,000.00						\$65,000.00	
82	Metals: General Conditions (L)	\$15,000.00	\$2,500.00	\$1,000.00		\$3,500.00	23.33%	\$11,500.00	
83	Metals: General Conditions (M)	\$175,000.00	\$25,000.00	\$2,500.00		\$27,500.00	15.71%	\$147,500.00	
84	Exterior Handrails/Stairs/Ladders (L & M)	\$25,000.00						\$25,000.00	
85	Interior Handrails/Stairs/Ladders (L&M)	\$45,000.00						\$45,000.00	
86	Metal Grating (L)	\$25,000.00						\$25,000.00	
87	Misc. Metals (L)	\$25,000.00						\$25,000.00	
88	Interior Access Hatches (L & M)	\$5,000.00						\$5,000.00	
89	Exterior Access Hatches (L & M)	\$5,000.00						\$5,000.00	
90	Wood Trusses (L)	\$20,000.00						\$20,000.00	
91	Wood Trusses (M)	\$30,000.00						\$30,000.00	
92	Rough Carpentry (L)	\$65,000.00						\$65,000.00	
93	Rough Carpentry (M)	\$35,000.00						\$35,000.00	
94	Finish Carpentry (L)	\$15,000.00						\$15,000.00	
95	Finish Carpentry (M)	\$15,000.00						\$15,000.00	
96	Plastic Fabrication (L)	\$1,500.00						\$1,500.00	
97	Plastic Fabrication (M)	\$1,500.00						\$1,500.00	
98	Fiberglass Grating (L)	\$8,500.00						\$8,500.00	
99	Fiberglass Grating (M)	\$25,000.00						\$25,000.00	
100	Dampproofing (L & M)	\$45,000.00						\$45,000.00	
101	Membrane Waterproofing (L&M)	\$125,000.00	\$80,000.00			\$80,000.00	64.00%	\$45,000.00	
102	Fluid Applied Waterproofing (L & M)	\$45,000.00						\$45,000.00	
103	Clearwell Insulation (L & M)	\$35,000.00	\$30,000.00			\$30,000.00	85.71%	\$5,000.00	
104	Backwash Tank Insulation (L & M)	\$35,000.00	\$30,000.00			\$30,000.00	85.71%	\$5,000.00	
105	Building Perimeter Insulation (L & M)	\$35,000.00		\$10,000.00		\$10,000.00	28.57%	\$25,000.00	
106	Translucent Wall Panels (L & M)	\$45,000.00						\$45,000.00	
107	Fiber Cement Siding (L&M)	\$45,000.00						\$45,000.00	
108	TPO Roofing (L&M)	\$181,000.00						\$181,000.00	
109	Firestopping (L & M)	\$5,000.00						\$5,000.00	
110	Metal Roofing (L & M)	\$125,000.00						\$125,000.00	
111	Metal Roofing Flashing & Trim (L&M)	\$15,000.00						\$15,000.00	

CONTINUATION SHEET

AIA DOCUMENT G703

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 Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO: 8
 APPLICATION DATE: 12/27/23
 PERIOD TO: 12/31/23
 ENGINEER'S PROJECT NO: 173420014

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		F MATERIALS PRESENTLY STORED (NOT IN D OR E)	G		H BALANCE TO FINISH (C - G)	I RETAINAGE (IF VARIABLE RATE)
			FROM PREVIOUS APPLICATION (D + E)	THIS PERIOD		TOTAL COMPLETED AND STORED TO DATE (D+E+F)	% (G ÷ C)		
112	Snow Retention System (L&M)	\$5,000.00						\$5,000.00	
113	Joint Sealers (L & M)	\$35,000.00						\$35,000.00	
114	Steel Doors and Frames (L)	\$25,000.00						\$25,000.00	
115	Steel Doors and Frames (M)	\$45,000.00						\$45,000.00	
116	FRP Doors and Frames (L)	\$7,000.00						\$7,000.00	
117	FRP Doors and Frames (M)	\$45,000.00						\$45,000.00	
118	Door Hardware (L&M)	\$20,000.00						\$20,000.00	
119	Overhead Doors (L&M)	\$27,000.00						\$27,000.00	
120	Painting (L&M)	\$264,000.00						\$264,000.00	
121	Windows (L & M)	\$25,000.00						\$25,000.00	
122	Gypsum Drywall (L & M)	\$5,000.00						\$5,000.00	
123	Acoustical Ceilings (L & M)	\$3,500.00						\$3,500.00	
124	Floor Treatment (L&M)	\$1,500.00						\$1,500.00	
125	Concrete and Masonry Sealer (L)	\$1,500.00						\$1,500.00	
126	Concrete and Masonry Sealer (M)	\$1,500.00						\$1,500.00	
127	Painting (L)	\$500.00						\$500.00	
128	Painting (M)	\$500.00						\$500.00	
129	Louvers/Vents (L & M)	\$13,000.00						\$13,000.00	
130	Signs (L & M)	\$5,000.00						\$5,000.00	
131	Subgrade Preparation (L)	\$15,000.00						\$15,000.00	
132	Aggregate Base (L & M)	\$25,000.00						\$25,000.00	
133	Site Preparation (L & M)	\$15,000.00						\$15,000.00	
134	Underground Water Main (L & M)	\$350,000.00						\$350,000.00	
135	Water Main Valves and Hydrant (L & M)	\$35,000.00						\$35,000.00	
136	Storm Sewer (L&M)	\$125,000.00						\$125,000.00	
137	Sanitary Sewer (L & M)	\$350,000.00						\$350,000.00	
138	Irrigation (L&M)	\$25,000.00						\$25,000.00	
139	Dewatering (L&M)	\$50,000.00	\$25,000.00			\$25,000.00	50.00%	\$25,000.00	
140	Erosion & Sediment Control (L&M)	\$5,000.00	\$5,000.00			\$5,000.00	100.00%		
141	Riprap (L&M)	\$5,000.00						\$5,000.00	
142	Flexible Paving (L&M)	\$95,000.00						\$95,000.00	
143	Concrete Paving (L&M)	\$35,000.00						\$35,000.00	
144	Concrete Curb & Gutter (L&M)	\$25,000.00						\$25,000.00	
145	Pavement Markings (L&M)	\$2,000.00						\$2,000.00	
146	Fences & Gates (L&M)	\$20,000.00						\$20,000.00	
147	Seeding & Restoration (L&M)	\$35,000.00						\$35,000.00	
148	Vegetation Establishment & Maintenance (L&M)	\$5,000.00						\$5,000.00	

CONTINUATION SHEET

AIA DOCUMENT G703

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 Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO: 8
 APPLICATION DATE: 12/27/23
 PERIOD TO: 12/31/23
 ENGINEER'S PROJECT NO: 173420014

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		F MATERIALS PRESENTLY STORED (NOT IN D OR E)	G		H BALANCE TO FINISH (C - G)	I RETAINAGE (IF VARIABLE RATE)
			FROM PREVIOUS APPLICATION (D + E)	THIS PERIOD		TOTAL COMPLETED AND STORED TO DATE (D+E+F)	% (G ÷ C)		
149	Plants (L&M)	\$35,000.00						\$35,000.00	
150	Filter Equipment (L)	\$50,000.00						\$50,000.00	
151	Filter Equipment (M)	\$850,000.00	\$70,352.64			\$70,352.64	8.28%	\$779,647.36	
152	Filter Controls (L)	\$50,000.00						\$50,000.00	
153	Filter Controls (M)	\$50,000.00						\$50,000.00	
154	Filter System Startup	\$2,500.00						\$2,500.00	
155	Filter Equipment O&M's	\$500.00						\$500.00	
156	High Service Pumps (L)	\$15,000.00						\$15,000.00	
157	High Service Pumps (M)	\$150,000.00						\$150,000.00	
158	High Service Pumps O&M's	\$500.00						\$500.00	
159	High Service Pumps Testing and Startup	\$2,500.00						\$2,500.00	
160	Backwash Pump (L)	\$5,000.00						\$5,000.00	
161	Backwash Pump (M)	\$55,000.00						\$55,000.00	
162	Backwash Pump Testing and Startup	\$2,500.00						\$2,500.00	
163	Backwash Pump O&M's	\$500.00						\$500.00	
164	Well Pump (L)	\$5,000.00						\$5,000.00	
165	Well Pump (M)	\$45,000.00						\$45,000.00	
166	Well Pump Testing and Startup	\$5,000.00						\$5,000.00	
167	Well Pump O&M's	\$500.00						\$500.00	
168	Valve Vault (L)	\$15,000.00						\$15,000.00	
169	Valve Vault (M)	\$15,000.00						\$15,000.00	
170	Pre-Engineered Building (L)	\$15,000.00						\$15,000.00	
171	Pre-Engineered Building (M)	\$450,000.00						\$450,000.00	
172	Submersible Pumps (L)	\$5,000.00						\$5,000.00	
173	Submersible Pumps (M)	\$20,000.00						\$20,000.00	
174	Submersible Pumps Testing and Startup	\$500.00						\$500.00	
175	Submersible Pumps O&M's	\$250.00						\$250.00	
176	Potassium Permanganate Feed Equipment (L)	\$5,000.00						\$5,000.00	
177	Potassium Permanganate Equipment (M)	\$20,000.00						\$20,000.00	
178	Potassium Permanganate Feed Equipment Startup	\$1,000.00						\$1,000.00	
179	Potassium Permanganate Equipment O&M's	\$500.00						\$500.00	
180	Chlorine Gas Feed Equipment (L)	\$5,000.00						\$5,000.00	
181	Chlorine Gas Equipment (M)	\$20,000.00						\$20,000.00	
182	Chlorine Gas Feed Equipment Startup	\$1,000.00						\$1,000.00	
183	Chlorine Gas Equipment O&M's	\$500.00						\$500.00	
184	Polyphosphate Feed Equipment (L)	\$5,000.00						\$5,000.00	
185	Polyphosphate Feed Equipment (M)	\$20,000.00						\$20,000.00	

CONTINUATION SHEET

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APPLICATION NO: 8
 APPLICATION DATE: 12/27/23
 PERIOD TO: 12/31/23
 ENGINEER'S PROJECT NO: 173420014

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		F MATERIALS PRESENTLY STORED (NOT IN D OR E)	G		H BALANCE TO FINISH (C - G)	I RETAINAGE (IF VARIABLE RATE)
			FROM PREVIOUS APPLICATION (D + E)	THIS PERIOD		TOTAL COMPLETED AND STORED TO DATE (D+E+F)	% (G ÷ C)		
186	Polyphosphate Feed Equipment Startup	\$1,000.00						\$1,000.00	
187	Polyphosphate Feed Equipment O&M's	\$500.00						\$500.00	
188	Fluoride Feed Equipment (L)	\$5,000.00						\$5,000.00	
189	Fluoride Feed Equipment (M)	\$20,000.00						\$20,000.00	
190	Fluoride Feed Equipment Startup	\$1,000.00						\$1,000.00	
191	Fluoride Feed Equipment O&M's	\$500.00						\$500.00	
192	Initial Supply of Chemicals (L&M)	\$15,000.00						\$15,000.00	
193	Blower (L)	\$5,000.00						\$5,000.00	
194	Blower (M)	\$35,000.00						\$35,000.00	
195	Blower Startup	\$1,000.00						\$1,000.00	
196	Blower O&M's	\$500.00						\$500.00	
197	Blower Vibration Tests	\$250.00						\$250.00	
198	Cranes, Hoists, Lifting Hooks (L&M)	\$5,000.00		\$2,500.00		\$2,500.00	50.00%	\$2,500.00	
199	Window Treatments (L & M)	\$500.00						\$500.00	
200	Lab Furniture (L & M)	\$1,000.00						\$1,000.00	
201	Magnetic Flow Meters (L&M)	\$5,000.00						\$5,000.00	
202	Magnetic Flow Meters Startup	\$500.00						\$500.00	
203	Magnetic Flow Meters O&M's	\$500.00						\$500.00	
204	Mechanical: General Conditions	\$50,000.00	\$2,000.00	\$2,000.00		\$4,000.00	8.00%	\$46,000.00	
205	Metallic Process Pipe/Fittings (L)	\$850,000.00	\$30,000.00	\$15,000.00		\$45,000.00	5.29%	\$805,000.00	
206	Metallic Process Pipe/Fittings (M)	\$2,375,000.00	\$275,000.00	\$275,000.00		\$550,000.00	23.16%	\$1,825,000.00	
207	Plastic Process Piping/Fittings (M)	\$150,000.00						\$150,000.00	
208	Plastic Process Piping/Fittings (M)	\$150,000.00						\$150,000.00	
209	Pipe Identification (L)	\$5,000.00						\$5,000.00	
210	Pipe Identification (M)	\$5,000.00						\$5,000.00	
211	Valves and Accessories (L)	\$25,000.00						\$25,000.00	
212	Valves and Accessories (M)	\$85,000.00						\$85,000.00	
213	Gauges (L)	\$5,000.00						\$5,000.00	
214	Gauges (M)	\$5,000.00						\$5,000.00	
215	Record Plan Process Drawings	\$250.00						\$250.00	
216	Pipe Insulation (L & M)	\$35,000.00						\$35,000.00	
217	Sanitary Below Ground (L)	\$45,000.00	\$22,500.00	\$22,500.00		\$45,000.00	100.00%		
218	Sanitary Below Ground (M)	\$45,000.00	\$22,500.00	\$22,500.00		\$45,000.00	100.00%		
219	Sanitary Above Ground (L)	\$55,000.00		\$2,000.00		\$2,000.00	3.64%	\$53,000.00	
220	Sanitary Above Ground (M)	\$55,000.00		\$2,000.00		\$2,000.00	3.64%	\$53,000.00	
221	Facility Storm Drainage (L)	\$35,000.00	\$15,000.00	\$10,000.00		\$25,000.00	71.43%	\$10,000.00	
222	Facility Storm Drainage (M)	\$35,000.00	\$15,000.00	\$10,000.00		\$25,000.00	71.43%	\$10,000.00	

CONTINUATION SHEET

AIA DOCUMENT G703

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 In tabulations below, amounts are stated to the nearest dollar.
 Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO: 8
 APPLICATION DATE: 12/27/23
 PERIOD TO: 12/31/23
 ENGINEER'S PROJECT NO: 173420014

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		F MATERIALS PRESENTLY STORED (NOT IN D OR E)	G		H BALANCE TO FINISH (C - G)	I RETAINAGE (IF VARIABLE RATE)
			FROM PREVIOUS APPLICATION (D + E)	THIS PERIOD		TOTAL COMPLETED AND STORED TO DATE (D+E+F)	% (G ÷ C)		
223	Water Piping (L)	\$45,000.00						\$45,000.00	
224	Water Piping (M)	\$45,000.00						\$45,000.00	
225	Clean-Outs (L)	\$2,500.00		\$500.00		\$500.00	20.00%	\$2,000.00	
226	Clean-Outs (M)	\$2,500.00		\$500.00		\$500.00	20.00%	\$2,000.00	
227	Floor Drains (L)	\$5,000.00	\$2,000.00	\$1,500.00		\$3,500.00	70.00%	\$1,500.00	
228	Floor Drains (M)	\$15,000.00	\$6,000.00	\$1,500.00		\$7,500.00	50.00%	\$7,500.00	
229	Wall Hydrants (L)	\$5,000.00						\$5,000.00	
230	Wall Hydrants (M)	\$5,000.00						\$5,000.00	
231	Plumbing Fixtures (L)	\$5,000.00						\$5,000.00	
232	Plumbing Fixtures (M)	\$15,000.00						\$15,000.00	
233	Sump Pumps (L)	\$15,000.00	\$11,000.00			\$11,000.00	73.33%	\$4,000.00	
234	Sump Pumps (M)	\$25,000.00	\$19,000.00			\$19,000.00	76.00%	\$6,000.00	
235	Water Heaters (L)	\$5,000.00						\$5,000.00	
236	Water Heaters (M)	\$25,000.00						\$25,000.00	
237	Sample Taps, Lines and Valves (L)	\$5,000.00						\$5,000.00	
238	Sample Taps, Lines and Valves (M)	\$5,000.00						\$5,000.00	
239	Record Plumbing Drawings	\$250.00						\$250.00	
240	Sheet Metal (L)	\$155,000.00						\$155,000.00	
241	Sheet Metal (M)	\$25,000.00						\$25,000.00	
242	Chimneys (L)	\$5,000.00						\$5,000.00	
243	Chimneys (M)	\$5,000.00						\$5,000.00	
244	Dampers (L)	\$5,000.00						\$5,000.00	
245	Dampers (M)	\$5,000.00						\$5,000.00	
246	Duct Insulation (L & M)	\$25,000.00						\$25,000.00	
247	Grilles/Registers/Diffusers (L)	\$5,000.00						\$5,000.00	
248	Grilles/Registers/Diffusers (M)	\$5,000.00						\$5,000.00	
249	Fans (L)	\$5,000.00						\$5,000.00	
250	Fans (M)	\$5,000.00						\$5,000.00	
251	Fans Startup	\$250.00						\$250.00	
252	Fans O & M Manuals	\$250.00						\$250.00	
253	Rooftop Units (L)	\$5,000.00						\$5,000.00	
254	Rooftop Units (M)	\$25,000.00						\$25,000.00	
255	Unit Heaters (L)	\$5,000.00						\$5,000.00	
256	Unit Heaters (M)	\$25,000.00						\$25,000.00	
257	Unit Heaters Startup	\$250.00						\$250.00	
258	Unit Heaters O & M Manuals	\$250.00						\$250.00	
259	Dehumidifier (L)	\$50.00						\$50.00	

CONTINUATION SHEET			<i>AIA DOCUMENT G703</i>			
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In tabulations below, amounts are stated to the nearest dollar.					APPLICATION DATE:	12/27/23
Use Column I on Contracts where variable retainage for line items may apply.					PERIOD TO:	12/31/23
					ENGINEER'S PROJECT NO:	173420014

A	B	C	D		E	F		G		H	I
ITEM NO.	DESCRIPTION OF WORK	SCHEDULED VALUE	FROM PREVIOUS APPLICATION	THIS PERIOD		MATERIALS PRESENTLY STORED	TOTAL COMPLETED AND STORED	% (G ÷ C)		BALANCE TO FINISH (C - G)	RETAINAGE (IF VARIABLE RATE)
			(D + E)			(NOT IN D OR E)	TO DATE (D+E+F)				
260	Dehumidifier (M)	\$50.00								\$50.00	
261	Dehumidifier O&M's	\$50.00								\$50.00	
262	Dehumidifier Start Up	\$50.00								\$50.00	
263	Temperature Control (L & M)	\$15,000.00								\$15,000.00	
264	Temperature Controls Startup	\$5,000.00								\$5,000.00	
265	Temperature Controls O&M's	\$250.00								\$250.00	
266	Record HVAC Drawings	\$250.00								\$250.00	
267	Electrical: General Conditions	\$300,000.00	\$37,000.00	\$2,000.00			\$39,000.00	13.00%		\$261,000.00	
268	Temporary Electrical	\$50,000.00	\$50,000.00				\$50,000.00	100.00%			
269	Plant Controls (L)	\$65,000.00								\$65,000.00	
270	Plant Controls (M)	\$125,000.00								\$125,000.00	
271	Interior Fixtures and Lamps (L)	\$22,000.00								\$22,000.00	
272	Interior Fixtures and Lamps (M)	\$35,000.00								\$35,000.00	
273	Exterior Fixtures and Lamps (L)	\$5,000.00								\$5,000.00	
274	Exterior Fixtures and Lamps (M)	\$10,000.00								\$10,000.00	
275	Distribution Equipment (L)	\$125,000.00								\$125,000.00	
276	Distribution Equipment (M)	\$500,000.00		\$78,000.00			\$78,000.00	15.60%		\$422,000.00	
277	Branch/Feeder Circuits (L)	\$40,000.00		\$5,000.00			\$5,000.00	12.50%		\$35,000.00	
278	Branch/Feeder Circuits (M)	\$25,000.00		\$2,500.00			\$2,500.00	10.00%		\$22,500.00	
279	Generator (L)	\$10,000.00								\$10,000.00	
280	Generator (M)	\$125,000.00								\$125,000.00	
281	Fire Alarm (L&M)	\$1,000.00								\$1,000.00	
282	Security (L&M)	\$15,000.00								\$15,000.00	
283	Telephone (L&M)	\$5,000.00								\$5,000.00	
284	Card Access System (L&M)	\$15,000.00								\$15,000.00	
285	Plant Controls (L)	\$35,000.00								\$35,000.00	
286	Plant Controls (M)	\$125,000.00								\$125,000.00	
287	Computer Equipment (L&M)	\$70,000.00								\$70,000.00	
288	Electrical Record Drawings	\$500.00								\$500.00	
289	Plant Controls (M)	\$5,000.00								\$5,000.00	
290	Remote Site RTU's (L)	\$5,000.00								\$5,000.00	
291	Remote Site RTU's (M)	\$5,000.00								\$5,000.00	
292	Facility Controls Startup (L&M)	\$5,000.00								\$5,000.00	
293	Record Plant Control Documents	\$500.00								\$500.00	
294	Record Electrical Conduit and Wire Drawings	\$500.00								\$500.00	
295	Change Orders	\$0.00									

CONTINUATION SHEET			<i>AIA DOCUMENT G703</i>			
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					ENGINEER'S PROJECT NO:	173420014

A	B	C	D	E	F	G	H	I	
ITEM NO.	DESCRIPTION OF WORK	SCHEDULED VALUE	FROM PREVIOUS APPLICATION (D + E)	THIS PERIOD	MATERIALS PRESENTLY STORED (NOT IN D OR E)	TOTAL COMPLETED AND STORED TO DATE (D+E+F)	% (G ÷ C)	BALANCE TO FINISH (C - G)	RETAINAGE (IF VARIABLE RATE)
	GRAND TOTALS	\$16,728,200.00	\$3,602,352.64	\$906,000.00	\$0.00	\$4,508,352.64		\$12,219,847.36	

Users may obtain validation of this document by requesting of the license a completed AIA Document D401 - Certification of Document's Authenticity



Memo

To: Kevin Mattson, PE, PW Director From: Steve Hegland, PE
 Nick Wyers, PE
 Project/File: 227705033 Date: January 3, 2024
 Subject: Pay Request #2 to S.M. Hentges & Sons – Street and Utility Construction for City Center Drive and 79th Place

Council Action Requested

Staff is recommending the City Council Approve Pay Application #2 for the Street and Utility Construction for City Center Drive and 79th Place to S.M. Hentges & Sons in the amount of \$1,542,769.17.

Summary

The contractor S.M.Hentges & Sons has completed the sanitary and water utilities on this project. Additionally, they have completed a significant amount of the site grading, road construction to gravel and storm sewer. The signed payment request form and pay application is attached for review. Below is a summary of the work completed to date:

Total Contract Value to Date	\$5,687,289.81
Work Completed to Date	\$2,835,620.04
5% Retainage	\$141,781.00
Amount Paid to Date	\$1,151,069.87
Total Pay App #2	\$1,542,769.17

Engineer’s Recommendation

We recommend approving Pay Request #2 to S. M. Hentges & Sons in the amount of \$1,542,769.17.

SECTION 00 62 76
APPLICATION FOR PAYMENT FORM

OWNER: City of Corcoran
PROJECT: Street and Utility Construction for City Center Drive and 79th Place
CONTRACTOR: S.M. Hentges & Sons, Inc.

PAY ESTIMATE NO. 2

Original Contract Amount:	<u>\$ 5,555,276.81</u>
Contract Changes approved to Date (List Change Order Numbers): CO #1	<u>\$ 132,013.00</u>
Revised Contract Price :	<u>\$ 5,687,289.81</u>
Work Completed to Date (attached):	<u>\$ 2,835,620.04</u>
Retainage to Date, 5%:	<u>\$ 141,781.00</u>
Work Completed to Date Less Retainage to Date:	<u>\$ 2,693,839.04</u>
Total Amount Previously Certified:	<u>\$ 1,151,069.87</u>
Payment Request This Estimate:	<u>\$ 1,542,769.17</u>

I declare under penalty of perjury that this account, claim, or demand is just and correct and that no part of it has been paid.

CONTRACTOR

CERTIFICATE OF CONTRACTOR

I hereby certify that the work and the materials supplied to date, as shown on the request for payment, represents the actual value of accomplishment under the terms of the contract dated 08/24/2023 between between the City of Corcoran (OWNER) and S.M. Hentges & Sons, Inc. (CONTRACTOR) and all authorized changes therto:

SM Hentges & Sons, Inc.

By Dustin Goranson

Title Project Manager

Approval:

(CONTRACTOR)	_____	Date	1/3/2024 _____
STANTEC CONSULTING SERVICES, INC.	_____	Date	1/3/2024 _____
CITY OF CORCORAN	_____	Date	_____ _____

END OF SECTION

Pay Request #2
City of Corcoran
Street and Utility Construction for City Center Drive and 79th Place
Project Number: 227705033
1/9/2024

LINE NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE	COMPLETED TO DATE		Less Previous Payments		PAY REQUEST #2 JANUARY 2024		
						QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	
BASE BID:												
1	MOBILIZATION	LUMP SUM	1	\$	150,000.00	0.5	\$ 75,000.00	0.5	\$ 75,000.00	0.00	\$ -	
2	PAVEMENT MARKING REMOVAL	LIN FT	8119	\$	0.80	\$ 6,495.20	0	\$ -	0.0	\$ -	\$ -	
3	SALVAGE SIGN	EACH	4	\$	41.00	\$ 164.00	1	\$ 41.00	1.0	\$ 41.00	0.0	\$ -
4	REMOVE SIGN	EACH	3	\$	41.00	\$ 123.00	0	\$ -	0.0	\$ -	0.0	\$ -
5	REMOVE CATCH BASIN	EACH	1	\$	330.00	\$ 330.00	1	\$ 330.00	0.0	\$ -	1.0	\$ 330.00
6	REMOVE SEPTIC TANK	LUMP SUM	1	\$	10,000.00	\$ 10,000.00	1	\$ 10,000.00	0.0	\$ -	1.0	\$ 10,000.00
7	REMOVE CURB AND GUTTER	LIN FT	30	\$	12.90	\$ 387.00	259	\$ 3,294.00	32.0	\$ 415.20	2.0	\$ 25.80
8	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	2618	\$	3.00	\$ 7,854.00	0	\$ -	0.0	\$ -	0.0	\$ -
9	REMOVE CULVERT	LIN FT	236	\$	8.00	\$ 1,888.00	166	\$ 1,328.00	166.0	\$ 1,328.00	0.0	\$ -
10	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	30	\$	4.00	\$ 120.00	21.5	\$ 86.00	0.0	\$ -	21.5	\$ 86.00
11	REMOVE BITUMINOUS PAVEMENT	SQ YD	2770	\$	4.00	\$ 11,080.00	0	\$ -	0.0	\$ -	0.0	\$ -
12	MILL BITUMINOUS PAVEMENT 2" DEPTH	SQ YD	560	\$	16.00	\$ 9,060.00	0	\$ -	0.0	\$ -	0.0	\$ -
13	REMOVE GRAVEL SURFACING	SQ YD	829	\$	2.00	\$ 1,658.00	0	\$ -	0.0	\$ -	0.0	\$ -
14	REMOVE TREE	EACH	90	\$	32.00	\$ 3,480.00	92	\$ 3,514.00	92.0	\$ 3,514.00	0.0	\$ -
15	STRIP, STOCKPILE, AND RESPREAD TOPSOIL	LUMP SUM	1	\$	45,000.00	\$ 45,000.00	0.5	\$ 22,500.00	0.0	\$ -	0.5	\$ 22,500.00
16	GRANULAR BORROW	TON	170	\$	30.00	\$ 5,100.00	0	\$ -	0.0	\$ -	0.0	\$ -
17	COMMON TOPSOIL BORROW SPECIAL	CU YD	900	\$	16.00	\$ 14,400.00	0	\$ -	0.0	\$ -	0.0	\$ -
18	SELECT GRANULAR BORROW MOD 5%	TON	8280	\$	19.00	\$ 157,320.00	7726	\$ 146,794.00	0.0	\$ -	7,726.0	\$ 146,794.00
19	STABILIZING AGGREGATE, 3" MINUS	TON	854	\$	34.00	\$ 29,036.00	291	\$ 9,894.00	0.0	\$ -	291.0	\$ 9,894.00
20	EXCAVATION - COMMON	CU YD	7925	\$	6.00	\$ 47,550.00	4755	\$ 28,530.00	0.0	\$ -	4,755.0	\$ 28,530.00
21	COMMON EMBANKMENT	CU YD	4265	\$	4.70	\$ 20,095.50	2559	\$ 12,027.30	0.0	\$ -	2,559.0	\$ 12,027.30
22	HAIL & DISPOSE OF EXCAVATED MATERIAL	SQ YD	3680	\$	15.00	\$ 54,900.00	6753	\$ 101,295.00	0.0	\$ -	6,753.0	\$ 101,295.00
23	GEOTEXTILE FABRIC TYPE 5	CU YD	18255	\$	1.80	\$ 32,859.00	15527	\$ 27,948.60	0.0	\$ -	15,527.0	\$ 27,948.60
24	SOIL STABILIZATION GEOGRID	SQ YD	1050	\$	3.50	\$ 3,675.00	0	\$ -	0.0	\$ -	0.0	\$ -
25	AGGREGATE SURFACING CLASS 2	TON	160	\$	50.00	\$ 8,000.00	0	\$ -	0.0	\$ -	0.0	\$ -
26	STREET SWEEPER (WITH PICKUP BROOM)	HR	65	\$	180.00	\$ 11,700.00	1.5	\$ 270.00	1.5	\$ 270.00	0.0	\$ -
27	WATER	MGAL	65	\$	65.00	\$ 4,225.00	0	\$ -	0.0	\$ -	0.0	\$ -
28	AGGREGATE BASE CLASS 5	TON	3300	\$	25.00	\$ 82,500.00	10000	\$ 250,000.00	0.0	\$ -	10,000.0	\$ 250,000.00
29	BITUMINOUS MATERIAL FOR TACK COAT	TON	1780	\$	4.00	\$ 7,140.00	0	\$ -	0.0	\$ -	0.0	\$ -
30	TYPE SP 12.5 NON WEARING COURSE MIXTURE (3,C)	TON	3625	\$	97.70	\$ 354,162.50	0	\$ -	0.0	\$ -	0.0	\$ -
31	TYPE SP 12.5 WEARING COURSE MIXTURE (3,C)	TON	1055	\$	101.00	\$ 106,555.00	0	\$ -	0.0	\$ -	0.0	\$ -
32	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)	TON	1045	\$	106.00	\$ 110,770.00	0	\$ -	0.0	\$ -	0.0	\$ -
33	24" RC FLARED END SECTION W/ TRASH GUARD	EACH	2	\$	3,000.00	\$ 6,000.00	2	\$ 6,000.00	2.0	\$ 6,000.00	0.0	\$ -
34	30" RC FLARED END SECTION	EACH	1	\$	2,000.00	\$ 2,000.00	1	\$ 2,000.00	1.0	\$ 2,000.00	0.0	\$ -
35	42" RC FLARED END SECTION	EACH	1	\$	3,300.00	\$ 3,300.00	1	\$ 3,300.00	1.0	\$ 3,300.00	0.0	\$ -
36	SUBGRADE EXCAVATION	CU YD	427	\$	4.27	\$ 1,823.00	150	\$ 637.50	0.0	\$ -	150.0	\$ 637.50
37	18" RC FLARED END SECTION W/TRASH GUARD	EACH	1	\$	2,300.00	\$ 2,300.00	0	\$ -	0.0	\$ -	1.0	\$ 2,300.00
38	4" PVC DRAIN TILE CLEANOUT	EACH	14	\$	230.00	\$ 3,220.00	10	\$ 2,300.00	0.0	\$ -	10.0	\$ 2,300.00
39	6" PVC DRAIN TILE CLEANOUT	EACH	4	\$	450.00	\$ 1,800.00	4	\$ 1,800.00	0.0	\$ -	4.0	\$ 1,800.00
40	8" PVC PIPE DRAIN CLEANOUT	EACH	1	\$	1,300.00	\$ 1,300.00	1	\$ 1,300.00	0.0	\$ -	1.0	\$ 1,300.00
41	4" PVC DRAIN TILE PIPE SCH 40	LIN FT	5016	\$	11.00	\$ 55,176.00	5016	\$ 55,176.00	0.0	\$ -	5,016.0	\$ 55,176.00
42	6" PVC DRAIN TILE PIPE SCH 40	LIN FT	322	\$	16.00	\$ 5,152.00	322	\$ 5,152.00	0.0	\$ -	322.0	\$ 5,152.00
43	12" PVC SANITARY SEWER PIPE SDR 35	LIN FT	438	\$	55.00	\$ 24,110.00	414	\$ 22,870.00	0.0	\$ -	2,910.0	\$ 160,300.00
44	12" PVC SANITARY SEWER PIPE SDR 26	LIN FT	625	\$	80.00	\$ 50,000.00	620	\$ 49,600.00	625.0	\$ 50,000.00	-5.0	\$ (400.00)
45	12" PVC SANITARY SEWER PIPE C-900 DR 18	LIN FT	606	\$	220.00	\$ 133,320.00	606	\$ 133,320.00	400.0	\$ 88,000.00	206.0	\$ 45,320.00
46	16" PVC SANITARY SEWER PIPE C-900 DR 18	LIN FT	279	\$	230.00	\$ 64,170.00	279	\$ 64,170.00	0.0	\$ -	279.0	\$ 64,170.00
47	15" PVC SANITARY SEWER PIPE SDR 26	LIN FT	279	\$	237.00	\$ 66,123.00	288	\$ 68,256.00	277.0	\$ 65,649.00	11.0	\$ 2,607.00
48	8" PVC SANITARY SEWER PIPE SDR 26	LIN FT	251	\$	63.00	\$ 15,813.00	251	\$ 15,813.00	0.0	\$ -	251.0	\$ 15,813.00
49	10" PVC SANITARY SEWER PIPE SDR 26	LIN FT	43	\$	71.00	\$ 3,053.00	43	\$ 3,053.00	43.0	\$ 3,053.00	0.0	\$ -
50	12" RC PIPE SEWER	LIN FT	638	\$	7.80	\$ 4,976.40	53	\$ 414.60	0.0	\$ -	9.0	\$ 70.20
51	15" RC PIPE SEWER	LIN FT	638	\$	60.00	\$ 38,280.00	632	\$ 37,920.00	227.0	\$ 13,620.00	405.0	\$ 24,300.00
52	18" RC PIPE SEWER	LIN FT	254	\$	69.00	\$ 17,526.00	242	\$ 16,698.00	146.0	\$ 10,074.00	96.0	\$ 6,624.00
53	24" RC PIPE SEWER	LIN FT	219	\$	98.00	\$ 21,462.00	205	\$ 20,090.00	205.0	\$ 20,090.00	0.0	\$ -
54	27" RC PIPE SEWER	LIN FT	272	\$	111.00	\$ 30,192.00	272	\$ 30,192.00	111.0	\$ 12,321.00	161.0	\$ 17,871.00
55	30" RC PIPE SEWER	LIN FT	1025	\$	157.50	\$ 161,437.50	1025	\$ 161,437.50	1,011.0	\$ 159,232.50	14.0	\$ 2,205.00
56	42" RC PIPE SEWER	LIN FT	88	\$	245.00	\$ 21,560.00	87	\$ 21,315.00	86.0	\$ 21,070.00	1.0	\$ 245.00
57	12" PIPE PLUG	EACH	1	\$	1,185.00	\$ 1,185.00	1	\$ 1,185.00	1.0	\$ 1,185.00	0.0	\$ -
58	10" PIPE PLUG	EACH	1	\$	900.00	\$ 900.00	1	\$ 900.00	1.0	\$ 900.00	0.0	\$ -
59	15" HDPE FLARED END SECTION W/ TRASH GUARD	EACH	1	\$	950.00	\$ 950.00	0	\$ -	0.0	\$ -	0.0	\$ -
60	CONNECT TO EXISTING STORM SEWER	EACH	2	\$	2,300.00	\$ 4,600.00	2	\$ 4,600.00	1.0	\$ 2,300.00	1.0	\$ 2,300.00
61	CONNECT TO EXISTING SANITARY SEWER SERVICE	EACH	1	\$	538.00	\$ 538.00	1	\$ 538.00	0.0	\$ -	1.0	\$ 538.00
62	CONNECT TO EXISTING SANITARY SEWER	EACH	1	\$	16,200.00	\$ 16,200.00	1	\$ 16,200.00	1.0	\$ 16,200.00	0.0	\$ -
63	4" DIAMETER SANITARY SEWER MANHOLE	EACH	11	\$	8,900.00	\$ 97,900.00	11	\$ 97,900.00	8.0	\$ 71,200.00	3.0	\$ 26,700.00
64	15" HDPE PIPE SEWER	LIN FT	432	\$	48.00	\$ 20,736.00	19	\$ 912.00	0.0	\$ -	19.0	\$ 912.00
65	30" STEEL CASING PIPE (JACKED)	LIN FT	100	\$	1,614.00	\$ 161,400.00	100	\$ 161,400.00	0.0	\$ -	100.0	\$ 161,400.00
66	IRRIGATION SYSTEM	LUMP SUM	1	\$	209,000.00	\$ 209,000.00	0	\$ -	0.0	\$ -	0.0	\$ -
67	16" BUTTERFLY VALVE AND BOX	EACH	2	\$	6,300.00	\$ 12,600.00	2	\$ 12,600.00	1.0	\$ 6,300.00	1.0	\$ 6,300.00
68	12" BUTTERFLY VALVE AND BOX	EACH	2	\$	4,300.00	\$ 8,600.00	2	\$ 8,600.00	0.0	\$ -	2.0	\$ 8,600.00
69	6" GATE VALVE AND BOX	EACH	5	\$	2,700.00	\$ 13,500.00	6	\$ 16,200.00	3.0	\$ 8,100.00	3.0	\$ 8,100.00
70	8" GATE VALVE AND BOX	EACH	3	\$	3,400.00	\$ 10,200.00	3	\$ 10,200.00	1.0	\$ 3,400.00	2.0	\$ 6,800.00
71	CONNECT TO EXISTING WATERMAIN	EACH	2	\$	6,500.00	\$ 13,000.00	2	\$ 13,000.00	1.0	\$ 6,500.00	1.0	\$ 6,500.00
72	HYDRANT	EACH	154	\$	6,940.00	\$ 1,068,800.00	7	\$ 48,580.00	3.0	\$ 20,820.00	4.0	\$ 27,760.00
73	WATERMAIN OFFSET	EACH	1	\$	4,430.00	\$ 4,430.00	0	\$ -	0.0	\$ -	0.0	\$ -
74	2" SADDLE	EACH	1	\$	770.00	\$ 770.00	1	\$ 770.00	0.0	\$ -	1.0	\$ 770.00
75	2" CURB STOP AND BOX	EACH	1	\$	1,100.00	\$ 1,100.00	1	\$ 1,100.00	0.0	\$ -	1.0	\$ 1,100.00
76	2" CORPORATION STOP	EACH	1	\$	665.00	\$ 665.00	1	\$ 665.00	0.0	\$ -	1.0	\$ 665.00
77	2" TYPE K COPPER PIPE	LIN FT	63	\$	42.00	\$ 2,646.00	67	\$ 2,814.00	0.0	\$ -	67.0	\$ 2,814.00
78	12" PVC C-900 DR-18 WATERMAIN OPEN CUT	LIN FT	804	\$	73.00	\$ 58,692.00	746	\$ 54,458.00	0.0	\$ -	746.0	\$ 54,458.00
79	16" PVC C-900 DR-18 WATERMAIN OPEN CUT	LIN FT	2071	\$	105.00	\$ 217,365.00	2185	\$ 229,575.00	823.0	\$ 84,789.00	1,362.0	\$ 140,286.00
80	16" PVC C-900 DR-18 WATERMAIN TRENCHLESS INSTALLATION	LIN FT	565	\$	205.00	\$ 115,825.00	565	\$ 115,825.00	565.0	\$ 115,825.00	0.0	\$ -
81	6" DIP CL 52 WATERMAIN	LIN FT	114	\$	51.00	\$ 5,814.00	85	\$ 4,335.00	22.0	\$ 1,122.00	63.0	\$ 3,213.00
82	8" PVC C-900 DR-18 WATERMAIN OPEN CUT	LIN FT	1575	\$	47.00	\$ 74,025.00	1504	\$ 70,688.00	340.0	\$ 15,980.00	1,164.0	\$ 54,708.00
83	8" PVC C-900 DR-18 WATERMAIN TRENCHLESS INSTALLATION	LIN FT	100	\$	140.00	\$ 14,000.00	100	\$ 14,000.00	0.0	\$ -	100.0	\$ 14,000.00
84	HYDRANT RISER	LIN FT	10	\$	1,200.00	\$ 12,000.00	0	\$ -	0.0	\$ -	0.0	\$ -
85	CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL 27'	EACH	1	\$	2,325.00	\$ 2,325.00	1	\$ 2,325.00				

106	TYPE III BARRICADES	EACH	1	\$	612.00	\$ 612.00	0	\$	-	0.0	\$	-	0.0	\$	-
107	SIGN PANELS TYPE SPECIAL	EACH	6	\$	107.00	\$ 642.00	0	\$	-	0.0	\$	-	0.0	\$	-
108	TRAFFIC CONTROL	LUMP SUM	1	\$	9,700.00	\$ 9,700.00	0.25	\$	2,425.00	0.3	\$	2,425.00	0.0	\$	-
109	SIGN PANELS TYPE C	SQ FT	59	\$	66.00	\$ 3,851.25	0	\$	-	0.0	\$	-	0.0	\$	-
110	INSTALL SIGN	EACH	4	\$	255.00	\$ 1,020.00	0	\$	-	0.0	\$	-	0.0	\$	-
111	DELINEATOR/MARKER	EA	16	\$	25.00	\$ 408.00	0	\$	-	0.0	\$	-	0.0	\$	-
112	DECIDUOUS SHRUB NO 5 CONT	EACH	254	\$	65.30	\$ 16,586.20	0	\$	-	0.0	\$	-	0.0	\$	-
113	DECIDUOUS TREE 2.5' CAL B&B	EACH	94	\$	505.00	\$ 47,470.00	0	\$	-	0.0	\$	-	0.0	\$	-
114	PERENNIAL NO 1 CONT	EACH	1974	\$	24.50	\$ 48,363.00	0	\$	-	0.0	\$	-	0.0	\$	-
115	FLARED END PROTECTION	EACH	4	\$	156.00	\$ 624.00	0	\$	-	0.0	\$	-	0.0	\$	-
116	STABILIZED CONSTRUCTION EXIT	EACH	2	\$	1,560.00	\$ 3,120.00	0	\$	-	0.0	\$	-	0.0	\$	-
117	SEDIMENT CONTROL LOG TYPE STRAW	LIN FT	951	\$	2.50	\$ 2,377.50	1003	\$	2,507.50	0	\$	-	1,003.00	\$	2,507.50
118	SILT FENCE, TYPE MS	LIN FT	6245	\$	2.30	\$ 14,363.50	1181	\$	2,716.30	1,090.00	\$	2,507.00	91.0	\$	209.30
119	STORM DRAIN INLET PROTECTION	EACH	21	\$	185.00	\$ 3,885.00	0	\$	-	0.0	\$	-	0.0	\$	-
120	COMMON TOPSOIL BORROW	CU YD	2803	\$	35.40	\$ 99,226.20	0	\$	-	0.0	\$	-	0.0	\$	-
121	LOAM TOPSOIL BORROW	CU YD	698	\$	40.60	\$ 28,338.80	0	\$	-	0.0	\$	-	0.0	\$	-
122	ROLLED EROSION PREVENTION CATEGORY 20	SQ YD	7143	\$	1.60	\$ 11,428.80	1250	\$	2,000.00	0	\$	-	1,250.00	\$	2,000.00
123	SODDING TYPE SALT TOLERANT	SQ YD	3320	\$	15.00	\$ 49,800.00	0	\$	-	0.0	\$	-	0.0	\$	-
124	SEEDING	ACRE	5.0	\$	1,250.00	\$ 6,250.00	1	\$	1,250.00	0.0	\$	-	1.0	\$	1,250.00
125	HYDRAULIC STABILIZED FIBER MATRIX	POUND	17061	\$	1.40	\$ 23,885.40	10240	\$	14,336.00	0	\$	-	10,240.00	\$	14,336.00
126	SEED MIXTURE 25-131	POUND	55	\$	6.30	\$ 346.50	140	\$	882.00	0	\$	-	140.00	\$	882.00
127	SEED MIXTURE 25-151	POUND	1010	\$	7.30	\$ 7,373.00	90	\$	657.00	0	\$	-	90.00	\$	657.00
128	SEED MIXTURE 34-171	POUND	10	\$	29.20	\$ 292.00	2.7	\$	78.84	0	\$	-	2.7	\$	78.84
129	24" SOLID LINE MULTI-COMPONENT GROUND IN	LIN FT	322	\$	16.50	\$ 5,313.00	0	\$	-	0.0	\$	-	0.0	\$	-
130	24" SOLID LINE MULTI-COMPONENT GROUND IN	LIN FT	378	\$	16.50	\$ 6,237.00	0	\$	-	0.0	\$	-	0.0	\$	-
131	4" DOTTED LINE MULTI-COMPONENT GROUND IN	LIN FT	935	\$	0.70	\$ 654.50	0	\$	-	0.0	\$	-	0.0	\$	-
132	4" DOUBLE SOLID LINE MULTI-COMPONENT GROUND IN	LIN FT	78	\$	9.50	\$ 742.50	0	\$	-	0.0	\$	-	0.0	\$	-
133	4" SOLID LINE MULTI-COMPONENT GROUND IN	LIN FT	2723	\$	0.70	\$ 1,906.10	0	\$	-	0.0	\$	-	0.0	\$	-
134	4" SOLID LINE MULTI-COMPONENT GROUND IN	LIN FT	1359	\$	0.70	\$ 951.30	0	\$	-	0.0	\$	-	0.0	\$	-
135	6" SOLID LINE MULTI-COMPONENT GROUND IN	LIN FT	3960	\$	1.00	\$ 3,960.00	0	\$	-	0.0	\$	-	0.0	\$	-
136	CROSSWALK PREFORM THERMOPLASTIC GROUND IN	SQ FT	325	\$	14.70	\$ 4,777.50	0	\$	-	0.0	\$	-	0.0	\$	-
137	PAVEMENT MESSAGE PREFORM THERMOPLASTIC GROUND IN	SQ FT	78	\$	30.00	\$ 2,340.00	0	\$	-	0.0	\$	-	0.0	\$	-
138	PAVEMENT MESSAGE PREFORM THERMOPLASTIC GROUND IN	SQ FT	78	\$	30.00	\$ 2,340.00	0	\$	-	0.0	\$	-	0.0	\$	-
					TOTAL BASE BID:	\$ 5,063,531.65			\$ 2,595,654.04			\$ 1,070,566.50			\$ 1,525,087.54

ALTERNATE #1

				QUANTITY	COST	QUANTITY	COST	QUANTITY	COST						
139	REMOVE TREE	EACH	1	\$	1,275.00	\$ 1,275.00	1	\$	1,275.00	1.0	\$	1,275.00	0.0	\$	-
140	16" BUTTERFLY VALVE AND BOX	EACH	1	\$	6,300.00	\$ 6,300.00	1	\$	6,300.00	0.0	\$	-	1.0	\$	6,300.00
141	6" GATE VALVE AND BOX	EACH	1	\$	2,635.00	\$ 2,635.00	2	\$	5,270.00	1.0	\$	2,635.00	1.0	\$	2,635.00
142	2" SADDLE	EACH	1	\$	770.00	\$ 770.00	1	\$	770.00	1.0	\$	770.00	0.0	\$	-
143	2" CURB STOP AND BOX	EACH	1	\$	1,100.00	\$ 1,100.00	1	\$	1,100.00	1.0	\$	1,100.00	0.0	\$	-
144	2" CORPORATION STOP	EACH	1	\$	665.00	\$ 665.00	1	\$	665.00	1.0	\$	665.00	0.0	\$	-
145	16" PVC C-900 DR-18 WATERMAIN OPEN CUT	LIN FT	7	\$	103.00	\$ 721.00	7	\$	721.00	0.0	\$	-	7.0	\$	721.00
146	16" PVC C-900 DR-18 WATERMAIN TRENCHLESS INSTALLATION	LIN FT	650	\$	199.50	\$ 129,675.00	650	\$	129,675.00	650.00	\$	129,675.00	0.0	\$	-
147	6" DIP CL 52 WATERMAIN	LIN FT	10	\$	68.00	\$ 680.00	21.5	\$	1,462.00	8.0	\$	544.00	13.5	\$	918.00
148	2" TYPE PE PIPE	LIN FT	280	\$	11.00	\$ 3,080.00	210	\$	2,310.00	210.00	\$	2,310.00	0.0	\$	-
149	DUCTILE IRON FITTINGS	POUND	378	\$	16.00	\$ 6,048.00	354	\$	5,664.00	132.00	\$	2,112.00	222.00	\$	3,552.00
150	SEDIMENT CONTROL LOG TYPE STRAW	LIN FT	97	\$	2.60	\$ 252.20	0	\$	-	0.0	\$	-	0.0	\$	-
151	SEEDING	ACRE	0.10	\$	9.370	\$ 937.00	0	\$	-	0.0	\$	-	0.0	\$	-
152	HYDRAULIC STABILIZED FIBER MATRIX	POUND	260	\$	2.70	\$ 702.00	260	\$	702.00	0.0	\$	-	260.00	\$	702.00
153	SEED MIXTURE 25-151	POUND	17	\$	7.30	\$ 124.10	0	\$	-	0.0	\$	-	0.0	\$	-
					TOTAL BASE BID:	\$ 154,964.40			\$ 155,914.00			\$ 141,086.00			\$ 14,828.00

ALTERNATE #2

				QUANTITY	COST	QUANTITY	COST	QUANTITY	COST						
154	4" CONCRETE WALK	SQ FT	1130	\$	51.59	\$ 58,296.70	0	\$	-	0.0	\$	-	0.0	\$	-
155	TREE GRATE AND FRAMES	EACH	57	\$	2,670.00	\$ 152,190.00	0	\$	-	0.0	\$	-	0.0	\$	-
156	SODDING TYPE SALT TOLERANT	SQ YD	-232	\$	15.00	\$ (3,480.00)	0	\$	-	0.0	\$	-	0.0	\$	-
					TOTAL BASE BID:	\$ 207,006.70			\$ -			\$ -			\$ -

ALTERNATE #3

				QUANTITY	COST	QUANTITY	COST	QUANTITY	COST						
157	DECIDUOUS TREE 2.5' CAL B&B	EACH	-94	\$	505.00	\$ (47,470.00)	0	\$	-	0.0	\$	-	0.0	\$	-
158	DECIDUOUS TREE 2.5' CAL B&B	EACH	94	\$	505.00	\$ 47,470.00	0	\$	-	0.0	\$	-	0.0	\$	-
					TOTAL BASE BID:	\$ -			\$ -			\$ -			\$ -

ALTERNATE #4

				QUANTITY	COST	QUANTITY	COST	QUANTITY	COST						
159	IRRIGATION SYSTEM	LS	1	\$	3,570.00	\$ 3,570.00	0	\$	-	0.0	\$	-	0.0	\$	-
160	LIGHTING UNIT TYPE SPECIAL	EACH	-54	\$	8,070.00	\$ (435,780.00)	0	\$	-	0.0	\$	-	0.0	\$	-
161	LIGHTING UNIT TYPE SPECIAL	EACH	54	\$	9,230.00	\$ 498,420.00	0	\$	-	0.0	\$	-	0.0	\$	-
					TOTAL BASE BID:	\$ 66,210.00			\$ -			\$ -			\$ -

ALTERNATE #5

				QUANTITY	COST	QUANTITY	COST	QUANTITY	COST						
162	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	20	\$	3.00	\$ 60.00	0	\$	-	0.0	\$	-	0.0	\$	-
163	REMOVE BITUMINOUS PAVEMENT	SQ YD	43	\$	5.00	\$ 215.00	0	\$	-	0.0	\$	-	0.0	\$	-
164	GEOTEXTILE FABRIC TYPE 5	SQ YD	650	\$	2.00	\$ 1,300.00	578	\$	1,156.00	0.0	\$	-	578.00	\$	1,156.00
165	AGGREGATE BASE CLASS 5	TON	423	\$	28.00	\$ 11,844.00	623	\$	17,444.00	0	\$	-	623.00	\$	17,444.00
166	BITUMINOUS MATERIAL FOR TACK COAT	GAL	46	\$	3.80	\$ 177.56	0	\$	-	0.0	\$	-	0.0	\$	-
167	TYPE SP 12.5 NON WEARING COURSE MIXTURE (3,C)	TON	78	\$	108.00	\$ 8,424.00	0	\$	-	0.0	\$	-	0.0	\$	-
168	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)	TON	59	\$	116.00	\$ 6,844.00	0	\$	-	0.0	\$	-	0.0	\$	-
169	IRRIGATION SYSTEM	LS	1	\$	3,570.00	\$ 3,570.00	0	\$	-	0.0	\$	-	0.0	\$	-
170	CONCRETE CURB & GUTTER DESIGN D418	LIN FT	225	\$	32.50	\$ 7,312.50	0	\$	-	0.0	\$	-	0.0	\$	-
171	LIGHTING UNIT TYPE SPECIAL 1	EACH	2	\$	6,100.00	\$ 12,200.00	0	\$	-	0.0	\$	-	0.0	\$	-
172	ELECTRICAL SYSTEM MODIFICATIONS	LS	1	\$	9,250.00	\$ 9,250.00	0	\$	-	0.0	\$	-	0.0	\$	-
173	CONIFEROUS TREE 6" HT B&B	EACH	3	\$	458.00	\$ 1,377.00	0	\$	-	0.0	\$	-	0.0	\$	-
174	4" SOLID LINE PAINT	LIN FT	180	\$	5.50	\$ 990.00	0	\$	-	0.0	\$	-	0.0	\$	-
					TOTAL BASE BID:	\$ 63,564.06			\$ 18,600.00			\$ -			\$ 18,600.00

TOTAL ORIGINAL CONTRACT: \$ 5,555,276.81 \$ 2,770,168.04 \$ 1,211,652.50 \$ 1,558,515.54

CHANGE ORDER #1

				QUANTITY	COST	QUANTITY	COST	QUANTITY	COST						
CO1.1	REMOVE HOLDING TANK	EACH	1	\$	8,500.00	\$ 8,500.00	1	\$	8,500.00	0.0	\$	-	1.0	\$	8,500.00
CO1.2	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	20	\$	3.00	\$ 60.00	0	\$	-	0.0	\$	-	0.0	\$	-
CO1.3	REMOVE BITUMINOUS PAVEMENT	SQ YD	1412	\$	4.00	\$ 5,648.00	0	\$	-	0.0	\$	-	0.0	\$	-
CO1.4	EXCAVATION - COMMON	CU YD	19	\$	6.00	\$ 114.00	0	\$	-	0.0	\$	-	0.0	\$	-
CO1.5	COMMON EMBANKMENT	CU YD	36	\$	4.70	\$ 169.20	0	\$	-	0.0	\$	-	0.0	\$	-
CO1.6	GEOTEXTILE FABRIC TYPE 5	SQ YD	187	\$	4.80	\$ 902.60	0	\$	-	0.0	\$	-	0.0	\$	-
CO1.7	AGGREGATE BASE CLASS 5	TON	49	\$	25.00	\$ 1,225.00	0	\$	-	0.0	\$	-	0.0	\$	-
CO1.8	BITUMINOUS MATERIAL FOR TACK COAT	GAL	11	\$	4.00	\$ 44.00	0	\$	-	0.0	\$	-	0.0	\$	-
CO1.9	TYPE SP 12.5 NON WEARING COURSE MIXTURE (3,C)	TON	19	\$	108.00	\$ 2,052.00	0	\$	-	0.0	\$	-	0.0	\$	-
CO1.10	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)	TON	14	\$	116.00	\$ 1,624.00	0	\$	-	0.0	\$	-	0.0	\$	-
CO1.11	6" PVC DRAIN/INLET PIPE SCH 40	LIN FT	200	\$	16.00	\$ 3,200.00	200	\$	3,200.00	0.0	\$	-	200.00	\$	3,200.00
CO1.12	NYOPLAST YARD DRAIN INLET	EACH	3	\$	2,000.00	\$ 6,000.00	3	\$	6,000.00	0	\$	-	3.00	\$	6,000.00
CO1.13	CONNECT TO EXISTING SANITARY SEWER SERVICE	EACH	1	\$	538.00	\$ 538.00	0	\$	-	0.0	\$	-	0.0	\$	-
CO1.14	WATERMAIN OFFSET	EACH	-1	\$	4,300.00	\$ (4,300.00)	0	\$	-	0.0	\$	-	0.0	\$	-
CO1.15	4" GATE VALVE AND BOX	EACH	1	\$	2,800.00										

CO1.26	WATERMAIN ALIGNMENT ADJUSTMENT	LUMP SUM	1	\$	23,700.00	\$ 23,700.00	1	\$ 23,700.00	1.0	\$ 23,700.00	0.0	\$ -
CO1.27	CONIFEROUS TREE 6' HT B&B	EACH	22	\$	459.00	\$ 10,098.00	0	\$ -	0.0	\$ -	0.0	\$ -
CO1.28	DECIDUOUS SHRUB NO 5 CONT	EACH	52	\$	66.30	\$ 3,395.60	0	\$ -	0.0	\$ -	0.0	\$ -
CO1.29	SILT FENCE, TYPE MS	LIN FT	233	\$	2.30	\$ 535.90	0	\$ -	0.0	\$ -	0.0	\$ -
CO1.30	SEEDING	ACRE	0.2	\$	1,250.00	\$ 250.00	0	\$ -	0.0	\$ -	0.0	\$ -
CO1.31	HYDRAULIC STABILIZED FIBER MATRIX	POUND	700	\$	1.40	\$ 980.00	0	\$ -	0.0	\$ -	0.0	\$ -
CO1.32	SEED MIXTURE 25-151	POUND	44	\$	7.30	\$ 321.20	0	\$ -	0.0	\$ -	0.0	\$ -
CO1.33	4" SOLID LINE PAINT	LIN FT	55	\$	5.50	\$ 302.50	0	\$ -	0.0	\$ -	0.0	\$ -
TOTAL CHANGE ORDER #1:					\$ 132,013.00	\$ 65,452.00		\$ 46,312.00		\$ 19,140.00		

CHANGE ORDER #2						QUANTITY	COST	QUANTITY	COST	QUANTITY	COST
CO2.1	SMALL UTILITY CONDUITS	LUMP SUM	1	\$	10,357.39	\$ 10,357.39	1	0.0	\$ -	1.0	\$ 10,357.39
CO2.2	TEMPORARY ACCESS ROAD	LUMP SUM	1	\$	9,324.15	\$ 9,324.15	1	0.0	\$ -	1.0	\$ 9,324.15
CO2.3	15' RC FLARED END SECTION W/ TRASH GUARD	LUMP SUM	1	\$	2,200.00	\$ 2,200.00	1	0.0	\$ -	1.0	\$ 2,200.00
CO2.4	DRAIN TILE MODIFICATIONS	LUMP SUM	1	\$	9,342.56	\$ 9,342.56	1	0.0	\$ -	1.0	\$ 9,342.56
TOTAL CHANGE ORDER #2:											

TOTAL REVISED CONTRACT: \$ 5,687,289.81 \$ 2,835,620.04 \$ 1,257,964.50 \$ 1,577,655.54

CONTRACT SUMMARY					COMPLETE TO DATE	LESS PREVIOUS	PAY REQUEST #2
ORIGINAL CONTRACT AWARD AMOUNT	\$	5,555,276.81					
TOTAL CHANGE ORDER:	\$	132,013.00					
TOTAL REVISED CONTRACT:	\$	5,687,289.81					
					\$ 2,835,620.04	\$ 1,211,652.50	\$ 1,577,655.54
					\$ 141,781.00	\$ 60,582.63	\$ 78,882.77
					\$ 2,693,839.04	\$ 1,151,069.87	\$ 1,498,772.77

RESOLUTION NO. 2024-002

Motion By:
Seconded By:

A RESOLUTION APPOINTING ELECTION JUDGES FOR THE 2024 ELECTION CYCLE

WHEREAS, a Presidential Nomination Primary will be held on March 5, 2024, a State Primary Election will be held on August 13, 2024, and a State General Election will be held on November 5, 2024; and

WHEREAS, MN Statute 204B.21, subd.2, requires election judges for precincts in a municipality be appointed by the governing body of the municipality; and

WHEREAS, the City of Corcoran has three voting precincts; and

WHEREAS, the following Minnesota residents have agreed to serve as election judges and have met the qualifications established by the State of Minnesota, or will be receiving training prior to the elections and will be eligible to serve after meeting the qualifications established by the State of Minnesota; and

NOW, THEREFORE, BE IT RESOLVED, that the City of Corcoran hereby appoints the following persons to be eligible election judges for the 2024 Presidential Nomination Primary, State Primary, General Elections, with the understanding that amendments may be necessary to the appointments in order to fill vacancies and meet party splits; and approves payment of an hourly wage of \$10.00 per hour for elections judges and, \$10.50 per hour for head judges for election judge training, direct balloting assistance, and time served on election day.

Gail Propson	Elias Lemon
Angeline Linquist	Heidi Quimby
Lillian Wawra	Ken Guenthner
Patricia Tadych	Jayne Myhre
Sharon Ratke	Gayle Southwell
Shelia Schouviller	Angie Laschinger
Catherine Leuer	Susan Prasch
Bonnie Maue	RaeAnn Carter
Jan Stieg	Mike Cannon
Linda Faatz	Judy Cannon
Jane Heins	William Fehn
Bonnie Aksteter	Patrick Gillespie
Gerald Johnson	Pam Habeger
JoAnne Johnson	Bob Habeger
Marcia Johnsrud	Elizabeth Knudson
Dan Mesick	Karen Nerison
SarahJane Nichols	Vickie Nordberg
Susan Poulsen	Jerome Ruzicka
David Schmidt	Virginia Anderson

RESOLUTION NO. 2024-002

VOTING AYE

- McKee, Tom
- Bottema, Jon
- Nichols, Jeremy
- Schultz, Alan
- Vehrenkamp, Dean

VOTING NAY

- McKee, Tom
- Bottema, Jon
- Nichols, Jeremy
- Schultz, Alan
- Vehrenkamp, Dean

Whereupon, said Resolution is hereby declared adopted on this 11th day of January 2024.

Tom McKee - Mayor

ATTEST:

Michelle Friedrich – City Clerk

City Seal

RESOLUTION NO. 2024-003

Motion By:
Seconded By:

RESOLUTION ESTABLISHING AN ABSENTEE BALLOT BOARD

WHEREAS, the City of Corcoran is required by Minnesota Statutes 203B.121, Subd. 1 to establish an Absentee Ballot Board effective January 19 through November 4, 2024; and

WHEREAS, this board will bring uniformity in the processing of accepting or rejecting returned absentee ballots in the City of Corcoran; and

WHEREAS, the Absentee Ballot Board would consist of a sufficient number of election judges as provided in sections 204B.19 to 204B.22 or city staff trained in the processing of absentee ballots;

THEREFORE, BE IT RESOLVED THAT, the Corcoran City Council hereby establishes an Absentee Ballot Board as provided by Minnesota Statutes 203B.121.

BE IT FURTHER RESOLVED, that the members of the Absentee Ballot Board for the 2024 Presidential Nomination Primary, State Primary, and General Elections are hereby named as Michael Pritchard, Dwight Klingbeil, Wayne Barnhart, Jodie Peterson, and Jessica C. Buck.

VOTING AYE

- Thomas, Ron
- Bottema, Jon
- Dejewski, Brian
- Keefe, Mike
- Schultz, Alan

VOTING NAY

- Thomas, Ron
- Bottema, Jon
- Dejewski, Brian
- Keefe, Mike
- Schultz, Alan

Whereupon, said Resolution is hereby declared adopted on this 11th day of January, 2024.

Tom McKee - Mayor

ATTEST:

Michelle Friedrich – City Clerk

City Seal

STAFF REPORT

Agenda Item 7i.

Council Meeting January 11, 2024	Prepared By Kevin Mattson
Topic 2024-2025 Capital Improvement Plan Pre-Order Equipment Amendment	Action Required Approval

Summary

On September 14, 2023, the City Council pre-authorized the order of a new purchase for a Patch Trailer with an estimated cost of \$40,000 as part of the draft 2024-2025 Capital Improvement Plan (CIP).

The final cost for the Patch Trailer came in at \$50,337.50 or a \$10,337.50 increase due to amendments to the state contract pricing. This includes a 10% discount (\$5,600) that staff negotiated that would be lost if this equipment purchase is deferred.

Financial/Budget

The revised cost for this piece of equipment as well as projected adjustments to other line items including resale values will be included with the final 2024-2025 CIP when it is presented prior to bonding later in 2024.

Options

1. Approve the purchase of the Patch Trailer in the amount of \$50,337.50.
2. Send back to staff for further review.

Recommendation

Approve the purchase of the Patch Trailer in the amount of \$50,337.50.

Council Action

Consider a motion to approve the purchase of the Patch Trailer in the amount of \$50,337.50.

Attachments

1. Draft 2024-2025 Capital Improvement Plan

Draft 2024-2025 Capital Improvement Plan

2024								
Fund	Department	Item	Cost	Re-sale	Grant	Sub-total	Pre Order Authorization	Notes
General	Public Safety	Support and Protection Equipment	\$ 17,100	\$ -	\$ -	\$ 17,100		
		Evidence Fire Arm Safe	\$ 5,000	\$ -	\$ -	\$ 5,000		
		Support and Protection Equipment	\$ 10,000	\$ -	\$ -	\$ 10,000		
		Ford SUV Explorer	\$ 43,500	\$ -	\$ -	\$ 43,500		
		Polaris Ranger	\$ 35,000	\$ -	\$ -	\$ 35,000		Repurpose the UTV for parks and recreation
		Detective Squad (567) Detective	\$ 70,000	\$ -	\$ -	\$ 70,000	X	Replace and repurpose squad 567 detective squad
		Ford SUV Explorer (568)	\$ 70,000	\$ -	\$ -	\$ 70,000	X	
		Child ID Printer	\$ 5,000	\$ -	\$ -	\$ 5,000		Replace 10-year-old printer
	Administration	Support and Protection Equipment	\$ 24,000	\$ -	\$ -	\$ 24,000		Replace portable and mobile radios
		Council Chamber Sound System	\$ 16,000	\$ -	\$ 16,000	\$ -		Paid for by ARPA fund
	Parks	City Park	\$ 7,100,000	\$ -	\$ 300,000	\$ 6,800,000		For remaster of city park. Will be paid using bond and grant
		Bellwether Boardwalk		\$ -	\$ -	\$ -		Needs further determination - evaluating City participation
	Streets/Parks	Pickup with Plow	\$ 65,000	\$ 20,000	\$ -	\$ 45,000	X	Replaces 2011 Pickup truck
		Pickup with Plow	\$ 55,000	\$ 20,000	\$ -	\$ 35,000	X	Replaces 2011 Pickup truck, requesting pre-purchase 9/14/23
		Pickup	\$ 55,000	\$ -	\$ -	\$ 55,000	X	New purchase
		Mower	\$ 40,000		\$ 10,000	\$ 30,000		New purchase; seeking partial grant funding (\$10k)
	Citywide	Tire Repair Machine and Balancer	\$ 15,000			\$ 15,000		New purchase
Fleet/Equipment Storage							Review options for storage for equipment	
Enterprise	Water/Sewer	Pickup with Plow	\$ 65,000	\$ -	\$ -	\$ 65,000	X	New purchase for utility department
	Sub-total					\$ 7,324,600		

2025								
Fund	Department	Item	Cost	Re-sale	Grant	Sub-total		Notes
General	Public Safety	Support and Protection Equipment	\$ 17,100	\$ -	\$ -	\$ 17,100		
		MDCs -replace squad computers	\$ 48,000	\$ -	\$ -	\$ 48,000		
		Ford SUV Explorer (563)	\$ 70,000	\$ -	\$ -	\$ 70,000		
		Ford SUV Explorer (564)	\$ 70,000	\$ -	\$ -	\$ 70,000		
		Support and Protection Equipment	\$ 20,000	\$ -	\$ -	\$ 20,000		
		Ford SUV Explorer (569)	\$ 70,000	\$ -	\$ -	\$ 70,000		Replace squad 569
		Ford SUV Explorer (570)	\$ 70,000	\$ -	\$ -	\$ 70,000		Replace squad 570
		SIU/Narcotics Squad Addition	\$ 70,000	\$ -	\$ -	\$ 70,000		
		Support and Protection Equipment	\$ 24,000	\$ -	\$ -	\$ 24,000		Replace portable and mobile radios
	Fire	Ez Go Golf Cart	\$ 20,000	\$ -	\$ -	\$ 20,000		Replace 2010 EZ Go Golf Cart
		Fire SUV	\$ 80,000	\$ -	\$ -	\$ 80,000		
	Parks	Trails		\$ -	\$ -	\$ -		Needs further determination
		Neighborhood Parks		\$ -	\$ -	\$ -		Needs further determination
		Open Space Parks		\$ -	\$ -	\$ -		Needs further determination
	Streets/Parks	Dump Truck	\$ 300,000	\$ 45,000	\$ -	\$ 255,000	X	Replacement for 2009 truck
		Dump Truck	\$ 300,000	\$ -	\$ -	\$ 300,000	X	New purchase
		Patch Trailer	\$ 40,000	\$ -	\$ -	\$ 40,000	X	New purchase
Loader Grapple		\$ 50,000	\$ -	\$ -	\$ 50,000		New purchase	
Street Sweeper		\$ 350,000	\$ -	\$ 350,000	\$ -		New purchase, requesting Watershed to cover funding	
3,000 Gallon Water Tank		\$ 20,000			\$ 20,000		New purchase, replace outdated water truck	
Public Works	Floor Sealing	\$ 100,000	\$ -	\$ -	\$ 100,000		Reseal public works facility	
	Lean-to Enclosure	\$ 50,000	\$ -	\$ -	\$ 50,000		Enclose lean-to for Public Works building	
Enterprise	Water/Sewer	Utility Truck with crane and bucket	\$ 250,000	\$ -	\$ -	\$ 250,000	X	New purchase for utility department
	Sub-total					\$ 1,624,100		

GRAND TOTAL FOR 2024-2025 CAPITAL IMPROVEMENT PLAN **\$ 8,948,700**

STAFF REPORT

Agenda Item: 7j.

Council Meeting January 11, 2024	Prepared By Jay Tobin
Topic Minnesota Clean Energy Bill Communication (HERC)	Action Required None

Summary

In February 2023, the Minnesota State Legislature passed a Clean Energy Bill, which will redefine HERC as a non-renewable energy source starting in 2040. The Hennepin County Board of Commissioners passed Resolution 23-0384 R1 on October 24, 2023 affirming intent to close HERC between 2028 and 2040, and a position moving forward toward a zero-waste future. And asking cities, to take bold and concrete actions in anticipation of the HERC's closure by accelerating recycling and zero-waste programs, while creating alternative plans for waste management.

On October 31, 2023 staff received an email from Hennepin County Commissioner David Hough sharing Resolution 23-0384 R1 and requesting feedback from cities on their actions by January 15, 2024. The resolution states that 75% of the trash delivered to the HERC facility comes from Minneapolis and the remaining 25% is primarily from Bloomington, Champlin, Deephaven, Excelsior, Hopkins, Loretto, Maple Plain, Medina, Minnetonka Beach, Osseo, Robbinsdale, Richfield, St. Bonifacius, St. Louis Park, Tonka Bay, and Wayzata. Corcoran is not identified amongst the eighteen (18) identified user/stakeholders of the HERC. As a non-stakeholder (not one of the eighteen (18) who use the HERC) amongst the forty-five (45) cities in Hennepin County, staff recommend that "no response" is necessary to the mass email sent.

Financial/Budget

It is anticipated that the City will receive approximately \$30,000-\$40,000 per year and the current balance in the fund is \$230,393.00.

Options

1. Take no action.
3. Send back to staff for further review.

Recommendation

Staff recommends that Council take no action.

Attachments

1. Hennepin County Climate Action Plan
2. HERC Report Briefing Sep 21, 2023
3. Memo to Commissioners Summary of Recommendations
4. Resolution 23-0384 R1 HERC
5. Zero Waste Plan



 Climate Action Plan

Strategies to cut greenhouse gas emissions and adapt to our changing climate in ways that reduce vulnerabilities and ensure a more equitable and resilient Hennepin County

May 2021





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Purpose

The climate in Hennepin County is changing. Hennepin County's climate is getting wetter year-round and winter low temperatures are getting warmer. Climate vulnerability assessments make it clear that the risks posed to Hennepin County residents, infrastructure, and natural resources from climate change warrant an urgent, significant, and coordinated response.

In order to avoid the most severe and devastating impacts from climate change, we need to make significant changes to how our society operates, and we need to do it quickly. Making these changes will have clear benefits to people and natural ecosystems and will help create a more sustainable and equitable society.

Through community engagement efforts, the county learned that residents, community partners, other units of government, and county operations have already been experiencing negative impacts due to climate change. Residents, community partners, and other units of government are advancing their own climate action strategies and are interested in working with the county to address the complexities of climate change. The county has an important role to play in protecting our most vulnerable residents, leading by example in our operations, and fostering partnerships to achieve shared goals.

Today, with our community in the midst of combating COVID-19, facing an uncertain economic outlook, and addressing the public health crisis of structural racism, it is more apparent than ever that building a more resilient community not only helps us adapt to a changing climate but also helps us reduce racial disparities and safeguards our residents, economy, infrastructure, and environment. If we do not act boldly, climate change will progressively worsen the disparities in health, housing, and income that communities of color are already experiencing.

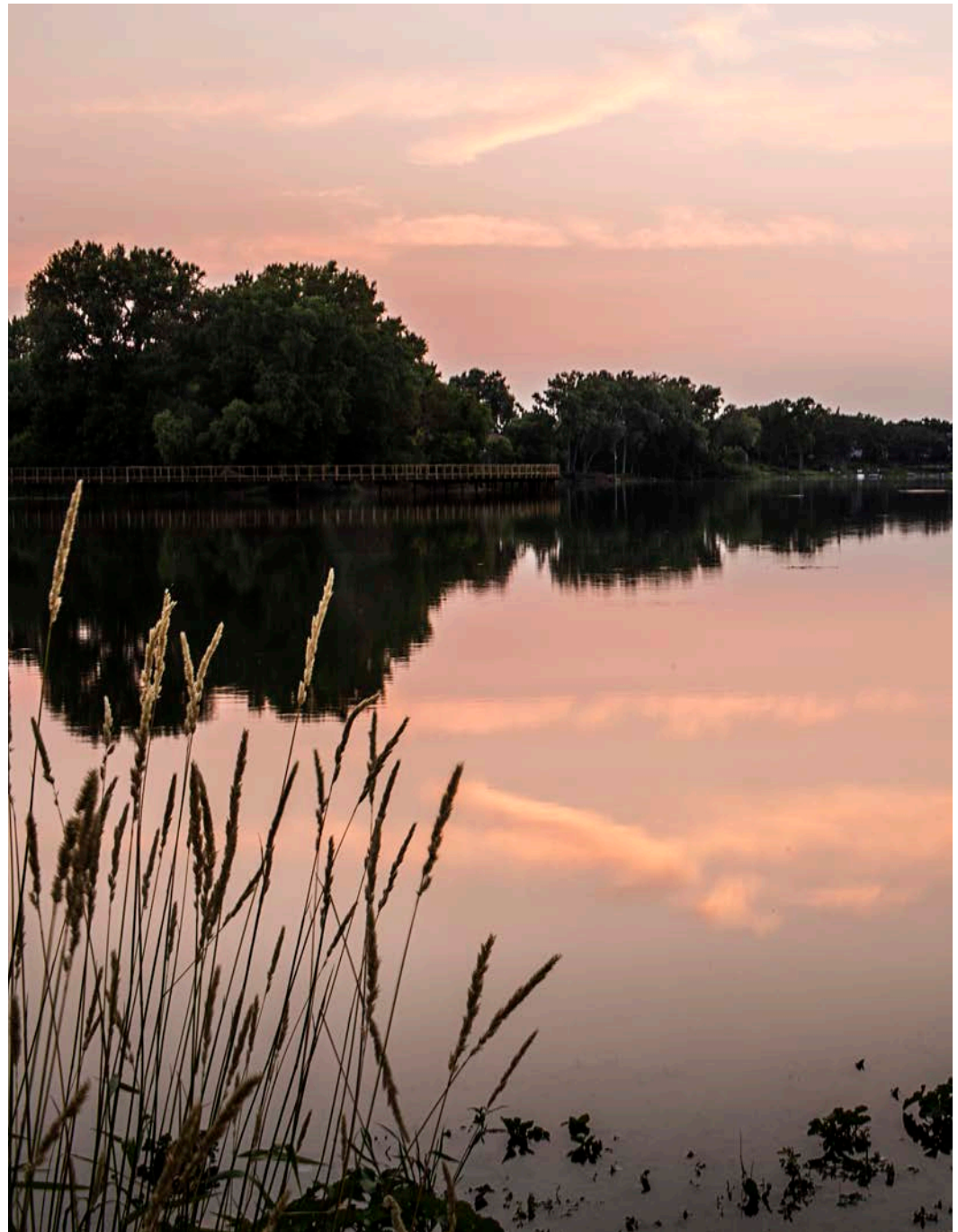


Our vision for a climate-friendly future

Acting boldly on climate change will enable us to create a better future for ourselves and generations to come. Pursuing the strategies laid out in this plan will make ourselves and our communities healthier. The buildings we live and work in will efficiently use the clean energy supplied to them, and we will have numerous sustainable and accessible options for getting where we need to go.

The lakes, rivers, forests, and prairies that make Hennepin County a great place to live will be protected and enhanced so that they provide habitat for a diversity of wildlife, give us a space to connect with nature, and contribute to making our communities more resilient. Transitioning to green, sustainable, and resilient infrastructure will provide economic opportunities that will be made accessible through workforce development and job training programs.

Engaging our communities and developing strong and diverse partnerships will make our strategies more creative, more ambitious, and more achievable. A focus on reducing disparities and protecting residents most susceptible to climate impacts will ensure these benefits are shared by all Hennepin County residents.



Foundation for an impactful response

Hennepin County's response to climate change is important. We lead in many areas that offer the most effective ways to cut greenhouse gas emissions, such as investing in transit, conserving energy use in our buildings, protecting natural resources, and preventing waste.

The county developed this climate action plan to serve as the foundation for a coordinated approach to planning, policy development, and responses to climate change. This plan both accounts for programs, services, and initiatives that are already underway and identifies new strategies that we need to pursue to effectively respond to and adapt to the changing climate.

The plan establishes how a climate response will be coordinated across lines of business and how reducing the impacts of climate change and creating a climate-friendly future will be integrated into the county's planning and decision-making. This is intended to be an iterative plan that integrates new and bolder goals and strategies as planning for climate change becomes core to how the county achieves its objectives.

This plan is an opportunity for the county to further our purpose-driven culture and innovate how we deliver service. We are well-equipped to meet this opportunity because responding to big challenges brings out the best in county staff – resourcefulness, innovation, and empowerment.

We cannot do it alone. Since climate change is primarily caused by humans burning fossil fuels for energy, we all have a shared responsibility – individuals, businesses, community organizations, institutions, and government – to do more to combat climate change and protect our environment for future generations.



This climate action plan is a framework for how the county will pursue initiatives to cut greenhouse gas emissions and strategies to adapt to the changing climate in ways that reduce vulnerabilities and ensure a more equitable and resilient Hennepin County.



Photo © Star Tribune



Our climate is changing and will continue to change

Climate change is caused primarily by humans burning fossil fuels, such as coal, oil, and natural gas, for energy to power buildings, fuel vehicles, and create goods. Burning fossil fuels for energy releases excess greenhouse gases into the atmosphere, most notably carbon dioxide (CO₂), nitrous oxide (N₂O), and methane (CH₄). The buildup of excess greenhouse gases acts like a blanket that traps heat around the world, disrupting the climate.

According to Minnesota Department of Natural Resources Climatology Office, Minnesota's climate is already changing rapidly and will continue to do so for the foreseeable future.¹ The variability in weather that Minnesota is known for between warm and cool and wet and dry will still be a staple of our climate, with projections showing that in some ways the climate will become more variable.

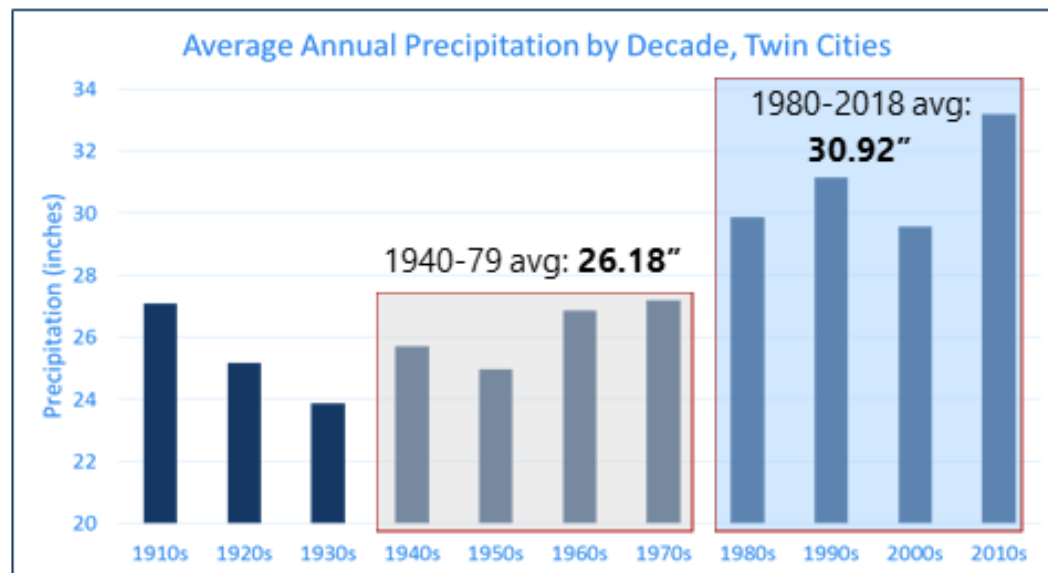


Figure 1: Average annual precipitation by decade in the Twin Cities

Source: Minnesota Department of Natural Resources, 2019

The region has gotten much wetter and warmer, driven by more frequent heavy precipitation and warmer winters (See Figure 1). In fact, the 2010s is the wettest decade on record in Minnesota, and projections indicate these trends will continue. Heavier precipitation events and warmer winters increase the frequency of flooding, landslides, freeze/thaw cycles, ice storms, rain on snow events, and heavy snowstorms. All of these put increased strain on county operations, residents, businesses, and the natural environment.

In addition to heavier precipitation events, the potential for drought will increase in the coming decades. Hot weather, including higher summer temperatures and heat waves, has not worsened yet, but it is expected to by mid-century.

¹ https://www.dnr.state.mn.us/climate/climate_change_info/index.html

Increasing the understanding of the local impacts of climate change

One challenge we face in Hennepin County is that the dramatic images seen in the news of hurricanes, persistent droughts, wildfires, and urban heat waves don't match up with how we are currently experiencing climate change, so it can be harder for our staff, residents, and partner organizations to understand our local impacts. Thus far, impacts in Hennepin County have mostly been limited to small geographic areas, such as an intense rainfall inundating a portion of a city, creeping groundwater flooding affecting a small zone of residents, or landslides happening in specific areas. Additionally, the effects of extreme heat and extreme cold disproportionately impact vulnerable populations, leaving the general public with an underappreciation of these climate change impacts.

There needs to be an increased understanding that a functioning, stable climate serves as the foundation of our lives. Our health and safety, water supplies, food systems, access to healthy air, and where we are able to live all depend on a stable climate. Climate change is the ground shifting under our feet, challenging our capacity to grow food, changing the diseases and pests we have to deal with, disrupting our communities, and threatening our health and safety.

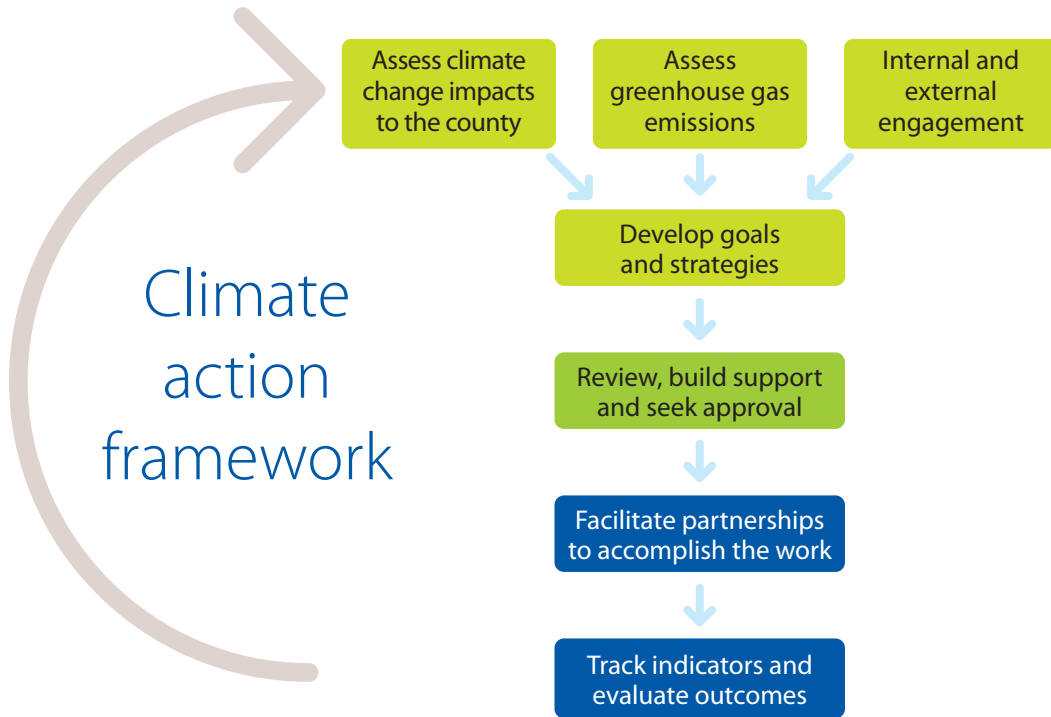


Our health and safety, water supplies, food systems, access to healthy air, and where we are able to live all depend on a stable climate.



Developing the climate action plan

Planning approach



Internal and external engagement was conducted throughout the plan development. The county will track the metrics identified through the plan to evaluate whether the strategies in the plan achieve their desired outcomes. The arrow reflects the intention to make the plan iterative and adaptable as the county moves into implementation of the plan.

Phase I: Research and assessment

The first phase of the county's climate action plan development involved conducting research and assessing climate change impacts and greenhouse gas emissions. A summary of the key findings are described in the background section for each goal. The full reports are posted online at hennepin.us/climate-action.

In this phase, staff engaged Hennepin County's cities, watershed organizations, park districts, and other regional and state units of government to learn about their priorities for climate work and opportunities for collaboration. Staff also reached out to partner community groups that are working on climate change to gather feedback on the community engagement approach.

Figure 2: Climate action framework

The development of the climate action plan has followed the process depicted in Figure 2 with the following phases:

- Phase 1: Research and assessment on climate change impacts and greenhouse gas emissions
- Phase 2: Develop goals and strategies
- Phase 3: Review, build support, and seek approval
- 2021 and beyond: Seek and facilitate partnerships to accomplish the work

Phase II: Develop goals and strategies

Staff from every line of business were engaged in the following five work teams to develop goals and strategies to respond to climate change.



People: health, behavior, and disparity reduction



Transportation and infrastructure



Buildings and energy



Waste and materials



Water, natural resources, and land use

The teams proposed climate action strategies based on their focus area. The climate team leads then worked with Diversity, Equity, and Inclusion staff to apply a disparities reduction lens to the brainstormed strategies. In total, the teams came up with more than 200 strategies to address climate change.

The strategies were analyzed for similarities among the teams and categorized into themes. Finally, team leads were asked to consider the current landscape, taking into account financial realities, the county's core work functions, and their professional expertise in their focus area to recommend

which strategies the county should pursue to build a strong foundation for an impactful response to climate change.

Seven foundational strategies were identified from that analysis. These strategies are staff's recommendation about the best place to start that will serve as a strong foundation for the county's long-term response to climate change. Those strategies were presented to the county board on September 24, 2020. See foundational strategies on pg. 65.

Appendix A includes an acknowledgement of the 59 staff members representing 20 departments that participated in the teams.

Phase III: Review, build support, and seek approval

The county's approach to engagement began with internal coordination, then expanded to include public entity and community group partners, and then residents and businesses more broadly.

Early in 2020, staff reached out to county subject matter experts and senior leadership in all lines of business asking for their commitment to this work and to consider how the county can best respond to climate change. For the county to succeed in an impactful response to climate change, this work needs to be a priority for all lines of business, not just work for environmental staff. Staff recognized that to achieve the desired outcomes in this plan, the county must commit to a long-term endeavor that requires significant changes to county policies, systems, and practices.

In May 2020, staff reached out to Hennepin County's cities, watershed organizations, park districts, and other regional and state units of government to learn about their priorities for climate work and opportunities for collaboration.

In June 2020, county commissioners reviewed the findings from the research and assessment phase of the work and provided feedback that helped shape the development of the strategies and informed the community engagement efforts.



On May 4, 2021, the Hennepin County Board of Commissioners adopted the Climate Action Plan.

2021 and beyond

With this plan, the county’s leaders have articulated a framework to realize our vision for a climate-friendly future. As the county moves into implementation, we will demonstrate that climate action is a countywide priority for all departments, and we will align resources with this priority. Work plans outlining timelines, budgets, and responsibilities will be created for the strategies identified in this plan. Employees are already engaged in pursuing the plan’s foundational strategies (see page 65) to showcase early successes.

The plan is driven by the county’s priority of reducing racial disparities. With this plan, the county centers how climate change work is intersectional with racial equity work. Staff will use the county’s Racial Equity Impact Tool to guide how we engage with community, particularly those most impacted by a policy, program, or budget decision, and ensure that we consider how the community may benefit or be burdened by those decisions.

The county looks forward to convening partners to further develop action plans for strategies, pursue collaborations for greater impact, and raise a collective voice for climate policy. The county will also help our residents understand the impacts from climate change, help residents, businesses, and organizations take action, and build support for collective action that is necessary to drive systems change.

For us to achieve our climate goals, climate-driven investments need to be priorities and longer-term solutions to funding must be found. Developing and including a climate analysis framework, which builds on the Race Equity Impact Tool, that can be applied in budgets and planning work will be critical to advancing this work with tight budgets. This plan shifts the climate aspects of projects from “nice to have” to “must have” features. By accounting for a changing climate in the things that we build, we are protecting our investments into the future.



Climate action plan

Prioritize disparity reduction

Cut greenhouse gas emissions

Adapt to climate hazards

Results in a more equitable and resilient Hennepin County

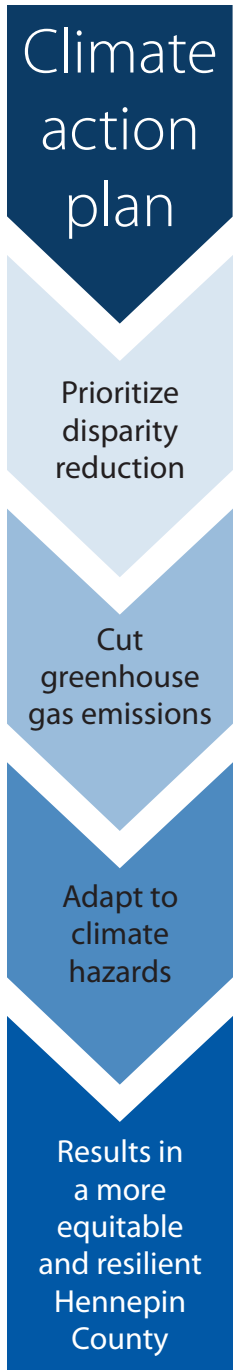
Vision for an impactful plan

This plan includes initiatives to cut greenhouse gas emissions and strategies to adapt to the changing climate in ways that reduce vulnerabilities and ensure a more equitable and resilient Hennepin County. This plan serves as the foundation for a coordinated approach to planning, policy development, and responses to climate change.

The most important values to residents and community partners in creating a climate-friendly future are:

- Ensuring a healthy environment for future generations
- Protecting people most susceptible to climate impacts and reducing racial disparities
- Protecting wildlife and nature
- Responsibly using resources and minimizing wastefulness





Cut greenhouse gas emissions

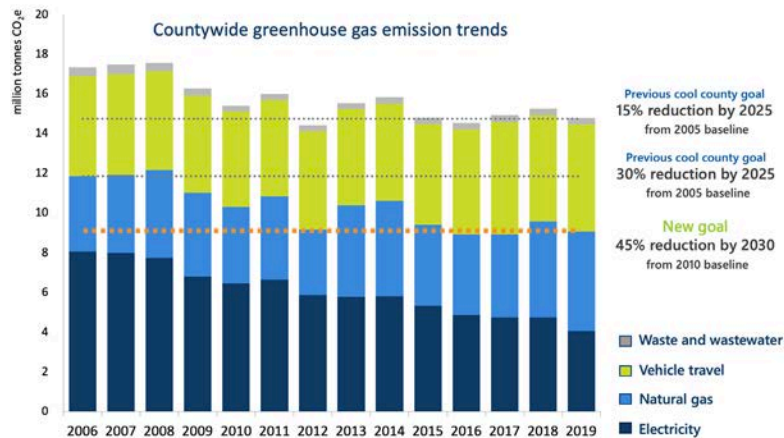
The Hennepin County Board of Commissioners updated county goals to reduce greenhouse gas emissions by 45% from 2010 levels by 2030 and achieve net zero emissions by 2050.

These goals are based on the global consensus from scientists working with the United Nations Intergovernmental Panel on Climate Change (IPCC) and align with the direction being taken at the federal and state level. The scientific consensus establishes that we need to substantially reduce emissions and make rapid and far-reaching changes in all aspects of society to avoid the most severe impacts of climate change. These emission reduction targets apply to both the geographic area of the county and county operations.

Net zero carbon emissions is achieved by “balancing” a limited amount of carbon released with offsets that remove carbon from the atmosphere. These ambitious goals were recommended as a way to limit warming to 1.5 degrees Celsius, which would reduce challenging impacts on ecosystems, human health, and well-being while making it easier to achieve equitable and sustainable development.

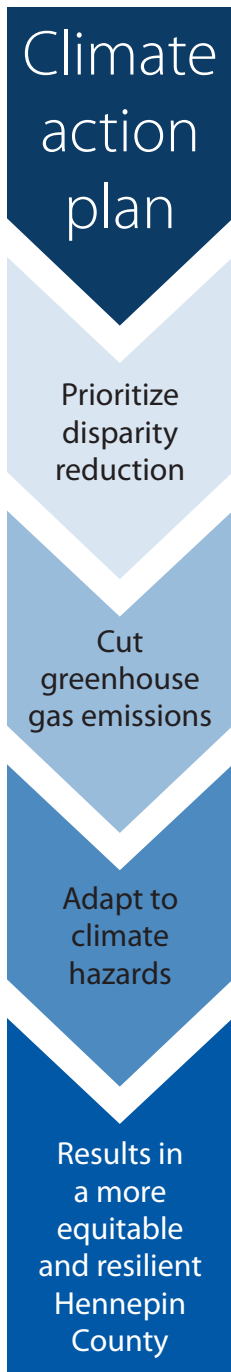
Previously, the county was pursuing emissions reduction goals from a 2005 baseline by: 15% by 2015; 30% by 2025; 80% by 2050 from both the geographic area of the county and from county operations. As depicted in Figure 3, countywide greenhouse gas emissions have dropped by more than 15% from the 2005 baseline. The success in meeting the 2015 greenhouse emission reduction goal was largely due to Xcel Energy’s efforts to expand renewable energy sources. Emissions relating to waste and wastewater treatment, transportation, and energy generation from natural gas have changed little over the past 12 years.

Figure 3: Countywide greenhouse gas emission trends



Adapt to climate hazards and prepare for the projected impacts

In May 2019, the county board directed staff (Resolution 19-0158R1 S1) to develop a coordinated resiliency and adaptation plan. **Climate adaptation** is about developing and implementing strategies to help human and natural systems cope with and become more resilient to the impacts of climate change.



Results in an equitable and resilient Hennepin County

The impacts of climate change will more acutely affect historically marginalized communities. Like other environmental justice issues, data shows that people of color, low-income families, and residents with disabilities contribute least to the problem of climate pollution, but these residents are the most at risk from negative climate impacts. As the county seeks to protect the most susceptible residents, we acknowledge that those who have the least capacity to respond to climate change will be most affected.

Resilience is the capacity of a community, individual, business, or natural environment to prevent, withstand, respond, and recover from acute shocks and stressors.

Because disparity reduction is a priority for the county, we modified a climate resiliency framework used by many organizations to show how climate resiliency aligns with disparity reduction. The county's the disparity

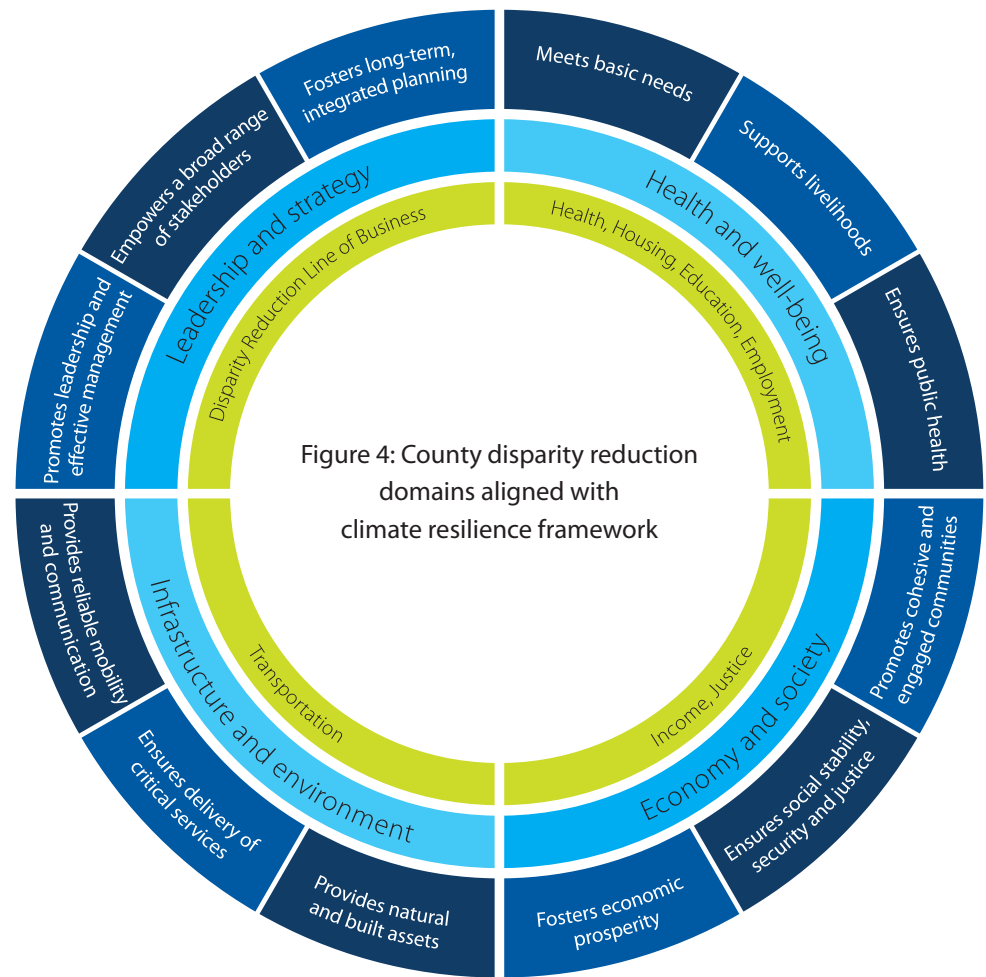


Figure 4: County disparity reduction domains aligned with climate resilience framework

reduction domains are shown in the green inner circle (See Figure 4). This helps to identify which areas of climate response and resiliency overlap with the disparity reduction domains. See Appendix C for a chart that aligns each climate plan strategy with its related disparity reduction domains.

The plan will result in building a more resilient community that can withstand and adapt to abrupt and sometimes unforeseen weather, social, and economic changes. The strategies pursued in this plan need to advance equitable outcomes and not exacerbate racial disparities.



Goal: Protect and engage people, especially vulnerable communities

The county strives to meet the needs of our residents by enhancing safety, health, and quality of life. As we serve today's residents, the county must also ensure a high quality of life for the generations to come.

The effects of climate change related to air pollution, flooding, and extreme heat will exacerbate health threats, especially for people of color, low-income families and people with physical disabilities. These residents are most susceptible to the negative impacts of climate change due to racist decisions in the past around land use, transportation and other policies. These persistent inequities are still upheld in our systems today. They have created disparities in outcomes and have inequitably increased the risk posed to historically marginalized communities by climate change.

The county must prioritize protecting the health of residents amid these increasing threats. At the same time, the investments the county makes in responding to climate change present the opportunity to reduce disparities in employment and grow the economy. To have a transformative impact, the county needs support and engagement from residents, businesses, and organizations to advance collective action and drive systemic change.



The impacts of the climate crisis are not felt equally, making the response to climate change a justice issue that requires authentically engaging with communities, advancing efforts to dismantle systemic racism, and reducing disparities.

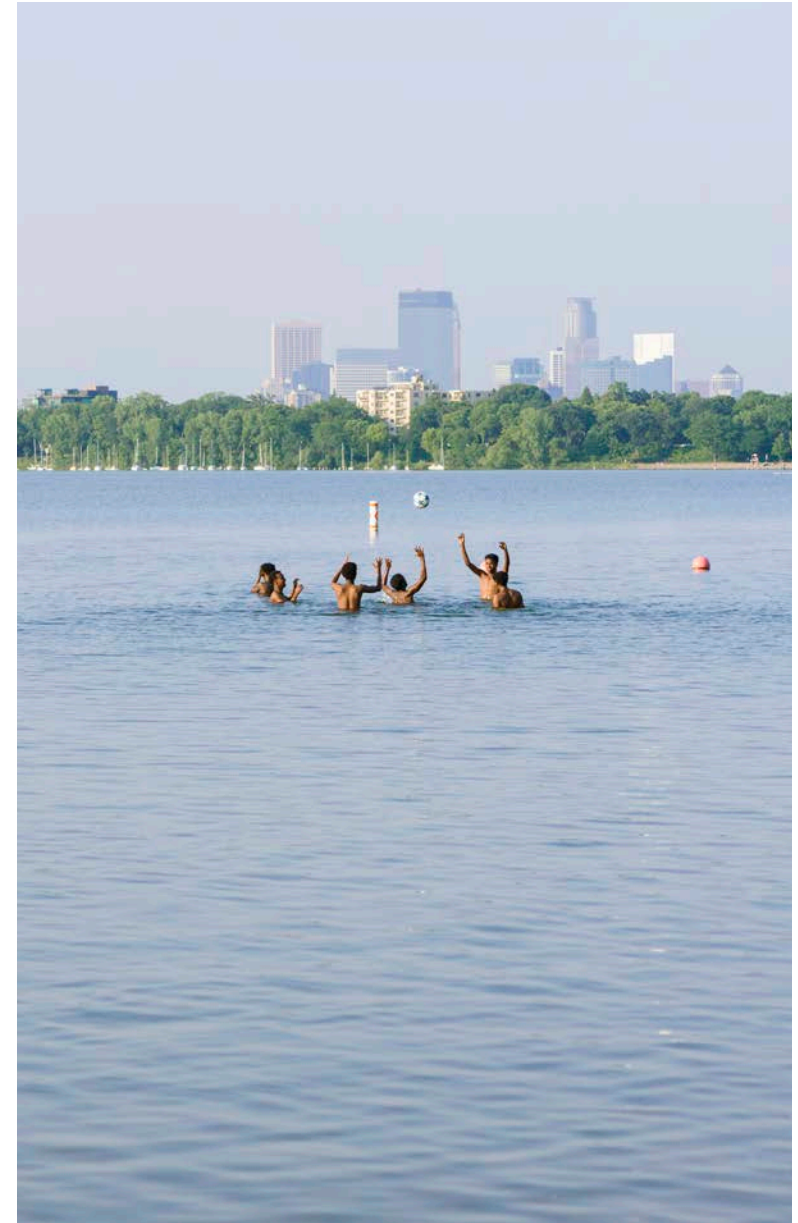


Goal: Protect and engage people, especially vulnerable communities

Health and livability impacts of climate change

Changes in our climate will result in changes to health and livability for our residents. The county anticipates preparing and responding to the following health and livability impacts:

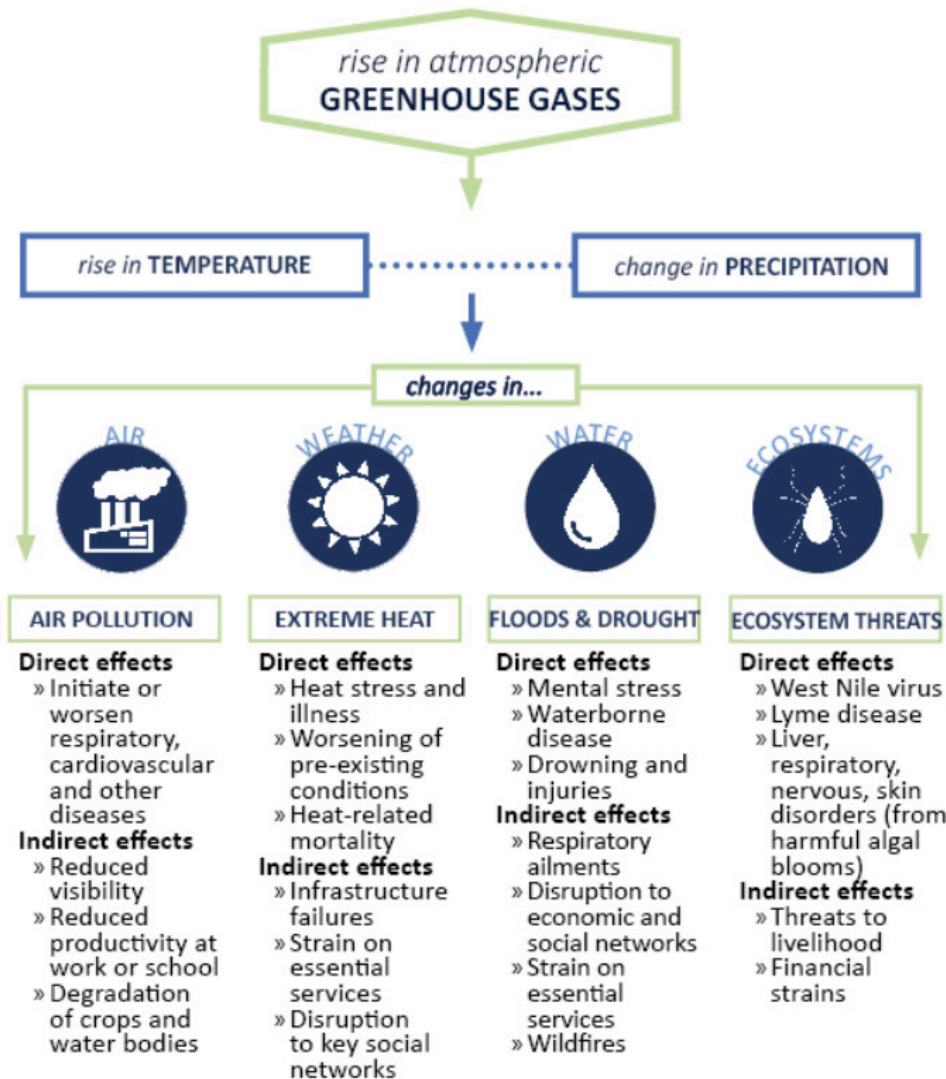
- Rising temperatures and changes in climate patterns are likely to increase air pollution. Air pollutants, such as ozone, particulate matter, and allergens, pose respiratory and cardiovascular threats.
- Increasing frequency and intensity of heavy rainfall events will lead to more flash flooding, which is a safety risk, especially for historically marginalized residents. Flash flooding also threatens property and belongings and limits access for emergency vehicles to respond to calls.
- Sustained high precipitation will saturate soils and disproportionately impact residents living and working in areas prone to groundwater flooding. Buildings in persistently wet soils are more likely to grow mold and bacteria that reduce indoor air quality and pose respiratory threats to people in the buildings.
- Extreme heat, especially in urban areas, will put historically marginalized residents at higher risk of overheating. Increasing temperatures combined with increases in precipitation will lead to increased humidity, compounding risks to residents with underlying health conditions.
- Transmission of West Nile Virus, Lyme disease, and other vector-borne disease is expected to increase as the distribution of ticks, mosquitoes, and other insects change as a result of warmer and wetter conditions.
- Negative mental health outcomes can be caused by the acute trauma of an extreme weather event or the gradual onset of climate change. Mental health issues may include anxiety, stress, depression, and post traumatic stress disorder.





Goal: Protect and engage people, especially vulnerable communities

Figure 5: Health effects of climate change.
Source: Minnesota Department of Health, 2016



Most common effects of climate change that residents have experienced over the last few years

(% of survey respondents who say they have experienced this effect)

- Stress or anxiety due to worrying about climate change and the future (74%)
- Changes in activities due to extreme, severe, or weird weather (55%)
- Increase in pests, such as ticks and mosquitoes (46%)
- Needing to deal with extreme heat or cold, including finding shelter and access to air conditioning (43%)
- Impacts on activities caused by poor air quality (40%)



Goal: Protect and engage people, especially vulnerable communities

Climate resilience

Climate change is likely to bring more abrupt and challenging situations, such as flash floods or severe weather, that worsen existing disparities.



© Star Tribune

A climate hazard, such as water in the basement, could be an inconvenience for some, a manageable problem for others, or a catastrophic event for those without the means to respond.

To illustrate this point, as winters have been warming, Hennepin County has seen an increase in winter rains. Rainwater flowing toward snow-covered stormwater intakes cannot infiltrate frozen soils and pools in the lowest spots. When winter rainwater flows into residential and commercial basements, the owner's and/or renter's financial ability to respond determines whether the damage is inconvenient, manageable, or catastrophic. The property of those without the financial means to repair the water damage may end up in tax forfeiture. Hennepin County is finding that many tax-forfeited properties have water damage, which the county repairs prior to reselling the property at market value.

Building a more resilient community – for example, at the individual level by providing financial assistance to help residents prevent or repair water damage and at the community level by increasing stormwater holding capacity in areas that are most prone to flooding – will help disrupt disparities and protect our society, economy, and public health.



Objective: Hennepin County becomes a more resilient community that can withstand and adapt to abrupt and sometimes unforeseen weather, social, and economic changes

Strategy: Strengthen individual and community resilience

- Collect, monitor, and communicate climate risks to public health, society, and the economy.
- Foster relationships with communities to engage, listen, and respond with people-centered solutions.
- Improve education and communication to promote awareness, personal action, and best practices in the areas of:
 - Chronic disease prevention and management.
 - Vector-borne diseases.
 - Physical and mental health, wellbeing, and resiliency.
 - Environmental health, including indoor air quality, wet basements, and mold.
 - Weather and subsequent health effects, including overheating, frost bite, and drowning.
- Plan for population growth due to people relocating from areas facing more severe climate impacts and explore lessons learned from previous climate shocks to prepare for climate refugees.
- Increase coordination with Minnesota Department of Health through their Climate and Health Program efforts.
- Collect data from recreational beach water to monitor disease rates and respond to outbreaks.



Goal: Protect and engage people, especially vulnerable communities

Protecting vulnerable communities

The impacts of climate change will affect all residents, but the impacts will not be felt equally. Like other environmental justice issues, data show that our communities of color, low-income families, and residents with disabilities contribute least to the problem of climate pollution.²

Despite this, these residents are the most at risk from negative climate impacts, especially during flooding events, heat waves, and poor air quality days.³ As the county seeks to protect residents most vulnerable to climate change impacts, we acknowledge that those who have the least capacity to respond to climate change will be most affected.

The darkest blue areas on the map (Figure 5, pg. 20) are census tracts where people who will most acutely feel disproportionate impacts of climate change live. This map was created by layering 14 social, demographic and economic variables to help assess the influence of social determinants of health on climate vulnerability. This approach is consistent with that used in other, similar analyses, such as Ramsey County Public Health's vulnerability assessment, Met Council's areas of concentrated poverty, MPCA's Environmental Justice datasets, and CDC's Human Vulnerability Index. Of note, this map mirrors both the county's Historically Undercounted Communities map and the COVID-19 Equity Impact Awareness Tool maps recently created by Hennepin County GIS. This makes it clear that the communities most impacted by historic and systemic racism and the COVID-19 pandemic are the communities most susceptible to the impacts of climate change.



² Minnesota Pollution Control Agency, Life and Breath: How Air Pollution Affects Public Health in the Twin Cities, July 2015.

³ Minnesota Department of Health, Minnesota Climate and Health Profile Report 2015.



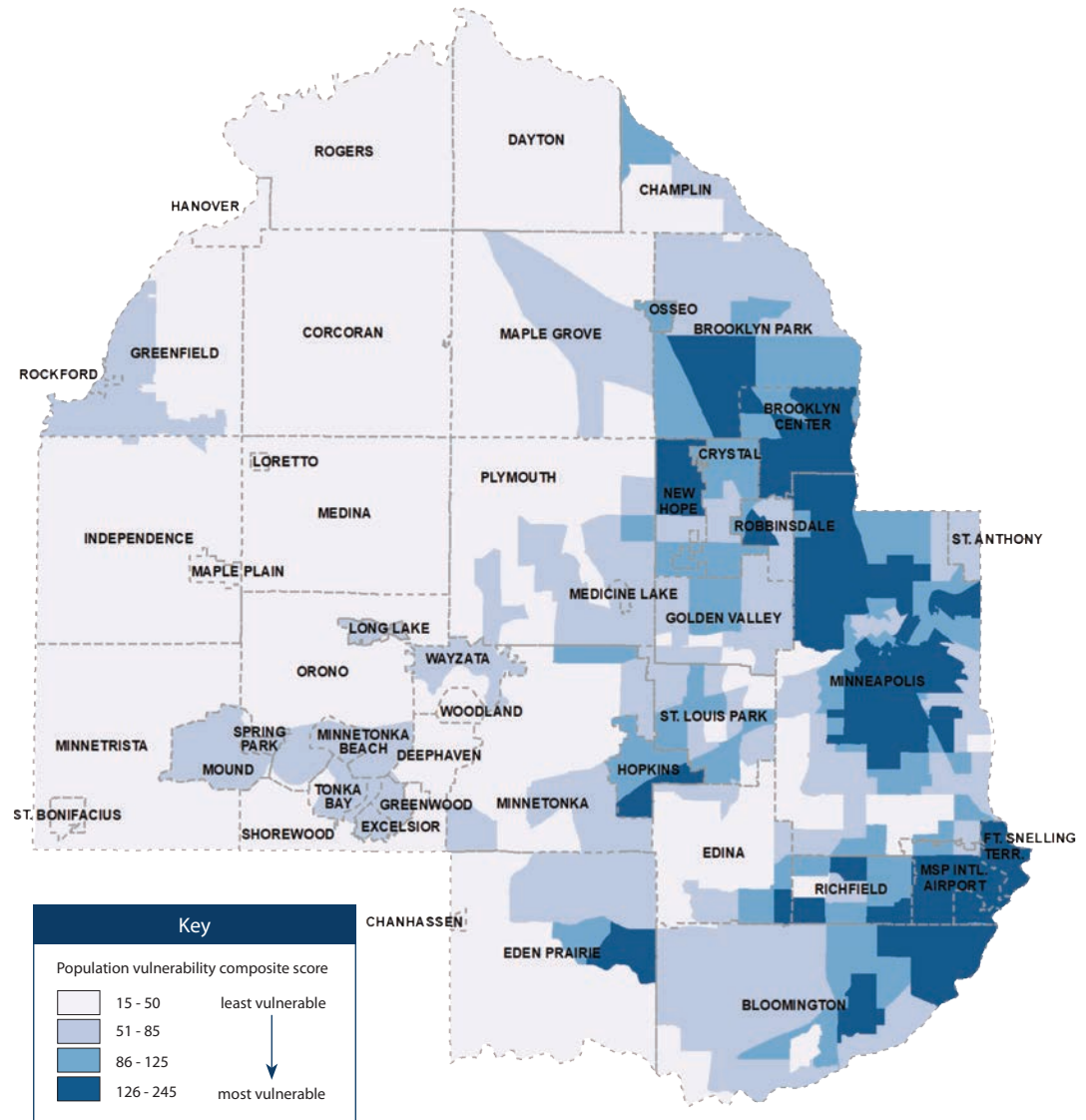
Goal: Protect and engage people, especially vulnerable communities

This map will be used to inform decision-making and help staff determine where to prioritize work to reduce specific vulnerabilities. This dataset can be used as a base layer to which additional program-specific datasets can be overlaid to provide a climate lens on decision-making. This will build on the county's use of a race equity impact tool to create a more robust picture about the impact of a policy, program, or budget decision. Using these tools can help staff and others consider how people of color and other people who are more susceptible to negative climate impacts may benefit or be burdened by those decisions.

Variables included:


- Asthma hospitalization rates
- COPD hospitalization rates
- Households with no vehicle
- Limited English language proficiency
- Median household income
- No high school degree
- People of color
- Population age 5 and under
- Populations below 185% poverty threshold
- Population density
- Population age 65 and older
- Population with any disability
- Renter housing units
- Unemployment rates

Figure 5: Human vulnerability index





Goal: Protect and engage people, especially vulnerable communities


 **Objective: The county's response to climate change prioritizes the protection of the most vulnerable residents and advances equitable health outcomes**

Strategy: Better understand and plan for the health needs of our diverse communities

- Improve collection of data and monitor the health impacts of climate change, including increased respiratory and cardiovascular disease burdens and particularly the impact on racial disparities.
- Strengthen sustainable access to affordable housing, healthcare, food, and transportation and other social determinates of health for residents.
- Create relationships with the communities in ways that strengthen engagement and build trust.
- Develop and include a climate analysis framework with a health and racial equity lens in budgets and planning work.
- Conduct outreach to vulnerable communities using customized and culturally appropriate approaches to meet diverse communities' needs.

Strategy: Mitigate disproportionate impacts associated with climate change

- Mitigate the heat island effect, especially in areas with people most vulnerable to extreme heat, by supporting increased access to air conditioning, increasing the tree canopy, and converting hardscape where possible to green infrastructure.
- Address flooding in housing, especially where people most vulnerable to flooding impacts live, by promoting and providing financial support for preventative measures such as sump-pumps and landscaping to redirect water away from structures.
- Build awareness of expanding flood zones among at-risk residents and businesses and the potential availability of optional flood insurance. Explore options for possible subsidized flood insurance based on financial need.
- Reduce air pollution associated with transportation, especially in areas with vulnerable populations.
- Reduce the health impacts associated with pollution from the production, packaging, use, and disposal of materials by supporting waste prevention, reuse, recycling, toxicity reduction, and proper management of hazardous waste.

 "Climate change is intersectional. Climate change burdens are racial/class discrimination burdens. It is all connected. Make space and time for those most impacted, along with experts. Talk to everyday people from all walks of life."

– Resident comment



Racism as a public health crisis

The reality is that persistent disparities separate people who are not thriving in Hennepin County from those who are.

Although everyone will be impacted by the climate crisis, it will not be experienced equally. Like other environmental justice issues, those who least contribute to the problem of climate change will be most impacted. In this climate action plan, the county recognizes our obligation to work toward eliminating disparities in our response to climate change.

In June 2020, the Hennepin County Board passed a resolution declaring racism as a public health crisis that affects the entire county. This declaration supports the county's foundational work to develop strategies that mitigate personal bias and prejudice in the community, create systems that build equity, and create a future where all residents are healthy and successful and all communities thrive.

In Hennepin County, inequities in education, employment, health, housing, income, justice, and transportation are starkest between residents of color and their white counterparts. Acknowledging that this is both true and unacceptable is just the beginning. When we start our work from this shared perspective and shift our guiding lens to one that is focused and committed to addressing these disparities, we can see the places, partnerships, programs, and services where we have a responsibility to act. Hennepin County will support local, state, regional, and federal initiatives that advance efforts to dismantle systemic racism, will seek partnerships with local organizations that have a legacy and track record of confronting racism, and will promote community efforts to amplify issues of racism to engage actively and authentically with communities of color wherever they live.

– Excerpt from County's Administration's response to the board resolution declaring racism as a public health crisis





Goal: Protect and engage people, especially vulnerable communities



Inequitable climate impacts that affect health and well-being

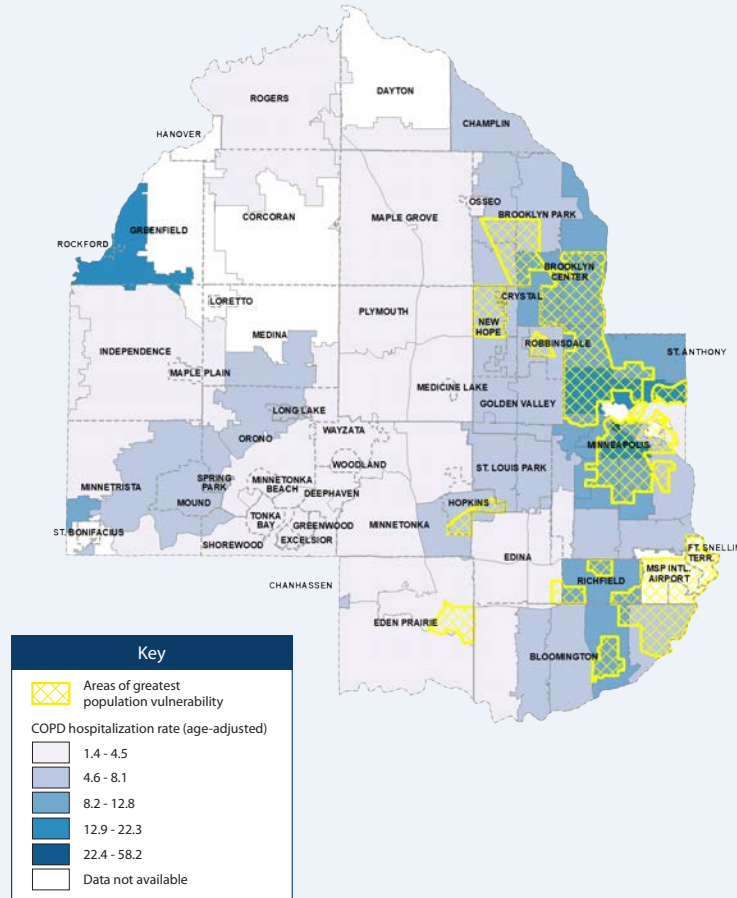
Air quality

Increased heat and precipitation associated with climate change is already causing adverse impacts on air quality that exacerbate many underlying health conditions by increasing stress on the body.

For example, rising humidity levels in combination with more frequent flood events from increased precipitation encourages greater mold and bacterial growth in buildings. In addition, rising temperatures and the lengthening of the growing season will expand the allergy season, disproportionately impacting residents with asthma and/or chronic obstructive pulmonary disease (COPD).

The following map (Figure 7) shows a significant association of COPD hospitalizations with the populations most vulnerable to climate change impacts. Public health experts use COPD hospitalizations rather than asthma hospitalizations because they more closely correlate with poor air quality.

Figure 7: COPD hospitalization rates



Health impacts of air pollution

Understanding the relationship between exposure to pollutants and disease is difficult because people move in and out of neighborhoods - they live, work, and are active in many settings. Some people are exposed to more air pollution than others because of where they live or work, and some people are more affected by it. For example, people with pre-existing heart and lung conditions are at greater risk, and so are the elderly and children. People of color, indigenous people, and people with low incomes face social, economic, and health inequities that often contribute to increased frequency of health conditions that can be affected by air pollution. These inequities mean that communities of color, indigenous communities, and lower-income communities tend to be more vulnerable to the effects of air pollution.⁴

⁴ The air we breathe. The state of Minnesota's air quality 2019 <https://www.pca.state.mn.us/sites/default/files/Iraq-1sy19.pdf>





Goal: Protect and engage people, especially vulnerable communities



Sources of greenhouse gas emissions and air pollution

Two-thirds of Hennepin County's greenhouse gas emissions come from the electricity and natural gas used to power industrial, commercial and residential buildings. Most of the remaining one-third comes from transportation emissions. The rest comes from the smaller, "neighborhood" sources such as backyard fires, auto-body shops, and dry cleaners.

Pollution from these emissions sources is higher in the parts of Hennepin County where our residents who are most vulnerable to climate change live because of the higher density of emissions sources. For example, with the exception of ground-level ozone, transportation-related air pollution is higher in the more urban areas of the county where the road network is densest and traffic is highest. This coincides with where many of the county's most vulnerable residents live.

Climate change impacts on air quality

While Hennepin County's air quality is generally good in terms of meeting federal air quality standards, projected climate trends will result in decreased air quality.

The Minnesota Pollution Control Agency maintains an Air Quality Index that categorizes air quality on a daily basis on a scale ranging from good to very unhealthy. Air quality has improved in recent years due to the increasing transition from coal-fired to natural-gas-fueled power plants, the expansion of solar- and wind-powered energy, more transit choices, and increased vehicle fuel economy standards.

However, unless significant mitigation efforts are undertaken, climate change will cause certain types of air pollution, such as particulates and ground-level ozone, to increase. This will potentially have significant consequences for our vulnerable residents.

One impact of climate change that Minnesota has not yet experienced is increased periods of drought, which is already occurring in other parts of the U.S. Droughts lead to the increased occurrence of wildfires, and smoke from these wildfires, especially those in western states and Canada, can adversely impact air quality in Hennepin County. During the summer of 2018, seven of the nine unhealthy air quality days in the metro area were the result of smoke from distant wildfires. Based on current projections, we can expect the number of unhealthy air quality days caused by distant wildfires to increase. In addition, if projections of periods of localized drought prove correct, nearby wildfires will also impact air quality.



Unhealthy air quality caused by Canadian wildfires. Photo: Minnesota Pollution Control Agency, 2015





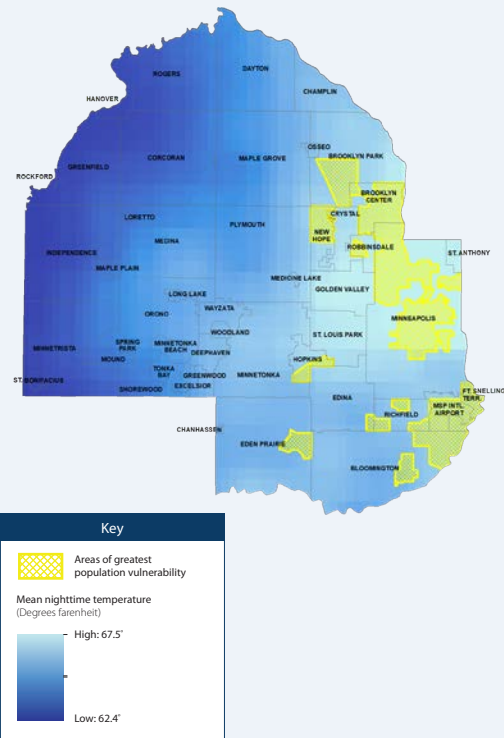
Goal: Protect and engage people, especially vulnerable communities



Extreme heat

Increased temperatures combined with increased humidity will disproportionately affect residents with underlying health conditions, especially those with limited means to adapt.

Figure 6: Heat Island – August Nighttime



Urban heat islands and vulnerable communities

Many urban areas have more concrete and other impermeable surfaces that radiate heat along with less tree canopy and greenspace to mitigate the heat. This creates urban heat islands where the temperature measured can be significantly higher than the official reported temperature. The continued rise of temperatures due to climate change is likely worsening this heat island effect.

Occurrences of daytime extreme heat are projected to increase by 2050. While a couple of degrees may not seem significant, increased temperatures combined with increased humidity will disproportionately affect residents with underlying health conditions, especially those with limited means to adapt.

Areas with those most vulnerable to the effects of extreme temperatures and the urban heat island are show in the map (Figure 6). The map was developed using average August nighttime mean temperatures from August 2011 to August 2014, which was derived from a study by the University of Minnesota⁵, overlain with the areas of greatest population vulnerability. Nighttime temperatures are an important factor because our bodies are evolved to cool down at night. The inability for the body to cool off, especially at night, exacerbates physical and mental health stressors.

These data show that the urban heat island effect is stronger at night in the summer and during the day in the winter. Temperatures in the urban Twin Cities core averaged 2 degrees F higher than surrounding areas and spiked to as much as 9 degrees F higher than surrounding areas during a heat wave.

Additionally, a separate analysis by the University of Minnesota⁶ showed that the areas most impacted by the urban heat island effect align with areas where people who have historically faced housing discrimination live. More information about this analysis can be found online in the county's climate vulnerability assessment.

Access to cooling centers and other means to cool down

Many cooling centers are not open overnight or are not reasonably available to those in need. In addition, the COVID-19 pandemic has complicated the use of cooling centers, which results in very few cooling centers available in areas where the most vulnerable residents live.

Once again, the capacity to respond to increasing temperatures determines whether heat is an inconvenience, a manageable problem, or a catastrophic event. For many residents, higher temperatures may translate only to higher utility bills resulting from increased use of air conditioning, but some residents may not have air conditioners or the ability to pay to run them and are more likely to have underlying health conditions that make lack of access to air conditioning a bigger problem.

⁵ Smoliak, Brian. Dense Network Observations of the Twin Cities Canopy-Layer Urban Heat Island. JOURNAL OF APPLIED METEOROLOGY AND CLIMATOLOGY. Pgs 1899-1917. September, 2015.

⁶ University of Minnesota CREATE Lab, Islands in the Sky: Urban Heat Island and Redlining presentation, 2020.






Goal: Protect and engage people, especially vulnerable communities

Engaging the public

Climate change affects all parts of the county and all residents, businesses, and organizations. Transformative climate policies must be driven and supported by the public. To advance an impactful climate change response, we need to engage residents, listen to how climate change is impacting them, and collectively build support for solutions. Defining and articulating our collective vision for a climate-friendly future is critical to motivate collective action.

 **Objective: Residents, businesses, and organizations pursue individual actions and support collective actions that drive systems change**

Strategy: Educate and engage the public in taking collective action

- Engage a broad range of stakeholders in understanding the impacts and developing solutions.
- Define and communicate the county's vision for a climate-friendly future, and work with residents and communities to articulate our collective vision for a climate-friendly future.
- Understand our residents' attitudes, barriers, and motivation toward taking action to address climate change and identify what different priority audiences need to take action.
- Develop effective programs, messages, and outreach efforts to support collective action.



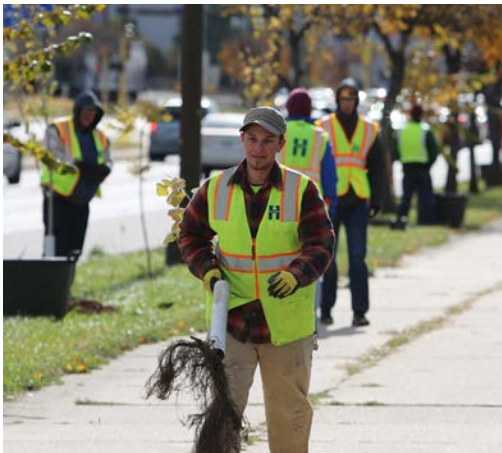
2015 Naturefest event, hosted by Hennepin County, with Earle Brown Elementary at Mississippi Gateway Regional Park in Brooklyn Park.



Goal: Protect and engage people, especially vulnerable communities

Green jobs

Several Hennepin County departments manage land and property for different purposes. New green infrastructure will help respond to projected changes in precipitation. Installing, establishing, and maintaining this infrastructure creates an opportunity to train a new green workforce and define new contract standards. Hennepin County has developed several training models to achieve other county priorities. The right workforce model will help multiple departments manage projected precipitation and achieve broader county goals to reduce disparities in employment and income.



Objective: County climate investments support broader county goals to reduce disparities in employment and grow the economy

Strategy: Maximize green economic recovery and workforce development opportunities

- Explore a green jobs/pathways program concept for installation, establishment, and maintenance of green infrastructure.
- Engage with youth, especially in areas of greatest vulnerability, to increase awareness of climate change and mitigation strategies, highlight careers in the environmental field, and create a community-based network of environmental stewards.
- Support new job opportunities in energy efficiency, renewable energy, and green infrastructure.

Target metrics

- Include climate considerations in the development of the 2022 budget.
- Determine which data to collect and begin monitoring for the health and environmental impacts of climate change by 2022.
- Develop options for a coordinated green jobs/pathways program by 2022 to support county departments as they install and maintain green infrastructure.



Snapshot from youth listening session

What kinds of green jobs are most interesting to you?

Youth suggested providing green job training in schools. They expressed interest in jobs such as:

- Building solar panels and working in the renewable energy sector
- Planting urban gardens and supporting urban agriculture
- Construction jobs for energy efficiency and extreme weather resiliency
- Conducting outreach to schools
- Environmental consultant to companies
- Transit driver

Community engagement included a listening session held with high-school aged youth involved with community group partners.



Goal: Enhance public safety

The county's emergency management work includes preparing for, mitigating against, responding to, and recovering from disasters to ensure public safety and health. Hennepin County Emergency Management coordinates the countywide emergency management program, maintains public and private disaster resources in the county, and works to ensure that emergency officials, government, private industry, and volunteer organizations take a unified approach to preparing for and responding to emergencies. Within this framework, Public Health Emergency Preparedness coordinates the portion of preparedness, response and recovery activities aimed at protecting the health of residents and staff.

The risk assessment process measures the vulnerabilities of communities, including loss of life, personal injury, property damage, and economic injury, resulting from hazard events. Hazards are triggered by natural processes, unintentional human causes, or intentional human threats. These triggers may also interact with each other to produce cascading impacts.

Detailed local hazard assessment information provides the framework to develop and prioritize mitigation strategies and plans to help reduce both the risk and vulnerability from future hazard events.

Reducing long-term risk

The most cost-effective disaster measures are mitigation actions that reduce or eliminate long-term risk to people and property from hazards. For every dollar invested in disaster mitigation, six dollars are saved in disaster response and recovery costs.⁷

Some of the climate-related hazards in the Hennepin County Hazard Mitigation Plan include extreme heat and cold, thunderstorms, extreme straight line winds (aka, "derecho"), tornadoes, winter storms, fires, flooding, power outages, infectious disease outbreaks, and geologic hazards, such as landslides or sinkholes. Mitigation efforts undertaken by communities will help to minimize loss of life, personal injury, and damages to buildings and infrastructure, such as water supplies, sewers, and utility transmission lines, as well as natural, cultural, and historic resources.



Surveying the damage from an EF-1 tornado in Minnetrista, 2019.

⁷ National Institute of Building Sciences, "Natural Hazard Mitigation Saves", 2017



Goal: Enhance public safety

Impacts of flooding due to heavier rainfall

Risks posed by heavier rainfall events

Hennepin County is experiencing a significant increase in the number of 2-, 3- and even 4-inch rainfall events. More frequent, heavy rainfall events means more flooding. Increased flooding events can put vulnerable residents at risk, endanger lives, destroy property and belongings, disrupt vital services, and hinder the ability of emergency response vehicles to respond to calls.

Varying ability to respond and recover

The ability of property owners and residents to respond and recover from flood impacts varies greatly. For some residents and businesses, flooding may be an inconvenience or a manageable problem. For others, such as a small business or a low-income family, flooding is potentially catastrophic. Beyond property damage, flooding also can lead to mold-related health impacts, waterborne diseases, and stress.

The increased need for flood insurance and protection

Until recently, those getting flood insurance were mostly property owners and residents in floodplains designated by the Federal Emergency Management Agency (FEMA). This led many people to believe that unless they were mandated to carry flood insurance, they were not at risk. But recently with the increasing frequency and intensity of heavy rainfall, nearly one-quarter of flood damage and one-third of flood recovery costs occur outside of the FEMA-designated floodplains, making it clear that wherever it can rain, it can also flood. This has led to an effort to increase flood insurance awareness and coverage in more areas.



*Hum's Liquors at the corner of 22nd & Lyndale flooded on July 16, 2019.
Photo by Jason Grote*



Goal: Enhance public safety



Objective: Hennepin County assesses, prepares for, and mitigates risks from hazard events

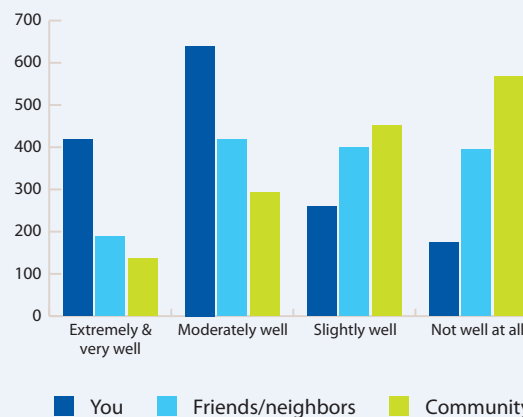
Strategy: Improve preparation for and response to extreme weather events, flooding, and other climate disasters

- Increase the density of the county’s network of automated weather and environmental monitoring stations (also known as the Hennepin West Mesonet) for improved warning and response decisions and increased ability to precisely target weather-related notifications.
- Identify areas at risk for all types of flooding, including flowing surface water (fluvial), standing surface water (pluvial) and subsurface water (groundwater) and coordinate with public entity partners to create strategies for reducing risk, especially for vulnerable populations.
- Inform development by increasing risk awareness of areas of surface and groundwater flooding, landslides, and sinkholes. Work with cities to include these risks as part of their review of new development proposals.
- Work with residents and businesses to build awareness of flood risks outside of FEMA-designated flood zones.
- Review emergency management preparedness plans to identify and address significant vulnerabilities in ensuring access to food, drinking water, energy supply and other living essentials during emergencies, particularly those anticipated to be exacerbated by climate change.
- Help create a more resilient energy infrastructure by establishing a mix of renewable energy and energy storage that together can withstand significant environment extremes to reduce the potential for blackouts, power outages, price spikes and public health risks.
- Regularly review continuity of operations plans to ensure delivery of core services and recovery after a disaster.
- Increase and maintain the supplies and equipment in the Hennepin Disaster Cache and elsewhere for emergency response to flooding and other increasing climate-related disasters.
- Improve natural disaster plans to include sustainable waste management practices to deal with the debris resulting from climate disasters.



Snapshot from resident survey


Preparedness to respond to climate change



Most respondents think they are prepared to deal with and adapt to climate change. Two-thirds of respondents describe themselves as being extremely, very, or moderately well prepared. Only 10% noted they were not well prepared, and another 10% responded they didn't know. The perspective shifted when asked to assess how well prepared their friends and neighbors are, with only about 40% of respondents describing their friends and neighbors as being extremely, very, or moderately well prepared. Nearly 30% think their friends and neighbors are not well prepared. Perception of preparedness is even lower when respondents consider their community. Nearly 40% think their community is not well prepared to respond to climate change impacts.



Goal: Enhance public safety

 **Objective: Residents, businesses, and organizations understand and are prepared to respond to the impacts of climate change**

Strategy: Reduce risks to vulnerable people from extreme heat or cold

- Clearly communicate climate risks and vulnerabilities and raise awareness about programs and services available to decrease risks and address vulnerabilities.
- Coordinate operations of readily accessible and culturally appropriate cooling and heating options and communicate the availability of these centers to vulnerable people.
- Advocate for expanding utility disconnect protections to include air conditioning and modifying building codes to require efficient air conditioning.



Target metrics

- Increase the county's network of automated weather and environmental monitoring stations (Hennepin West Mesonet) in areas most vulnerable to heat and flooding by 2022.
- Develop a mapping tool to comprehensively identify the sites most at risk for flooding of all types (fluvial, pluvial, and groundwater) to guide effective mitigation and response actions by 2022.
- Identify the structures and properties most at risk for flood damage in Hennepin County and develop partnerships that will help reduce or eliminate flood damages and disruption by 2025.



Goal: Increase the resilience of the built environment and protect natural resources

Climate adaptation is about developing and implementing strategies to help human and natural systems cope with and become more resilient to the impacts of climate change. The county needs to plan for and respond to increased pressure on natural resources and the built environment, including building sites, roads, and other infrastructure, from impacts such as increased rainfall, extreme weather, and freeze/thaw cycles. There are also many opportunities to use green and natural infrastructure to manage stormwater, improve water quality, decrease the urban heat island, and sequester carbon. Protecting and enhancing our natural areas will provide habitat for native plants and wildlife, increase wellbeing, and make our communities more resilient.



Buildings and transportation infrastructure

Stormwater design standards

Hennepin County uses the national standard, Atlas-14 precipitation estimates,⁸ to build resilient infrastructure. The dataset analyzes the historical frequency of heavy rainfall events through 2011. Transportation infrastructure is currently designed to handle a broad range of impacts based on historic climate records and familiar seasonal variations. Preparing for climate change and extreme weather events using projections of increased precipitation and heavier rainfall events is critical to protecting the integrity of the transportation system and the sound investment of taxpayer dollars.

While most county roads are kept passable with a stormwater pipe, these pipes were designed to old precipitation projections and may not adequately keep roads passable given mid-century precipitation projections. This map (Figure 8) depicts the locations where county roads were temporarily impassable due to flooding from 2014 to 2018.

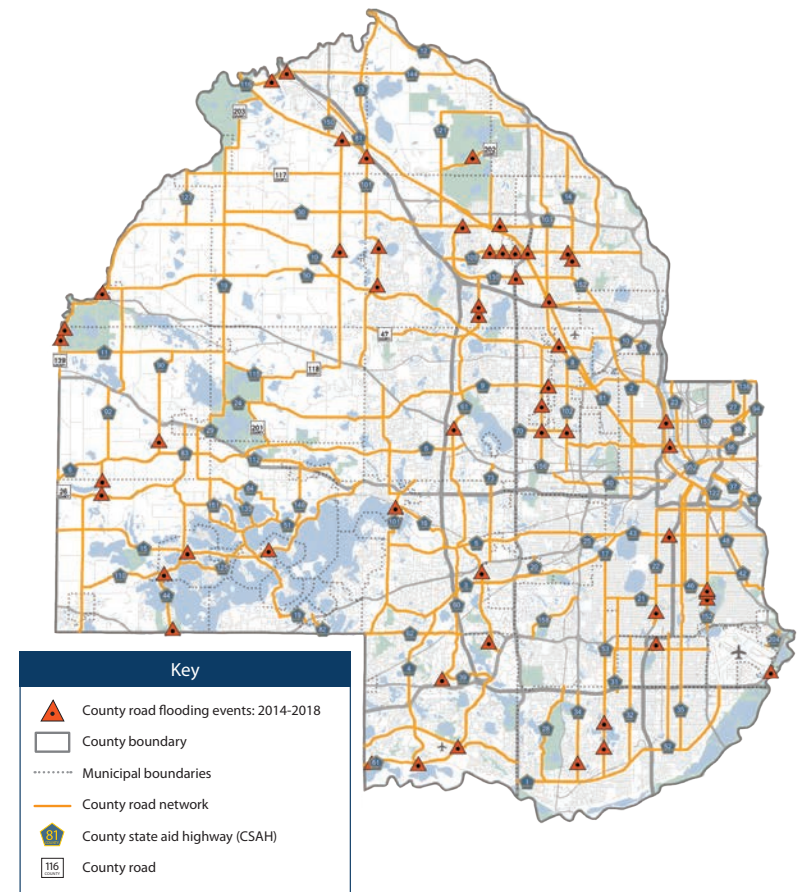
The county is working to identify ways to estimate changes to projected rainfall, relative to current Atlas-14 estimates, to better understand how planning needs must change to ensure county transportation infrastructure is prepared to handle mid-century conditions.

Freeze/thaw cycles

Minnesota is experiencing warmer winters and an increase in freeze/thaw events, which negatively impact pavement systems. Generally speaking, more freeze/thaw cycles will accelerate infrastructure deterioration, especially for older pavements that are distressed and have cracks in the surface and places where water will impact buildings, facades, sidewalks, and plazas.


⁸ National Oceanic and Atmospheric Administration, Precipitation-Frequency Atlas of the U.S. Volume 8 https://www.weather.gov/media/owp/oh/hdsc/docs/Atlas14_Volume8.pdf

Figure 8: County roads locations temporarily impassable due to flooding (2014-2018)





Goal: Increase the resilience of the built environment and protect natural resources

 **Objective: Climate risks and impacts to county buildings and infrastructure are assessed and mitigated**

Strategy: Reassess policies, design standards, and maintenance practices for county buildings and infrastructure projects

- Update stormwater design standards that will serve as a standard across Hennepin County lines of business to account for increased rainfall intensities.
- Modify pavement and sidewalk design standards to accommodate projected changes to freeze/thaw cycles.
- Change snow and ice removal practices to account for increased precipitation intensity and increased icing due to increased freeze/thaw cycles, reduce total salt use on county property, and accommodate more multi-modal transportation options on county roads.
- Alter site development performance standards and design guidelines for rights-of-way and other county properties to reduce impervious surfaces and prioritize green infrastructure, such as trees, boulevard landscaping, tree trenches, and detention tactics. Adjust county policy to address long-term maintenance needs of green infrastructure assets.
- Design capital projects to projected mid-century rain events and incorporate landslide hazard reduction approaches, where applicable.
- Incentivize projects that are designed to control projected mid-century rainfall events in the cost participation policy for contribution to regional flood reduction projects.

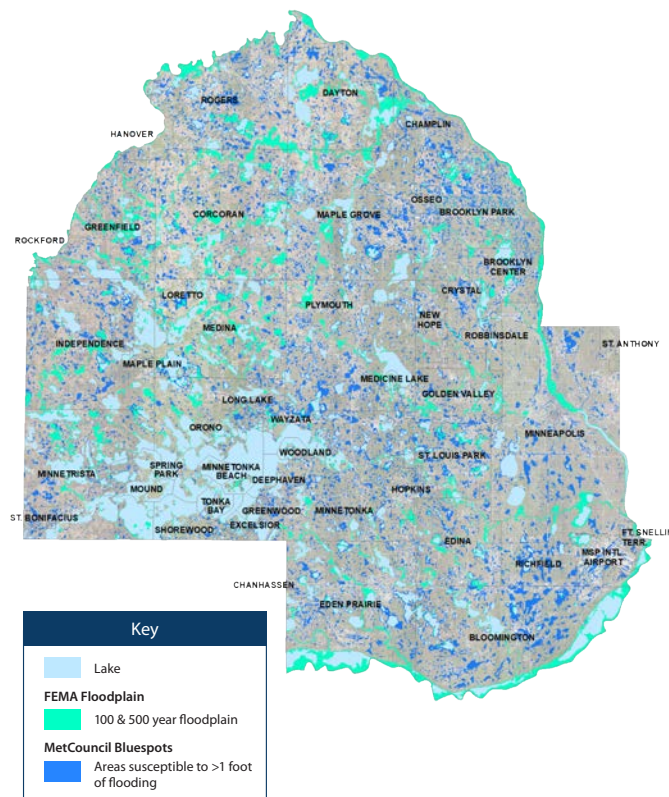


Increased stormwater and localized flooding

Surface water impacts are determined by how much and how quickly precipitation falls and by the ability of soils to infiltrate water or the capability of stormwater conveyance systems to drain it away.

This map (Figure 9) depicts the location of 100-year and 500-year floodplains as mapped by FEMA. A 100-year flood is more accurately defined as a flood that has a 1% probability of occurring in any one year. Due to increasing precipitation, the 500-year floodplain is rapidly becoming the new 100-year floodplain. While many FEMA maps take into account storm sewer capacity and soil types, the mapping doesn't present a full picture because it doesn't consider localized flooding. The Minnesota Department of Natural Resources is working to update these maps locally.

Figure 9: Areas susceptible to flooding



The locations on the map in dark blue are identified by the Met Council as susceptible to localized flash flooding from high-intensity rainfall based on topography. In other words, these are low spots. This analysis was conducted, in part, to examine risks from localized flooding that FEMA mapping doesn't consider. This Met Council "Blue Spot" data does not consider the varying capacity of these locations to drain, either by the existence of stormwater drains or soil infiltration. However, most stormwater conveyance systems were designed based on outdated precipitation models.

Increased precipitation also increases groundwater recharge, which in many cases results in a rise in local water tables. This can create groundwater flooding, which is already occurring in several locations in Hennepin County. The increased flooding poses risks to numerous properties, many of which may not have flood insurance because they are located outside of the mapped 100-year floodplain. While the acute risks posed by surface flooding from heavy rains are potentially covered, the longer-term impacts of increased precipitation such as rising water table levels and the expansion of wetlands and shorelines can jeopardize local infrastructure, private wells and sewage treatment systems, cause flooded basements, and create water-quality impacts.

Goal: Increase the resilience of the built environment and protect natural resources

Objective: Risks and impacts from increased precipitation, flooding, and landslides are reduced

Strategy: Reassess policies and practices to manage increased stormwater volumes

- Design capital projects to manage flows from mid-century forecasted rainfalls.
- Incorporate Green Streets stormwater management strategies into the county's Complete Streets policy.
- Protect and restore streams, wetlands, floodplains, and uplands.
- Reduce impervious surfaces, use green infrastructure, reuse stormwater for irrigation, and design landscapes that don't require irrigation.
- Reduce barriers to regional stormwater management by investing in partnerships, empowering staff to work beyond property line boundaries, and creating a policy for financial contributions to such projects.
- Preserve open space and agricultural lands and promote stormwater best management practices to landowners.

Strategy: Manage the increased risk of landslides due to increased rainfall

- Conduct further analysis to determine areas of risk, rank them in terms of severity, and develop solutions.



Localized urban street flooding, 2013

Strategy: Coordinate regional stormwater resiliency efforts with public entity partners

- Align land use, zoning, ordinances, and permitting activities with the realities of climate vulnerabilities and risks.
- Dedicate land at time of plat for climate change mitigation and stormwater facilities.
- Consider managed retreat in areas most vulnerable to flash flooding, such as finding opportunities with Hennepin County's tax-forfeited land portfolio, city economic development authorities, and local watersheds.
- Build stormwater facilities within county rights-of-way as part of capital improvement projects in opportunistic ways that share costs while achieving county, city, and watershed management goals.
- Protect drinking water by assessing vulnerability of wellhead protection areas and private wells to increased precipitation and flooding.
- Develop a groundwater plan that considers the impacts of climate change, including extreme weather events and wet/dry cycles, on groundwater resources, surface-level groundwater hazards, and drinking water availability.



Goal: Increase the resilience of the built environment and protect natural resources

Green infrastructure and resilience in the built environment

The county offers incentives for sustainable building practices and green infrastructure that can be leveraged to increase resiliency in the built environment. Green infrastructure refers to ecological systems, both natural and engineered, that act as living infrastructure. Examples include rain gardens, bio-swales, trees, and green roofs. These systems restore some of the natural processes required to manage water and create healthier urban environments. Building and maintaining green infrastructure to manage stormwater in flood-prone areas, especially on county-owned property, can protect surrounding properties, create green spaces, and make the community more resilient to climate change.

Through the Transit Oriented Development (TOD) financial assistance program, the county has provided \$40 million in assistance to create walkable, mixed-use, human-centered communities established around high-quality transit service. These TOD projects are compact and typically include reduced or shared parking, increased density that emphasizes public spaces, and enhanced pedestrian and bicycle amenities. Some of the projects incorporate sustainable design and stormwater management features. The county's Environmental Response Fund, which provides grants for the assessment and cleanup of contaminated sites, helps to remove barriers to green infrastructure and has scoring criteria that encourages developers to incorporate sustainable development. In addition, the county's Natural Resources Grants have funded 80 projects

that include neighborhood rain garden programs, water reuse projects, habitat restoration, and regional stormwater facilities.

The county's forestry program was created in 2015 as the county took on an expanded role in natural resources conservation. The forestry program focuses on protecting the county's tree canopy to increase the benefits that trees provide. Trees improve air quality by absorbing fine particulate matter and other pollutants and protect water by slowing down and infiltrating stormwater runoff. They also provide shade, reduce the urban heat island effect, lower stress, and increase property values. The county's forestry program includes growing healthy trees, partnering in large-scale planting events, managing threats to the tree canopy, raising awareness about tree pests and disease, educating the public on the benefits of trees, providing forestry workforce development opportunities, and supporting partners through the Healthy Tree Canopy Grants program.





Goal: Increase the resilience of the built environment and protect natural resources



Objective: The county employs green and natural infrastructure, including trees, plants, and soil, to increase resiliency of the built environment, especially in areas at higher risks for localized flooding and extreme heat

Strategy: Reassess policies and practices to ensure capacity to design, implement, and maintain green infrastructure

- Expand the use of sustainable landscapes to increase the resilience of county properties by managing stormwater onsite, reducing the impact of the urban heat island, and sequestering carbon by incorporating Minnesota's sustainable building guidelines (B3) site and water guidelines for building projects.
- Minimize hardscape in project designs and convert existing hardscape, where practical, into pervious pavement or green infrastructure.
- Assure long-term financial support to maintain green infrastructure and create green jobs.
- Include green infrastructure in site development performance standards for county projects.
- Reduce the volume of and pollutant load in stormwater runoff through increased implementation of stormwater best management practices on current county building sites and rights-of-way.

Strategy: Use county investments to increase resilience in the built environment

- Advocate for and incentivize the incorporation of green infrastructure into building renovation and site development plans on private property through transit-oriented development, Environmental Response Fund, Natural Resources Grants, and other incentive programs.
- Assess all excess and tax-forfeited property for higher public uses, such as water infiltration basins or tree plantings, before considering for sale.



Target Field Station includes a variety of features, including these cisterns and bio swale that capture and filter approximately three million gallons of rainwater and snow annually.



Goal: Increase the resilience of the built environment and protect natural resources

Strategy: Plant, diversify, and maintain trees throughout Hennepin County and increase the resiliency of the county's community forest

- Achieve a goal of no net loss of trees on Hennepin County property by planting more trees, replacing trees, addressing barriers associated with maintenance, and protecting mature trees.
- Create and implement tree planting plans to expand the urban forest canopy using the tree planting prioritization map to determine greatest needs and focus on increasing tree species diversity to include bird-friendly native species as well as species that are now hardy in Hennepin County.
- Partner with cities and other organizations on tree plantings and provide grants to cities and organizations for tree inventories, tree plantings and maintenance, and forestry education
- Educate the public about tree benefits and threats, engage volunteers and youth through tree plantings and tree care education, and support the planting of trees on private property.



Maple-basswood forest restoration on a conservation easement in Independence.



Natural areas and agricultural lands

Hennepin County has an abundance of natural areas and diverse landscapes that provide critical habitat for wildlife, protect water quality, offer recreational opportunities, and serve as the foundation for the region’s environmental well-being, economic prosperity, and collective quality of life. Climate change will further disrupt our ecosystems, which are already impacted by invasive species, population growth, and development. Healthy ecosystems play a vital role not only in the health of plants and animals, but of people, too.

As the Soil and Water Conservation District for Hennepin County, the county is responsible for providing technical and financial assistance to landowners to help manage natural resources, protect soil, preserve habitats, and improve water quality. The county also enforces wetland regulations, establishes conservation easements, protects natural areas, maintains natural resources data, and provides technical assistance to local governments.

Native wildlife and plants are extremely sensitive to climate change impacts. Warming lakes, rivers, streams, and wetlands and an increase in algae blooms impact fish habitat and recreation. Our tree canopy already faces many threats from pests, such as the invasive emerald ash borer, and climate change will only worsen those pressures by enabling more pests to survive. A warming climate is also changing the types of plants and trees that can thrive in our area, with northern species struggling while new species adapted to warmer climates start to take their place.



Woodpecker activity on an ash tree infected with emerald ash borer



Goal: Increase the resilience of the built environment and protect natural resources

Increasing groundwater levels pose threats to water quality as our climate trends wetter. Groundwater is not far from the surface in most of Hennepin County. Although a comprehensive evaluation of groundwater flow through shallow soils in Hennepin County has not been conducted, increased precipitation over the last decade has already affected groundwater levels across the county. As groundwater levels rise, there is a risk that contaminants in shallow soils may be mobilized in ways that are not yet fully understood. Rising groundwater levels may pose a risk to local water quality when it intersects with septic systems, petroleum tanks, areas of historic contamination, plumes, and vapors, which are all regulated by federal, state, county, and municipal offices. Protecting local water quality in partnership across jurisdictions is crucial to increased climate resilience.

The trend toward a wetter climate has already added uncertainty and increased the challenge of producing food in a rapidly developing county. Working with residents to preserve open space and improve agricultural practices represent some of the best opportunities to sequester carbon, manage increased precipitation, connect habitats, and improve access to nutritious, locally produced food. However, the added business risks that climate change poses to farmers will make it increasingly challenging to realize those benefits, and the incentives to develop open space will only increase. Without efforts focused on preserving agricultural land, the vibrant local and regional economy that agricultural activity supports will shift westward out of Hennepin County.

Changes in temperature and precipitation patterns will also disrupt the delicate balance of ecosystems and the species that depend on each other. Shifts in food availability, migration timing, and breeding seasons will impact survivability for many species. For example, a bird species may start to arrive earlier in the spring because the temperatures are already warm enough, but they may not have enough food to sustain themselves because the plants they rely on start growing in response to the amount of sunlight available, which is not changing.



Preserving the agricultural character of western Hennepin County's open space and working to improve land management practices is one of the best ways to support local food production, protect wildlife corridors, restore habitat, and work to improve regional water quality.





Goal: Increase the resilience of the built environment and protect natural resources

Objective: Natural areas and open spaces are functional and diverse

Strategy: Plan for and mitigate anticipated ecosystem and open space impacts

- Monitor for both aquatic and terrestrial invasive species by using early detection methods, such as community scientists, and implementing invasive species control programs that include rapid response protocols and employ integrated pest management on public and private property.
- Protect, restore, and connect natural areas, including streams, wetlands, floodplains, prairies, savannas, and forests, with a focus on supporting biodiversity and providing habitat for species that alter their range in response to climate change.
- Continue efforts to preserve natural areas through conservation easements.
- Create pathways for residents and partners to preserve natural areas and other open spaces and adjust land management practices to provide ecosystem services crucial to climate adaptation, including
 - Wetland restorations that can help manage stormwater and mitigate flooding.
 - Erosion-control best management practices that can protect water quality even as precipitation increases.
 - Growing practices that support the local food system.
 - Habitat protection and restoration in areas that are crucial for wildlife movement.



Wetland and tallgrass prairie restoration on a conservation easement in Independence



Goal: Increase the resilience of the built environment and protect natural resources

- Develop an Integrated Water Management Plan that considers findings from the groundwater plan, including vulnerabilities and/or areas of concern, with already established surface watershed management plans and land use management practices to develop a framework that protects vital aquatic ecosystems and source waters.
- Create and preserve affordable agricultural space for every scale of local food production – from conventional commodity agriculture to urban farming – and work with partners to encourage the development of farm-to-table efforts, focusing especially on increasing access to these programs in low-income communities.
- Promote best management practices on agricultural land with a focus on practices that create healthier soils with increased carbon storage and water holding capacity of soils while maintaining or improving long-term crop yields.
- Conduct education and outreach that helps current and future agricultural producers and their partners understand both the need for and financial benefit of building climate change resiliency into their farming operations and the agricultural economy.
- Work with other public agencies to address threats from climate change impacts to water quality more broadly to clearly understand the risks related to increased precipitation and changing surface-level groundwater flows and ensure that responses in one location do not exacerbate water quality degradation downstream.



Target metrics

- Develop stormwater design standards for mid-century precipitation projections and develop policies and practices for green infrastructure to manage precipitation projections by 2023.
- Evaluate all existing building sites to maximize water retention considering projected mid-century rain event volumes by 2050.
- For new buildings, exceed runoff rates using projected mid-century rain event volumes instead of current Atlas 14 volumes, where feasible.
- Plant 1 million trees by 2030 through partnerships with cities, Three Rivers Park District, and other community partners.
- Acquire 6,000 additional acres of conservation easements by 2040.
- Develop a groundwater plan by 2025 and an integrated water management plan by 2026.

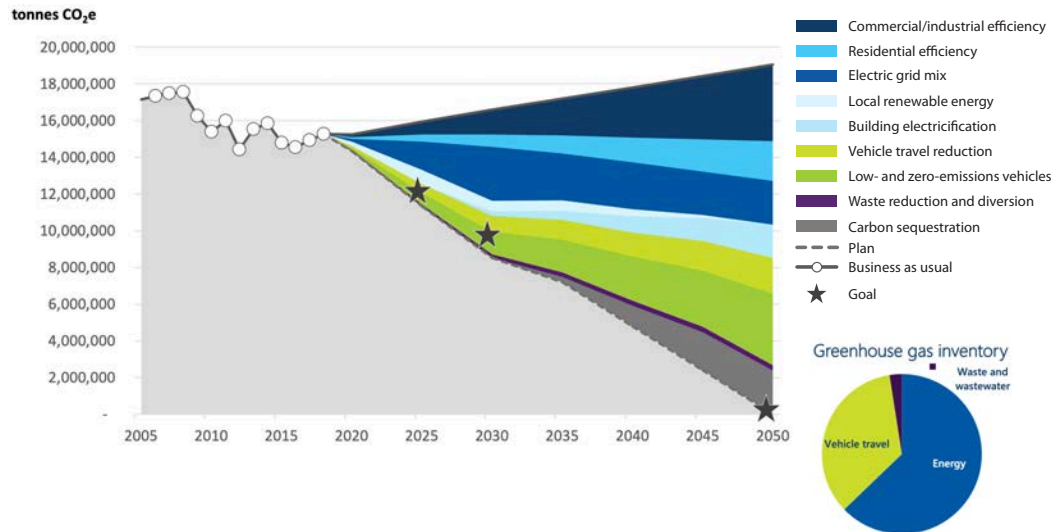


Goal: Reduce emissions in ways that align with core county functions and priorities

There is a path forward to meeting the county's greenhouse gas reduction goals. That was the finding from a scenario planning exercise staff conducted that generated the graphic below (Figure 10) using greenhouse gas emissions inventory data within the county's geographic boundaries. See Appendix D for the assumptions made for each strategy in this planning exercise.

Starting after 2020, the solid line across the top is a forecast of business-as-usual based on anticipated population and job growth out to 2050. The dotted line trending down to 2050 shows a scenario of how the county climate action plan can meet its net zero greenhouse gas reduction goal. The stars at 2025 and 2030 show the interim emission reduction goals established by the county board.

Figure 10: Greenhouse gas emission reduction scenario planning



Components to meeting our greenhouse gas reduction goal

The colored wedges show what high-impact strategies will need to be pursued to reach these goals.

- The top five wedges in blue show the impact of strategies that address the energy slice of our greenhouse gas emissions – from increasing efficiency in commercial and residential energy use to transitioning to a carbon-free energy mix.
- The two wedges in green show the impacts from reducing vehicle travel and using clean cars.
- The purple wedge shows the impacts of reducing waste and avoiding disposal of waste in landfills or waste-to-energy facilities. It is worth noting that disposal is responsible for a small percentage of the carbon footprint of most products. The biggest opportunity to reduce greenhouse gas emissions lies in the phases of production, distribution, and use, which are not accounted for in regional greenhouse gas inventories.
- The gray wedge shows the impacts achieved from carbon sequestration through tree planting, preservation and restoration of natural areas, soil health improvement initiatives including the use of compost and biochar in landscaping projects, and emerging carbon sequestration technologies for the built environment.



Goal: Reduce emissions in ways that align with core county functions and priorities

This analysis shows we can meet our greenhouse gas emission reduction goals, but only if we work in sync with our partners. On the energy side, the county has a role to play in leading by example and supporting the adoption of these efforts by local governments for broader impact. Because the county operates a transportation network and supports transit and transit-oriented development, we have an important role to play in reducing vehicle related emissions. Also, because of the county's statutory responsibilities to manage a solid waste system, we can be impactful in reducing greenhouse gas emissions associated with material use and waste.



When the county's Public Works Facility was commissioned in 1997, it was the first building in Minnesota to use the sustainable building design standards.

Buildings and energy use

As a large organization, a major consumer of energy, and an energy generator, Hennepin County can have a significant impact through efforts to reduce energy use and improve energy efficiency in buildings. The county is well situated to lead by example in reducing energy use and associated emissions, as well as influencing energy planning, policies and regulations to lessen the impact on the environment, improve communities, and protect public health.

The greenhouse gas emissions associated with buildings are accounted for in two ways. The initial emissions from the construction and materials used are called embodied emissions. The remaining emissions are from the energy used to operate the building.

The county has a history of leading collaborative efforts to improve energy efficiency and sustainability of buildings. Recognizing the importance of energy efficiency in building design and operation, the county initiated a collaborative effort that resulted in the creation of the Minnesota Sustainable Design Guide in 1996. This guide was a precursor to the current Minnesota Sustainable Building Guidelines (B3 guidelines) that are now widely used by state and local agencies to meet sustainability goals for new building design and building renovations.

Other ways to avoid greenhouse gas emissions with buildings is by reusing buildings and building materials rather than building new and by using of a life cycle analysis when designing new buildings. Some of the materials widely used in construction have the highest climate impacts, including cement, aluminum, steel, and plastics. Unlike operational carbon emissions, which can be reduced over time with building energy efficiency renovations and the use of renewable energy, embodied carbon emissions are locked in place as soon as a building is constructed. As new buildings become more energy efficient, the construction and material sourcing of the building will be a much larger component of the overall building carbon footprint.



Goal: Reduce emissions in ways that align with core county functions and priorities

A significant portion of meeting our greenhouse gas emission goals will require energy conservation and using energy more efficiently in existing buildings. The county has reduced energy use in county buildings by 21% since 2013. To continue to achieve reductions in energy use, the county is investing in more comprehensive retrofits of our buildings, energy efficient technology, and continuous commissioning. These investments will allow us to increase energy efficiency and improve the space for employees and residents while preserving the county's assets. The county is also looking to maximize the use of our existing building space to best serve the community.

Electrifying buildings is another key pathway to meeting ambitious greenhouse gas emission reduction goals. By transitioning to electricity for heating, cooling, and hot water needs instead of burning natural gas or fuel oil, the county can greatly reduce our buildings' emissions. This is a new endeavor for the county that will require further study to evaluate strategies and establish priorities for electrifying county buildings.



Capital project in 2017 to replace electric chillers at the Hennepin County Energy Center with more efficient models, saving \$175,000 per year in electricity costs.



The county seeks to use carbon-free electricity sources, such as solar and wind, for county operations and to make carbon-free electricity more widely available for residents and businesses. In county operations, we generate less than 1% of our energy use from on-site solar and get another 4% from subscriptions to community solar gardens. The county can support Xcel Energy's commitment to providing carbon-free electricity by 2050 by purchasing electricity through renewable rates tariffs. We can also work with the other local electricity providers to create opportunities to purchase and increase renewable energy in their portfolio.

The cities of Minneapolis and St. Louis Park have goals of 100% of renewable electricity by 2030. These cities comprised 33% of the county's residential electricity use and 38% of commercial electricity use in 2018. In 2019, about 6% of Xcel's residential customers and less than 1% of business customers in Hennepin County participated in renewable energy purchasing programs, such as Xcel's Windsource or Renewable*Connect. Nationally, the highest participation rate in residential green power purchase programs is Portland, Oregon, currently at 19%.

Hennepin County residents, businesses and institutions are generating 21 megawatts (MW) of on-site solar, or 2.4% of the of total community electricity use. The State of Minnesota has set a goal of 10% of total community electricity use met by on-site solar by 2030.



Goal: Reduce emissions in ways that align with core county functions and priorities

Hennepin County leads the Efficient Buildings Collaborative, which supports the adoption and implementation of local benchmarking ordinances by Minnesota cities. Energy benchmarking is the process of monitoring and reporting the energy use of a building. It allows comparison of a building's energy use to similar buildings or the building's past performance. Minneapolis, Edina, and St. Louis Park are cities within the county that currently have commercial building benchmarking ordinances in effect, and Bloomington is working toward an ordinance. A national study found benchmarked buildings achieve a 2.4% annual average reduction in energy use.⁹

This plan makes it clear that the county is pursuing more ambitious greenhouse gas reduction goals that will prioritize carbon-free energy sources, such as solar and wind. In review of the draft climate plan, community members sought clarity about the role that waste-to-energy plays in the county's climate response and waste management plans. Neither the county nor other local governments or utilities see the Hennepin Energy Recovery Center (HERC) or waste-to-energy as the solution to meeting renewable energy goals. Biomass accounts for only 3% of Minnesota's energy portfolio, and waste-to-energy facilities are at capacity. HERC and other waste-to-energy plants in Minnesota are in place to manage trash in an environmentally preferable way to landfills, and they are not major sources of energy production. More information on HERC's role in meeting greenhouse gas emissions goals can be found in the waste and material use section (page 57).

⁹ U.S. Environmental Protection Agency, 2012, Benchmarking and Energy Savings



Replacing the lighting at the Hennepin County Government Center with an energy-efficient option



Goal: Reduce emissions in ways that align with core county functions and priorities

 **Objective:** Greenhouse gas emissions associated with buildings and energy use are reduced to meet the county's emission goals

Strategy: Reduce climate impacts of buildings through innovative and efficient design, including the use of climate-friendly material choices

- Establish green building guidelines for county and regional adoption that include:
 - Using the B3 guidelines to measure and track the impacts of design features on all county capital improvement projects.
 - Using life cycle analysis for selecting climate-friendly building materials and furnishings for all county facilities. The analysis will:
 - Prioritize renovation over building new.
 - Promote the design of all county buildings for adaptability and reuse.
 - Implement a sustainable purchasing policy, especially for the use of concrete and steel.
 - Implementing procedures that require the salvage and recycling of construction and demolition waste at all county-funded building projects.
 - Continuing to work with the state and Hennepin County cities to develop and adopt policies that prioritize building reuse and construction and demolition waste reuse and diversion.
 - Working with cities to establish guidelines around building materials that prioritize materials with lower climate impact
 - Working with cities to establish minimum energy performance targets for new construction and major renovations on both public and private properties.
- Reassess current development grants and explore new financial incentives to increase market transformation of climate-friendly buildings and renewable energy.

Strategy: Transition to renewable energy sources and reduce energy use overall in county operations

- Prioritize conservation, efficiency, and renewable energy in policies and programs.
- Invest in renewable energy through utility sources, community solar gardens, and on-site solar.
- Develop strategies to convert Hennepin County buildings from natural gas to electric fuel sources.
- Maximize centralized energy sources that incorporate renewable technologies.



Solar panels on the roof of Hennepin County Public Works Facility in Medina.



Goal: Reduce emissions in ways that align with core county functions and priorities

Strategy: Support Hennepin County communities in establishing initiatives to reduce greenhouse gas emissions associated with energy use

- Determine the approach and level to which the county encourages residential and commercial energy efficiency and renewable energy, focusing on:
 - Training contractors and building operators on new energy technology and efficient building construction and operation.
 - Supporting affordable adoption of renewable energy and conservation for energy consumers, including small businesses and low-income households.
 - Establishing and funding programs to promote equitable clean energy and efficient housing.
- Become more engaged in:
 - Developing benchmarks and strategies for the state Conservation Improvement Program (CIP), which is a program funded by ratepayers and administered by utilities that helps households and businesses use electricity and natural gas more efficiently.
 - Advancing a statewide Advanced Energy Standard (stretch code) for a building code that would require net zero buildings by 2036, along with other regional efforts.
 - Advancing energy efficiency and energy resilience investments where energy-cost burdens are greatest.
- Encourage energy benchmarking of buildings and expand the Hennepin County Efficient Buildings Collaborative.
- Explore a uniform, county-level green building policy that cities could adopt, or advocate for B3/LEED standards and protocols above and beyond when state funding comes in for facilities and infrastructure.
- Engage with municipalities to develop strategies that encourage switching to a less carbon-intense fuel source for commercial and residential buildings, such as electrification.



Energy benchmarking is the process of monitoring and reporting the energy use of a building. Some cities require large buildings to record their energy use each year. This allows for comparison of buildings' energy use to similar buildings or the buildings' past performance and helps pinpoint properties with efficiency issues. The county's Health Services Building is the top ranked public owned building in Minneapolis.

Target metrics

- Use carbon-free electricity used for county operations by 2035, and the geographic area of Hennepin County transitions to carbon-free electricity by 2050.
- 10% of total community electricity use is met by on-site solar by 2030.
- Reduce operational energy by 3% annually through 2030.
- Implement procedures that require the salvage and recycling of construction and demolition waste at all county-funded building projects by 2022.
- Use life cycle analysis for selecting climate-friendly building materials and furnishings for all county facilities by 2023.
- Develop a framework for a public sector, regional energy efficiency partnership by 2022.



Goal: Reduce emissions in ways that align with core county functions and priorities

Transportation



Hennepin County plans, funds, builds, and manages a transportation network of roadways, bikeways, and sidewalks. Long-term partnerships with the State of Minnesota, other metropolitan counties, cities, and park districts have produced an increasingly dense network of transit and transportation options that include light rail transit, bus rapid transit, commuter rail, bikeways, and pedestrian walkways.

Managing the land and infrastructure in this transportation network creates opportunities to reduce greenhouse gas emissions from vehicles, sequester carbon, manage increased precipitation, and reduce the impact of the urban heat island effect.

In 2019, vehicle travel produced 35% of all greenhouse gas emissions within the county. Emissions in the vehicle sector are influenced by three main factors:

1. Land use and community planning: Where people are located and where they go affects how often trips are made and how long those trips take.
2. Mode of transportation: Whether people are driving, walking, biking, or taking transit.
3. Fuel choice and fuel efficiency: Which could include gasoline, diesel, biofuels, electricity, or human effort.

Transportation emissions have declined slightly in the past decade despite an increase in the number of miles driven due to increased transit options, higher fuel economy standards, and intelligent traffic systems that reduces congestion.

Hennepin County adopted its Complete Streets policy in 2009. Complete Streets are designed, built, and maintained to be safe and convenient for people of all ages and abilities — whether they are walking, biking, taking transit, or driving. As the first Minnesota county to adopt a Complete Streets policy, Hennepin County recognizes the importance of addressing the needs of transit riders, bicyclists, and pedestrians along with the needs of motorists.

With maintaining current efforts, Minnesota's transportation planners have determined that we will not be able to achieve our state greenhouse gas emission reduction goals without reducing vehicle miles traveled (VMT).¹⁰ Vehicle miles traveled is a measure used in transportation planning that is calculated by adding up all the miles driven by all the cars and trucks on all the roadways in a region. Reducing VMTs means reducing the amount of time and money that people spend driving, which reduces air pollution and promotes safe and healthy communities.

¹⁰ Minnesota Department of Transportation <http://www.dot.state.mn.us/sustainability/docs/advisory%20council/stac-recommendations-response-2020.pdf>



Goal: Reduce emissions in ways that align with core county functions and priorities

In response to the COVID-19 pandemic, many office workers have been sent to work at home for more than a year, including two-thirds of county employees. This has led many businesses, organizations, and individuals to reconsider the need to work in an office full time.

While it is too soon to tell the lasting effects of the pandemic, the greenhouse gas emissions scenario planning analysis (Figure 10 on page 44) assumes an 8% emissions reduction due to a sustained increase in remote work. In addition, work being less tied to a centralized office space could reduce the necessity or appeal of living near the urban core, causing shifts in land use and community planning.

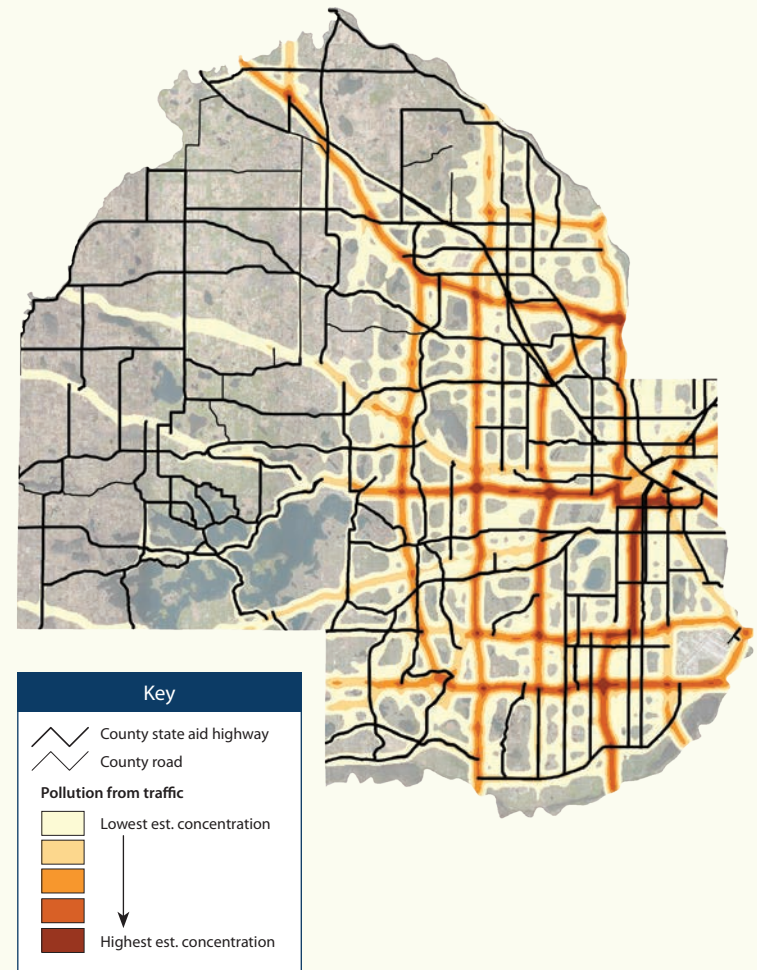
As our transportation system is evolving, reducing air pollutants from fossil fuel combustion will not only help meet our greenhouse gas emission reduction goals, but also reduces disparities in traffic-related health impacts.

Inequitable climate impacts: Air pollution from transportation

Vehicles are a large source of air pollution. The map (Figure 11) depicts a projection of air pollution from traffic based on average daily trip data.¹¹ As would be anticipated, transportation-related air pollution is higher in the more urban areas of the county where the road network is densest and traffic is highest. According to the Minnesota Pollution Control Agency, communities of color bear a disproportionate burden of traffic-related health impacts¹² due to living in proximity to the highest traffic levels.

According to the Minnesota Department of Transportation, reducing VMT will have immediate, lasting benefits to communities of color who breathe worse air and are at a higher risk of traffic crashes. Lowering VMT will help reduce both particulate matter and other pollutant emissions and reduce the risk of traffic crashes, resulting in improved, equitable outcomes.¹¹

Figure 11: Projection of air pollution from traffic based in average daily trips.



¹¹ Minnesota Department of Health, Healthy Communities Count! Indicators of Community Health along the Central Corridor Light Rail Transit

¹² Minnesota Pollution Control Agency, Life and breath: How air pollution affects health across Minnesota (2019)

Goal: Reduce emissions in ways that align with core county functions and priorities

 Objective: Greenhouse gas emissions associated with transportation are reduced to meet the county emission goals

Strategy: Reduce vehicle miles traveled in Hennepin County and throughout the region

- Advance the Minnesota Department of Transportation's (MnDOT) goal of 20% reduction in VMT by 2050 by developing a more ambitious goal for Hennepin County that reflects our role in the state as a more densely populated county, and also reflects rural, suburban, and urban contexts within Hennepin County.
 - Develop a plan by June 2022 with a recommendations on a more ambitious goal and evaluate how to achieve this goal.
- Engage with MnDOT and other transportation partners as the MnDOT develops the Statewide Multimodal Transportation Plan in 2021 to align greenhouse gas emission reduction strategies by:
 - Evaluating the preliminary goal in a public engagement process, establish a baseline year from which reductions would be measured, and consider interim goals.
 - Developing a method for estimating program and project VMT outcomes by assessing both induced (e.g. adding lanes) and reduced (e.g. increasing walking access) vehicle travel demand.
 - Participating in a new intergovernmental climate change council (once established) to coordinate efforts with partner agencies, cities, and counties.
- Advocate for the buildout of planned transit routes and the development of new routes.
- Expand transit-oriented development and bicycle and pedestrian facilities.
- Explore strategies to reduce employee vehicle use for county business purposes

- Advocate for strategies to reduce travel demand, such as employer support for employee transit expenses and promoting flexible work schedules.
- Prioritize roadway preservation and modernization, including expanded safety and multi-modal upgrades, to minimize system expansion.
- Manage the road system to minimize pollution by leveraging additional technologies.
- Support increased and more efficient transit on county roadways in coordination with transportation partners.
- Update the county's Complete Streets policy to develop a modal hierarchy framework that prioritizes transit, pedestrians, and bicyclists in urban and suburban contexts.

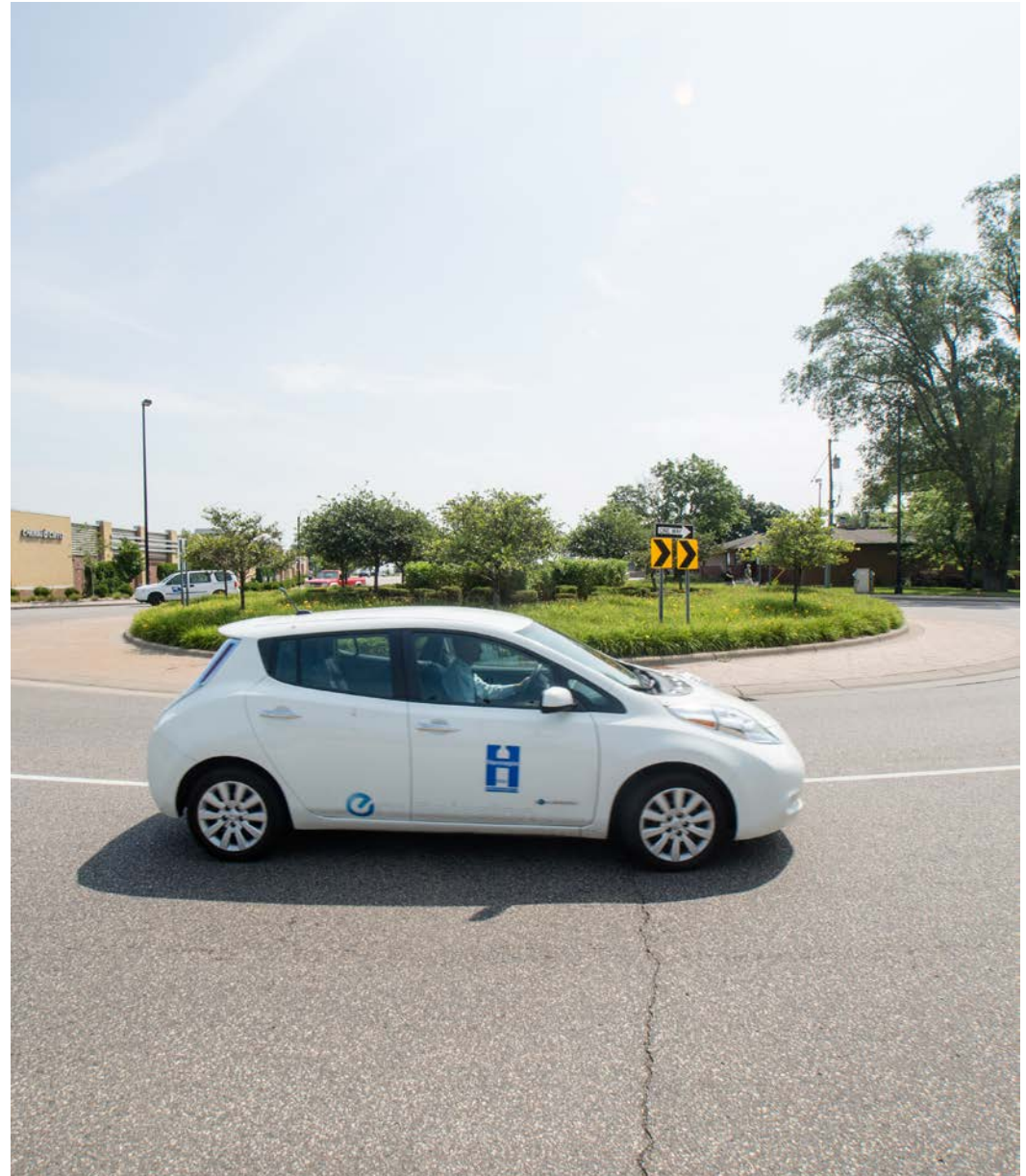




Goal: Reduce emissions in ways that align with core county functions and priorities

Strategy: Promote electric vehicle infrastructure regionally

- Engage with regional and statewide efforts to advance electric vehicles.
- Work with the private sector and municipal partners to increase charging capacity.
- Develop electric vehicle and infrastructure guidelines at county buildings.
- Complete an assessment of existing county fleet vehicles and infrastructure for electrification opportunities, right-size county fleet through new standards, and develop an electrification implementation plan to guide the procurement of electric vehicles and charging station locations.
- Educate residents about proper vehicle maintenance and electric vehicle options and support incentives for low-income residents, such as a scrappage incentive for vehicles in areas of higher air pollution or low-interest loans to income-qualified households, to increase participation.





Goal: Reduce emissions in ways that align with core county functions and priorities

Strategy: Use transportation investments to support broader county goals including reducing disparities, improving health, enhancing livability, and growing the economy

- Link transit, bicycle, pedestrian, and road projects to housing, jobs, and recreational opportunities.
- Prioritize vehicle emission reduction strategies in areas with the residents experiencing high health burdens.
- Provide convenient, affordable access to destinations, especially for residents experiencing high transportation and housing cost burdens.
- Create healthy and livable communities by including pedestrian, bicycle, and transit facilities as well as green boulevards in roadway projects.
- Strengthen the connection between land-use planning and transportation to promote orderly growth and transit-oriented development that reduces the need to drive.

➤ “The biggest opportunities for county impact are transportation and housing, and particularly their intersection. County roads are responsible for a huge amount of transportation emissions. Reallocate capacity from cars to alternatives, such as public transit and biking. Housing sprawl in the exurbs is also responsible for a huge amount of transportation and energy emissions. Promote availability of higher-density housing options closer to the core metro area.”

– Resident comment



Construction at RiZe at Opus Park Apartments along the Southwest LRT line in Minnetonka.

Target metrics

- Plan to meet a more ambitious vehicle miles traveled reduction goal by June 2022.
- Achieve net zero emissions in the county’s fleet by 2050, with interim goals of:
 - Decreasing greenhouse gas emissions 30% by 2030.
 - Converting a minimum of 20% of the county’s light-duty fleet vehicles to electric and 50% to hybrid by 2030.

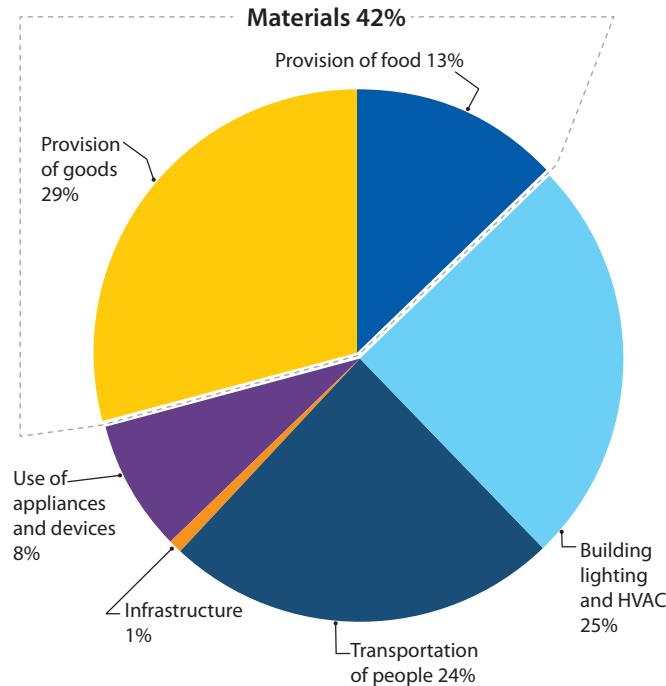


Goal: Reduce emissions in ways that align with core county functions and priorities

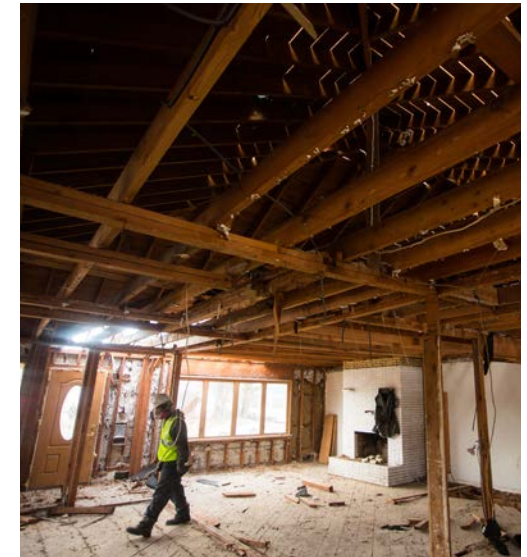
Waste and material use

A traditional greenhouse gas inventory shows the emissions broken down by energy, transportation, and waste, but disposal is responsible for only a small percentage of the carbon footprint of most products. If you regroup the emissions to show how they are tied to the production of materials and goods, you see that what we buy has a big impact on the climate (Figure 12). Creating new products requires energy – to harvest raw material, process it, manufacture it, transport it, and sometimes, to use it. Producing and transporting goods is associated with 45% of global greenhouse gas emissions. This underscores the importance of sustainable purchasing. Public entities have significant purchasing power, which provides an opportunity to make a positive impact on climate change through procurement decisions. There are also opportunities with salvaging construction and demolition waste, reducing food waste, and shifting consumer behavior.

Figure 12: Systems-based greenhouse gas sources
Source U.S. EPA 2009



Materials widely used in construction, including cement, aluminum, steel, and plastics, have some of the highest climate impacts. Many building materials have the potential to be salvaged and reused or recycled. In fact, about 85% of the materials in a typical demolition project could be salvaged for reuse and kept out of landfills. But currently, only about 30% of building materials are reused or recycled.



Goal: Reduce emissions in ways that align with core county functions and priorities

Climate action experts identify reducing food waste as one of the single most effective solutions to climate change, and the county has a lead role in waste management. Food has both upstream and downstream impacts, from the energy used to grow, transport, process, and refrigerate it to the methane generated when food waste is landfilled. Although methane made up only 10% of the total greenhouse gas emissions nationwide in 2018¹³ it is 28 times more potent than carbon dioxide in terms of trapping solar radiation and exacerbating climate change. An estimated 17% of all methane emissions come from landfills. From waste sorts, we know that 20% of our trash is food. Preventing food waste and composting or digesting food scraps is the biggest opportunity for our residents and businesses to reduce waste.



Organic waste is hauled to a commercial composting facility

In 2018, Hennepin County revised its recycling ordinance to make organics recycling more widely available and accessible to residents. By January 1, 2022, large cities (those with more than 10,000 residents) must make organics service available to all households with curbside recycling, which includes single-family homes and dwellings up to 4 units. Smaller cities (those with fewer than 10,000 residents) must provide an organics recycling drop-off if curbside organics service is not made available to residents. In multifamily buildings not served by city programs, properties can request organics hauling service from some haulers for a fee. The county provides financial assistance to cover some of the start-up costs through the county's business recycling grants. The county also provides free educational materials and on-site assistance to property owners and managers. Additionally, as of January 1, 2020, businesses that generate large quantities of food waste must implement food waste recycling in back-of-house operations.



Goal: Reduce emissions in ways that align with core county functions and priorities

Engaging and educating residents, businesses, institutions, and cities will be critical to both adapting to what lies ahead and taking action to reduce climate impacts. For materials and waste, this means engagement and education around the climate impacts of consumption and reducing the environmental impacts of waste.

The county has several popular programs that shift consumer behavior by generating excitement about waste prevention, encouraging action on waste reduction and reuse, and partnering with organizations in the community to motivate behavior change. These efforts include training Master Recycler/Composter volunteers, offering educational challenges for residents to reduce waste, go plastic-free and prevent food waste, and hosting fix-it clinics to encourage repair. The county also supports reuse retailers and encourages residents to shop used first through the Choose to Reuse program.



Repair Lair, Choose to Reuse retail participant



In review of the draft climate plan, community members sought clarity about the role that waste-to-energy plays in the county's climate response and waste management plans. The county sees the Hennepin Energy Recovery Center (HERC) as just one part of the county's integrated solid waste management master plan, which outlines the county's strategy to pursue a zero-waste future. HERC is not a featured strategy in the climate action plan because the county chose to highlight higher priority climate solutions. Climate experts at Project Drawdown recognize waste-to-energy's potential as a transitional solution because it reduces methane emissions by keeping waste out of landfills.¹³ HERC also recovers scrap metal – more than twice the amount collected in city curbside programs. Recycling steel requires 60% less energy than producing steel from iron ore. Waste delivered to HERC is processed close to where it is produced, minimizing the transportation of waste and associated truck emissions. Finally, HERC creates baseload electricity and steam that might otherwise be sourced from coal or gas-fired power plants.


The county expects waste-to-energy to decline in importance as waste prevention, reuse, recycling and composting become more widely adopted. There is still a lot of trash created by residents and business, and we need to manage it responsibly. HERC makes environmental sense until we have successfully diverted most organic materials which include food waste, paper and wood, from the trash. Until then, HERC operates with stringent safety standards and meets all air permit requirements.

Learn more about the county efforts to reach the goal of 75% recycling and zero waste to landfills in the county's board-adopted Solid Waste Management Master Plan at hennepin.us/solidwasteplanning

¹³ Project Drawdown <https://drawdown.org/solutions/waste-to-energy>



Goal: Reduce emissions in ways that align with core county functions and priorities

 **Objective: Greenhouse gas emissions associated with waste and material use are reduced to meet county goals**


Strategy: Prevent food waste and divert organic material from the trash

- Support food rescue efforts to divert more food to people in need.
- Help businesses and organizations that produce a lot of food waste implement best practices for preventing food waste.
- Use research gathered by surveying residents and conducting focus groups into the barriers and benefits to reducing wasted food at home to develop a consumer campaign on food waste prevention.
- Continue to support and fund residential and commercial organics recycling programs and implement business food waste recycling requirements and city residential organics recycling requirements.
- Develop organics recycling infrastructure by advancing anaerobic digestion and making improvements to the Brooklyn Park Transfer Station.
- Close the loop by increasing the use of compost in county projects and encouraging public and private partners to do the same.
- Expand organics collection and improve recycling at county facilities.

Strategy: Reuse and recycle construction and demolition waste

- Require the salvage and recycling of construction and demolition waste at all county-funded building projects.
- Educate county contractors on building material reuse and recycling.
- Increase implementation of in-place pavement rehabilitation in road projects.
- Sustainably manage waste after disasters.



 “We need to ask more of people. The assumption that we can all continue to live as we always have, consuming and disposing wantonly, driving everywhere, is a fallacy, and we need initiatives that make it easy for people to change their habits. Or expectations that require change. And the county must lead the way. Every county building should have organics recycling, 100% green energy, and other easy changes. If the county isn’t showing up and making changes, no one else will.”

– Resident comment



Goal: Reduce emissions in ways that align with core county functions and priorities

Strategy: Understand the climate impacts of our consumer choices and mitigate the largest impacts

- Conduct a consumption-based emissions inventory and use the results to create a more comprehensive approach to climate change mitigation.
- Educate residents on the climate impacts of consumer choices and expand efforts that educate residents and businesses on the importance of practicing more thoughtful consumption by preventing waste, recycling more, participating in organics recycling or backyard composting and reducing meat consumption.
- Develop and implement a county sustainable purchasing policy on par with other leading public entities and provide sustainable purchasing best practices.
- Encourage purchases that prioritize reuse, durable goods, and avoiding disposables.



Buying sports equipment second-hand.

Strategy: Advocate for state leadership on zero-waste policies and producer responsibility

- Support product stewardship and extended producer responsibility (EPR), especially for plastic packaging and single-use plastics.
- Support standards for product design that minimize environmental impacts, improve product durability and longevity, ensure the right to repair, and establish producer responsibility for end-of-life management of goods they produce.
- Advocate for state funding and market development initiatives that align with climate and zero-waste goals.
- Advocate for additional authority and tools that would allow local government to implement climate action and zero-waste strategies.
- Join the U.S. Plastics Pact, which brings together plastic packaging producers, brands, retailers, recyclers, and waste management companies to take coordinated action to tackle plastic waste and pollution.

Target metrics

- Implement a consumer food waste prevention campaign by 2022.
- Recycle 75% of waste and send zero waste to landfills by 2030.
- Divert at least 75% of construction and demolition waste for reuse or recycling.



Goal: Reduce emissions in ways that align with core county functions and priorities

Carbon sequestration

Carbon sequestration is the process of capturing and storing carbon dioxide from the atmosphere. This is a critical part of achieving net zero carbon emissions since it involves “balancing” a certain measured amount of carbon released with an amount of carbon offsets.

Protecting, restoring, and managing natural ecosystems, planting trees and plants, and leveraging the ability of soil to store carbon are among the most effective ways to remove carbon dioxide from the atmosphere. Trees and plants remove carbon dioxide from the atmosphere through photosynthesis. Trees store carbon in their wood, while plants, such as cover crops on fallow agricultural lands, return the carbon to the soil when they decompose. Other examples of carbon sequestration include adding materials that improve soil health, like compost and biochar. Biochar is wood that is heated to create a specialized charcoal that acts like a sponge to hold nutrients in the soil for a long time and help plants grow better.

Each decision that Hennepin County makes around the use and management of properties it owns and manages presents an opportunity to sequester carbon. Hennepin County manages hundreds of miles of road and trail rights-of-way and many building sites, buys and sells property to meet operational needs, and stewards hundreds of properties as they move through the tax-forfeiture process and back into private ownership.


In addition, through the county’s role as the Soil and Water Conservation District, there is tremendous opportunity to sequester carbon on private property. This includes in agricultural soils, backyards, pastures, boulevard pollinator gardens, trees, urban farms, forests, woodlands, prairies, and wetlands throughout the county. Given the immense scale of the climate crisis, all opportunities to sequester carbon must be considered, and Hennepin County plays a crucial role in empowering residents, businesses, and communities to play their part.

Researchers are also working to improve technologies that capture the carbon dioxide generated by burning fossil fuels before it is released to the atmosphere. For example, CenterPoint Energy is piloting the use of onsite carbon capture technology locally, including at the Radisson Blu Mall of America. Carbon capture technology is relatively expensive compared to carbon sequestration through biological processes, but this is a field of research to monitor for developments.





Goal: Reduce emissions in ways that align with core county functions and priorities


 **Objective:** The county sequesters carbon on county-owned property, including along county road rights-of-way and tax-forfeit properties.

Strategy: Reassess policies and practices to increase carbon sequestration on county-owned properties

- Develop goals, accounting strategies, and guidelines to help staff advance carbon sequestration on county projects.
- Prioritize trees and native plants over turfgrass in landscape designs on new projects.
- Convert from turfgrass to other landscape types where appropriate to improve carbon sequestration.
- Use compost and biochar as a soil amendment on county projects.



Biochar being used on Hiawatha Avenue in Minneapolis.

 **Objective:** Landowners sequester carbon by protecting and restoring habitat, building soil health, and preserving and planting trees.

Strategy: Assist residents to sequester carbon on private property

- Develop goals, prioritization frameworks, and outreach and marketing strategies to promote carbon sequestration projects in the most impactful places around the county.
- Provide assistance to landowners wishing to adjust land management practices to increase the carbon storage of soils and sequester carbon in trees and plants. Examples of the types of project the county will provide assistance for include:
 - Agricultural soil health practices
 - Improved grazing and pasture management
 - Diversification of agricultural landscapes and crop types
 - Habitat restoration and protection
 - Expanded shoreline and buffer plantings
- Incorporate carbon sequestration potential into evaluation and planning of other natural resource and water resource projects and partnerships.
- Track carbon sequestration and other benefits accrued from soil health efforts, land management improvements, habitat restoration and protection projects, and other related work on private lands.

Target metrics

- Develop and track a parcel-specific carbon sequestration metric for county properties by 2023.
- Set carbon sequestration goals by 2023 to identify areas with the best sequestration potential and greatest needs.
- Start tracking carbon sequestration and other benefits, such as improved air quality and the water-holding capacity of soils, associated with county initiatives and programs by 2023.



Goal: Partner in ways that can be most impactful

Climate change is one of the most pressing challenges the county faces because of its significant environmental, societal, and economic impacts on both a global and local level. We know that no one entity can achieve the complex and evolving goal of climate adaptation on its own.

Developing the Climate Action Plan is foundational to the county's response to climate change. However, a plan is only as good as the execution of the strategy. The county has clear authority in some areas of this plan, for example operating the county's roadway network or managing waste responsibly. Other strategies in this plan will require influencing and supporting other organizations that have responsibilities in those areas, like land use and energy.

The plan's success relies on engaging a broad range of stakeholders, including public partners, businesses, community organizations, employees, and residents. The county's Racial Equity Impact Tool guides how we engage with community, particularly those most impacted by a policy, program, or budget decision, and ensures that we consider how the community may benefit or be burdened by those decisions. This process is key to understanding impacts and developing solutions.

Building a more equitable and resilient community will be most effective if the county can align priorities, leverage resources, and foster partnerships.





Goal: Partner in ways that can be most impactful

Public entity partners

Staff conducted several meetings and surveys with managers, administrators and senior leaders at Hennepin County's cities, watershed organizations, park districts, and other regional and state units of government to learn about their priorities for climate work and opportunities for collaboration and later to gather feedback on proposed strategies that will require external partnership and greater coordination to achieve. More than 80 public entity partners shared feedback through these efforts.

 **Objective: Partnership models driven by mutual climate goals are explored and pursued**

Strategy: Pursue strategies with the widest agreement and clearest direction forward

- Foster long-term, integrated planning that includes jointly collecting and analyzing data and modeling with a lens on health and racial equity.
- Reduce localized flooding and coordinate regional stormwater resiliency efforts.
- Decarbonize transportation and buildings.
- Educate and engage the public in taking collective action.
- Raise a collective voice for climate policy at the local and state level.



Hennepin County's climate action team meets in January 2019




Goal: Partner in ways that can be most impactful

Community organizations

Staff conducted feedback sessions with representatives from community-based organizations as well as high-school-aged youth involved in environmental and climate change groups. The community organizations and youth represented a diverse set of audiences throughout Hennepin County. Staff also presented to the county's Race Equity Advisory Council, a group of appointed members that advise county leadership on reducing racial disparities and advancing racial equity throughout Hennepin County.

Partners provided feedback on the county's priorities, foundational strategies, and approach to the climate action plan. They also shared the impacts their organizations and community have experienced from climate change and described how the county's priorities align with what they think we need to do to create a climate-friendly future. The participants expressed strong interest in collaboration and commitment to working with us to ensure our plan is effective and impactful.

 **Objective: Communities are engaged and empowered through partnership and shared leadership**

Strategy: Establish long-term partnerships to increase engagement and support community-driven solutions

- Foster long-term community engagement that takes a social and environmental justice lens and gives community partners and youth a voice in plan development and implementation.
- Support community initiatives and empower local leadership to ensure solutions are relevant and effective.
- Improve climate education throughout the county by partnering with community groups and schools to ensure messages and messengers are relevant.

- Take a strong leadership position and collaborate broadly with diverse partners to encourage bold climate action at the local and state level.
- Implement solutions and support community-driven initiatives that provide financing options, offer job training and workforce development, and increase investment in vulnerable communities.
- Increase transparency and facilitate community involvement in measuring progress toward meeting the established goals and ensure accountability.



Community members add design ideas for a sustainable landscaping project at the building complex where they live.

Foundational strategies

Staff recommend this set of foundational strategies as the best place to start to serve as a strong foundation for the county's long-term response to climate change.



Strengthen individual and community resilience

- Communicate climate risks, develop education efforts, and support collective action.
- Foster relationships with communities to engage, listen, and respond with people-centered solutions.
- Strengthen sustainable access to affordable housing, healthcare, food, and transportation for residents, particularly in areas that have the greatest vulnerabilities.
- Improve preparation for and response to extreme weather.



Cut greenhouse gases from transportation

- Reduce vehicle miles traveled in Hennepin County and throughout the region.
 - Advocate for the buildout of planned transit routes.
 - Expand transit-oriented development and bicycle and pedestrian facilities.
 - Reassess flexible work schedules and facilitate remote work for employees.
 - Manage the road system to minimize pollution by leveraging additional technologies.
- Promote electric vehicle infrastructure regionally by working with the private sector to install charging stations.



Transition to renewable energy sources and reduce energy use overall

- Invest in renewable energy through utility sources, community solar gardens, and on-site solar.
- Prioritize conservation, efficiency, and renewable energy in policies and programs.
- Support affordable adoption of renewable energy and conservation for energy consumers, including small businesses and low-income households.

Foundational strategies



Prevent food waste and divert organic material from the trash

- Support food rescue efforts to divert more food to people in need.
- Help businesses and organizations that produce a lot of food waste implement best practices for preventing food waste.
- Develop organics recycling infrastructure by advancing anaerobic digestion and making improvements to the Brooklyn Park Transfer Station.
- Increase the use of compost in county projects.



Design infrastructure, buildings, and property to future climate conditions

- Work with local and regional partners to reassess stormwater design standards.
- Build and renovate county buildings following state's sustainable building guidelines (B3) as possible with a goal of net-zero emissions.
- Implement construction and demolition waste procedures.
- Use life cycle analysis for selecting climate-friendly building materials and furnishings.
- Develop and implement a sustainable purchasing policy.



Build and maintain green infrastructure and sequester carbon on all county-owned property

- Install green infrastructure to manage stormwater on county-owned property, including on tax-forfeited properties in flood prone areas to protect surrounding properties and create green spaces.
- Explore a green jobs/pathways program concept for installation, establishment, and maintenance of green infrastructure.
- Convert turfgrass to plants that sequester carbon, where appropriate.



Decrease the heat island effect, especially in areas with highest vulnerability

- Coordinate operations of readily accessible and culturally appropriate cooling centers.
- Preserve mature trees, plant more trees and plants, and address maintenance issues.
- Convert hardscape where possible into pervious pavement or green infrastructure.
- Pursue site development performance standards that include green infrastructure.
- Gather better, real-time data to allow for targeted notification of weather-related warnings.



Engaging residents to act on climate change

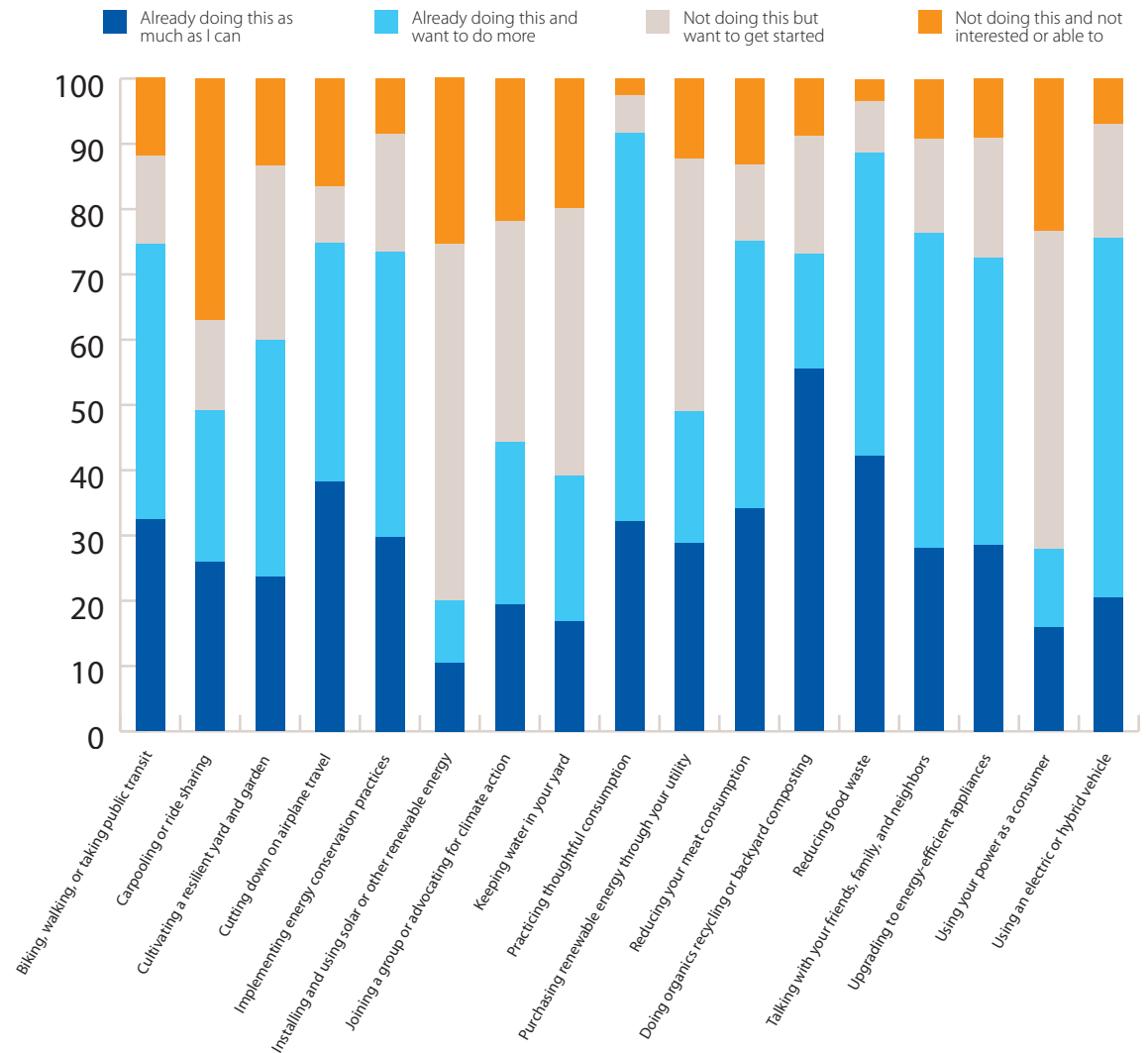
In responding to climate change, the county's top priorities are changing the systems that the county controls and using our influence as a bold leader to collaborate with local and state partners to achieve broader systemic change. The foundational strategies identify the best place for the county to start on those systemic changes.

Engaging our residents to take action on climate change is also important because it helps get people more engaged in the issue, can quickly scale to more impactful collective action, and puts pressure on government agencies, businesses, and institutions to make greater, systemic changes.

People are often presented with a long list of actions that they can take to address climate change, and there is often a disconnect among the actions people think are effective and the actions that actually are. This can leave people feeling overwhelmed and unsure where to focus.

Determining the most impactful actions to focus on for outreach and communications involves factoring in an action's potential to reduce greenhouse gas emissions, people's willingness and readiness to take that action, and the ability of the county and partners to support people in taking that action. Responses in the public survey to a question on climate actions provide useful insights (Figure 13). This information can guide what to promote, what resources and programs to develop, and what partnerships to establish.

Figure 13: Resident interest and engagement in climate actions



Engaging residents to act on climate change

Actions residents are already taking

Even among the actions that residents are already doing, there is opportunity for more engagement. The most common actions that residents who responded to the survey are already doing include (% already doing and not able to do more):

- Signing up for organics recycling or composting in your backyard (55%)
- Taking steps to reduce food waste (42%)
- Cutting down on airplane travel (38%)

It's important to note that the survey respondents are likely more engaged in environmental issues and taking more environmental actions than the general public. So with just around half of the respondents already engaged in these actions, there is room to encourage more people to take these actions. Additionally, the responses to cutting down on airplane travel could be skewed by travel restrictions caused by the COVID-19 pandemic, so it will be important to encourage people to continue these actions.



Actions with the best opportunity for increased engagement

Residents identified actions that quickly scale up to having a larger collective impact as actions they want to be doing more – using their power as a consumer, practicing thoughtful consumption, and talking to others about climate change. Residents likely need tools, support, and ideas for getting engaged in these actions. Residents are also interested in renewable energy, energy-efficiency, and electric or hybrid vehicles, as well as lawn care practices that provide habitat and manage water runoff.

The most common actions that survey respondents either said they are already doing and want to do more or are not doing but want to start include (% already doing this and want to do it more plus not doing this but want to start):

- Using your power as a consumer to support businesses that are taking steps to reduce their climate impact (72%)
- Practicing thoughtful consumption by only buying what you need, investing in high-quality, long-lasting items, shopping used, and borrowing items when possible (65%)
- Installing and using solar energy or other renewable energy at your home (64%)
- Cultivating a resilient yard and garden by planting native species that provide habitat for pollinators, considering turf alternatives that require less watering and mowing, or planting a tree (63%)
- Keeping water in your yard by installing rain barrels, designing a rain garden, or redirecting downspouts (63%)
- Talking with your friends, family, and neighbors about why you are concerned about climate change and what you are doing (63%)
- Upgrading to energy-efficient appliances (62%)
- Using an electric or hybrid vehicle (61%)

Engaging residents to act on climate change

Actions with the highest barriers to adoption

The actions that residents said would be the hardest to adopt include carpooling or ride sharing, installing renewable energy at their home, or using an electric or hybrid vehicle. Several of these actions are also on the list of actions to focus on for increased engagement, showing that some residents think the barriers to taking these actions are more insurmountable than others. Although more needs to be learned about the barriers to taking action, some barriers that respondents mentioned include renting versus owning their home and the cost to implement some of these options. Focusing on understanding and reducing barriers and changing systems to make it easier, more convenient, and more accessible for residents will make it more likely that residents will take action.

Actions that survey respondents said they were least interested in or able to do (% not doing this and not interested or able to):

- Carpooling or ride sharing (37%)
- Installing and using solar energy or other renewable energy at your home (25%)
- Using an electric or hybrid vehicle (23%)



Residential solar panels, photo by Jeff Stuhr, courtesy MPCA

Appendix A: Acknowledgements

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Appendix B: Public engagement findings

The first phase of public engagement

A series of feedback sessions were held in November 2020 with community groups, youth, and the county's Race Equity Advisory Council. A total of 84 people shared feedback on the climate action plan's foundational strategies, impacts the community has experienced from climate change, and their priorities for a climate-friendly future.

An online survey for residents was also conducted to learn about impacts the community has experienced from climate change and understand residents' priorities to inform the plan. The survey received 2,300 responses.

Key findings from the first phase of external engagement efforts

Many insights from the feedback have been incorporated throughout the plan, including the impacts the community has experienced from climate change, the most important values they hold in responding to climate change, and their desire for green jobs. The following key findings reflect commonly expressed ideas that garnered strong support.

Set ambitious goals and provide bold leadership

Most open-ended comments from the online survey stressed the urgency of the issue of climate change and encouraged the county to respond by being ambitious and providing bold leadership. This sentiment was echoed in the listening sessions, with participants noting how Hennepin County's response will be a catalyst for both local and state efforts. Participants wanted to see a more aggressive timeline and stressed that meaningful metrics need to be established so the county and community could measure progress toward meeting our goals.

Climate change is intersectional with racial disparities

Although everyone will be impacted by the climate crisis, it will not be experienced equally. Community partners and survey respondents see the connection of systemic racism and environmental injustices. Many community organizations see the county's development of a climate

What else would you like to tell the county about climate change?
Visual of topics identified from open-ended comments





Appendix B: Public engagement findings

action plan as an opportunity to advocate for changes in the county's transportation network and waste management system, specifically operations of the Hennepin Energy Recovery Center (HERC), as well as for better health outcomes for people of color.

The plan provides a new opportunity to develop and implement a collective vision for:

- Health and well-being outcomes
- Equitable transportation system
- Zero-waste future
- Green economic recovery, workforce development, and job creation

Focus on systems change, not individual choice

A significant number of survey comments focused on the desire for transformational systems change through leadership and the use of policies, procedures, and incentives rather than focusing on educating residents on the actions they can take individually. At the same time, community partners explained that educating the public and empowering their involvement in change would help expand the county's reach and the impact of greenhouse gas emission reduction strategies. Community partners expressed the need for the county to authentically partner with communities to empower local leadership and community-driven initiatives to make solutions relevant and effective.

The second phase of public engagement

Feedback on the draft Climate Action Plan was gathered from February 9 to March 3, 2021, through community meetings, an online comment form, and a survey for public entity partners. Anyone interested in the county's response to climate change was encouraged to attend an online meeting or submit comments. Feedback was received from residents, representatives of community organizations and advocacy groups, and staff from state agencies, cities, and watershed districts.

A total of 79 participants attended the online community meetings where county staff presented goals and core strategies. A recording of the meeting was also made available for those who couldn't attend live. The online comment form received responses from 150 people.

Key findings from the second phase of public engagement

The public engagement process generated more than 1,000 ideas and comments that were categorized based on alignment with the five plan goals and subsections and then analyzed to identify key themes and calls to action. The following key findings reflect the most strongly and commonly expressed ideas.



Appendix B: Public engagement findings

What do you like?

Respondents were happy to see the county is working on a climate action plan and making it a priority. They are grateful to live in a place that recognizes the need to take urgent action.

They thought the county developed a comprehensive plan and appreciated the emphasis on collaboration, equitable outcomes, complex and overlapping impacts, and community input. They appreciate the county acknowledging that county policies, systems, and practices need to change.

Respondents appreciated the process of developing the plan and the opportunity to provide feedback, and they expressed support for the plan's implementation and the county's response to climate change.

What is missing or could be improved?

Ensure the plan results in meaningful action that meets the urgency of the climate crisis

Respondents emphasized they want to see the Climate Action Plan be fully implemented to produce meaningful change. They encouraged the county to think bigger and more boldly to meet the reality of the climate crisis. They wanted to see a more ambitious plan with stronger commitments to act on the solutions identified. Respondents also felt the county needed to more clearly communicate the immediacy of climate change and the urgency required to respond.

Set bigger goals and define performance metrics, timelines, and responsibilities

Respondents made it clear that the county's current greenhouse gas emission reduction goals are no longer adequate based on the global scientific consensus and that a more aggressive goal of net zero carbon emissions by 2050 should be adopted. Respondents also noted that the plan seemed more like a framework, and they felt that action plans with specific and measurable goals, targets, and implementation timelines would be needed to provide details on how the work will be accomplished and who is responsible. They also wanted to know how progress on the plan would be shared with the public, expressing interest in reporting requirements and set dates for reviewing and updating the plan.

Put greater emphasis on reducing greenhouse gas emissions

Respondents wanted greater emphasis on greenhouse gas emission reduction efforts and sought more specifics about how to reduce emissions from transportation, buildings and energy use, and zero-waste initiatives. They did not think the plan went far enough in moving the county away from a car-centric transportation system and toward people-centered road design. They called on the county to establish goals to reduce vehicle miles traveled and car lane miles and increase investments in transit, biking, and walking infrastructure and transit-oriented development. Respondents wanted the plan to include more strategies to support the transition from oil and natural gas to clean, renewable energy technologies. They also called for the county to accelerate plans for increasing the energy efficiency of





Appendix B: Public engagement findings

county owned and managed buildings and vehicles and incentivizing and supporting low-tech, zero-energy solutions for the community. Respondents wanted to see greater advocacy for waste prevention policies, especially for plastics, increased access to organics recycling, and more focus on shifting behaviors around household goods to focus on avoidance, reuse, repair, and zero waste.

Elevate the role that natural resources play in addressing climate change

Respondents emphasized the critical role healthy, functioning ecosystems play in mitigating climate change impacts and preserving biodiversity, and they felt the plan needed a stronger focus on natural resources, green infrastructure, and carbon sequestration strategies. They were very interested in efforts to protect natural resources, preserve open space, support regenerative agriculture and local food systems, and increase green roofs and green spaces in urban areas.

Respondents liked that safety preparations include flooding and extreme weather. They considered the topic to be timely in regard to recent extreme weather in Texas. They appreciated the amount of data included to determine high risk areas and safety concerns. Many respondents agree that we need to be better prepared. They think that many people believe we are more prepared than we are.

Ensure capacity to respond to natural disasters

Recent natural disasters, such as the energy grid failure in Texas after a winter storm, have increased concern about preparedness for natural disasters. Respondents were concerned about the capacity to respond to natural disasters and other health issues related to climate change. Many respondents stated that the public needs more education about climate change impacts and preparedness, and respondents felt the county should highlight the hidden costs of climate change, including increased costs for health care, emergency responses, agricultural losses, and infrastructure, property, and road repairs.

Define the county's role, scope, and capacity

Respondents felt they needed a better understanding of the scope of the county's responsibilities and the relationships the county has with external partners who will be involved in accomplishing the goals of the plan. They also wanted to understand the capacity of the county departments involved to accomplish the goals laid out in the plan. They wanted to see requirements that all county departments use race equity and climate impact assessment tools when evaluating plans, projects, and investments, and they wanted to see the resources and budget allocated to make implementation possible.



Appendix B: Public engagement findings

Increase engagement to build community buy-in and trust

Respondents want the county to do more to collaborate and engage with the community. Some were concerned that the ideas and strategies in the plan were coming from the county and being brought to the community for feedback, rather than being generated by the community. Others felt the timeline for gathering feedback on the plan was too short and the opportunities were too limited. They expressed concern that those providing feedback are likely those who are already engaged in this work, and more approaches are needed to ensure broad participation and create space for more meaningful and diverse engagement. They felt that more community engagement earlier in the process would be critical when developing action and implementation plans to ensure success.

How the feedback informed the plan and will guide the work

The public engagement process provided insights on how the community is experiencing the effects of climate change and helped us understand how our values and priorities align with those of the community.

In many instances, we heard that we are generally on the right track, and the community supports us in taking bold and urgent action. We heard the community wants us to be more bold, more urgent, and more aggressive with our emission reduction strategies, we need to provide more specifics about how the work will be accomplished, and we need to establish metrics and reporting requirements to ensure accountability. We heard the importance of taking an intersectional approach to ensure our climate action plan responds to issues of racial and environmental justice, health, workforce development, and other topics.

Changes to the plan

The following are key changes that were made to the plan based on the feedback from the public and commissioners:

- Set a more ambitious overall goal to reduce greenhouse gas emissions to net zero by 2050.
- Provided more context in the introduction sections to more clearly communicate the urgency of addressing climate change and that humans are responsible for climate change pollution.



Appendix B: Public engagement findings

- Added new strategies in the Goal: Enhance public safety to more clearly define the need to support a stronger energy infrastructure and disaster plans that support basic lifesaving resources.
- Renamed the goal “Protect building sites, roads, infrastructure and natural resources” to “Increase resilience of the built environment and protect natural resources” to more accurately describe this section and expanded strategies for protecting natural resources, using green infrastructure, planting and maintaining trees, and increasing carbon sequestration.
- Made the following significant updates to the Goal: Reduce greenhouse gas emissions:
 - Defined stretch goals in a number of key metrics:
 - Carbon-free electricity in county operations by 2035
 - Regional on-site solar goal of 10% by 2030
 - Net zero county fleet by 2050
 - Plant 1 million trees by 2030
 - Acquire 6,000 additional acres of conservation easements by 2040
 - Added strategies to advance fuel-switching (building electrification) and getting to carbon-free electricity.
 - Added strategies to develop a plan to establish a more ambitious vehicle miles traveled goal and strategies to achieve it, along with participating in MnDOT’s Statewide Multimodal Plan development in 2021.
- Added strategies to achieve zero-waste goals faster, including more specifics about organics recycling services, ways to reduce gaps in recycling service at multi-unit housing, and policy advocacy work. Staff also defined the county’s position on the Hennepin Energy Recovery Center (HERC) and its role in mitigating climate change.
- Expanded on carbon sequestration strategies to highlight opportunities both on county properties and in partnership with private landowners.

Implications to guide the work going forward

As the county develops action plans for implementation of the strategies outlined in the plan, the following implications from public engagement process will guide the work:

- Specific action plans for the strategies included in the plan need to be developed to provide details on how the work will be accomplished and who is responsible. The county needs to define the scope of the county’s responsibilities and the relationships the county has with external partners who will be involved in accomplishing the goals of the plan.
- The impacts of the climate action plan strategies need to be further analyzed to refine the metrics that the county, community, and public can use to measure progress. Like other environmental justice issues, those who least contribute to the problem of climate change will be most impacted. The county should continue to recognize our obligation to work toward eliminating disparities in our response to climate change.



Appendix B: Public engagement findings

- The pathway to transformative climate policies must be created by the county and other leaders, and then supported and moved forward by the public. To advance an impactful climate change response, the county needs to engage residents, listen to how climate change is impacting them, and collectively build support for solutions. Defining and articulating our collective vision for a climate-friendly future is critical to motivating collective action.
- There is a need for more education on the impacts of climate change and increased awareness about the urgency of the issues. Understanding about the connections to racial equity, health, and unequal impacts to vulnerable communities needs to be heightened. Presenting findings from the vulnerability assessment helped groups who were struggling to see the connections more clearly understand the full implications of climate change.
- Community engagement efforts during plan implementation need to be multi-faceted, robust, and consistent to build community buy-in and trust. Participants want the county to do more to collaborate and engage with the community. Both community organizations and public entity partners expressed strong interest in collaborating on climate solutions and working with the county to ensure the plan is effective and impactful. Deeper engagement with more diverse audiences and vulnerable communities will require partnerships with community organizations who can help lead outreach efforts that resonate with their communities.

The full results from the both phases of public engagement are available at hennepin.us/climate-action.



Appendix C: Strategy alignment with disparity reduction

Goals	Objectives	Strategy	Education	Employment	Health	Housing	Income	Justice	Transportation
Goal: Protect and engage people, especially vulnerable communities	Objective: Hennepin County becomes a more resilient community that can withstand and adapt to abrupt and sometimes unforeseen weather, social, and economic changes	Strategy: Strengthen individual and community resilience			x	x			x
	Objective: The county's response to climate change prioritizes the protection of the most vulnerable residents and advances equitable health outcomes	Strategy: Better understand and plan for the health needs of our diverse communities			x	x			x
		Strategy: Mitigate disproportionate impacts associated with climate change			x	x			x
	Objective: Residents, businesses, and organizations pursue individual actions and support collective actions that drive systems change	Strategy: Educate and engage the public in taking collective action	x		x				
	Objective: County climate investments support broader county goals to reduce disparities in employment and grow the economy	Strategy: Maximize green economic recovery and workforce development opportunities	x	x			x		x
Goal: Enhance public safety	Objective: Hennepin County assesses, prepares for, and mitigates risks from hazard events	Strategy: Improve preparation for and respond to extreme weather events, flooding, and other climate disasters			x	x			x
	Objective: Residents, businesses, and organizations understand and are prepared to respond to the impacts of climate change	Strategy: Reduce risks to vulnerable people from extreme heat or cold			x	x			x





Appendix C: Strategy alignment with disparity reduction

Goals	Objectives	Strategy	Education	Employment	Health	Housing	Income	Justice	Transportation
Goal: Increase the resilience of the built environment and protect natural resources.	Objective: Climate risks and impacts to county buildings and infrastructure are assessed and mitigated	Strategy: Reassess policies, design standards, and maintenance practices for county buildings and infrastructure projects	x	x					x
	Objective: Risks and impacts from increased precipitation, flooding, and landslides are reduced	Strategy: Reassess policies and practices to manage increased stormwater volumes		x	x				x
		Strategy: Coordinate regional stormwater resiliency efforts with public entity partners		x					x
		Strategy: Manage the increased risk of landslides due to increased rainfall				x			x
	Objective: The county employs green and natural infrastructure, including trees, plants, and soil, to increase resiliency of the built environment, especially in areas at higher risks for localized flooding and extreme heat	Strategy: Reassess policies and practices to ensure capacity to design, implement, and maintain green infrastructure	x	x	x				x
		Strategy: Use county investments to increase resilience in the built environment			x	x			x
		Strategy: Plant, diversify, and maintain trees throughout Hennepin County and increase the resiliency of the county's community forest				x			
	Objective: Natural areas and open spaces are functional and diverse	Strategy: Plan for and mitigate anticipated ecosystem and open space impacts		x	x				x





Appendix C: Strategy alignment with disparity reduction

Goals	Objectives	Strategy	Education	Employment	Health	Housing	Income	Justice	Transportation	
Goal: Reduce emissions in ways that align with core county functions and priorities	Objective: Greenhouse gas emissions associated with buildings and energy use are reduced to meet the county's emission goals	Strategy: Reduce climate impacts of buildings through innovative and efficient design, including the use of climate-friendly material choices		x	x					
		Strategy: Transition to renewable energy sources and reduce energy use overall in county operations		x						
		Strategy: Support Hennepin County communities in establishing initiatives to reduce greenhouse gas emissions associated with energy use				x	x			
	Objective: Greenhouse gas emissions associated with transportation are reduced to meet the state's Next Generation Energy Act and county emission goals	Strategy: Reduce vehicle miles traveled in Hennepin County and throughout the region				x				x
		Strategy: Promote electric vehicle infrastructure regionally				x				x
		Strategy: Use transportation investments to support broader county goals including reducing disparities, improving health, enhancing livability, and growing the economy		x	x			x		x
	Objective: Greenhouse gas emissions associated with waste and material use are reduced to meet county goals	Strategy: Prevent food waste and divert organic material from the trash				x				
		Strategy: Reuse and recycle construction and demolition waste				x				





Appendix C: Strategy alignment with disparity reduction

Goals	Objectives	Strategy	Education	Employment	Health	Housing	Income	Justice	Transportation
		Strategy: Understand the climate impacts of our purchases and mitigate the largest impacts			x		x		
		Strategy: Advocate for state leadership on zero-waste policies and producer responsibility			x				
	Objective: The county sequesters carbon on county-owned property, including along county road rights-of-way and tax-forfeit properties	Strategy: Reassess policies and practices to increase carbon sequestration on county-owned properties		x					x
	Objective: Landowners sequester carbon by protecting and restoring habitat, building soil health and preserving and planting trees	Strategy: Assist residents to sequester carbon on private property			x				
Goal: Partner in ways that can be most impactful	Objective: Partnership models driven by mutual climate goals are explored and pursued	Strategy: Pursue strategies with the widest agreement and clearest direction forward	x	x	x	x	x		x
	Objective: Communities are engaged and empowered through partnership and shared leadership	Strategy: Establish long-term partnerships to increase engagement and support community-driven solutions	x	x	x	x	x		x



Appendix D: Net zero planning exercise

The following assumptions were used to create the greenhouse gas emissions reduction planning exercise (Figure 10 on page 44) that shows the participation rates required by strategy to achieve net zero emissions by 2050. This work was completed by LHB, Inc.

Commercial/industrial efficiency		2030	2040	2050	Assumptions/context
Energy Code Enforcement	Percentage of new commercial/ industrial building area (in the ten-year time period ending in the specified year) that complies with the Minnesota Energy Code	100%	100%	100%	<ul style="list-style-type: none"> Code will continue to be enforced for all new buildings. This compliance rate is higher than the statewide average of 78% for commercial buildings.
Net-Zero Energy Buildings	Percentage of new commercial/ industrial building area (in the ten-year time period ending in the specified year) that meets advanced energy goals	40%	78%	100%	<ul style="list-style-type: none"> This strategy models Minnesota’s SB 2030 program of stepped reduction standards for new construction that reach net-zero energy in 2030. A small number of buildings (5%) will either be required to meet SB 2030 or will voluntarily meet advanced energy goals. Additionally, St. Louis Park’s green building policy requires SB 2030 for new municipal buildings and new commercial buildings above a certain size that receive financial assistance from the City. This policy is estimated to impact 15% of new commercial construction. Multiple local jurisdictions are likely to adopt a stretch energy code option if available, which would apply to all commercial buildings. Bloomington, Brooklyn Center, Eden Prairie, Edina, Golden Valley, Minneapolis, Minnetonka, and St. Louis Park participated in a working group to this end. Based on their forecasted percentage of countywide population and job growth, 63% of new construction in Hennepin County is estimated to occur within these cities. This assumes state legislation enables stretch energy code adoption in 2024. Based on the proposed Minnesota Energy Code trajectory from a 2019-2020 workgroup convened by MN DLI and Commerce, future versions of Minnesota’s energy code are assumed to reach net-zero energy in 2036.

Appendix D: Net zero planning exercise

Commercial/industrial efficiency		2030	2040	2050	Assumptions/context
Existing Building Efficiency	Percentage of energy saved compared to 2018 baseline in existing commercial buildings through energy efficiency retrofits and efficient building operations by the specified year	17%	28%	38%	<ul style="list-style-type: none"> Minnesota’s Energy Conservation Improvement policy sets annual energy-savings goals of 1.5% for electricity and 1% for natural gas.¹⁴ In Hennepin County between 2015 and 2019, commercial/industrial participants in Xcel’s conservation improvement programs achieved annual electricity savings between 1.6 and 2.6% of Xcel’s total county-wide commercial/industrial electricity sales, with an average of 2%.¹⁵ Hennepin County leads the Efficient Buildings Collaborative, which supports the adoption and implementation of local benchmarking ordinances by Minnesota cities. Minneapolis, Edina, and St. Louis Park currently have commercial building benchmarking ordinances in effect and Bloomington is working toward an ordinance. A national study found buildings that benchmark their energy use achieve an average of 2.4% annual savings.¹⁶ The savings rates shown here for Hennepin County assume that cities with commercial building benchmarking policies (including Bloomington) will achieve 2.4% annual savings for participating buildings and all other buildings/cities will achieve 1.5% annual savings for electricity and 1% annual savings for natural gas. The following Hennepin County cities have developed Energy Actions Plans for their communities or include existing building efficiency goals in their climate action plans: Bloomington, Edina, Eden Prairie, Golden Valley, Minnetonka, Shorewood, St. Louis Park. The goals for these cities have not been analyzed and may go beyond the rates included here.

¹⁴ M.S. 2016B.241; <https://www.revisor.mn.gov/statutes/cite/216B.241>

¹⁵ Analysis conducted by LHB using data from Xcel Energy’s Community Energy Reports for Hennepin County; https://www.xcelenergy.com/working_with_us/municipalities/community_energy_reports

¹⁶ U.S. Environmental Protection Agency, 2012, Benchmarking and Energy Savings; https://www.energystar.gov/sites/default/files/buildings/tools/DataTrends_Savings_20121002.pdf

Appendix D: Net zero planning exercise

Residential efficiency		2030	2040	2050	Assumptions/context
Energy Code Enforcement	Percentage of new residential building area (in the specified year) that complies with the Minnesota Energy Code	100%	100%	100%	<ul style="list-style-type: none"> Minnesota's current residential energy code will continue to be enforced for all new buildings. This compliance rate is higher than the statewide average of 76.8% for residential buildings.
Net-Zero Energy Buildings	Percentage of new residential building area (in the specified year) that produces as much energy on-site as it uses	5%	45%	100%	<ul style="list-style-type: none"> A small number of new homes will voluntarily be designed to be net-zero energy by 2030. Net-zero energy becomes a requirement of Minnesota's Energy Code in 2036.
Existing Building Efficiency	Percentage of energy saved compared to 2018 baseline in existing homes through energy efficiency retrofits and behavioral strategies by the specified year	13%	22%	30%	<ul style="list-style-type: none"> Minnesota's Energy Conservation Improvement policy sets annual energy-savings goals of 1.5% for electricity and 1% for natural gas.¹⁷ In Hennepin County between 2015 and 2019, residential participants in Xcel's conservation improvement programs achieved average annual electricity savings of 0.3% and natural gas savings of 0.9% compared to Xcel's total county-wide residential energy sales.¹⁸ The savings rates shown here for Hennepin County assumes that the 1.5% annual savings goal for electricity and 1% annual savings goal for natural gas will be achieved. The following Hennepin County cities have developed Energy Actions Plans for their communities or include existing building efficiency goals in their climate action plans: Bloomington, Edina, Eden Prairie, Golden Valley, Minnetonka, Shorewood, St. Louis Park. The goals for these cities have not been analyzed and may go beyond the rates included here.

¹⁷ M.S. 2016B.241; <https://www.revisor.mn.gov/statutes/cite/216B.241>

¹⁸ Analysis conducted by LHB using data from Xcel Energy's Community Energy Reports for Hennepin County; https://www.xcelenergy.com/working_with_us/municipalities/community_energy_reports

Appendix D: Net zero planning exercise

Residential efficiency		2030	2040	2050	Assumptions/context
Xcel Energy's Planned Emissions Reduction	Percentage reduction in CO ₂ e emissions per kWh of electricity from baseline year	73%	79%	100%	<ul style="list-style-type: none"> Based on the emissions factors derived from Xcel's Preferred Plan for 2020-2034.¹⁹ For 2035-2050, it follows a linear trajectory to Xcel's stated goal of carbon-free by 2050.
Renewable Energy		2030	2040	2050	Assumptions/context
On-Site Renewable Electricity	Percentage of total community electricity use met by on-site renewable electricity generation in the specified year	10%	10%	10%	<ul style="list-style-type: none"> The State of Minnesota (M.S. 216B.1691) and the Cities of St. Louis Park and Eden Prairie have goals of generating 10% of electricity use from solar by 2030. Minneapolis aims to generate 10% of its electricity from local, renewable sources by 2025. Hennepin County's rooftop generation potential equates to about 50% of the annual electricity use.²⁰
Green Power Purchase - Business	Percentage of commercial/industrial electricity use met through participation in renewable energy purchasing programs (e.g. Xcel's Windsource or Renewable*Connect) in the specified year	38%	39%	0%	<ul style="list-style-type: none"> This strategy uses city-specific goals where available, and historic county-wide trends otherwise. Minneapolis and St. Louis Park have goals of 100% of renewable electricity by 2030. These cities comprised 38% of the county's commercial/industrial electricity use in 2018.²¹ In 2019 0.7% of Xcel's business customers in Hennepin County participated for a total of 0.3% of total commercial/industrial electricity.²² A linear growth in this percentage based on 2015-2019 data would result in 0.6% of commercial/industrial electricity in 2030 and 1% in 2040. When the electricity grid is carbon-free in 2050, green power purchase programs will become obsolete.

¹⁹ Xcel Energy, Upper Midwest Integrated Resource Plan 2020-2034, dated July 1, 2019.

²⁰ Metropolitan Council, Local Planning Handbook, Solar Resource Calculation for Hennepin County, 2017.

²¹ Regional Indicators Initiative.

²² Analysis conducted by LHB using data from Xcel Energy's Community Energy Reports for Hennepin County; https://www.xcelenergy.com/working_with_us/municipalities/community_energy_reports

Appendix D: Net zero planning exercise

Residential efficiency		2030	2040	2050	Assumptions/context
Green Power Purchase - Residential	Percentage of residential electricity use met through participation in renewable energy purchasing programs (e.g. Xcel's Windsource or Renewable*Connect) in the specified year	36%	37%	0%	<ul style="list-style-type: none"> This strategy uses city-specific goals where available, and historic county-wide trends otherwise. Minneapolis and St. Louis Park have goals of 100% of renewable electricity by 2030. These cities comprised 33% of the county's residential electricity use in 2018.²³ In 2019, 6.4% of Xcel's residential customers in Hennepin County participated for a total of 2.2% of community-wide residential electricity.²⁴ A linear growth in this percentage based on 2015-2019 data would result in 4.1% of residential electricity in 2030 and 5.8% in 2040. Nationally, the highest participation rate in green power purchase programs is currently 19% (in Portland – assumed to be % of customers, not energy). When the electricity grid is carbon-free in 2050, green power purchase programs will become obsolete.
Fuel Switching		2030	2040	2050	Assumptions/context
Business Electrification	Percentage of commercial buildings served by natural gas for space and water heating that have switched to electricity by the specified year	9%	38%	70%	<ul style="list-style-type: none"> Derived from the "Electrification Futures Study Sensitivity" scenario used in the energy modeling analysis for Xcel Energy's Upper Midwest Integrated Resource Plan 2020-2034.
Residential Electrification	Percentage of homes served by natural gas for space and water heating that have switched to electricity by the specified year	17%	55%	97%	<ul style="list-style-type: none"> Derived from the "Electrification Futures Study Sensitivity" scenario used in the energy modeling analysis for Xcel Energy's Upper Midwest Integrated Resource Plan 2020-2034.

²³ Regional Indicators Initiative.

²⁴ Analysis conducted by LHB using data from Xcel Energy's Community Energy Reports for Hennepin County; https://www.xcelenergy.com/working_with_us/municipalities/community_energy_reports

Appendix D: Net zero planning exercise

Travel		2030	2040	2050	Assumptions/context
VMT Reduction	Percentage reduction from baseline (2017) vehicle miles traveled (VMT) per resident due to increased walking, biking, transit ridership, telecommuting, ride-sharing, and trip efficiency	14%	19%	26%	<ul style="list-style-type: none"> An 8.6% reduction is derived from the estimated regional change in daily VMT per resident by 2040 due to all changes made to the regional transit system.²⁵ An additional 8% savings are estimated based on a significant and lasting trend toward telecommuting post-coronavirus as well as enhancements to the regional bicycle and pedestrian infrastructure network, advancements in rideshare technology, and autonomous vehicle implementation.²⁶ Minneapolis' draft Transportation Action Plan (March 2020) calls for 3 of every 5 trips to be taken by walking, rolling, bicycling, or transit by 2030 and to cut VMT by 1.8% each year from 2018 through 2030 (a 21% total reduction). Minneapolis 2040 notes that "Even with the adoption of electric cars, a 38 percent reduction in passenger miles traveled by automobile is needed to achieve the 80 percent reduction of greenhouse gas emissions by 2050." Eden Prairie's Climate Action Plan (published pre-coronavirus) calls for a 7% reduction by 2030, 10% by 2040, and 14% by 2050. St. Louis Park's Climate Action Plan (published pre-coronavirus) calls for a 12% reduction by 2030 and models a 20% reduction in 2040. The numbers shown here use the city-specific goals for Minneapolis, Eden Prairie, and St. Louis Park's portions of vehicle travel, and 12%/17%/23% reductions for the rest of the county (based on transit plus telecommuting trends).

²⁵ U.S. Department of Transportation, Federal Transit Administration, and Metropolitan Council, Southwest Light Rail Transit Final Environmental Impact Statement, May 2016; <https://metro council.org/Transportation/Projects/Light-Rail-Projects/Southwest-LRT/Environmental/Final-EIS.aspx>

²⁶ VMT reduction from telecommuting trends were derived from the Metropolitan Council's COVID-19 (Coronavirus) Outbreak Transportation Survey: May 2020; <https://metro council.org/Council-Meetings/Committees/Transportation-Committee/2020/July-27,-2020/Info-1-COVID.aspx>. The percentage increase from the baseline percentage of days spent teleworking pre-COVID to the preferred future percentage of days spent teleworking (222%) was applied to the 2018 baseline teleworking rate for Hennepin County from the U.S. Census (6.4%); <https://data.census.gov/cedsci/table?q=hennepin%20county%20commuting&tid=ACSS1Y2018.S0801&hidePreview=false>. This survey includes responses from 3,244 metro area adults, with results weighted to reflect the regional population demographics. Respondents who reported never teleworking (even during COVID) and those who reported being unemployed or furloughed during COVID were not asked about future teleworking preferences and are assumed not to telework in the future.

Appendix D: Net zero planning exercise

Travel		2030	2040	2050	Assumptions/context
Electric Light-Duty Vehicles	Percentage of light-duty vehicles that drive within City boundaries that are electric by the specified year	20%	46%	84%	<ul style="list-style-type: none"> • BloombergNEF produces global forecasts for electric vehicles, with 64% penetration by 2050.²⁷ While forecasted passenger vehicle EV adoption rates for the U.S. are similar to global averages, they are likely to be higher in urban areas such as Hennepin County. • Minnesota aims to power 20% of the light-duty vehicles in the state with electricity by 2030.²⁸ • The Zero Emissions Vehicle (ZEV) standard currently under consideration by the Minnesota Pollution Control Agency as part of the Clean Cars Minnesota rulemaking would require 22% of the light-duty vehicles delivered for sale in Minnesota to have ultra-low or zero tailpipe emissions.²⁹ • The targets used here represent an acceleration of the global forecast by five years (e.g. the 2030 target equates to the 2035 global forecast) to reflect Minnesota’s more aggressive goals.
Emissions Reductions in Medium- and Heavy-Duty Vehicles	Percent reduction in emissions per mile for medium- and heavy-duty vehicles that drive within City boundaries by the specified year	10%	20%	20%	<ul style="list-style-type: none"> • This strategy reflects the Future Fuels bill currently under consideration by the Minnesota legislature to decrease transportation fuel intensity by at least 20% by 2035.³⁰

²⁷ BloombergNEF, Electric Vehicle Outlook 2020; <https://about.bnef.com/electric-vehicle-outlook/>

²⁸ Minnesota Department of Transportation, Minnesota Pollution Control Agency, and Great Plains Institute, Accelerating Electric Vehicle Adoption: A Vision for Minnesota, 2019; <http://www.dot.state.mn.us/sustainability/docs/mn-ev-vision.pdf>

²⁹ California Code of Regulations, Title 13, Section 1962.2.; [https://govt.westlaw.com/calregs/Document/I505CA51BB0AD454499B57FC8B03D7856?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Document/I505CA51BB0AD454499B57FC8B03D7856?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default))

³⁰ Minnesota House of Representatives, HF2083; <https://www.house.leg.state.mn.us/bills/Info/HF2083/92/2021/0>

Appendix D: Net zero planning exercise

Waste		2030	2040	2050	Assumptions/context
Waste Reduction	Percentage reduction in municipal solid waste per capita by the specified year from 2018 baseline	22%	22%	22%	<ul style="list-style-type: none"> • There is a regional policy goal to reduce waste generation by 4% from 2015 by 2030.³¹ Accounting for anticipated population growth in Hennepin County and its increased waste generation since 2015, this equates to a 22% reduction per capita from 2018.³² • For context, the county's per capita waste dropped 17% during the economic recession between 2007 and 2009. It dropped an additional 5% by 2015.³³ • Hennepin County generated 5.6 pounds per capita per day in 2018, up from 5.1 lbs in 2015. The median per capita waste in Minnesota counties between 1991-2018 is 4.3 lbs (a 23% reduction from Hennepin 2018). Counties in the lowest quartile reported 1.5-3.4 lbs/person-day (a 39-73% reduction).³⁴ The 2017 U.S. average is 4.5 lbs and the worldwide average is 1.6 lbs.³⁵ Since Hennepin County is an economic hub (managing waste generated by people living in other counties), it is expected to have higher per capita rates than the state, national, or worldwide averages. • Minneapolis has a goal of maintaining total waste at 2010 levels.³⁶ When accounting for population growth, this would be a 17% reduction per capita by 2030.³⁷

³¹ Minnesota Pollution Control Agency, Metropolitan Solid Waste Management Policy Plan, 2016-2036; <https://www.pca.state.mn.us/sites/default/files/w-sw7-21.pdf>

³² Analysis conducted by LHB using municipal solid waste data from the Minnesota Pollution Control Agency's SCORE Overview and Data (<https://www.pca.state.mn.us/waste/score-overview-and-data-1991-2018>), historic county population data from the Minnesota State Demographic Center (<https://mn.gov/admin/demography/data-by-topic/population-data/our-estimates/pop-finder1.jsp>), and future population estimates from the Metropolitan Council's Thrive MSP 2040 Population Forecasts (January 1, 2020). Hennepin County began including yard waste data in their annual MSW reports in 2016. To provide a consistent baseline, 2015's per capita rate was adjusted using 2018 yard waste data.

³³ Ibid.

³⁴ Ibid. Yard waste may be undercounted in some Minnesota counties/years.

³⁵ U.S. average from the U.S. Environmental Protection Agency, National Overview (<https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/national-overview-facts-and-figures-materials#R&Ctrends>), accessed August 13, 2020.

³⁶ Minneapolis Zero Waste Plan, November 2017; https://lims.minneapolismn.gov/Download/RCA/2885/24-Zero-Waste-Plan_November-2017_clean.pdf.

³⁷ Analysis conducted by LHB using the Metropolitan Council's Thrive MSP 2040 Population Forecasts (January 1, 2020).

Appendix D: Net zero planning exercise

Waste		2030	2040	2050	Assumptions/context
Recycling	Percentage of municipal solid waste that is recycled (including organics recycling) in the specified year	75%	85%	90%	<ul style="list-style-type: none"> In 2018, 43% of Hennepin County's MSW was recycled.³⁸ Hennepin County has a 75% recycling goal by 2030, including 15% organics recovery and 60% recycling.³⁹ Minneapolis has a goal to reach 80% recycling/composting by 2030.⁴⁰ St. Louis Park's Climate Action Plan has a goal of reducing emissions from MSW by 50% by 2030.⁴¹ Eden Prairie's Climate Action Plan has a goal of net-zero emissions from MSW by 2050.⁴² The Zero Waste International Alliance sets a goal for communities to reduce their waste to landfill, incineration and the environment by 90% or more.⁴³
Landfill Diversion	Percentage of municipal solid waste that is diverted from landfills in the specified year	99%	99%	99%	<ul style="list-style-type: none"> Hennepin County has a goal to send a maximum of 1% of MSW to landfills by 2030.⁴⁴ In 2018, 78% of Hennepin County's MSW was diverted from landfills.⁴⁵ Landfilled waste is expected to increase in the near term due to the closure of the Elk River Resource Recovery Facility in 2019.

³⁸ Minnesota Pollution Control Agency's SCORE Overview and Data (1991-2018); <https://www.pca.state.mn.us/waste/score-overview-and-data-1991-2018>, accessed August 24, 2020.

³⁹ Minnesota Statute 115A.551 ([https://www.revisor.mn.gov/statutes/cite/115A.551#:~:text=Subd.,-2a.&text=\(b\)%20Each%20county%20will%20develop,establishing%20a%20higher%20recycling%20goal](https://www.revisor.mn.gov/statutes/cite/115A.551#:~:text=Subd.,-2a.&text=(b)%20Each%20county%20will%20develop,establishing%20a%20higher%20recycling%20goal)) and Hennepin County Solid Waste Management Master Plan, 2018 (<https://www.hennepin.us/-/media/hennepinus/your-government/projects-initiatives/documents/solid-waste-mgmt-master-plan-18-23.pdf>).

⁴⁰ Minneapolis Zero Waste Plan, November 2017; [https://lims.minneapolismn.gov/Download/RCA/2885/24-Zero Waste Plan_November 2017_clean.pdf](https://lims.minneapolismn.gov/Download/RCA/2885/24-Zero%20Waste%20Plan_November%202017_clean.pdf)

⁴¹ St. Louis Park Climate Action Plan 2040, February 2018; <https://www.stlouispark.org/home/showdocument?id=8214>

⁴² Eden Prairie Climate Action Plan, March 2020; <https://www.edenprairie.org/home/showdocument?id=15547>

⁴³ Zero Waste International Alliance, Zero Waste Community Certification (<http://zwia.org/zero-waste-community-certification/>), accessed August 13, 2020.

⁴⁴ Hennepin County Solid Waste Management Master Plan, 2018; <https://www.hennepin.us/-/media/hennepinus/your-government/projects-initiatives/documents/solid-waste-mgmt-master-plan-18-23.pdf>

⁴⁵ Minnesota Pollution Control Agency's SCORE Overview and Data (1991-2018); <https://www.pca.state.mn.us/waste/score-overview-and-data-1991-2018>, accessed August 24, 2020.



Appendix D: Net zero planning exercise

Carbon Sequestration		2030	2040	2050	Assumptions/context
Carbon Sequestration	Percentage reduction in business-as-usual county-wide emissions due to carbon sequestration within the County in the specified year	0%	6%	12%	<ul style="list-style-type: none">While advanced strategies to address the remaining emissions from transportation, natural gas, and waste processing may help close the remaining gap to the county's 2050 goal, the majority of this reduction is assumed to be achievable through carbon sequestration within the county through land management practices. Additional research and analysis is needed to quantify how these goals translate directly into implementable actions.





The Hennepin Energy Recovery Center and its role in the solid waste system

A staff report for the
Hennepin County Board of Commissioners

September 2023

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Purpose

This report was prepared for the Hennepin County Board of Commissioners to provide information and context related to decision-making for the 2024 Solid Waste Management Plan, the Hennepin Energy Recovery Center (HERC), community concerns, and a provision in the state legislature's 2023 infrastructure bill that the county must submit a plan for the cessation of operations at HERC to access the \$26 million appropriated for the construction of an anaerobic digester.

How to read this report

This report includes background information and operational, historical, legal, financial, and environmental considerations.

Throughout the report, waste refers to all materials discarded as trash, recycling, or organics recycling. Trash refers specifically to materials put in the garbage.

Background section

- **Solid waste planning** includes a description of the county's responsibilities for managing a solid waste system in accordance with the state's Waste Management Act.
- **County trash management facilities** includes a description of the two facilities the county owns and operates: HERC and the Brooklyn Park Transfer Station. This section also includes a description of additional transfer stations and privately owned landfills that manage trash generated in the county.
- **History of waste management** provides a chronological review of key steps the county has taken to meet state-mandated waste management and recycling goals from the passage of the Waste Management Act in 1980 through today.
- **Trash generation and disposal methods** provides an overview of how much waste is generated in the county and what methods have been used to dispose of trash over time.
- **Landfill abatement policy** provides a description of the state's Metro Policy Plan, reviews the forecast of waste generation growth in this next planning period, and shows waste management in Hennepin County in five-year increments, noting significant milestones described in the history section. It also includes a summary of the MPCA's position on waste-to-energy.

Considerations and consequences section

- **Operational considerations** include impacts to county buildings, contracts, jobs, and resiliency of energy infrastructure. It also includes impacts on waste disposal, including service considerations for the municipalities and businesses and associated liability assessments. Additionally, it includes information about landfill capacity.

- **Legal and financial considerations** provide an overview of the county's Solid Waste Enterprise Fund, including revenues, expenditures, and impacts of the potential loss of revenue for environmental programs if HERC were to close.
- **Environmental considerations** include information on climate, air, and water pollution associated with waste-to-energy and landfills, as well as legacy impacts from landfills.
- **Policy and legislative considerations** provide a set of state legislative actions and supporting federal, and county led efforts to be implemented to advance a zero-waste future and environmental impacts.

Summary of considerations

This closing section provides a summary of the key considerations identified by staff in this review and next steps.

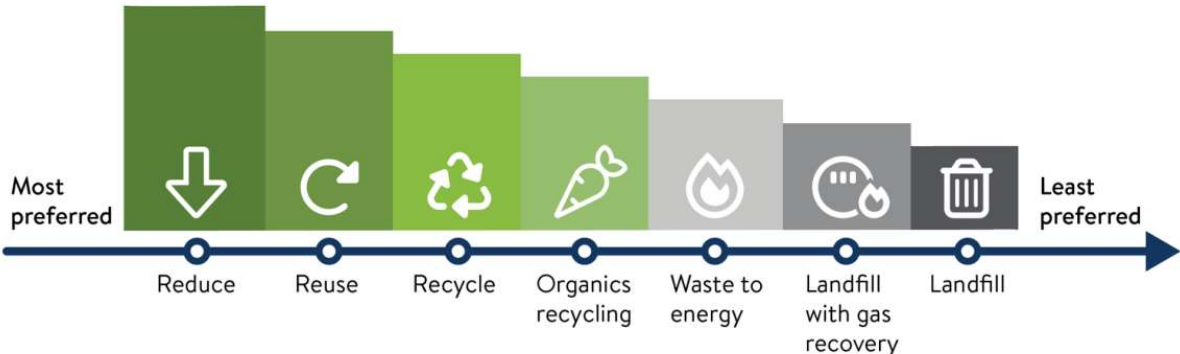
Background

Solid waste planning

Counties engaging in solid waste management in Minnesota are responsible for managing their solid waste systems in accordance with the state’s Waste Management Act, which establishes a waste management hierarchy (Minn. Stat. § 115A.02) (Fig. 1). The hierarchy prioritizes, in descending order of preference: reduce, reuse, recycle, organics recycling, waste-to-energy, landfill with gas recovery, and landfill without gas recovery. Implementing a system that complies with state law is a shared responsibility between government, the waste management industry, businesses, manufacturers, retailers, and residents.

Minnesota’s waste management hierarchy

Fig. 1

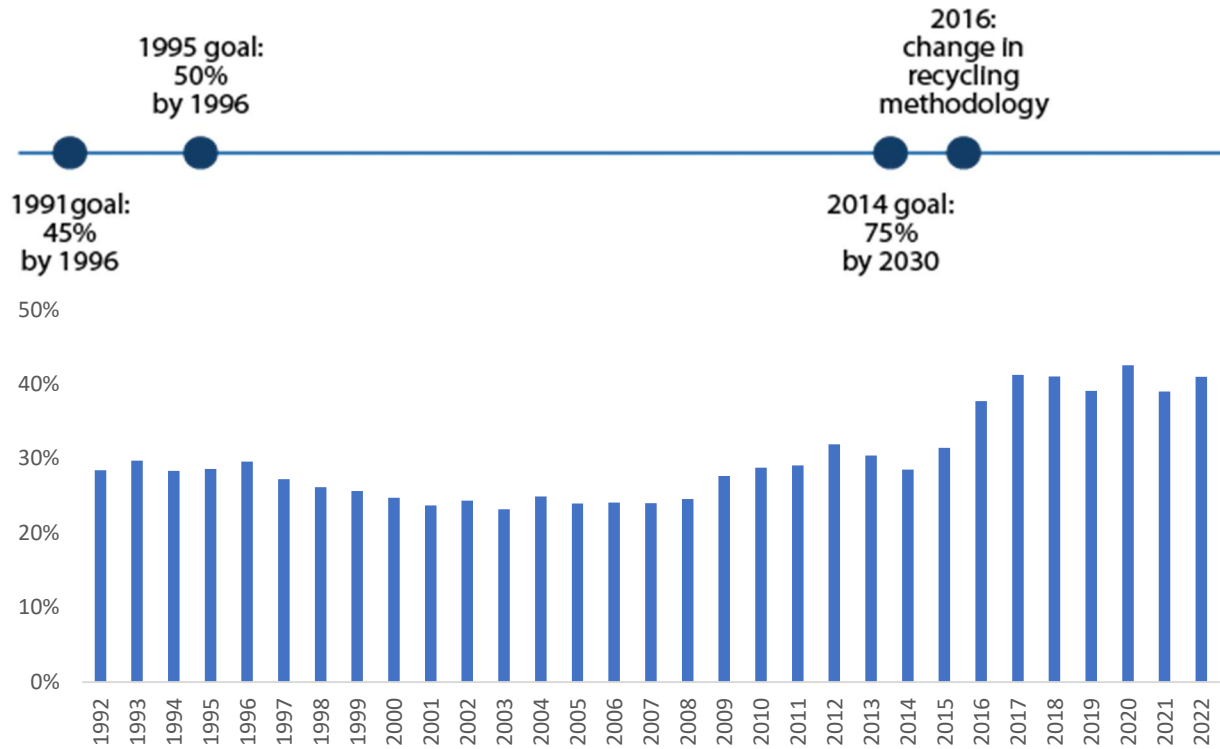


Source: Minnesota Pollution Control Agency

The county is required to develop a solid waste management plan that implements the Metropolitan Solid Waste Management Policy Plan and identifies strategies to meet the recycling goals and objectives of the Metro Policy Plan (Minn. Stat. §§ 473.149; 473.803). The county’s current [solid waste management plan for 2018 to 2023](#) establishes the county’s solid waste strategies to achieve the goal of 75% recycling by 2030 and zero waste to landfills.

Figure 2 shows the county’s recycling rate compared to established state recycling goals by year. As the chart indicates, setting a goal is not enough. Progress toward the state’s ambitious goals has been incremental, and it has been challenging for the county to achieve a diversion rate greater than 50% despite the implementation of many new programs. A serious effort to reduce the trash we produce will require bold action at the state and local levels on policy, new infrastructure, and expanded funding.

Recycling rate and state recycling goals
 Fig. 2



The state has a draft of its [2022 to 2042 Metropolitan Policy Plan](#) (draft Metro Policy Plan) available for public comment through September 17, 2023 (subject to change). Once the state policy plan is finalized, the county has nine months to complete its own Solid Waste Management Plan. The county’s plan requires approval by the county board and the MPCA commissioner.

The county recently completed a [Zero Waste Plan](#) to transform the waste management system to a future where all materials are designed to become resources for others to use. In the Zero Waste Plan, the county has defined zero waste as preventing 90% or more of all discarded materials from being landfilled or incinerated. This plan will serve as the foundation of the county’s Solid Waste Management Plan that will be developed in 2024.

County trash management facilities

To support the county's integrated waste management plan, the county owns and operates two solid waste facilities: HERC and the Brooklyn Park Transfer Station. Waste facilities include transfer stations, processing facilities, and disposal sites and facilities (Minn. Stat. § 115A.03, subd. 35).

A transfer station is a facility where trash is unloaded from smaller trucks and reloaded into larger vehicles for transport to a final disposal site. Waste transfer stations make trash collection more efficient and reduce overall transportation costs, air emissions, energy use, truck traffic, and road wear and tear.

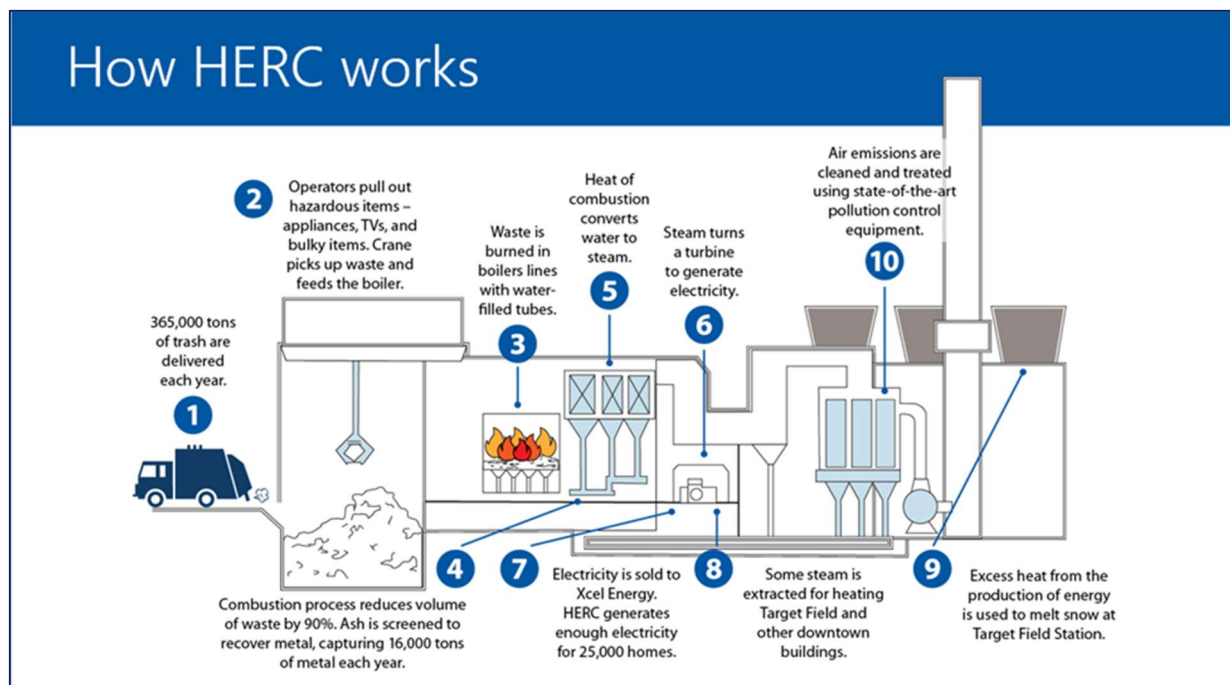
"Processing" describes the treatment of trash after collection and before disposal, typically to recover resources from the trash (Minn. Stat. §§ 115A.03, subd. 25 & 473.848, subd. 5).

Cities and private haulers contract with the county and pay the county tipping fees to deliver trash generated in Minneapolis and the surrounding communities to HERC and the Brooklyn Park Transfer Station. These tipping fees fund the county's Solid Waste Enterprise Fund and the Environment and Energy Department's activities (see page 33).

Hennepin Energy Recovery Center (HERC)

Located in downtown Minneapolis (505 N 6th Ave), HERC is a mass-burn facility that processes trash to avoid landfilling and recover resources from the trash stream. It is the only waste processing option located within the county.

How HERC works
Fig. 3



As depicted in Figure 3, about 200 garbage trucks per day deliver trash from Minneapolis and 16 suburban communities (see page 25) to HERC. The facility is limited by its state permit to processing 365,000 tons of trash annually. The trash is dumped out of garbage trucks and pushed into the fully enclosed waste pit with loaders. A crane picks the trash up from the pit and feeds it into two boilers. Operators pull out hazardous and problematic materials such as appliances, televisions, and bulky items, and those items are either recycled or landfilled.

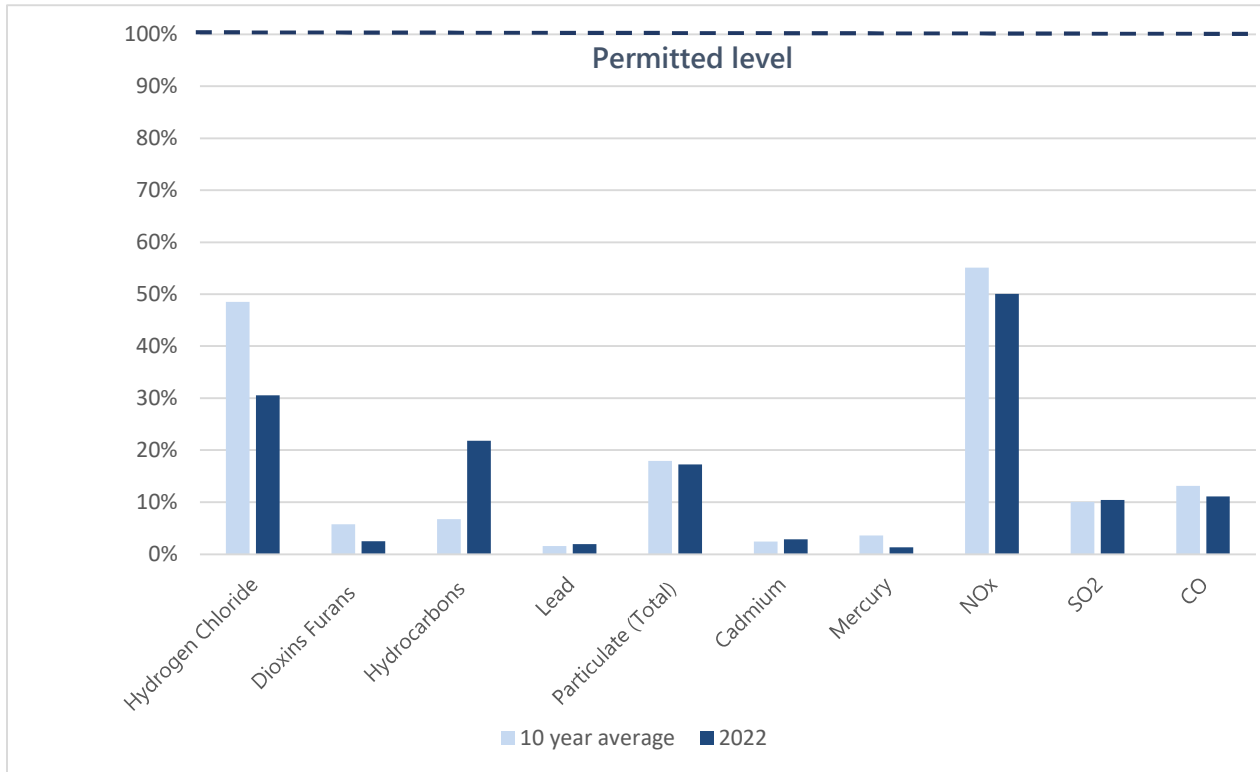
The trash is burned in boilers lined with water-filled tubes. The heat of combustion converts the water in the tubes to steam that turns a turbine to generate electricity. HERC produces about 200,000 megawatt hours of electricity every year, enough to power 25,000 homes. The electricity is sold to Xcel Energy at the market rate. A portion of the steam produced is sent to the steam line under the 7th Ave bridge. This steam provides heating and cooling to the downtown Minneapolis district energy system (operated by Cordia Energy Solutions) and Target Field. The district energy system is a network of pipes that aggregates the heating and cooling needs for 100 downtown buildings. District energy systems are more efficient and less costly than buildings operating their own boilers and chillers.¹

¹ Project Drawdown Climate Solutions [District Heating](#)

As shown in Figure 4, HERC’s pollution control equipment and operators control air emissions to be consistently below the MPCA’s permitted levels.²

HERC emissions as a percent of permitted levels

Fig. 4



The combustion process reduces the volume of trash by 90 percent. The material remaining after combustion is non-hazardous ash that is disposed of at the SKB Landfill in Rosemount. The non-hazardous ash is processed by GEM-Ash at the landfill to recover and recycle additional metals. In 2022, 17,251 tons of metal were recovered from waste processed at HERC.

Since HERC opened in 1989, it has processed 12 million tons of trash – enough to fill Target Field 100 times. HERC has produced enough electricity to power 25,000 homes for 34 years and has recovered 350,000 tons of metal.

Brooklyn Park Transfer Station (BPTS)

The county’s transfer station is located at 8100 Jefferson Highway in Brooklyn Park. BPTS is used to unload trash from haulers in smaller trucks and reload it into larger vehicles for transport to disposal facilities, including HERC. In 2022, the county transferred 154,000 tons of trash through this facility, with 70,000 tons delivered to HERC and 84,000 tons delivered to the Elk River

² MPCA [Point source air emissions data](#)

Landfill, which is owned and operated by Waste Management. The county also uses this facility as a drop-off center for residents to dispose of hazardous items and to transfer organics to composting facilities. The central location of BPTS provides an opportunity to efficiently collect and process organics and reduce emissions from transporting the material. The location of the county's proposed anaerobic digestion facility is adjacent to the transfer station, at 9401 83rd Avenue in Brooklyn Park.

Additional solid waste facilities

This report includes references to additional solid waste facilities that are a part of the county's solid waste system, though some are located outside of Hennepin County. The draft Metro Policy Plan requires counties to complete an environmental justice review when developing their solid waste management plans. Map 1 shows the locations of solid waste facilities and census tracts that are considered areas of concern for environmental justice. Areas marked with blue lines are census tracts with more than 40% of the population earning incomes less than 185% of the federal poverty level. Areas shaded in green are census tracts with greater than 50% people of color (see MPP 2022 – 2042 Draft, 56, Appx. B.).

Transfer stations

In addition to BPTS, five transfer stations are part of the county's solid waste system:

- City of Minneapolis Transfer Station, 2710 N Pacific St, Minneapolis, MN 55411
- City of Minneapolis Transfer Station, 2850 20th Ave S, Minneapolis, MN 55407
- Republic Flying Cloud Transfer Station, 9813 Flying Cloud Dr, Eden Prairie, MN 55347
- SKB Malcolm Ave Transfer Station, 630 Malcolm Avenue SE, Minneapolis, MN 55414
- Waste Management Maple Grove Transfer Station, 10633 89th Ave N, Maple Grove, MN 55369

Landfills

Modern landfills are designed to keep waste and landfill byproducts separate from soil and groundwater. Landfills that accept trash are constructed with a layer of clay and a flexible plastic liner to contain liquids. As stormwater and liquids in the trash passes through the landfill, this leachate draws out contaminants from the trash. The leachate is collected through a drainage system that conveys the liquid to tanks or a holding pond. It is then most commonly trucked or piped directly to a wastewater treatment facility where it can be treated to remove traditional contaminants before being released back into local waterbodies. Lined landfills are designed with leak detection systems called lysimeters to monitor for leaks in the liner, and landfill operators are required to test groundwater wells to monitor for liner leaks.

Landfills typically require a Conditional Use Permit by the local government and are issued solid waste permits and air permits from the MPCA for the landfill gas and flare/energy recovery unit.

Monitoring wells are permitted by the Minnesota Department of Health (MDH) and, sometimes, the local government.

Trash trucks unload trash on the working face of a landfill, and a loader moves and compacts the trash into cells. Every evening, a layer of soil or other materials is used to cover the trash to minimize odors, litter, and wildlife problems.

The food, paper, and wood in a landfill will decompose over time. The decomposition process produces gas that is approximately 50% carbon dioxide, a greenhouse gas, and 50% methane, a flammable and potent greenhouse gas. Local landfills that accept municipal solid waste have low permeability liners and covers and gas extraction systems to manage the gas to protect the integrity of the cover and prevent migration of the landfill gases to adjacent areas. Methane recovery systems for modern landfills collect approximately 75% to 85% of the methane produced. This methane gas is flared or used as fuel source.

Metro-area landfills outside of Hennepin County

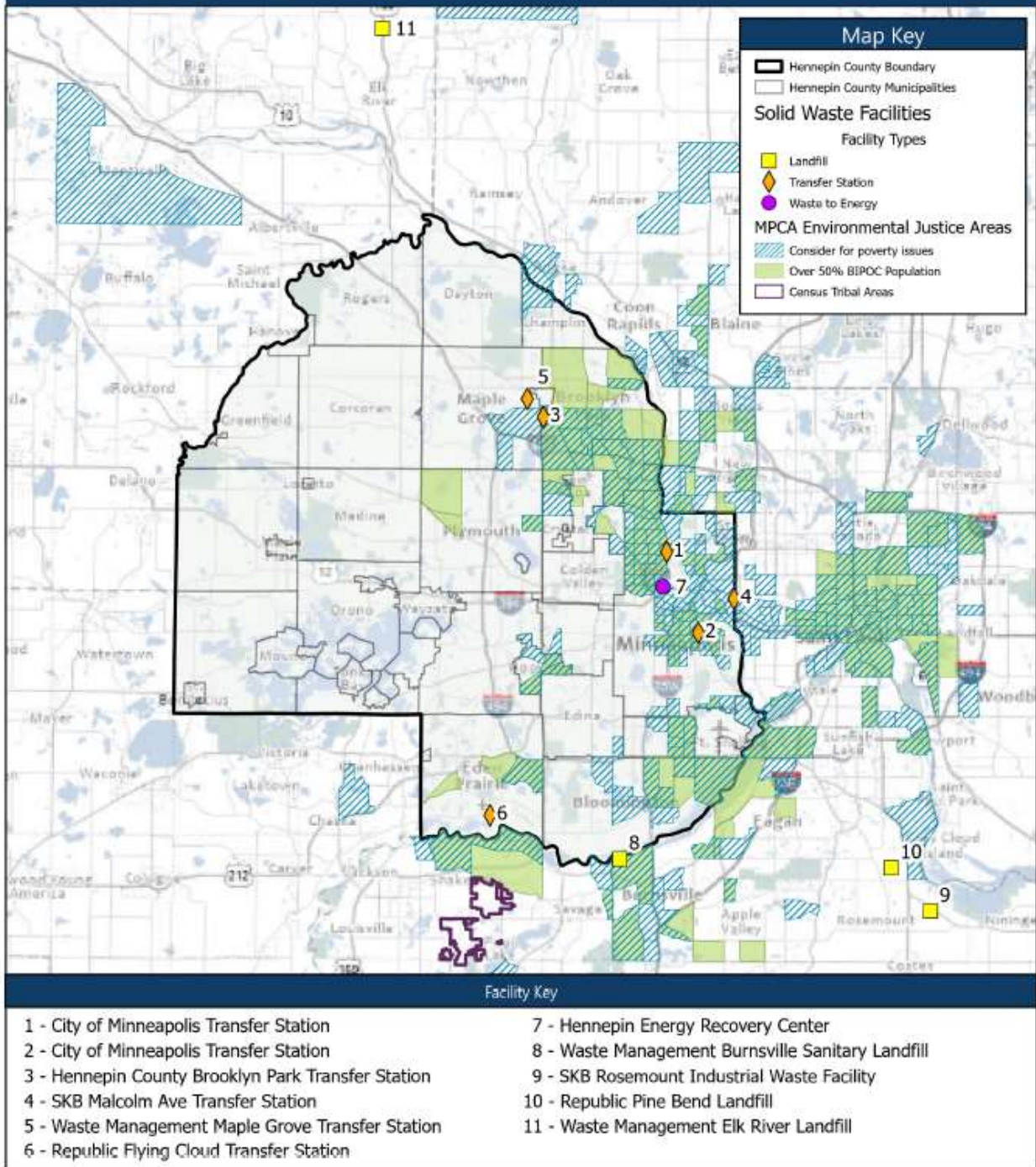
There are no active landfills in Hennepin County, and those located elsewhere in the metro must receive permission from the MPCA to expand their current capacities (see page 29).

There are four landfills that are part of the county's solid waste system:

- Republic Pine Bend Landfill, 2495 117th St E, Inver Grove Heights, MN 55077
- SKB Rosemount Industrial Waste Facility, 13425 Courthouse Blvd, Rosemount, MN 55068 (ash only, not permitted for municipal solid waste)
- Waste Management Burnsville Sanitary Landfill, 2650 Cliff Rd W, Burnsville, MN 55337
- Waste Management Elk River Landfill, 22460 Highway 169 NW, Elk River, MN 55330

Map 1 – Solid Waste Facilities

Environmental Justice Areas - Minnesota Pollution Control Agency



Disclaimer: This map (i) is furnished "AS IS" with no representation as to completeness or accuracy; (ii) is furnished with no warranty of any kind; and (iii) is not suitable for legal, engineering or surveying purposes. Hennepin County shall not be liable for any damage, injury or loss resulting from this map.



Publication date: 7/18/2023

Data sources: Hennepin County, MPCA

History of waste management in Hennepin County

The waste management hierarchy that guides the county's priorities today was established by the Minnesota Waste Management Act in 1980. The first citywide curbside recycling program began in Minneapolis in 1983 with monthly collection. The county's recycling ordinance (Ordinance 13) was adopted in 1986, and curbside recycling became available throughout the county in the late 1980s.

Building waste-to-energy plants

The state Waste Management Act also required metropolitan counties to submit plans for facilities that would process waste rather than disposing of it in landfills. Specifically, the act required counties to create proposals to "address at least waste reduction, separation, and resource recovery" (1980 Minn. Laws Ch. 564, Art. X, § 8, adding Minn. Stat. § 473.803, subd. 1b).

Hennepin County looked to Europe, where, because land for disposal is limited and energy is needed, pollution control technology was developed to turn garbage incinerators into waste-to-energy plants that can exist in metropolitan areas. In 1984, the county explored two north Minneapolis locations, first on the west bank of the Mississippi River and then on its east bank, for a 2,000 tons per day waste-to-energy facility (double the capacity of HERC). These locations were explored due to the proximity of the Riverside Power Plant. Residents successfully opposed the north Minneapolis sites. Legislators also limited the average daily throughput of resource recovery facilities in Minneapolis to 1,000 tons per day (Minn. Stat. § 383B.235 (1984)).

The county then narrowed the search for locations that were large enough for a 1,000 tons per day facility, had truck routes and freeway access, were screened from neighborhoods, and were close to a potential downtown steam market. In 1985, the final site, a former Greyhound bus garage site, was selected. This location was selected because few people were living nearby, it was an industrial area with salvage yards and a chemical processing hub, it was adjacent to steam heating lines, and it was near downtown Minneapolis where large amounts of trash were generated. In 1987, the MPCA granted final permit approval, the City of Minneapolis approved the conditional use permit, and construction began. HERC was constructed by Blount Corporation at a total cost of \$160.5 million, funded primarily by Hennepin County debt of \$134.5 million. Blount sold HERC to General Electric in 1988. Covanta Energy operated the plant from 1989 until 2018.

In total, seven waste-to-energy plants were developed in Minnesota in the 1980s. This includes three plants in addition to HERC that were planned to serve the metropolitan area.

Ramsey/Washington Recycling and Energy facility opened in 1985, and the Elk River Resource Recovery Facility opened in 1989.

As part of the 1980 Waste Management Act, the legislature also created a landfill siting process and required metro counties to identify potential landfill sites within their respective counties (1980 Minn. Laws Ch. 564, Art. X, § 8 (adding Minn. Stat. § 473.803, subd. 1a)). Hennepin County

identified four potential sites in Corcoran, Dayton, Greenfield, and Independence. In 1988, these cities sued the county to block the study of a landfill to dispose of incinerator ash and municipal waste within their boundaries. By 1991, the legislature halted the landfill siting process for all counties (1991 Minn. Laws Ch. 337, § 90).

Flow control overturned by the U.S. Supreme Court

When HERC began operations in 1989, the county implemented waste flow designation (flow control) that required all haulers to deliver trash generated in Hennepin County to HERC or county-designated transfer stations. From 1990 to 1994, almost all trash generated in Hennepin County was being processed rather than landfilled. In 1994, the U.S. Supreme Court decided *C & A Carbone, Inc. v. Town of Clarkstown, N.Y.*, which overturned local flow control ordinances. After this decision, the county began contracting with haulers for trash deliveries to HERC. Some haulers chose not to contract with the county and delivered trash to local landfills instead.

Managing hazardous waste

In addition to being concerned about the volume of trash being disposed of in landfills in the 1970s and 1980s, the community was concerned about waste mismanagement, particularly for hazardous waste. Hennepin County adopted a hazardous waste management ordinance (Ordinance 7) in 1980 and started licensing, inspecting, and handling enforcement for businesses that generate hazardous waste. The county also started holding community collection events where residents could drop off their household hazardous waste, such as cleaners, electronics, appliances, paint, automotive products, and batteries, in the mid-1980s. Hazardous waste collection events for residents became so popular that the events were often over capacity, so the county opened permanent drop-off facilities in Bloomington and Brooklyn Park in the early 1990s. Additionally, one of the first product stewardship initiatives started in 1994 with NSP (now Xcel Energy) reimbursing counties for collecting and properly disposing of fluorescent light bulbs.

The county's household electronics collection program began in 1992 with the goal of removing heavy metals and other materials from the trash. The county formed a unique partnership with a nonprofit to demanufacture electronics, meet high environmental standards, and provide paid job training for adults with barriers to successful employment. The quantity of electronic waste continued to grow, and management of e-waste became a key concern in the mid-2000s. In 2006, the state banned electronics containing cathode ray tubes (CRTs) from the garbage because they contain lead, and the Electronics Recycling Act in 2007 required electronics manufacturers to reimburse counties for the collection and proper disposal of electronics.

Focusing on reduce, reuse, and recycle

Programs to minimize trash continued to evolve. The county started waste prevention programs in the early 1990s, including a rewear fashion show, free product centers at the drop-off facilities, and reducing waste in county operations. The state prohibited yard waste from being

included in trash in 1990, and the last landfill in Hennepin County closed in 1993. The metro area counties formed the Solid Waste Management Coordinating Board (SWMCB) in 1993 to work collaboratively on solid waste issues. Recycling in multiunit buildings became mandatory in the early 1990s. Recycling programs began accepting plastic bottles in 1991, and recyclable materials have continued to expand and evolve.

Organics recycling launches

With recycling programs well-established, the county started to focus on the most prevalent material in our trash – food and other organic waste – in the early 2000s. The county sold compost bins to residents, and a citywide curbside organics recycling pilot launched in Wayzata in 2003 as well as programs in 21 schools in Hopkins, Minnetonka, and St. Louis Park. To help further expand recycling, the county funded grant programs to support recycling improvements in schools, businesses, multifamily buildings, and public spaces. Waste prevention efforts expanded in the 2010s with the start of the Community Recycling Ambassador program, Fix-It Clinics, and Zero Waste Challenge. County program development also began to increase salvage, reuse, and recycling of building materials.

County pursues efforts to process more waste; takes ownership of HERC

The state legislature eliminated the 1,000 tons per day limit for HERC in 2000, allowing it to process waste “to the full extent of its maximum yearly capacity,” if it did so in compliance with federal and state environmental laws and with a conditional use permit from Minneapolis (2000 Minn. Laws, Ch. 488, Art. 3, § 30).

In 2003, the county bought HERC from General Electric for \$37 million and paid off the debt for the original purchase in 2012.

In 2010, the county sought modifications of both HERC’s conditional use permit and air permit to allow HERC to operate at its full capacity (1,212 tons per day). The county pursued this effort in conjunction with new waste reduction and recycling strategies to further reduce the amount of trash going to landfills and to maximize energy revenues for environmental programming. Processing additional trash at HERC received opposition from community and Minneapolis city council members. The air permitting process was drawn out over three years. Eventually, the county board withdrew the application in 2014 (Resolution 14-0058R2). This resolution also required the City of Minneapolis to offer organics recycling to its residential customers.

New operator agreement

In 2018, the county hired Great River Energy HERC Service LLC (GREHS) to operate HERC. The structure of the agreement with GREHS is a cost pass-through contract that includes the county paying GREHS a management fee. Under the terms of the agreement, the county reviews and approves operating and capital expenditures, providing greater transparency and accountability.

Amending the recycling ordinance

Organics recycling programs for residents, at various businesses and nonprofit organizations, and at many schools continued to develop throughout the county during the 2010s. To accelerate the development of these programs, the county amended Ordinance 13 in 2018 to require businesses that generate high volumes of food waste to recycle that waste and to require all cities to offer organics recycling service to their residents.

Also during this time, recycling programs switched to single stream so that all recycling is collected together, and the county reinvigorated efforts to improve recycling at multiunit buildings. Additionally, the state and the county passed new recycling requirements for businesses.

Waste-to-energy facilities face pressure

Seeking approval to process more trash at HERC and receiving negative attention while the Twins' ballpark was sited next to the plant in 2010 renewed efforts by environmental activists and political leaders to close HERC.

An international anti-incineration organization funded grassroots organizers in Minnesota to call for shutting down HERC. Efforts began at the state legislature to remove waste-to-energy from the definition of "renewable energy," despite allowing landfills that recover methane to continue qualifying as "renewable" and receive the related benefits.

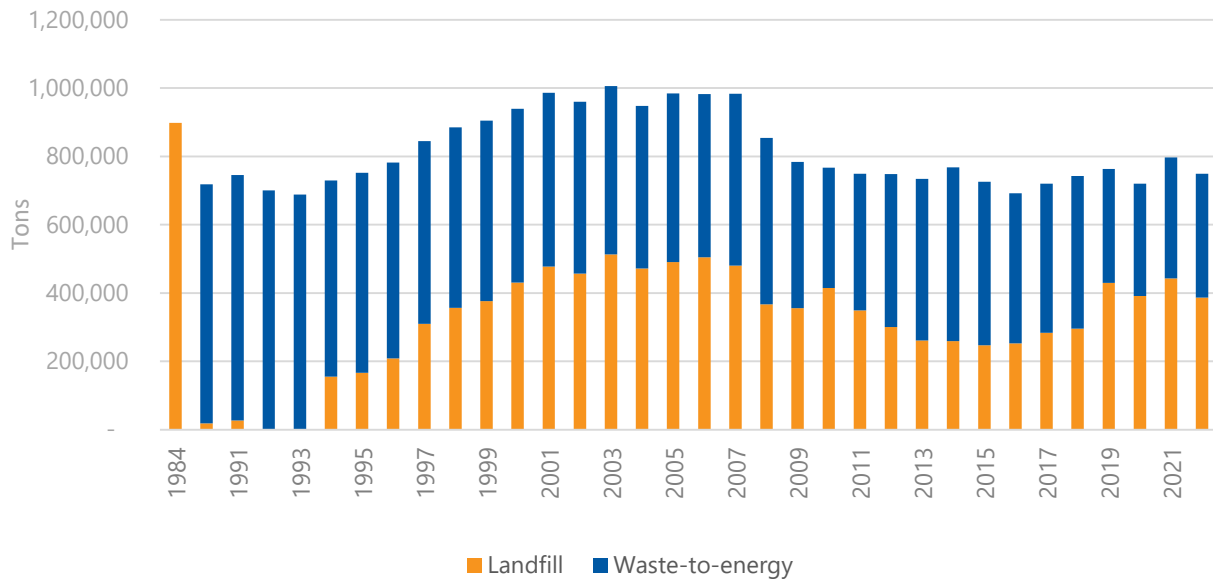
Privately owned waste-to-energy plants also faced economic pressures. The owner of Elk River Resource Recovery Facility (ERRRF), Great River Energy, decided it was no longer economically feasible to continue operating ERRRF. GRE offered to sell ERRRF for \$1.00 to Anoka, Sherburne, or Hennepin counties and continue to operate ERRRF under contract with the county that purchased it. Politically, Anoka County had no interest in staying in the waste business. Sherburne County was too small and could not afford to finance ERRRF operations. Hennepin County's commissioners did not want to buy a facility that was located two counties away. Without an interested government entity, ERRRF closed in 2019, which resulted in a dramatic increase in the amount of trash from the metro area being landfilled.

Trash generation and disposal methods

In 2022, approximately 1.27 million tons of waste was generated in Hennepin County, a 2% decrease from 2021. Of the total waste generated, 41% was recycled or composted, and the rest was managed as trash. Figure 5 shows how trash has been disposed, either in a landfill or processed to recover energy.

How trash has been disposed in Hennepin County

Fig. 5

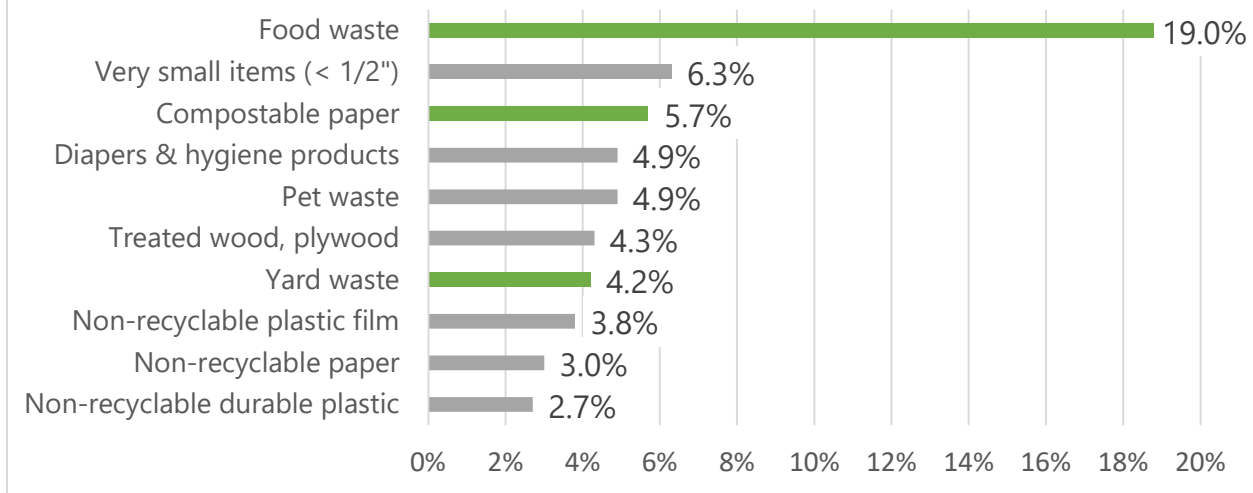


What materials are still in our trash?

Organics are the single biggest opportunity for reducing and diverting trash. Currently, almost 30% of trash is organic material, which includes food waste and other compostable materials. Additionally, 15% is recyclable and 20% is other specialty or hard-to-recycle materials such as mattresses, carpet, building materials, and furniture. There is still a lot of trash – or materials for which the county does not currently have viable recovery options for – in the county’s waste stream. This trash, which represents 40% of the waste generated, includes pet waste, diapers, hygiene products, and nonrecyclable plastics. Figure 6 depicts the 10 most prevalent materials in trash by weight and presented in percentages.

Top 10 most prevalent materials in the trash

Fig. 6



Minnesota's land disposal abatement policy

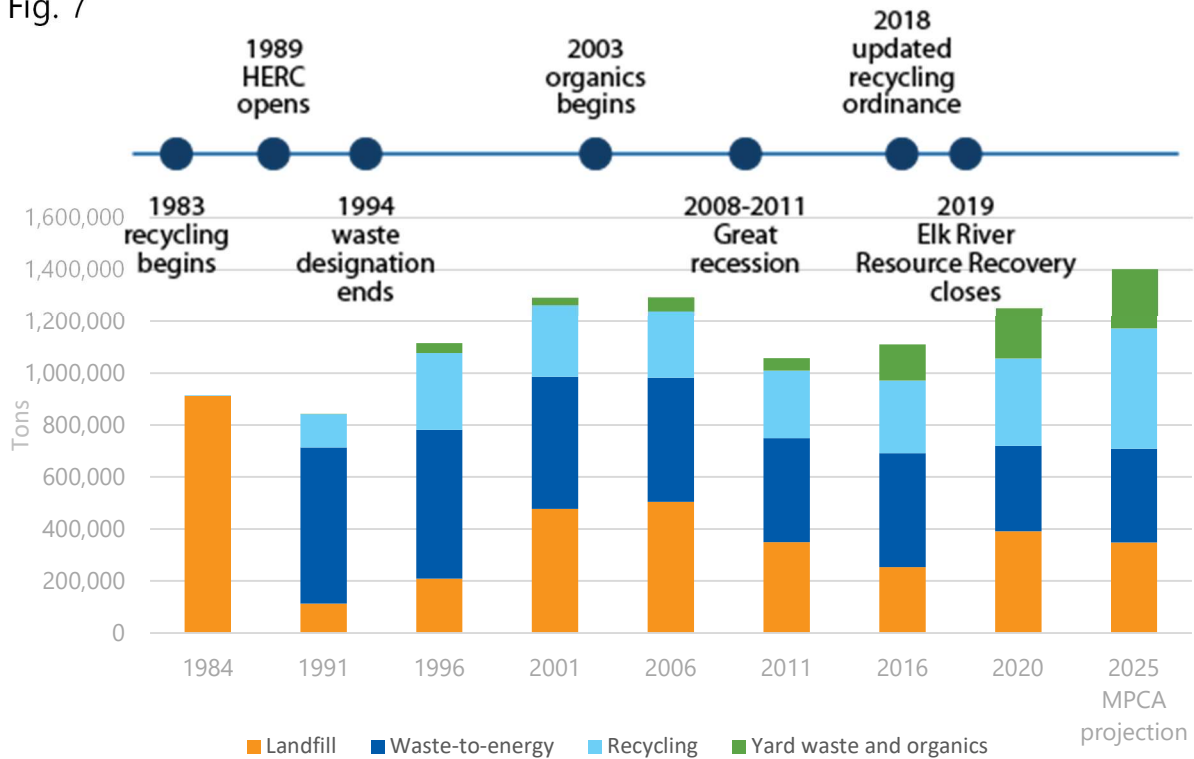
The MPCA's Metro Policy Plan sets goals and policy for the metropolitan solid waste system, including establishing specific and quantifiable objectives for abating the need for and practice of land disposal in the metro region over the next 20 years.

Waste generation in the metro area is forecasted to grow to 3.92 million tons by 2042, an increase of 18% from 2021 levels of 3.3 million tons. The draft Metro Policy Plan has established objectives for waste reduction, recycling, organics recycling, waste-to-energy, and landfilling to address this increase. The objectives are based on the following assumptions:

- Metro counties will achieve the 75% recycling goal rate by 2030 in accordance with Minn. Stat. § 115A.551
- All waste-to-energy facilities will operate at their full permitted capacities
- Landfilling will be minimized, with only 5% of waste managed by land disposal by 2030

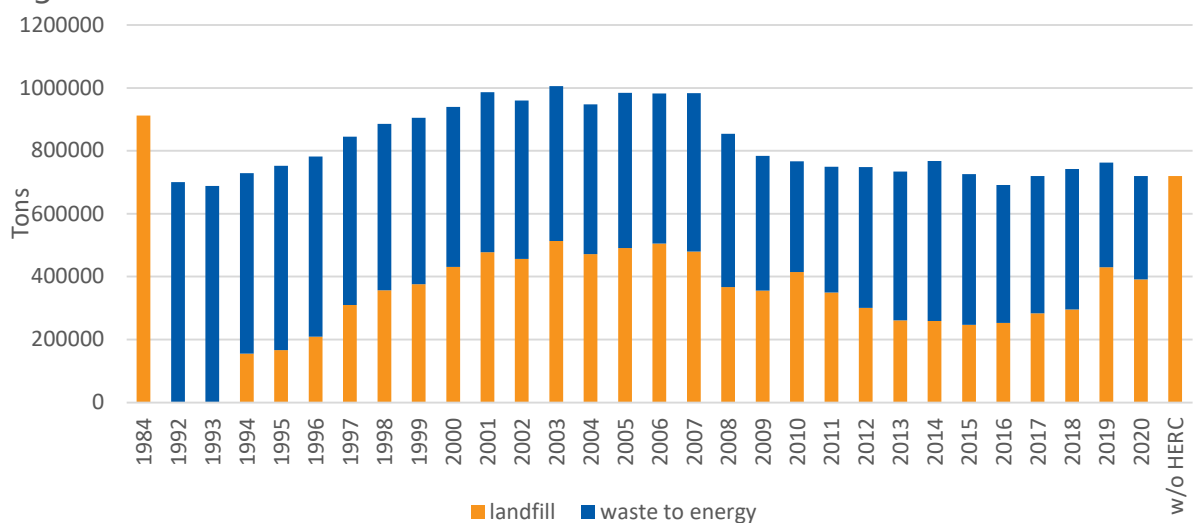
Based on statistical modeling by the MPCA, an estimated 1.55 million tons of waste will be generated in Hennepin County per year by 2042, a 19% increase from 2022. Figure 7 shows waste management in Hennepin County in five-year increments, noting significant milestones. Figure 7 also includes a projection for 2025 waste management based on the MPCA's modeling in the Metro Policy Plan.

Waste management in Hennepin County
Fig. 7



As shown in Figure 8, if HERC were to shut down, all trash generated in Hennepin County will be disposed of in landfills, resulting in disposal methods mirroring results from the early 1980s.

Trash disposal methods in Hennepin County
Fig. 8



MPCA direction on waste-to-energy facilities

In its draft Metro Policy Plan, the MPCA states:

The MPCA “supports waste to energy (WTE) facilities. WTE facilities provide important services and reduce environmental risk. They do not carry legacy impacts that result in later clean-ups. They also result in lower greenhouse gas emissions than landfills because they offset coal power and landfills emit methane, which is a potent greenhouse gas. Finally, WTEs are vital for destruction of medications and drugs that can contaminate drinking water. While the MPCA supports the concept that waste should be managed as high on the waste hierarchy as possible, as is evident from the rest of the policy plan, closing WTE facilities without a strong plan is inadvisable. It will only result in more landfilling and less material recycling, rather than increasing recycling and composting.”

The draft Metro Policy Plan also includes a policy to “assure elected county officials understand the importance of supporting and maintaining WTE facilities” and a required strategy that “counties must continue to support the implementation of Minn. Stat. § 473.848 Restriction on Disposal.” The Restriction on Disposal prohibits disposal of unprocessed metro waste at a landfill unless that landfill meets new landfill standards, and (1) the trash has been certified by the county as unprocessable; or (2) the trash is transferred from a resource recovery facility, no other landfill can accept it, and the trash is unprocessable. Shutting down HERC prematurely before more meaningful waste reduction and recycling requirements are established by the legislature and adequately funded would be voluntarily taking a form of waste processing offline and would put the county out of compliance with the current landfill abatement laws.

Considerations and consequences

This report describes the operational, legal and legislative, financial, and environmental conditions that should be met before HERC can be responsibly retired. In addition to these conditions, this report highlights the consequences – direct and indirect – that will result from a premature HERC closure.

Operational considerations

Buildings

HERC plant

If the county shuts down HERC, the county will need to decommission the plant. Decommissioning a power plant in the downtown area would be complex and expensive. Staff will work with consultants on developing cost estimates to decommission the facility.

The adjacent county parking ramp would remain. Currently, Target Field Plaza’s snowmelt system uses excess heat from the production of energy at HERC to heat antifreeze and pump it through 50 miles of plastic tubing embedded in the parking ramp’s concrete. This warms the concrete and melts the snow without salt or other chemicals. Unless a new source of thermal energy was connected to this system, likely from the downtown district energy system, the sidewalks and driveways would need to be cleared with contracted snow removal services.

Brooklyn Park Transfer Station (BPTS)

Currently, the county transfers trash from the Brooklyn Park Transfer Station (BPTS) to HERC and landfills. This allows the county to control trash volumes delivered to HERC, an important operational component of managing HERC. If HERC were to shut down, there would be no regulated requirement to control trash volumes. The county may wish to evaluate other options for the solid waste portion of the transfer station:

- Shut down the facility.
- Lease or sell the solid waste transfer station capacity to a waste company or municipality that needs to transfer trash to a landfill. The transfer station’s proximity to freeway access and the Elk River landfill could be of interest to waste haulers.
- Repurpose to serve as a reuse center or to manage construction and demolition waste. The Zero Waste Plan includes actions to establish brick-and-mortar reuse and repair centers and to assess the feasibility of a building material reuse exchange warehouse and yard. BPTS could serve as a permanent location for repair clinics or as a hub for upcycling, sharing, refurbishing, and reusing. Alternatively, BPTS could serve as a construction materials bank where materials can be examined, repaired, and shared. Examples of materials that can be amassed and shared include rubble, fill, bricks and

pavers, stone and boulders, clean dimensional lumber, and compost. The county would need to determine how to fund these operations.

- Explore opportunities to recover more recyclable materials. The Zero Waste Plan includes actions to expand drop-off options for harder to recycle items and to study options for recovering recyclable materials from the trash. Harder to recycle items include clothing and other textiles, plastics, and bulky items. Recovering material from the trash could be limited to high value, easily recoverable items (such as cardboard, ferrous metals, and plastics #1 and #2). The challenge is that the current footprint of the transfer station is not large enough to accommodate extensive operations with a lot of equipment. Smaller scale options would need to be evaluated.

Contracts and employment

The county manages six major contracts to operate HERC. If the county board decides to shut down HERC, there will be contract decisions to be made and employment consequences for hundreds of employees.

HERC operator

The county contracts with Great River Energy HERC Services, LLC (GREHS) for the management, operation, and maintenance of HERC. The current contract terminates December 31, 2025. The contract is structured as a pass-through contract with a monthly management fee paid to GREHS.

Ash landfill/metal recovery

The county contracts with SKB Environmental (Waste Connections) for ash disposal, metal recycling, and additional metal recovery at SKB's Industrial Waste Landfill in Rosemount. SKB contracts with GEM-Ash to mechanically recover gold, copper, aluminum, steel, and other precious metals from ash. The contract with SKB expires on December 31, 2025.

Steam sales

The county has two contracts for the sale of steam that is generated at HERC. The first steam sales agreement is with Energy Center Minneapolis LLC, the downtown district energy provider. The contract with Energy Center Minneapolis expires March 2, 2025. The county also sells steam to Twins Ballpark LLC through a contract that expires in 2040.

Power purchase agreement

The county contracts with Xcel Energy for the sale of electricity generated at HERC through a power purchase agreement that expires on December 31, 2024.

HERC apprentice/workforce development

The county contracts with Project for Pride in Living LLC for workforce development program for HERC apprentices. The contract expires on July 31, 2024.

Jobs

A total of 352 jobs are associated with HERC and are summarized in the table below.

Jobs associated with HERC

Table 1

Position	Number of jobs	Employer	Associated with HERC operations	Union representation
County HERC contract managers	3	Hennepin County	Direct	Non-union
Waste loader operators	3	Hennepin County	Direct	Local 49 union positions
Scalehouse attendants	3	Hennepin County	Direct	AFSCME 2822 union positions
HERC GRE operators and administration	53	Great River Energy HERC Services	Direct	66% of employees are members of IBEW union
HERC pathway apprentices	3	Great River Energy HERC Services	Indirect	Members of IBEW
Sub-contractors for HERC outage projects and maintenance	250	Various contractor teams	Indirect	Local union teams complete 95% of the projects
Metal recovery from ash	7	GEM-Ash	Indirect	Non-union
County forestry and natural resources staff	30	Hennepin County	Indirect	Non-union
Total jobs associated with HERC	352			

The county employs three full time employees who oversee the operations at HERC, three AFSCME 2822 scalehouse attendants to manage hauler transactions at HERC and Brooklyn Park Transfer Station, and three full time Local 49 union employees at the Brooklyn Park Transfer Station and to transfer trash to HERC.

Through the operations contract, GREHS employs 53 people to operate HERC, 35 of whom are members of the International Brotherhood of Electrical Workers (IBEW). The average annual

salary at HERC is \$102,000. These employees are highly trained and have an average of 11 years of experience working at the HERC facility. Long-term staff may begin leaving for other employment opportunities if a closure date is identified, which would make operations more challenging and present risks that would need to be mitigated.

To maintain HERC, there are regularly scheduled outages each year to make repairs and ensure safe operation of the facility. Local union labor teams of, on average, 250 contractors complete approximately 95% of the projects, totaling \$7 million in operational projects and \$5 million in capital projects.

In 2022, the county, GREHS, and Project for Pride in Living (PPL) started a HERC operator apprenticeship program to hire three diverse candidates to participate in a nine-month training program. The program provides a pathway to careers in the trades while supporting apprentices with full-time pay, benefits, and union access. Participants receive on-the-job training, classroom learning, and coaching to navigate barriers to employment. After the completion of the first year of the program, one apprentice has been hired by GREHS to a full-time position, another was hired by Hennepin County Facility Services, and the third apprentice is continuing their education and pursuing other employment. Year two of the apprenticeship program started in July 2023 with three new apprentices.

Another company, GEM-Ash, employs seven people who operate equipment that mechanically recovers gold, copper, aluminum, nickel, steel and other precious metals from HERC's ash at the SKB Environmental landfill.³

The county's 30 natural resources positions are funded largely by HERC revenues from the sale of energy and recovered materials, as allowed by state statute (Minn. Stat. § 383B.236). Natural resources programming revenues are outlined on page 35.

Resiliency of the energy infrastructure

One goal of the county's Climate Action Plan is to prepare for and ensure the safety of communities responding to extreme weather events such as flooding, extreme heat and cold, and other natural disasters. The county's Hazard Mitigation Plan identifies power-outages as a hazard, and the county's Continuity of Operations Plan identifies HERC as an essential, top-level priority for waste disposal services and electricity generation.

The county's Climate Action Plan includes a strategy to create a more resilient energy infrastructure. HERC currently plays a role in ensuring redundancy and reliability in the power supply to withstand significant environmental extremes and to reduce the potential for blackouts, power outages, price spikes and public health risks associated with power loss. As more on-site, renewable energy and distributed energy storage becomes available, the role of HERC in a resilient energy infrastructure will decrease.

³ Star Tribune, [How GEM-Ash recovers gold and other metals in HERC's ash](#), Sept 2020

To fully determine the energy impact of ending HERC operations on the downtown electrical grid and related impacts to system reliability, Xcel Energy or others would need to complete an engineering study to determine the impact of taking HERC off the power grid.

Trash disposal and impacts to cities

About 75% of the trash delivered to HERC comes from Minneapolis residents and businesses. This accounts for the majority of all Minneapolis solid waste, both residential and commercial. The remaining 25% is residential trash from primarily Bloomington, Champlin, Deephaven, Excelsior, Hopkins, Loretto, Maple Plain, Medina, Minnetonka Beach, Osseo, Robbinsdale, Richfield, St. Bonifacius, St. Louis Park, Tonka Bay, and Wayzata.

If HERC is no longer available as a disposal option, there will be direct financial impacts on Hennepin County businesses, municipalities, and residents. The county cannot foresee the exact severity of the price hikes, but in a completely privatized solid waste market, it is certain that the county will have no influence on the tipping fees the private sector transfer stations and landfills charge. Businesses, cities, and residents located closer to a landfill than to HERC may see a price increase to what they are currently paying for disposal services at HERC. Those located closer to HERC, where the distance to a landfill is greater, are likely to see larger price increases related to the need to transfer and transport trash further distances. The costs associated with transferring and transporting trash would be passed on from the haulers to residential and commercial customers.

Minneapolis considerations

The City of Minneapolis' solid waste services includes organized collection of 107,000 residential units' recycling, organics recycling, and trash, as well as collection from 200 larger residential or commercial properties, parks, and city buildings. In 2022, Minneapolis delivered nearly 80,000 tons of residential trash to HERC. Minneapolis solid waste services customers recycle and compost 35% of the waste generated.⁴

The City of Minneapolis and its contracted haulers send approximately 60 garbage trucks per day (Monday through Friday) to HERC. In addition, Minneapolis sends one to two transfer trailers per week from its South Transfer Station to HERC.

If HERC were to shut down, the City of Minneapolis will need to identify alternative strategies to manage and haul trash.

Staff do not have information from the City of Minneapolis, but the county estimates that costs would significantly increase based on current available market rates. The tipping fees paid to dispose of nearly 80,000 tons of residential trash would likely rise from the current \$69 per ton at HERC to closer to \$90 to \$100 per ton at metro landfills, including tipping fees, surcharges, transfer costs, and transportation costs. A \$20 to \$30 per ton increase in disposal costs would

⁴ [Minneapolis Solid Waste and Recycling Annual Tonnages report 2018-2022](#)

represent a 30% to 45% increase in the cost to manage trash generated within the City of Minneapolis. Overall, this change could result in \$1.7 million to \$2.5 million of additional costs per year. Those costs will be passed directly on to homeowners and renters.

Trash generated by Minneapolis businesses

About 180,000 tons of trash are produced annually by businesses located in Minneapolis, and more than 90% of those tons are delivered by private waste haulers to HERC. Ceasing operations at HERC would likely mean this trash would be delivered to the Malcolm Transfer Station in southeast Minneapolis before going to a landfill and/or go directly to metro area landfills. Again, the waste fees will, in all likelihood, increase costs for business owners. Assuming the cost to dispose of waste could increase to \$90 to \$100 per ton, a conservative estimate of \$3.4 million to \$5 million in increased costs for Minneapolis businesses per year.

Suburban considerations

Nearly every city in the county has trash delivered to Brooklyn Park Transfer Station and/or HERC. Numerous suburban cities contract directly with waste haulers to dispose of all residential trash at HERC: Bloomington, Champlin, Deephaven, Excelsior, Hopkins, Loretto, Maple Plain, Medina, Minnetonka Beach, Osseo, Robbinsdale, Richfield, St. Bonifacius, St. Louis Park, Tonka Bay, and Wayzata.

Without county participation in solid waste management, it is likely that these cities will need to truck their trash to a transfer station or directly to a landfill in Burnsville, Elk River, or Inver Grove Heights.

Additionally, haulers deliver trash to HERC from businesses and residential accounts across the county, not just from these cities. Without HERC, these haulers would also need to find alternative disposal options and would pass those costs onto their customers.

Consequence:

A HERC shutdown will lead to increased waste removal costs for cities, residents, and businesses in Hennepin County.

Liability assessments

All cities and other public entities that will contract for additional landfilling in the absence of HERC, including Minneapolis, will need to submit a potential liability assessment and plan to the MPCA, accounting for the potential liability to the city and its taxpayers for landfilling the trash. This is because landfilling is lower on the solid waste hierarchy than waste-to-energy, and landfilling would be in violation of the county's (current) solid waste management plan (Minn. Stat. § 115A.471). In general, potential landfill environmental cleanup liability and closure costs across the region will be increased due to increased landfilling.

Control and further consolidation of the solid waste system

The county's research for its Zero Waste Plan showed that more public control over the solid waste system was a defining factor in the success of high-performing communities. The gaps analysis notes that leading zero-waste communities exert a higher level of control over their materials management, hauling, and processing systems by providing direct service, using contracts, or adopting franchise agreements. This has helped those communities increase access to services for all generators, reduce the number of trucks driving down their streets, provide competitive rates to generators, and use incentive structures that encourage haulers to achieve greater levels of diversion and reduced contamination.

The Office of the Legislative Auditor produced a report on Recycling and Waste Reduction⁵ that summarized the implications of a further privatized system:

Several events in the last decade have curtailed counties' ability to manage their garbage. The waste hauling industry has consolidated as small independent haulers have been purchased by larger companies. These large national waste hauling companies also own landfills and transfer stations in Minnesota and surrounding states. These changes in the waste hauling industry have highlighted the tension between counties' efforts to meet state policy goals and private sector interests. Because the larger hauling companies own their own landfills, they have an incentive to maximize the amount of garbage that is landfilled and a disincentive to encourage their customers to recycle. In addition, waste haulers are not paying the full cost of disposal at landfills which includes landfill closure, post-closure maintenance and monitoring, and financial assurance for possible cleanup of future groundwater contamination.

If HERC were to shut down, the county expects further privatization of the system. Local landfills are operated by two multinational corporations – Republic Services and Waste Management. These corporations also offer trash hauler services in the county in addition to four larger independent haulers and 62 smaller haulers, which includes small- and minority-owned business enterprises.

Consequence:

Further loss of control over the solid waste system and risk of consolidation to independent and small haulers will likely contribute to higher waste collection costs.

⁵ Office of the Legislative Auditor [Program Evaluation Report on Recycling and Waste Reduction](#) (2002)

Legal and financial considerations

Compliance with state statute

Minnesota statutes require metropolitan counties to submit to the MPCA solid waste management plans that adhere to and implement the Metropolitan Policy Plan, the most recent draft of which prioritizes landfill diversion and aims to “achieve full use of resource recovery facility capacity” (MPP 2022 – 2042 Draft, 11). The Metropolitan Policy Plan “*shall* address the state policies and purposes expressed in section 115A.02 [the waste hierarchy].” (emphasis added). (Minn. Stat. § 473.149.) The Metropolitan Policy Plan itself is statutorily required to set “quantifiable metropolitan objectives for abating . . . land disposal,” which the county solid waste management plans must implement (Minn. Stat. §§ 473.149, subd. 2d; 473.803, subd. 1c).

The draft Metro Policy Plan also includes a policy to: “Assure elected county officials understand the importance of supporting and maintaining WTE facilities,” and a required strategy that “counties must continue to support the implementation of Minn. Stat. § 473.848 Restriction on Disposal.” (see page 20; MPP 2022 – 2042 Draft, 10; 41).

If the county’s solid waste management plan does not comply with the Metropolitan Policy Plan, the MPCA could reject the county’s plan, and the county would have to revise it and resubmit it for approval (Minn. Stat. § 473.803, subd. 2). It is unclear whether the MPCA would reject a county plan that closed HERC before waste reduction and recycling rates allowed for a simultaneous reduction in the need for landfilling and that made cities and the private sector responsible for disposing of the current volumes of solid waste into landfills. An unapproved solid waste management plan could lead to a loss of the county’s SCORE (the Governor’s Select Committee on Recycling and the Environment) funding (Minn. Stat. § 115A.557, subd. 3).

In addition to the county’s solid waste management plan, the county must comply with the state’s landfill abatement statutes and annually submit a certification report to the MPCA detailing how much unprocessed trash went into landfills in the preceding year, explain why the trash was not processed (which includes waste-to-energy), include a strategy to increase the processing of trash, and report any progress towards that goal. (Minn. Stat. § 473.848, subds 2, 5). The statute indicates the MPCA will approve of a certification report “if it determines that the county is reducing and will continue to reduce the amount of unprocessed waste” (Minn. Stat. § 473.848, subd. 2). Absent that finding, it is unclear whether the MPCA will continue to approve the county’s annual certifications required by this statute.

Finally, if the county were to delegate its solid waste responsibilities to the private sector or to cities (or to a combination of both), there are statutory and financial requirements the county must meet to accomplish this. The county would need to “establish a funding mechanism to assure the ability of the entity to which it delegates responsibility to adequately carry out the responsibility delegated” (Minn. Stat. § 115A.46, subd. 4). Additionally, the county would need to ensure, by “active oversight,” that the private sector accomplishes the goals and requirements of the Metro Policy Plan, which prioritize resource recovery over landfilling (Minn. Stat. § 473.803,

subd. 5). The county would also be required to continue to “enforc[e] waste management law,” which includes adherence to the landfill abatement statutes.

Consequence:

Removing HERC from the county’s solid waste management system would render the county unable to implement the anticipated Metro Policy Plan and the state’s landfill abatement policy, therefore putting the county out of compliance with current state statute. It would also require the county’s ongoing financial support for the cities that take over solid waste responsibilities and active oversight of the private sector and enforcement of waste management laws.

Landfill capacity

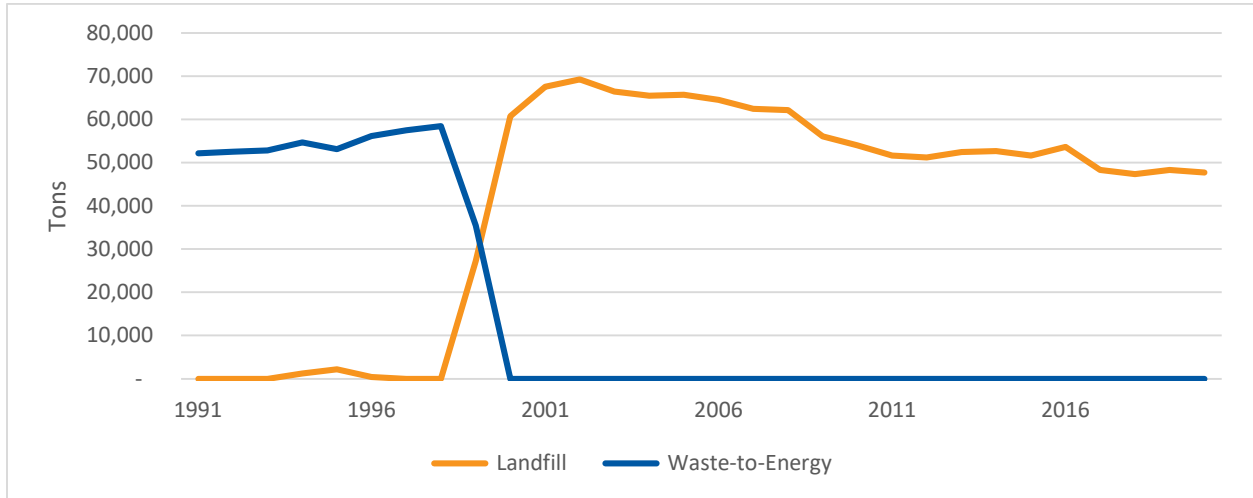
Landfills have finite capacity based on MPCA and local governance permits, space constraints, and the surrounding land use. Landfills in greater Minnesota and surrounding states are less constrained than metro area landfills, but transportation costs and the associated environmental impacts are greater.

State law requires that no metro area landfills expand their capacities without a Certificate of Need (CON) issued by the MPCA indicating that the additional landfill capacity is needed. The MPCA must certify that there are no feasible and prudent alternatives to landfilling, including waste reduction, source separation, and resource recovery (Minn. Stat. § 473.823, subd. 6).

Advocates for HERC’s closure frequently cite HERC’s existence as a barrier to the formation of a fully equitable zero-waste system, asserting that a shutdown date and transition plan would create a concerted effort across local governments and mobilize the county’s resources and will towards achieving zero waste. The solid waste system in Minnesota has two case studies of waste-to-energy plant closures that contradict this theory: the Western Lake Superior Sanitary District’s waste-to-energy facility closure in 1999 (Fig. 8) and the closure of the Great River Energy Recovery Facility in 2019 (Fig. 9).

Western Lake Superior Sanitary District (WLSSD) – Impact of waste-to-energy facility closure on disposal method

Fig. 9

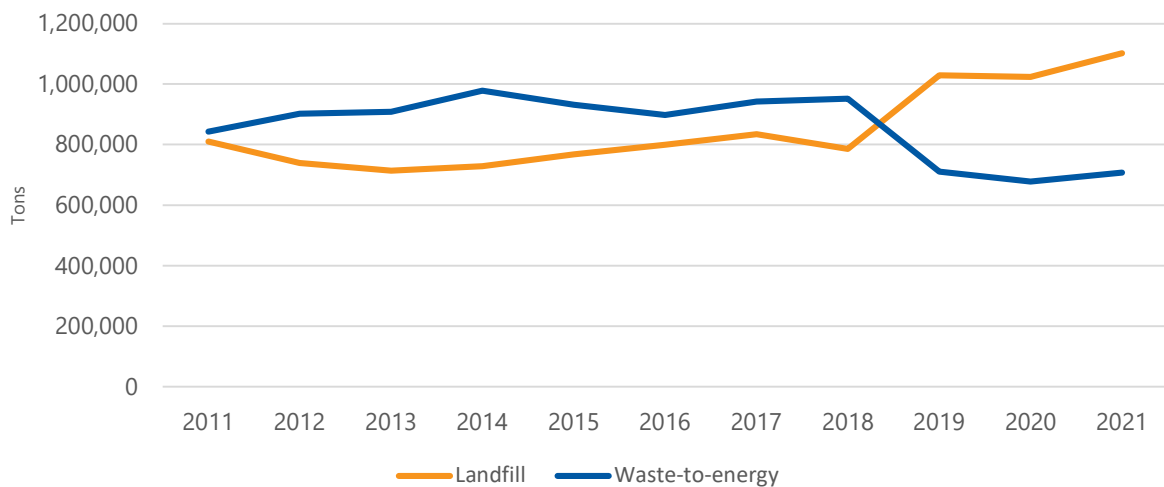


The closure of the waste-to-energy facility in Duluth shows that closing a waste-to-energy facility leads to more landfilling (figure 9) and demonstrates the challenge of making progress toward zero waste.

More recently, in 2019, the Great River Energy Resource Recovery Facility in Elk River closed. The closure of that facility has resulted in more than 250,000 tons of trash per year going to landfills (figure 10) and directly caused the need for landfill expansions in the metro area.

Impact of GRE Elk River closure in 2019 on metro trash disposal method

Fig. 10



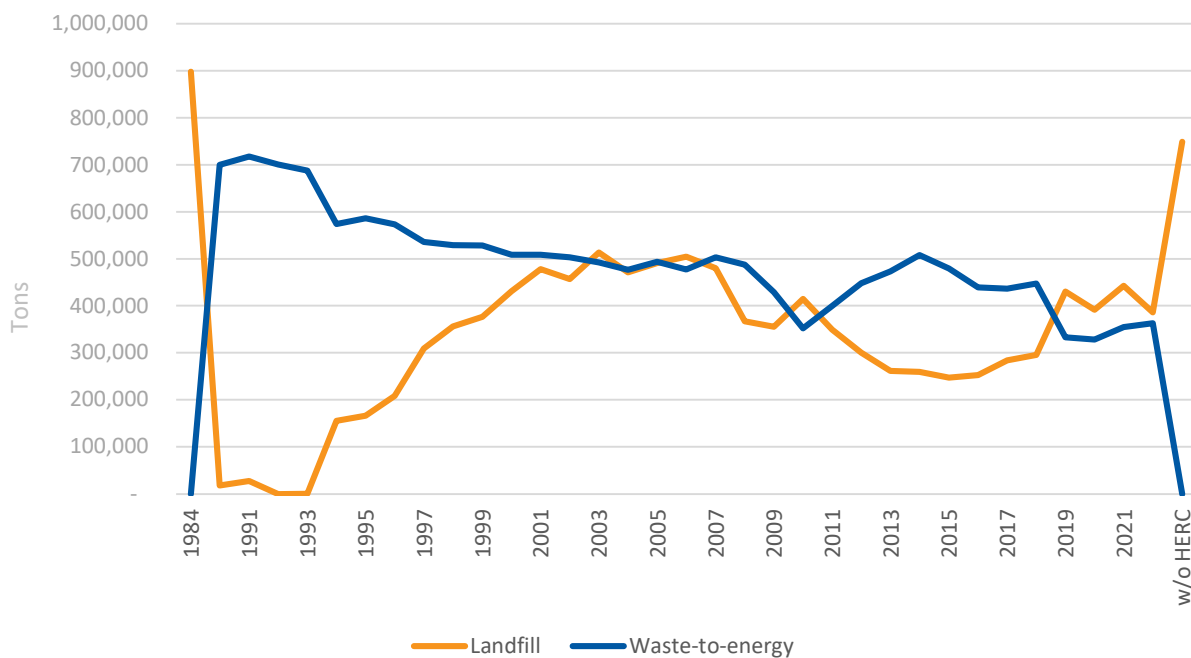
MPCA analysis determined that over the next seven years, assuming HERC remains operational, approximately 6 million tons of trash from the metro area will need to be disposed of in landfills.⁶ With fewer metro waste-to-energy facilities available and the high financial and environmental costs associated with hauling trash to facilities outside the metro, the MPCA decided in 2021 that additional metro area landfill capacity was necessary. Without the expansions, the MPCA had concerns that metro area residents would be unable to manage their trash.

If HERC were to cease operations in the very near future, the recently granted additional landfill capacity will last five years instead of the planned seven years. It is not clear if additional expansion of metro area landfill capacity is possible. Total landfill capacity in the metro area may be limited to 8 to 22 years. The prospect of permitting a new landfill in or near the metro area would be extremely challenging due to location siting, zoning limitations, obtaining a local use permit, and public concerns. The MPCA would be responsible for environmental review and would need to issue the solid waste permit.

As shown in figure 11, if HERC were to cease operations before fully resourcing and implementing the county’s Zero Waste Plan, the county could expect to see a dramatic increase in the amount of trash landfilled, reversing 40 years of solid waste system investment to avoid landfilling.

Hennepin County trash disposal method

Fig. 11



⁶ MPCA [Metro landfill certificate of need process documentation](#)

Consequence:

Closure of HERC within the next several years, given the county's current trash generation levels, will require additional landfill capacity and/or new landfills sited in the metro in the next five years. These options will be logistically, politically, and regulatorily complex and problematic. Alternatively, county residents and businesses will pay to truck their trash further and further away, assuming those facilities will accept metro area trash.

Solid Waste Enterprise Fund

State law requires the county to maintain a Solid Waste Enterprise Fund (Fund 34 or "fund") to receive revenues from the county's solid waste services – including waste tip fees, the Solid Waste Management Fee (Ordinance 15), and sale of HERC's energy and recyclable material (Minn. Stat. §§ 473.811, subd. 9; 400.08). This fund also receives any federal and state grants used to pay for waste, recycling, and other environmental programs. Revenues generated by HERC significantly exceed capital and operating expenditures for the facility and provide the primary revenue source for the county's natural resources programs.

The fund's cash balance from solid waste activities, as of March 31, 2023, was \$49.3 million. The county's debt for the initial construction of HERC (\$134.5 million) was paid off in 2012. The county plans approximately \$5 million to \$6 million per year in capital improvement projects. These investments maintain the facility and preserve HERC's complex environmental controls to not only ensure compliance with air emission permit requirements but also to invest in emission reduction technology to achieve greater environmental performance for residents and safety measures for employees. As of December 31, 2022, the outstanding debt from capital projects was \$37.7 million, and would be fully paid off in 2042 (if it is not added to going forward). This indebtedness is through general obligation bonds tied to 20-year maturities. Currently, revenue generated by HERC pays this debt service obligation. If HERC is decommissioned and no longer generates revenue, the county will need to find other revenue sources to pay this debt.

If the county ceases operating HERC, the county would lose the primary funding source for its current natural resources programming, which includes key climate initiatives such as the one million trees goal. Additional detail on the complexity of the natural resources program revenues are outlined on page 35.

Revenues

The county's 2023 revenue budget for the Environment and Energy department is \$93.6 million. Of this amount, nearly \$59 million will be generated by two different solid waste management fees: the Ordinance 15 Solid Waste Management Fee and the "tip fee."

In 1995, the county established Ordinance 15, the Solid Waste Management Fee, to fund the implementation of state mandates governing waste management programs. The fee is paid by residents and businesses that pay private waste haulers and/or cities for trash pickup. The fee is not applied to recycling or organics pickup services. Fee revenue collected by the county

increases when the volume of trash being collected by haulers increases or when the price of trash collection services increases.

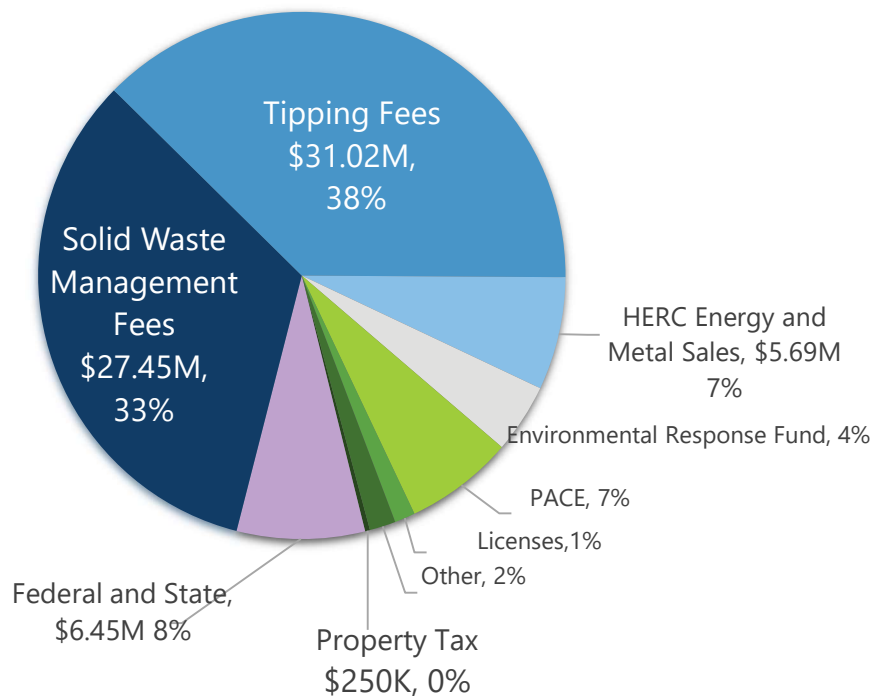
Additionally, haulers pay a “tip fee” to deliver waste to transfer stations, HERC, and landfills. The county’s 2023 contract rate for tip fees at both HERC and BPTS is \$69 per ton, generating an estimated revenue of \$30.4 million. The rate for non-contract tip fees (gate rate) is \$90 per ton. Tip fees are adjusted periodically to keep up with increased costs to operate the system. County revenue from tip fees is also volume-based and increases or decreases based on the amount of trash being delivered to county-owned solid waste facilities.

As shown in Figure 12, tip fees, together with the Solid Waste Management Fee (Ordinance 15), provide the primary sources of revenue to support the county’s solid waste system, including its waste reduction, recycling, and education initiatives, and all of the county’s continued efforts to advance a zero-waste future. In addition to tip fees and solid waste management fees, Hennepin County generates revenues from energy and metal sales from HERC.

Legally, only these HERC-derived commodity revenues, not the tip fees or Solid Waste Management Fee, can be used to fund the county’s natural resource programs (Minn. Stat. § 383B.236). The county sells the energy and metal commodities at market rate. Because the market rates for electricity, steam and metal are volatile, the county budgets conservatively for these revenues each year. Revenue streams from commodity sales include:

- Electricity produced at HERC and sold to Xcel Energy (range: \$3 million to \$4 million)
- Steam produced at HERC and sold to Cordia Energy for the downtown district energy system (range: \$250,000 to \$350,000)
- Steam produced at HERC and sold to the Twins Ballpark (range: \$100,000 to \$135,000)
- Metal recovered from HERC and sold to SKB (range: \$350,000 to \$450,000)

Environment and Energy Department Revenues
 Fig. 11 (2023 budgeted revenues)



Expenditures

The primary expenditures for HERC include:

- Operations agreement: The county contracts with GREHS to operate HERC. The county paid GREHS \$24.56 million in 2022. This covers labor, supplies, and commodities.
- Ash disposal: After combustion at HERC, the volume of waste is reduced by 90%. The county contracts with SKB to screen the waste to recover additional metals and dispose of the remaining ash in a landfill. The county budgeted \$2.8 million in 2023 for managing these services.
- Property insurance and fleet services fees: The county budgeted \$2.2 million in 2023 for these expenses.

During a year when there is an extended maintenance outage at HERC related to repairs to the turbine/generator, tip fees and electrical revenue will decrease, and expenditures may exceed revenues for that budget year. The county plans and budgets for these fluctuations and pays for expenses during these periods using the fund balance.

Environment and Energy Department programming revenues

Without revenues from managing solid waste, projections indicate that the county would experience considerable uncertainty and disruption to the revenues it uses to support the activities of the Environment and Energy Department.

If the county shut down HERC, the county could also expect to stop collecting any revenue from the “tip fee” for trash that is currently delivered to the Brooklyn Park Transfer Station or to the HERC. Tip fees are budgeted at \$30.4 million in 2023. County Ordinance 15 would remain in effect, and the county’s Solid Waste Management Fee would continue to be collected. As seen in Table 2, revenue from this fee is budgeted at \$27.5 million in 2023.

The sustainability of relying on Ordinance 15 as the sole revenue source for Environment and Energy programs is unclear, especially as efforts toward achieving zero waste continue. As the volume of solid waste decreases with zero-waste efforts, revenues from Solid Waste Management Fees may decrease. Furthermore, the cost to implement zero-waste strategies are largely unknown at this time and may exceed the amount of revenue generated by collecting Solid Waste Management Fees.

The 2023 annual budget for waste reduction and recycling is \$11.5 million, with about \$3.5 million of state SCORE dollars passed through to the cities. The 2024 proposed budget includes \$12.4 million for waste reduction and recycling. A conservative estimate would be a 5% increase each year for expanded zero-waste programming. However, it is important to note that advancing zero waste will not be achieved through county programming alone. As identified in the Zero Waste Plan, the county must play an important role in zero-waste infrastructure as well.

Hennepin, Ramsey, and Washington counties collaborate in areas of waste and energy management, including legislation and policy development, communications, and planning and evaluation of waste processing technologies. This collaboration, established through a joint powers agreement between Hennepin County and Ramsey/Washington Recycling & Energy (R&E), is called the Partnership on Waste and Energy.

Both Ramsey and Washington counties are pursuing significant investments in solid waste infrastructure. These counties have jointly invested approximately \$50 million in their Recycling & Energy Center to recover more recyclables and organics from the waste stream. They are also moving forward with plans for an anaerobic digester facility that will be almost three times the size of Hennepin County’s proposed facility. The facility would process waste from Ramsey and Washington counties and other entities. The estimated annual cost of their anaerobic digestion waste delivery contract is \$6 million over a 20-year period. In addition, Ramsey County has plans for a new \$29 million recycling center, and Washington County has plans for a new \$18 million residential waste disposal facility.

Apart from the capital budget maintenance projects at HERC, Hennepin County last invested significant resources into solid waste infrastructure in 2000 with an expansion at the Brooklyn Park Transfer Station.

Natural resources programming revenues

Natural resource program expenditures are budgeted at \$6.3 million in 2023, with \$4.5 million of funding coming from the sale of energy and recovered materials from HERC (see Table 2).

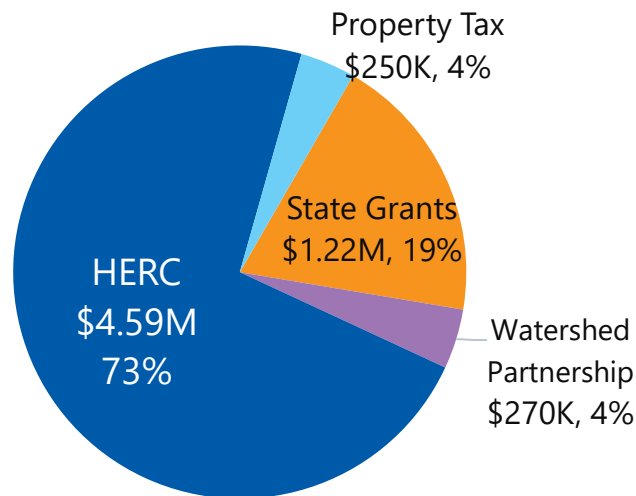
Historically, land and water programs, including conservation work and the Lake Minnetonka program, were funded primarily by property tax. In 2009, the state legislature allowed the county's Environment and Energy Department to transition these costs away from property tax and finance them with revenues derived from HERC's energy and recovered materials sales instead (Minn. Stat. § 383B.236).

The recovered energy sales revenue created an opportunity for the county to manage trees on county property and meaningfully address emerald ash borer, saving the county hundreds of thousands of dollars, typically funded with property tax, by completing much of this work with the county's own foresters. The county began expanding conservation easement work as the county assumed the role of the Soil and Water Conservation District. The Climate Action Plan further prioritized the county's natural resources work to sequester carbon, manage increased stormwater, and reduce the heat island effect.

The Department's 2023 budget significantly ramps up investments needed over the next several decades to address climate change, adding FTEs and dollars to the department's core functions to advance and expand climate initiatives. This work is largely funded by revenues from HERC (see Figure 13). The revenue generated from the sale of energy and recovered materials cannot continue to sustain the level of investment needed to continue these initiatives.

Funding sources for natural resources and forestry programs

Fig. 13 (2023 operating budget)



If HERC were to shut down prematurely, forestry, natural resources, and some climate programming would need to significantly and immediately scale back, or the county would need to allocate funds from property tax or other sources to fund these programs. State law prohibits Hennepin County from accessing other solid waste management revenues not derived from the sale of energy and recovered materials to support these initiatives (Minn. Stat. §§ 473.811, subd. 9 & 383B.236). Scaling back these activities would negatively impact the county's progress toward reaching its climate action goals.

Some of the county's natural resource programs are statutorily mandated, including enforcement of the Wetland Conservation Act and Buffer Law, the agricultural inspection program including noxious weed control, and the Lake Minnetonka program.

Consequence:

If HERC shuts down without a clear and robust plan for alternative funding, the board will need to significantly scale back or eliminate much of the county's current forestry, natural resources, and climate action programming.

Environment and Energy Department revenues and expenses

Table 2

Solid Waste & Environmental Protection: Revenues and Expenses, by program area

Dollars in millions

REVENUES	<u>2023 Budget</u>	Projected impact without HERC
Solid Waste Management programs		
Revenues restricted to solid waste management		
Ordinance 15 waste collection fees	27.5	Decrease
Trash tipping fees	30.4	Eliminated
Organics tipping fees	0.7	Unaffected
State grants (SCORE recycling grants)	4.5	Unknown
Other misc. revenues	1.1	Unaffected
Revenues not restricted to solid waste purposes		
Sale of energy and recovered materials from HERC problem materials, and recyclables from drop-off programs	5.7	Eliminated
Transfers to Natural Resources & Forestry	(4.6)	Eliminated
Subtotal Solid Waste Revenues	66.5	Decrease
Environmental Protection programs		
Natural Resources & Forestry programs		
Property taxes	0.3	Unaffected
State grants	1.2	Unaffected
Transfers from solid waste revenues	4.6	Eliminated
Reimbursements for project management and implementation	0.3	Unknown
Contaminated Lands programs		
Commercial Hazardous Waste programs	1.0	Unaffected
Subtotal Environmental Protection	8.1	Decrease
E&E Administration	10.0	Unknown
TOTAL SOLID WASTE & ENV. PROTECTION REVENUES	84.6	Decrease
Impacts w/o HERC & growing climate priorities		
EXPENSES	<u>2023 Budget</u>	
Solid Waste Management		
Solid Waste management programs	56.8	Decrease
Waste Reduction, Recycling, and Organics programs	9.8	Growing
Environmental Protection		
Natural Resources & Forestry programs	6.3	Growing
Contaminated Lands programs	1.5	Unaffected
Commercial Hazardous Waste programs	1.6	Unaffected
E&E Administration	8.1	Unknown
TOTAL SOLID WASTE & ENV. PROTECTION EXPENSES*	84.1	Decrease

*Does not include the Property Assessed Clean Energy (PACE) or Environmental Response Fund (ERF) programs. These programs are not funded with solid waste management related revenue sources.

Environmental considerations

Climate impacts

Methane emissions

Greenhouse gas mitigation experts⁷ continue to recognize waste-to-energy as a transitional climate solution because it reduces methane emissions by keeping trash out of landfills. When food waste, paper, wood, and other biogenic materials in trash end up in landfills, they create methane, which is 28 times more potent of a greenhouse gas than carbon dioxide over a 100-year period.⁸ From a climate perspective, until most of the biogenic waste is removed from the waste stream or recycled, it is better to manage biogenic waste with waste-to-energy than to dispose of the waste in landfills. Currently, about 50% of trash generated in Hennepin County is biogenic material.

Modern, local landfills have gas recovery systems that capture 75% to 85% of methane gas and flare it or use it as fuel.⁹ Based on information provided by the MPCA, the landfills in Burnsville, Elk River, and Inver Grove Heights are flaring this gas – meaning the methane is burned without recovering energy. This produces carbon dioxide and other pollutants. The Inver Grove Heights landfill is both flaring and converting some gas to fuel. The Elk River landfill has a renewable natural gas plant coming online in the next 18 months. The Burnsville landfill is exploring adding a renewable natural gas plant.

Landfills that flare gas have three times higher global warming impacts than HERC. This is calculated by using standard protocols to compare the carbon dioxide equivalent (CO₂e) emission offsets from the energy generation associated with HERC with a landfill that flares its landfill gas. The difference in overall CO₂e emissions from the two scenarios is approximately an increase of 52,000 tons of CO₂e per year for landfilling, or approximately 150% of the annual net CO₂e emissions from HERC. If local landfills were to add renewable natural gas plants, the climate impacts depend on whether the renewable natural gas is converted to electricity or used as vehicle fuel. If converted to electricity, the difference in overall CO₂e emissions is approximately an increase of 18,000 tons of CO₂e per year for landfilling, or approximately 52% of the annual net CO₂e emissions from HERC. If converted to fuel and replacing diesel fuel, the CO₂e emissions per year for landfilling is comparable to HERC.

The MPCA compared the climate impacts of processing trash into energy to disposing of trash in a landfill over time. This is important because a ton of trash put in a landfill will continue to produce methane over many decades. As depicted in Fig. 13, the example assumes one ton of trash per year for each disposal method for 25 years. In a landfill, one ton of trash will emit some methane initially. Eventually, conditions in the landfill develop where anaerobic digestion is

⁷ Project Drawdown Climate Solutions, [Waste to Energy](#)

⁸ USEPA [Overview of Greenhouse Gases](#)

⁹ USEPA Landfill Methane Outreach Program, [Landfill Gas Energy Projects](#)

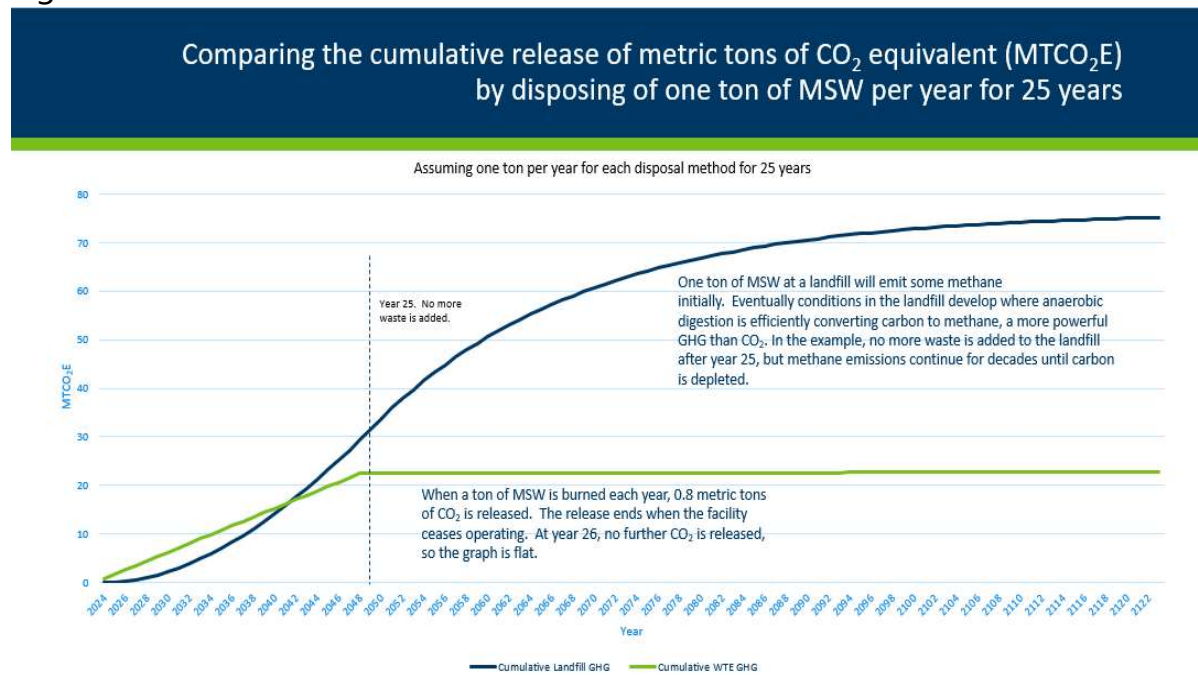
efficiently converting carbon to methane. In this example, no more trash is added to the landfill after year 25, but methane emissions continue for decades until carbon is depleted. By comparison, when a ton of trash is burned each year, 0.8 metric tons of carbon dioxide is released. The release ends when the ton of trash is completely burned. In this example, no further carbon dioxide is released at year 26, so the graph is flat.

Recent studies¹⁰ using direct monitoring of landfills show the current emission factors vastly undercount methane and other landfill emissions, so the climate impact of landfilling waste over processing through waste-to-energy is even greater than estimated.

Consequence:

If HERC shuts down when the current volume of trash is being produced in the county and when a significant portion of that trash is still organic material, the shutdown will result in an immediate and significant increase in landfilling and a parallel increase in methane released from those landfills, putting the state and the county further from established greenhouse gas emission reduction goals.

Comparing climate impacts of trash disposal methods over time (source MPCA)
Fig. 13



¹⁰ Environmental Integrity Project, [Notice of Intent to the USEPA](#), December 9, 2021

Metal recovery

Metal in the trash is also recovered from the ash from HERC. Approximately 16,000 tons a year are recovered, which is more than double the amount of metal recovered through curbside collection programs in Hennepin County. Comparatively, local landfills do not process trash to recover metal before land disposal. Producing new metal to replace the amount currently recovered at HERC and recycled would produce approximately 43,000 CO₂e in greenhouse gas emissions each year.¹¹

Consequence:

If HERC shuts down without an alternative method for recycling large amounts of metals from the waste stream, that metal will go straight into landfills and more greenhouse gases will be emitted in the production of new metal.

Electricity production

The electricity produced at HERC powers the equivalent of 25,000 homes annually. A ton of trash processed at HERC creates electricity to run a house for 18 days. A ton of trash buried in a landfill that converts its landfill gas to electricity would run a house for 3 days.¹²

As more energy in the electrical grid is generated from renewable sources, the climate benefits of waste-to-energy will decrease. Minnesota recently updated its renewable energy standard to require 100% carbon-free electricity by 2040. Xcel Energy's renewable electricity percentage is currently 34%.¹³ The steam produced at HERC and put into the downtown district energy system, owned by Cordia Energy, offsets the use of natural gas, the system's primary fuel source. Further, natural gas is still used to heat two-thirds of Minnesota homes.¹⁴

Consequence:

With the shutdown of HERC, annual electricity used by 25,000 homes and steam to heat downtown buildings on the district energy system will be eliminated and no longer offset the use of fossil fuels by energy producers.

Water

Impacts to both groundwater and surface water from landfills have traditionally been tied to the production of leachate.

¹¹ [EPA CCCL Emission Factor Hub](https://www.epa.gov/climateleadership/ghg-emission-factors-hub). April, 2023. <https://www.epa.gov/climateleadership/ghg-emission-factors-hub> and World Steel Association, <https://worldsteel.org/wp-content/uploads/Life-cycle-inventory-LCI-study-2020-data-release.pdf>

¹² Calculations made by Hennepin County staff based on US Energy Information Administration estimate of 900 kWh/month of electricity for an average house, and EPA comparison of kWh/ton recovered from WTE (600 kWh/ton) vs landfill gas recovery (65 kWh/ton),

¹³ [Xcel Energy](#) Certified Renewable Percentage, 2021

¹⁴ [Decarbonizing Minnesota's Natural Gas End Uses \(e21initiative.org\)](https://www.e21initiative.org/)

Many operating landfills have documented impacts to groundwater. These impacts are largely connected to a “legacy” unlined portion of the landfill that has been capped and a modern, lined landfill has been developed adjacent to the unlined portion.

Subtitle D regulations of the federal Resource Conservation and Recovery Act (RCRA) include proscriptive requirements for the location, design, construction, operation, groundwater monitoring, closure, post-closure care, and financial assurance of landfills. The MPCA has been given the authority to administer the Subtitle D requirements. This is done through the facility permitting process that also addresses the liner, leachate collection, and proper leachate management.

Landfill leachate is managed in several ways. Many facilities accumulate and temporarily store leachate in tanks, while some use ponds. Most leachate is sent to publicly owned wastewater treatment facilities for treatment, and the treated water is discharged along with treated municipal wastewater. Some leachate is recirculated in the landfill to enhance waste degradation with the goal of achieving relatively inert material.

Modern landfills can still leak. In fact, leakage is assumed in design and modeling calculations even given full compliance with RCRA in design, construction, and operation. Other factors leading to leaks include mismanagement, accidents, and extreme weather. Leak detection systems are installed underneath the leachate sumps, which are the most likely places a liner will leak. The MPCA requires landfill operators to test groundwater monitoring wells to determine whether waste pollutants have leached from the landfill. Leaks from areas of the liner other than the leachate sumps would eventually show up in the monitoring wells but would take a long time to contribute at a level to detect in groundwater.

Following closure, the rules require a minimum 20-year period of post-closure monitoring and maintenance. The goal is to continue post-closure care until the facility reaches a relatively stable state based on leachate, gas quantity and quality, physical stability and environmental monitoring.

When landfills seek to expand, the project may require environmental review in the form of a mandatory or supplemental Environmental Impact Statement (EIS). The EIS will assess impacts and mitigation measures associated with:

- Groundwater quality and areas of impact in the vicinity
- The groundwater monitoring plan
- Predicted future groundwater levels and flow direction using existing and updated information
- Potential impacts to nearby drinking water wells
- Potential changes in impacts to groundwater resulting from the additional weight
- A comparison of the pre-expansion surface water discharge rates to the post-project surface water discharge rates for 2-year, 10-year, 500-year storm events and extreme

flooding events, and identification of potential impacts and suggested measures to mitigate those impacts

- An assessment of the change in drainage to wetlands located within the new development area for the pre-expansion and post-project conditions

A modern, well-maintained landfill in compliance with its permits poses little risk to groundwater or surface water at the landfill location. But with leachate being treated at a wastewater treatment facility, there is the potential for pollutants to be discharged into surface water with the treated wastewater.

HERC has two sewer discharge permits: a National Pollutant Discharge Elimination System (NPDES) permit is for cooling tower blowdown that discharges to surface water through the storm sewer and a Metropolitan Council Environmental Services (MCES) permit is for sanitary and industrial discharge to the water treatment plant. HERC meets all water discharge permit requirements and poses little risk to surface waters.

Consequence:

A shut down of HERC will result in increased risk for water contamination as the amount of unprocessed waste being landfilled climbs.

Forever chemicals

Per- and polyfluoroalkyl substances (PFAS) have been commonly used for their water- and grease-resistant properties in many industrial applications and consumer products. This includes carpeting, waterproof clothing, upholstery, food paper wrappings, cookware, personal care products, fire-fighting foams, and metal plating. Sometimes called “forever chemicals,” PFAS are persistent and can bioaccumulate, meaning the amount builds up in the body over time. PFAS have been linked with certain cancers, immune deficiencies, and developmental problems.¹⁵

According to the MPCA, PFAS in landfills can migrate into the leachate, which is often treated at a wastewater treatment facility. Few existing removal systems installed at landfills or wastewater treatment plants are capable of removing PFAS, creating the potential for PFAS to be discharged into surface water with the treated wastewater. A recent report¹⁶ commissioned by the MPCA found that the removal and destruction of PFAS from certain wastewater streams in Minnesota could cost an estimated \$14 billion to \$28 billion over two decades.

While there is uncertainty that waste-to-energy (WTE) facilities consistently maintain the operating conditions required to completely destroy PFAS, thermal destruction is among the mitigation technologies suggested by the U.S. Environmental Protection Agency (EPA) to control

¹⁵ Environmental Protection Agency, [PFAS explained](#)

¹⁶ Minnesota Pollution Control Agency, [News release and report on unaffordable costs of destroying PFAS in wastewater](#)

PFAS in air emissions.¹⁷ HERC, along with 144 other waste facilities, is likely to be asked to participate in the MPCA's PFAS monitoring plan¹⁸ to collect and analyze PFAS air emissions data in HERC's annual emissions test. This data will help the MPCA and federal agencies develop minimization strategies to reduce PFAS releases into the environment. Results of this data collection effort are expected in 2025.

Consequence:

Shutting down HERC before research on whether waste-to-energy facilities are able to completely destroy PFAS means the county could be losing a potential solution to the problem of forever chemicals.

Air pollution

Health risks

In 2021, the county contracted with Barr Engineering to complete an evaluation of HERC's air emissions and associated health risks using the MPCA's MNRisks analysis tool. The analysis provided context about the relationship between air emissions (the pollutants released into the air from numerous types of sources), air quality (the concentrations of pollutants in the air we breathe), and risk (potential health impacts associated with outdoor air quality). The EPA, MPCA, and Minnesota Department of Health (MDH) use the science of "risk assessment" to characterize the nature and extent of potential health impacts to people due to chemical contaminants in the environment (air, water, and soil).

To summarize the findings:

- HERC operates air pollution control equipment to reduce pollutants in the exhaust released at the stack.
- MPCA's risk assessment data indicates that cancer and non-cancer risks from HERC emissions are well below MDH's incremental risk thresholds.
- Like other permitted facilities, the MPCA does not allow HERC to emit pollutants in amounts that would increase cancer or non-cancer risks above incremental risk thresholds.
- Emissions in Hennepin County are dominated by mobile (72%) and non-point (24%) sources, and those are sources more likely to have greater health impacts on residents in the area compared to permitted sources like HERC.
- Based on MPCA data, the overall impact from HERC's emissions, in isolation, is negligible, and especially when compared with the current background cancer and non-cancer levels that result from all other sources, such as vehicle emissions, unpermitted emissions sources, other environmental sources (water and soil contamination), poor indoor air

¹⁷ US Environmental Protection Agency, [Interim Guidance on the Destruction and Disposal of PFAS and Substances and Materials containing PFAS](#)

¹⁸ Minnesota Pollution Control Agency, [PFAS Monitoring Plan](#)

quality in homes and workplaces, smoking, limited access to health care, and food insecurity.

- HERC emissions are not likely to cause more cancer or non-cancer health effects in one part of the community than in another. MPCA's data indicates no disproportionate impact on any particular census tract; rather, it shows similar and low impact to all populations.
- Shutting down HERC will not result in observable health outcome improvements for residents of Minneapolis or its suburbs.

Consequence:

Closure of HERC will increase truck transport of trash throughout the county and outside of Hennepin County to landfills, resulting in more than 10,000 additional trips by semi-trailer trucks and the associated vehicle emissions annually.

Air pollution from landfills

Comparing air pollution from managing waste at HERC to disposal at landfills is challenging. The MPCA states: "the comparative standing of landfills will be quite limited when it comes to air emissions because there has been a persistent lack of actual data about air emissions from the surface area of landfills. While waste-to-energy plants must provide continuously or regularly monitored emission data for a specific set of air pollutants, landfills do not have to collect any continuous data from the surface of the landfill, only from the landfill-gas collection system and only if they have one."¹⁹

The following air pollutants are emitted from landfills through several means, including from the waste directly through the landfill cover, from the combustion of landfill gas, or from trucks and compaction vehicles at the landfill:

- Criteria pollutants: carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM), sulfur dioxide (SO₂), and volatile organic compounds (VOCs).
- Air toxics and hazardous air pollutants: vinyl chloride, ethyl benzene, toluene, and benzene
- Greenhouse gases: carbon dioxide (CO₂), methane and nitrous oxide calculated as carbon dioxide equivalents (CO₂e).

Air pollution from landfill fires

The risk of fires is another air quality concern associated with land disposal of trash. The growing use of lithium-ion batteries in electronics, power tools, flashlights, toys, and other products increases the risk of fires in trash caused by damage to these batteries.²⁰ Fires are very difficult to control in a landfill because of the large fuel source. Once put out, landfill fires can continue

¹⁹ MPCA Program Management Decision Memo, Issue Waste-to-Energy in an Integrated Solid Waste Management System, Effective date: June 14, 2010.

²⁰ [An Analysis of Lithium-ion Battery Fires in Waste Management and Recycling \(epa.gov\)](https://www.epa.gov/air-pollution/lithium-ion-battery-fires-waste-management-and-recycling)

to smolder and emit toxic smoke for weeks. Contaminants of concern for landfill fires include carbon monoxide, hydrogen sulfide, benzene, VOCs, dioxins/furans, heavy metals, and PAHs.²¹ Landfills are not equipped with air pollution control equipment to reduce the emissions impact when fires do occur. Depending on the size and location of the fire, the landfill liner and leachate and gas collection systems can be damaged. According to the MPCA, there have been 26 fires at municipal solid waste landfills in Minnesota since 2010.

The most recent landfill fire occurred at the Rice Lake Landfill in May 2023. By documenting the response to the emergency, Rice County provided an example of relevant concerns associated with landfill fires.²²



The fire burned for four days. Air quality monitoring equipment was ordered but not available for three days due to limited regional supplies. When residential properties within one mile of the landfill were tested for particulates and gases, air quality met standards. The cause of the fire remains unknown. Rice County is now determining if the landfill liner was damaged by the fire.

Legacy impacts of landfilling

According to the MPCA, landfills must be managed forever to prevent groundwater contamination, and decomposing waste will continue to release greenhouse gases. Further, trash in landfills can overheat, causing underground fires, and continue to compact, creating unstable ground that cannot be used for future development.²³

In 1994, the Landfill Cleanup Act created Minnesota's Closed Landfill Program so the state could effectively protect human health, safety, and the environment associated with certain closed, state-permitted, mixed municipal solid waste landfills throughout Minnesota. The program's goals include managing the risks to human health and the environment associated with:

- Human exposure to landfill waste
- Contaminated groundwater and surface water emanating from the waste area
- Landfill gas migrating from the waste that could threaten nearby structures as well as be released to the atmosphere as a greenhouse gases
- Chemical vapors released from shallow contaminated groundwater into structures

In 1999, the Minnesota Legislature established the Closed Landfill Investment Fund (CLIF) for the purpose of setting aside and investing money for future post-closure care of the Closed Landfill

²¹ Landfill Fire Response Guide for Surface and Subsurface Fires at Solid Waste Facilities
October 2018 Version 2.0 Referenced from USFA-FEMA

²² [Landfill fire updates | Rice County, MN \(ricecountymn.gov\)](https://www.ricecountymn.gov/)

²³ MPCA Waste-to-Energy GHG presentation

Program landfills. The Closed Landfill Program is responsible for the permanent, long-term care of the program landfills.

Each year, the Closed Landfill Program projects its future, 30-year financial obligations and liabilities required to care for the landfills. The program's current contractual obligations over the next 30 years are anticipated to be \$309 million.

Financial obligations have increased significantly due to:

- The addition of three landfills to the Closed Landfill Program, including the Freeway Landfill in Burnsville
- The need to conduct vapor investigations and increased monitoring and impacts of PFAS and 1,4-dioxane (another cancer-causing chemical that can leach from products that are difficult to remove from water)
- Better understanding of the extent and magnitude of groundwater contamination

An increase in future obligations is anticipated to evaluate alternative technologies to address landfill greenhouse gases and remove PFAS and 1,4-dioxane from the groundwater at several closed landfills.

Stable, long-term funding is needed to address the public health and environmental risks posed by the 111 closed landfills in Minnesota, including three in Hennepin County in Eden Prairie, Hopkins, and Medina.²⁴ The program will depend on three funding sources: the Remediation Fund, the CLIF, and state general obligation bonds.

Consequence:

If HERC were to shut down, given the county's current waste production and recycling rates, an additional 365,000 tons of trash produced in Hennepin County for a total of 750,000 tons would be landfilled each year. The county cannot forecast the exact liability risks or considerations that will accompany this dramatic increase in landfilling waste, but examining and understanding the region's current and legacy landfilling landscape is instructive.

Policy and legislative considerations

The county's Zero Waste Plan includes 17 zero-waste policy actions that are key to realizing a zero-waste future (see [Zero Waste Plan](#) pages 32 to 38). Drafting, passing, and implementing these policies is not solely in the control of the county, so following through with these actions requires working across county and city borders, building coalitions, and long-term planning. Their implementation will require the county to collaborate with partners, stakeholders, and lawmakers to advocate for the adoption of the policies at the state legislature and federal action.

²⁴ MPCA Closed Landfill Program [GIS Map](#)

State legislative action

If HERC's shutdown is contingent on getting to zero waste, the state legislature needs to prioritize these policy actions to advance zero waste and protect the environment:

Adopt policies on par with national zero-waste leaders

- Adopt extended producer responsibility (EPR) for packaging
- Change organized collection process and hauler licensing
- Adopt and enforce material bans at landfills for all materials that emit methane – food/organics, paper/cardboard, wood, and textiles
- Eliminate the diversion of solid waste management tax for other purposes and provide to local government for recycling programs as intended
- Set a 50% or higher diversion requirement for construction and demolition (C&D) waste

Invest in recycling infrastructure, advancing circularity and waste reduction and reuse

- Stop diverting solid waste management tax revenue to the general fund, instead provide to local government through increasing SCORE recycling grants
- Fund a pre-processing facility in Hennepin County to recover reusable and recyclable materials from the trash before disposal (estimated cost \$100 million to \$200 million)
- Fully fund the anaerobic digestion facility
- Increase state taxes/fees on landfills to fund county zero-waste programs
- Improve statute language on volume- or weight-based pricing to incentivize waste reduction (115A.9301)
- Increase fees on construction and demolition (C&D) waste disposal to fund reuse and recycling of building materials
- Invest in market development for both traditional and hard-to-recycle items
- Provide resources for MPCA to enforce state statutes (115A.151, etc.)
- Increase the Solid Waste Processing Facilities Capital Assistance Program (CAP) grant amounts

Reduce disproportionate impacts from the solid waste system

- Direct funding to areas of environmental justice concern
- Phase in emissions requirements for waste trucks (use of compressed natural gas, % electric, etc.)
- Update landfills to achieve greater environmental outcomes – require gas recovery systems and monitoring and reporting on air emissions.

Amend existing policies to remove disincentives

- Adopt a food waste compost requirement in MNDOT specs (3890)
- Reduce barriers for businesses to use refillable containers
- Revise building codes and zoning ordinances that inhibit recycling
- Revise the current EPR system to cover collection costs for all electronic waste

Federal action

On the federal level, county staff recommend supporting policy changes and initiatives that lead to greater standardization and coordination across the country to reduce confusion and inconsistencies for brand owners, manufacturers, consumers, and local waste management systems. Areas where standardization and coordination are most needed include improve product labeling, both to indicate recyclability or composability and perishability of food, passing extended producer responsibility legislation, implementing sustainable product design standards, removing barriers in the food code to allow for reusable packaging,, mandating single-use plastics reduction and pollution prevention, and reducing the toxicity of plastics additives. Increased federal funding for recycling market development, zero-waste infrastructure, and Justice40 initiatives that channel benefits to disadvantaged communities would also be highly impactful.

County-led efforts

The county board will also need to prioritize zero-waste efforts in their legislative priorities and advance zero-waste policies within the county's authority. Staff have prioritized the following county-led policy efforts as identified in the Zero Waste Plan:

- Revise the Recycling Ordinance 13 to provide clarity on existing language and expand requirements
- Require the use of food waste compost in county construction and landscaping projects
- Bolster the county's sustainable purchasing policy using MPCA guidance
- Transition to organized waste collection countywide, which cities would implement
- Mandate participation in recycling and composting programs, which cities would implement
- Evaluate the county/city role in providing zero-waste infrastructure:
 - Expand recycling drop-off options
 - Establish brick-and-mortar reuse and repair centers
 - Support innovation hubs, districts, and resource recovery parks
 - Study options for recovering recyclables from the trash
- Repurpose BPTS for reuse and hard-to-recycle materials
- Use county hauler licensing agreements to advance zero-waste efforts
- Require cities to add multifamily waste service to single-family residential service
- Adopt a single-use ban and zero-waste packaging requirements for food service
- Establish food waste reduction targets and timeline
- Fully implement a county plan to eliminate food waste

Minneapolis-led efforts

As the largest city in the state and the biggest generator of waste in the county, Minneapolis will play a crucial role in making progress toward zero waste. The city has achieved many notable

successes on residential recycling, but the county will not meet its goals if Minneapolis does not adopt policies on par with zero-waste leaders across the country:

- Establish organized commercial collection, including multifamily
- Require mandatory large generator waste reduction and diversion plans
- Increase hauler accountability by requiring reporting and service standards
- Create a funding mechanism, such as a clean community fee, to support zero waste initiatives
- Implement a multifamily recycling program with adequate staffing
- Improve options for managing large items and specialty recyclables in the multifamily sector
- Provide waste reduction community grants to support innovative, community-based efforts
- Adopt specifications to increase the use of food-derived compost in city projects
- Develop a construction and demolition waste diversion ordinance requiring the recycling of a portion of construction and demolition debris
- Enhance enforcement of existing city ordinances

Summary of considerations and consequences

As this report outlines, the closure of the Hennepin Energy Recovery Center (HERC) is complex and requires operational, legal, financial, and environmental considerations. These considerations need to be conditions precedent. In other words, the conditions need to be accomplished prior to the closure date. If the conditions are not accomplished, there may be collateral consequences that adversely impact residents, the environment, and the county's climate action goals and natural resource priorities. These considerations are summarized here.

Operational considerations

County buildings

If the county closes HERC, the county will need to decommission the plant. A study is underway to determine the costs and ongoing liabilities related to the decommissioning of HERC, but the county can expect decommissioning a power plant in the downtown area to be complex and extremely expensive. The county will also need to consider various options for the Brooklyn Park Transfer Station, which primarily serves to control trash volumes delivered to HERC. This facility may be closed.

Impacts on jobs and employment

62 jobs are directly associated with operating HERC, nine of which are county employees, six of which are union members. GREHS employs 53 people to operate HERC, 35 of which are members of the International Brotherhood of Electrical Workers (IBEW). A revenue source is needed to support implementation of a transition plan for these employees.

Another 30 jobs in the county's natural resources and forestry units are funded largely by revenues from HERC energy sales. To close HERC, a replacement funding source for the county's natural resources and forestry programs and the associated climate-driven priorities needs to be identified. In 2023, the total budget for these program costs, including climate initiatives, was \$6.1 million. Without replacement funding, the closure of HERC will require the county to significantly scale back its natural resources and forestry work and develop a transition plan for these employees.

Impacts to cities

The City of Minneapolis will experience the greatest operational, financial, and environmental impacts if HERC closes. The city will no longer be able to depend on the county's solid waste system for its waste management and, as a consequence, could expect a significant increase in tipping fees each year and additional administration, equipment, labor, and fuel costs.

Financial impacts on businesses and the 16 suburban cities that contract with waste haulers to dispose of residential trash at HERC is unclear. Changes in prices for waste pickup service for

businesses and cities will likely increase depending on geographic location and other market variables. The county cannot foresee how trash disposal fees at landfills will change, but in a completely privatized solid waste market, it is certain that the county would have no influence on the tipping fees the private sector disposal sites charge. In the end, customers will, in all likelihood, pay more.

The City of Minneapolis and the county's 16 suburban cities may want to seek a financial analysis to better understand the operational and financial impacts on these cities if HERC were to close.

Impacts to the regional solid waste system

Strained landfill capacity

Landfills have finite capacity based on permits, space constraints, and the surrounding land use. If HERC closes, the recently granted out-of-county additional landfill capacity will last five years instead of the planned seven years. It is not clear how much further expansion of metro area landfill capacity is physically or politically possible. Total landfill capacity in the metro area may be limited to 8 to 22 years. Landfills in greater Minnesota and surrounding states are less constrained, but transportation costs and the associated environmental impacts are greater. The county should also consider the possibility that landfills outside the metro area may refuse to accept trash generated in Hennepin County.

Further privatization on the solid waste system

If HERC closes, the county can expect further privatization of the solid waste system. In all likelihood, this will increase the costs for four larger independent and 62 smaller haulers, some of which are small- and minority-owned business enterprises. As described in the Office of the Legislative Auditor report, the larger hauling companies that own their own landfills have an incentive to maximize the amount of trash that is landfilled and a disincentive to encourage their customers to recycle. In addition, waste haulers are not paying the full environmental associated with land disposal, which includes landfill closure, post-closure maintenance and monitoring, and financial assurance for possible cleanup of future groundwater contamination.

Statutory and legal considerations

Compliance with state statute

Statutorily, the county is required to implement the MPCA's Metropolitan Policy Plan, which currently prioritizes waste processing and waste-to-energy methods over landfilling. The plan also emphasizes landfill abatement, not expansion. It is unclear how the MPCA will react to a county solid waste plan that prematurely closes HERC and dramatically increases landfilling, putting the county out of compliance with the plan and state statute. The MPCA could reduce the county's SCORE funding, refuse to approve the county's solid waste plan, and/or refuse to

certify the county's annual unprocessed waste report, putting the county out of compliance with its statutory obligations.

To shut down HERC without rendering the county noncompliant with state waste management law, the state legislature must act prior to closure. Specifically, the legislature must amend statutes and administrative rules that currently require Hennepin County to comply with the Metro Policy Plan and landfill abatement law and to enforce waste management law within the county. The legislature could also fundamentally change the waste hierarchy itself by putting landfilling on an equal footing with incineration-based resource recovery, which would require a new Metro Policy Plan.

Financial considerations

Without revenues and expenditures associated with the solid waste management system, the county can expect significant uncertainty and disruption to the revenues it uses to pay for activities of the Environment and Energy Department. Revenue from the Ordinance 15 Solid Waste Management Fee would continue to be collected, though tip fee revenue is expected to be nearly eliminated. Revenue from the sale of energy and recovered materials from HERC would be eliminated. State grants that are tied to compliance with the state's solid waste management statutes may also be jeopardized, such as the SCORE grant funding that is passed through to cities to assist with recycling and waste reduction programs.

The 2023 budget includes \$11.3 million for waste reduction and recycling programming. With continued investments in zero-waste initiatives, conservative projections indicate these annual costs will reach \$16 million or more over the next decade.

Closure of HERC would have consequences for outstanding county debt. The county would need to pay its outstanding debt service, which totaled \$37.7 million as of December 31, 2022, and is currently paid for by HERC-related revenues.

A study is underway to determine the costs and ongoing liabilities related to the decommissioning of HERC. This study will not identify the costs to restore this site for future needs, so that would remain a significant unknown.

Furthermore, statute doesn't allow the county to use revenue from solid waste activities to fund natural resources programs. The 2023 budget includes \$6 million for forestry and natural resources programs. Projections indicate that this amount will grow to more than \$7 million in the next decade. Currently, the primary sources of funding for these programs come from the sale of electricity and recovered materials from HERC, partnerships with local watersheds, and state grants.

If revenue from the sale of electricity and recovered materials from HERC operations are no longer a funding option for natural resource and climate programming, the county will need to consider implementing one or more of the following solutions for solving for the funding gap:

- Seek flexibility from the state legislature to use all sources of revenue in SWEF to fund natural resources work
- Obtain state revenue to support natural resource programming
- Significantly scale back natural resources programming

Continued investment in zero-waste infrastructure and climate initiatives related to natural resources work will require additional revenue whether or not HERC is operational.

Environmental considerations

Climate

From a climate perspective, waste-to-energy is preferable to landfilling. The size of the climate benefit of waste-to-energy is measured primarily by the amount of food, paper, and other biogenic materials in the waste stream (currently about 50% of trash) that would break down in a landfill, producing carbon dioxide and methane. How these gases are then managed at landfills is another significant factor to determining the size of the waste-to-energy climate benefit. Landfills that flare these gases, which is the current practice at local landfills, have three times higher global warming impacts than HERC. The climate impacts would decrease if local landfills were to add renewable natural gas plants, but the size of that decrease depends on whether the renewable natural gas is converted to electricity or used to replace fossil-based vehicle fuel. The Inver Grove Heights landfill has an operational renewable natural gas facility where a portion of the landfill gas is converted and connected to an Xcel Energy pipeline.

Another significant factor in determining the value of the waste-to-energy climate benefit is how much the energy recovered offsets the use of fossil fuels. Currently, our region's electricity is 34% renewable, and the downtown district energy system, where HERC sends steam to heat downtown buildings, uses primarily fossil-based natural gas. As more energy in the state is generated from renewable sources, the climate benefits of waste-to-energy will decrease.

There are additional climate benefits associated with preventing the metal recovered from HERC from being landfilled.

Air pollution

Air emissions from HERC are, and have been, significantly below permitted levels. For many individual pollutants, air emissions are fractions of permitted levels. HERC emissions account for 0.2% of countywide air emissions. Vehicles account for 74% of countywide air emissions. Closure of HERC will increase truck transport of trash throughout the county and outside of Hennepin County to landfills, resulting in more than 10,000 additional trips by semi-trailer trucks and the associated vehicle emissions annually.

In response to community members' concerns about air pollution from HERC, staff pursued an additional science-based review and repeatable analysis of HERC's potential health impacts. This review confirmed that cancer and non-cancer risks from HERC emissions are well below MDH's incremental risk thresholds. HERC is not more likely to cause cancer or non-cancer health effects in one part of the community than in another; rather, the review shows similar and low impacts across all populations.

Comparing air pollution from managing waste at landfills is challenging because landfills do not collect continuous data from the surface of the landfill. Air pollutants, including particulate matter, nitrogen oxides, and air toxics, are emitted from landfills in several ways: from the waste directly through the landfill cover, from the combustion of landfill gas, or from the trash trucks and compaction vehicles operating at the landfill. Further, landfill fires can be a significant air pollution concern.

Water pollution

Landfill impacts on groundwater and surface water are associated with leachate. The primary concern is the potential for PFAS and other emerging chemicals of concern to be discharged into surface water with the treated wastewater.

Next steps

On Thursday, September 21, 2023, the Hennepin County Board will hold a briefing to review this report and participate in a working session to discuss HERC's future. Based upon the considerations, conditions, and consequences presented in this report, a series of policy questions will be asked to inform the decision and next steps. Any closure of HERC will require accomplishing many complex actions and meeting many conditions required to protect our environment, ensure Hennepin County is in compliance with state waste management law, and reduce any unnecessary financial burden to county residents.

HENNEPIN COUNTY
MINNESOTA

Memo

To: Hennepin County Board of Commissioners

From: David Hough, County Administrator
Lisa Cerney, Assistant County Administrator Public Works

Date: September 20, 2023

Re: Hennepin County Climate Action Plan/Zero Waste Plan and HERC - Recommendations

You received a report on the Hennepin Energy Recovery Center (HERC) and its role in the solid waste system on September 16, 2023. This memo provides County Administration's recommendation that is aligned with the county's Climate Action Plan, Zero Waste Plan and state and federal statutes. Included is a summary of the staff report and a consideration of actions and recommendations that will be presented in the briefing on Thursday, September 21, 2023.

Recommendation: Establishing a target closure date for HERC with the necessary conditions to meet the goal

The county is committed to meeting our climate action goals and achieving zero waste, as well as being compliant with state and federal law. Based upon our goals and existing laws we are recommending an anticipated year range closure for HERC of 2040 to 2050. To achieve this year range there are many conditions which need to be met. They include:

- Compliance with all applicable state and federal laws, rules and regulations
- Achieving the county board approved Climate Action Plan goals
- Achieving the metrics identified in the county's Zero Waste Plan
- The State of Minnesota is at or near its 100% renewable electricity goal
- Recycling rate of at least 85%
- Food waste, paper, and other biogenic materials make up less than 10% of trash needing disposal
- Alternative funding sources are secured for county natural resources, forestry, zero waste, and climate work
- Alternative energy sources are found to heat, cool, and electrify homes and businesses

Hennepin is a national leader in waste reduction and recycling. In order to maintain this status, we recommend focusing on HERC to highlight Hennepin County's trash problem and pushing for robust goals and building a zero-waste future that reduces our reliance on incineration and landfilling. This strategy will ensure Hennepin County remains in compliance with state waste management laws. To

achieve zero waste, the state, Hennepin County, and cities will need to deliberately commit to new policies and programs. Setting a date for HERC's closure will require the county attaining all previously mentioned conditions. By not meeting these conditions a premature closing of HERC will create a significant number of collateral consequences that impact the environment and our residents.

Required State Legislative Action

As stated in the report, "If HERC's shutdown is contingent on getting to zero waste, the state legislature needs to prioritize these policy actions to advance zero waste and protect the environment".

- Adopt policies on par with national zero waste leaders - including but not limited to packaging, organized collection, hauler licensing and material bans at landfills.
- Invest in recycling infrastructure, advancing circularity and waste reduction and reuse – including but not limited to increasing SCORE recycling grants, funding of a pre-processing facility in Hennepin to recover reusable and recyclable materials from trash, fully funding the anerobic digestion facility, increasing state taxes/fees on landfills to fund county zero waste programs and other investments.
- Reduce disproportionate impacts from the solid waste system – including but not limited to direct funding to areas of environmental justice concern, phased in emissions requirements for waste trucks and updating landfills to achieve greater environmental outcomes.
- Amend existing policies to remove disincentives – including but not limited to adopting a food waste composting requirement in MnDOT specs, reducing barriers for businesses to use refillable containers, revising building codes and zoning ordinances that inhibit recycling and revising the current system to cover collection of all electronic waste.

Required Federal Action

The county board needs to recommend and support policy changes and initiatives that lead to greater standardization and coordination across the country to improve consistency among all stakeholders. Areas where standardization and coordination are most needed include product labeling to indicate recyclability, ability to compost and perishability, producer responsibility legislation, sustainable product design standards, mandating single use plastics reduction and pollution prevention. In addition, seeking increased federal funding for recycling market development, zero waste infrastructure and Justice40 initiatives.

Required County Efforts

As previously mentioned, the county board will need to prioritize zero waste efforts in its legislative priorities. In addition, the board will need to advance zero waste policies focused on the following Zero Waste Plan priorities:

- Revise Recycling Ordinance 13 to provide clarity in existing language and expand requirements
- Require the use of food waste compost in county construction and landscape projects
- Bolster the county's sustainable purchasing policy using MPCA guidance
- Transition to organized waste collection countywide, which cities would oversee and implement
- Mandate participation in recycling and composting programs, which cities would oversee and implement
- Require cities to add multi-family waste service to single-family residential service
- Adopt a single use ban and zero waste packaging requirement for food service
- Establish food waste reduction targets and timeline
- Fully implement a county plan to eliminate food waste

- Evaluate needed collaboration in providing zero waste infrastructure
 - Expand recycling drop-off options
 - Establish brick-and-mortar reuse and repair centers
 - Support innovation hubs, districts, and resource recovery parks
 - Study options for recovering recyclables from the trash

Required City Efforts

With forty-five cities in Hennepin County there is a significant need for city leadership. Minneapolis is the largest city in the state and the biggest generator of waste in the county. Minneapolis will play a crucial role in achieving climate action and zero waste goals. The city has achieved many notable successes on residential recycling, but the county will not meet its goals if Minneapolis does not adopt policies similar to other zero waste leaders across the country. Required policy changes are as follows:

- Establish organized commercial collection, including multi-family
- Require mandatory large generator waste reduction and diversion plans
- Increase hauler accountability by requiring reporting and service standards
- Implementing multi-family recycling programs with adequate staffing
- Improve options for managing large items and specialty recyclables in the multi-family sector
- Adopt specifications to increase the use of food-derived compost in city projects
- Develop a construction and demolition waste diversion ordinances requiring recycling on construction and demolition projects
- Enhance enforcement of existing city ordinances

These policy changes at the federal, state, county and city levels are needed to move Hennepin County toward zero-waste, make meaningful progress toward climate emissions reduction, and mitigate the impacts of the potential closure of HERC.

As demonstrated by the 2023 legislative session, modest recycling policies and funding are progressing, but the transformative policies and funding resources that match the scope of the waste problem we face are not yet moving forward.

Policy questions and discussion:

As discussed in the report and in this memo, the closure of HERC requires certain conditions being satisfied. Many of those conditions are outside or beyond our control. The intent of our report and this recommendation was to provide an objective analysis based upon available facts and data. As a data informed organization, it is critical that we provide you with all relevant details to inform your decision. During the briefing, after a short presentation, it is our intent to ask the board specific policy questions in order to inform the discussion and assist the board in future board actions. In preparation for the briefing, we are providing some of the questions you will be presented with. Those questions are as follows:

- Is there support to pursue a targeted closure date range for HERC of 2040-2050 if all the conditions mentioned in the report and this memo are achieved (e.g., federal, state and county required actions and climate action/zero waste goals attained)?
- If the targeted closure date conditions are not all met, is there understanding that the closure date may be delayed?

You have received much information about the impacts and consequences of a premature (before 2040) shutdown of HERC. Pages 21 through 44 of the report outline the many consequences of a premature closure. If the county board directs staff to shut HERC down prior to 2040 there are a series of questions that the board will have to answer specific to the consequences. Those questions include but are not limited to the following:

- How will the county address noncompliance with state and federal law?
- How will the county modify its Climate Action Plan and Zero Waste Plan?
- Will Hennepin county completely divest itself from managing waste streams in the county (e.g., trash, hazardous waste, recycling, composting, organics, etc.)?
- Without the enterprise revenue how will the county support its environmental and climate efforts and programs?
- Where should trash generated in Hennepin County be disposed of while we are advancing a zero-waste future?

We look forward to presenting this information and getting your direction on the policy questions.

cc:
Rosemary Lavin – Director, Environment and Energy
Diana Chaman Salas – Director, Climate and Resiliency

HENNEPIN COUNTY

MINNESOTA

300 South Sixth Street
Minneapolis, MN
55487-0240

RESOLUTION

Board of Hennepin County Commissioners RESOLUTION: 23-0384 R1

At a meeting of the Board of Hennepin County Commissioners, a motion was made by Commissioner Lunde and seconded by Commissioner Goettel, that the Resolution be adopted. The motion passed.

WHEREAS, population and density near the Hennepin Energy Recovery Center (HERC) facility has grown dramatically since its opening 34 years ago in 1989; and

WHEREAS, about 75% of the trash delivered to the HERC facility comes from Minneapolis and the remaining 25% is primarily from Bloomington, Champlin, Deephaven, Excelsior, Hopkins, Loretto, Maple Plain, Medina, Minnetonka Beach, Osseo, Robbinsdale, Richfield, St. Bonifacius, St. Louis Park, Tonka Bay, and Wayzata; and

WHEREAS, HERC's operation has enabled the county to manage its waste in compliance with current state statute which requires implementation of the Minnesota Pollution Control Agency's (MPCA) Metropolitan Solid Waste Management Policy Plan(s) (Minn. Stat. §§ 473.149; 473.803), and adherence to the Restriction on Disposal (Minn. Stat. sec. 473.848) and the waste hierarchy (Minn. Stat. § 115A.02), as well as United States Environmental Protection Agency regulations and federal laws; and

WHEREAS, the county currently lacks sufficient infrastructure, and the state legislature has not advanced policies or resources, to meaningfully remove biogenic and recyclable material from waste and to reduce overall waste generation; and

WHEREAS, in September 2023, the County Administrator provided a staff report to the Hennepin County Board on the HERC and its role in the solid waste system, including considerations and recommendations related to closure; and

WHEREAS, on September 21, 2023, as part of a public board briefing regarding the HERC, the County Administrator and staff recommended establishing a closure date for the HERC in the estimated timeframe of 2040 - 2050; and

WHEREAS, the County Board seeks a comprehensive strategy for the closure of the HERC, consistent with its previous adoption of the Climate Action Plan in 2022 and the finalization of the Zero Waste Plan in 2023, and its declaration of Racism as a Public Health Crisis in 2020; and

WHEREAS, the County Board seeks to identify and understand the necessary conditions, prerequisites, and ramifications for closure of the HERC on a more expedited timeline, between 2028 and 2040.

Resolution:

BE IT RESOLVED, that the Hennepin County Board of Commissioners directs the County

Administrator to develop a plan for the closure of the HERC facility between 2028 and 2040 (the “Plan”), and to submit such plan to the County Board no later than February 1, 2024, and directs staff to prepare contingency plans in the event a sooner closure date is established by the Legislature or Board; and

BE IT FURTHER RESOLVED, that the Plan must address statutory compliance, the County’s Climate Action Plan goals, the County’s Zero Waste Plan metrics, and the County Board’s declaration of racism as a public health crisis, including efforts to reduce or mitigate environmental racism; and

BE IT FURTHER RESOLVED, that the Plan should include: (1) an estimated timeline, (2) estimated financial requirements, and (3) foreseeable environmental consequences related to the following:

- a. prioritization of the county’s Zero Waste Plan action items that would accelerate the achievement of zero waste in Hennepin County;
- b. decommissioning of the HERC facility;
- c. transitioning the labor force currently working at the HERC and other labor connected to HERC;
- d. land disposition after HERC is decommissioned;
- e. paying HERC’s existing debt service;
- f. future of Brooklyn Park Transfer Station;
- g. alternative waste disposal methods for the waste generated across the county;
- h. ongoing natural resources and climate action programming;
- i. timeline mapping out future legislative agenda items and priorities to fund natural resources and climate action programming, closure of the HERC and payment of related debt service; and

BE IT FURTHER RESOLVED, that the Hennepin County Board of Commissioners further directs the County Administrator to consult with County Intergovernmental Relations (IGR) and other county staff to propose legislative priorities as well as legislative platform items no later than December 1, 2023, relating to closure of the HERC facility and in anticipation of the 2024 Legislative Session, and such legislative proposals should specifically address:

1. legislative actions including but not limited to actions that would facilitate the County’s ability to significantly reduce waste levels and remove the biogenic and recyclable material from the waste stream before 2040 in a manner consistent with the County’s Zero Waste Plan;
2. legislative actions that would clarify the County’s ongoing waste management responsibilities if and when the County elects to divest from waste infrastructure;
3. legislative actions to provide adequate funding for the closure and decommissioning of HERC;
4. legislative actions to provide adequate funding to replace revenue currently derived from tipping fees, and electrical and commodity sales, in order to maintain current funding levels for the County’s waste reduction efforts, and natural resources and climate action programming; and

BE IT FURTHER RESOLVED, that the County Administrator be authorized to engage in a Request for Proposals (RFP) to retain a consultant that can ascertain the viability of the County investing in renewable energy sources, like solar, hydro, geothermal/geo-exchange technologies, with the goal of engaging a consultant no later than February 1, 2024; and


BE IT FURTHER RESOLVED, that the Clerk of the County Board is directed to send the materials

from the September 21, 2023 public board briefing to city council members and mayors of cities that use the HERC and invite individual cities to provide feedback or input regarding proposed legislative priorities or platform issues relating to closure of the HERC to the County Administrator no later than January 15, 2024.

RESOLUTION ADOPTED ON 10/24/2023

The question was on the adoption of the resolution with the votes as follows:

Aye: 6 Commissioner Fernando, Commissioner Greene, Commissioner Lunde, Commissioner Conley, Commissioner Goettel, and Commissioner Anderson

Attest by 

Maria Rose

HENNEPIN COUNTY Zero Waste Plan





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Executive summary

Hennepin County is committed to achieving a zero-waste future where all materials are designed to become resources for others to use, the volume and toxicity of waste and materials is systematically eliminated, and all resources are conserved and recovered and not burned or buried. The county has defined zero waste as preventing 90% or more of all discarded materials from being landfilled or incinerated. The actions in the Hennepin County Zero Waste Plan are designed to collectively move the county as close as possible to the goal of zero waste.

Developing the plan

The plan's development process was guided by Hennepin County's Racial Equity Impact Tool (REIT) to ensure the plan aligns with the county's goal to reduce disparities. The plan was also developed to complement the county's newly adopted Climate Action Plan and will be the foundation for the county's state-mandated 2024 Solid Waste Management Plan.

The development process and the ensuing plan was designed to value waste reduction, reuse, recycling, and composting above waste-to-energy and landfilling, to prioritize actions over aspirational language, and to include space for diverse stakeholders to be fully engaged. The plan was shaped by broad community engagement and community voices and intentionally placed diversity, equity, and inclusion at the forefront of planning.

The engagement process included more than 500 conversations with community members, collaboration with 18 community groups, 10 meetings with industry stakeholders with a total of 170 participants, and surveys, stories and ideas shared by 457 site visitors on **BeHeardHennepin.org**.

The project team collaborated with county staff, stakeholders, and community members to identify and refine programs, actions, and solutions for inclusion in the Zero Waste Plan. Nearly 150 participants formed action planning work groups where, through four virtual meetings, they learned about community and system needs, heard findings from research, and explored and amended the zero-waste actions.

The plan was then drafted and released to the public for comment. Final feedback was considered, edits were made, and the plan was finalized.

Plan actions

The plan includes 62 total actions to transition the county to a zero-waste system. The actions:

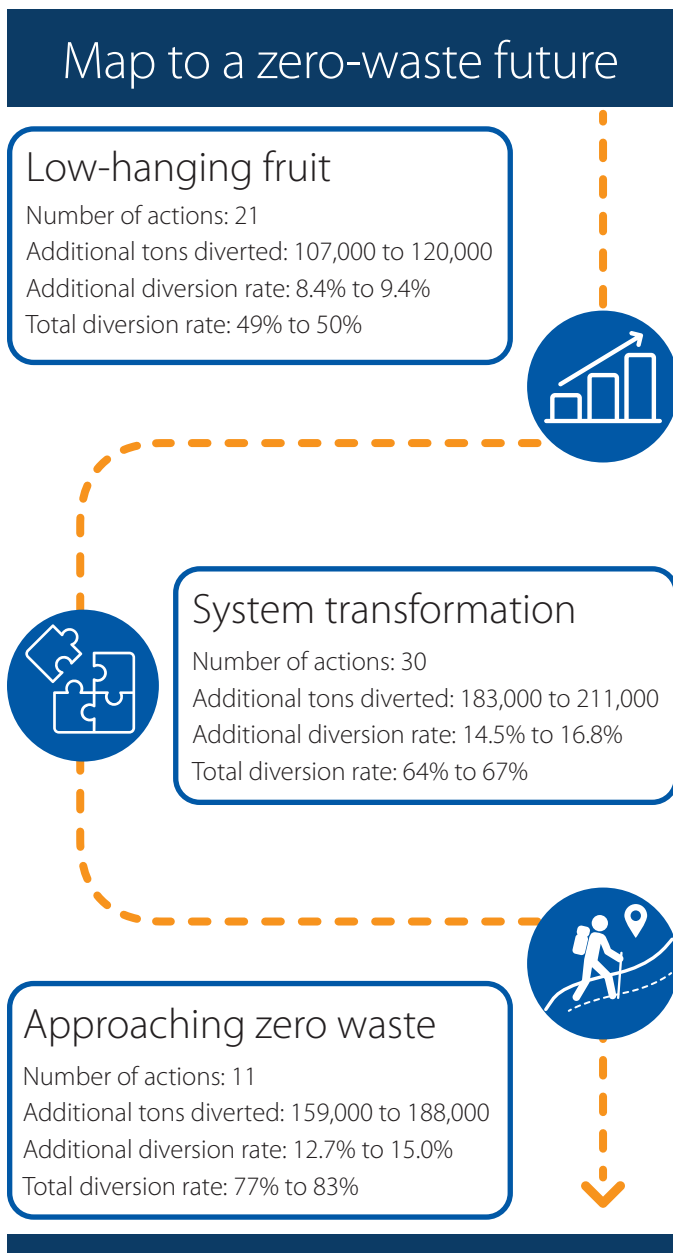
- Increase the recovery of recyclables and organics.
- Address harder to recycle materials such as bulky items and construction debris.
- Reduce consumption and increase circularity
- Bolster and expand end markets .
- Encourage or incentivize behavior change.
- Look upstream to reduce waste by influencing what is sold into the regional market.

With these actions, change is achieved through optimizing existing programs, developing new programs, investing in infrastructure, engagement, and grants, passing local and regional policy, and increasing partnerships with local community groups and others.

Collectively, the actions have the potential to more than double the county’s current diversion rate (39% in 2021). If the county were to achieve an 80% diversion rate, it would be the highest performing county in the United States and one of the highest performing jurisdictions in the world.

The actions are mapped to be implemented over time. As depicted in the map to a zero-waste future, some of the actions are low-hanging fruit that can be implemented relatively easily and are not contingent upon the completion of other actions, others will work to transform the system by increasingly focusing on policy and infrastructure, while the last set of actions are best implemented as the county approaches zero waste by focusing on technology, mandates, state policy, and investments in innovation.

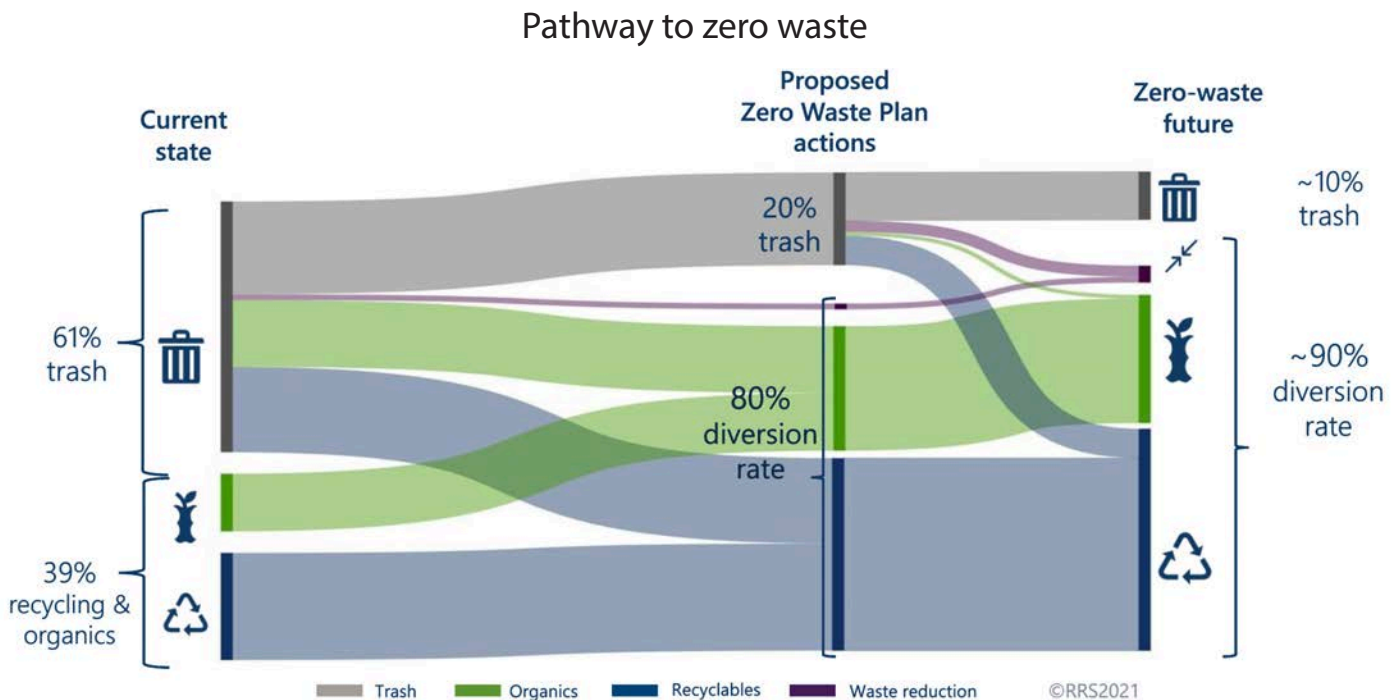
The plan considers that some programs require a complementary action to be implemented first or are best suited for successful implementation once a foundational program has been established. The action plan prioritizes creating a system that is equitable and accessible for all of Hennepin County while also focusing on the largest gaps and opportunities in the system. Once these needs and gaps have been addressed, actions that recover significant tons, increase circularity, expand the reach of programs, or support infrastructure and markets are recommended for adoption.



Achieving zero waste

Collectively, the actions in the Zero Waste Plan are estimated to achieve between a 77% to 83% diversion rate in Hennepin County. These actions would divert approximately 500,000 tons of waste to recycling, composting, and waste reduction. To achieve a diversion rate of 90% and meet the county's zero-waste goal, the county will need to divert an additional 147,000 tons from disposal annually.

Despite the challenges, there are potential viable pathways to achieving a zero-waste system with 90% diversion. The chart below demonstrates that the pathway to zero waste would require increased recovery of currently hard-to-recover items in the trash and changes in consumption and waste reduction.



Plan implementation

State statute requires metropolitan counties to prepare solid waste management plans every six years to implement the strategies identified in the state's Metropolitan Solid Waste Management Policy Plan and achieve the state's recycling goal of 75% diversion by 2030. Development of the county's next solid waste management plan will begin in 2023, and adoption of the plan by the Hennepin County Board of Commissioners is anticipated in 2024. The county will use the solid waste management planning process to prioritize the implementation of actions in the county's Zero

Waste Plan over the next six years. More information about the details, cost estimates, and timelines for priority actions will be provided as the county moves forward with implementation.

The county will continue to work with community groups on implementation and will report on progress toward implementing the actions. The county provides an annual recycling progress report to share updates on implementation, progress toward diversion goals, and a summary of results from the county's waste management programs.

Section 1: Developing the plan

The development of Hennepin County's Zero Waste Plan included a review of the existing waste management system and the programs and policies that influence it, a robust engagement process of community members and industry stakeholders, and the identification of actions that will accelerate the county's path to zero waste. The plan was developed to complement the county's newly adopted Climate Action Plan and will be the foundation for the county's state-mandated 2024 Solid Waste Management Plan.

Hennepin County contracted with several consultants and community groups to develop the plan. Dr. Antonia Apolinário-Wilcoxon, a local diversity, equity, and inclusion facilitator, and 18 community groups were hired to conduct community engagement centered on community voices traditionally left out of the solid waste management decision-making process. Resource Recycling Systems (RRS) conducted a gaps analysis of the county's solid waste system, completed a scan of communities with high recycling rates, facilitated industry and other stakeholder engagement, and developed the plan.

County staff coordinated and supported the efforts of the consultants and community groups. The county team included waste reduction and recycling managers and recycling specialists and an environmental education manager and specialists. Two county REIT Champions served on the core planning team, and staff from the county's Engagement Services department participated in consultant and community contract selection and provided input throughout the process.

Acknowledging the community group cohort

The Zero Waste Plan's team of consultants and county staff acknowledge the significant contribution of the community groups to ensure community voices traditionally left out of the solid waste management decision-making process were centered in the plan development process.

Thank you!

- Action to Equity
- Audubon Neighborhood Association
- Center for Hmong Arts and Talent
- Climate Generation/Youth Environmental Activists of Minnesota (YEA! MN)
- Community Power/MN EJ Table
- Congregations Caring for Creation/Minnesota Interfaith Power and Light
- Eastside Neighborhood Services
- Ebenezer Oromo Evangelical Church
- Encouraging Leaders
- Lao Assistance Center of Minnesota
- Little Earth Protectors
- McKinley Community
- MN Renewable Now
- NoMi Roots
- Off The Blue Couch
- Somali American Women Action Center
- Resilient Cities and Communities with Inquilinxs Unidxs por Justicia
- Thai Cultural Council of Minnesota

1.1 Plan process

The development of the Zero Waste Plan followed the process depicted in Figure 1 with the following phases:

Phase I: Listen and learn

Initial public engagement work included community conversations, online engagement, and industry stakeholder meetings. Research on the solid waste system, including a baseline evaluation of the county’s current solid waste system and a comparative scan of national and global zero-waste leaders, was completed. The findings from the engagement and research were used to complete a gaps analysis that identified opportunities for the county to advance a zero-waste future.

Phase II: Draft actions

The project team recruited and coordinated action planning work groups with nearly 150 community members and industry stakeholder participants who met to develop actions. These actions were further analyzed for their impacts on equity and waste diversion. The actions were organized into aims and how they address needs identified in phase 1: listen and learn. The community group cohort then reviewed and provided input on the actions.

Phase III: Review

The Zero Waste Plan project team provided a briefing to the Hennepin County Board of Commissioners on the plan development process, key findings from community engagement and research, and recommended plan actions. The plan was then drafted and released to the public for comment.

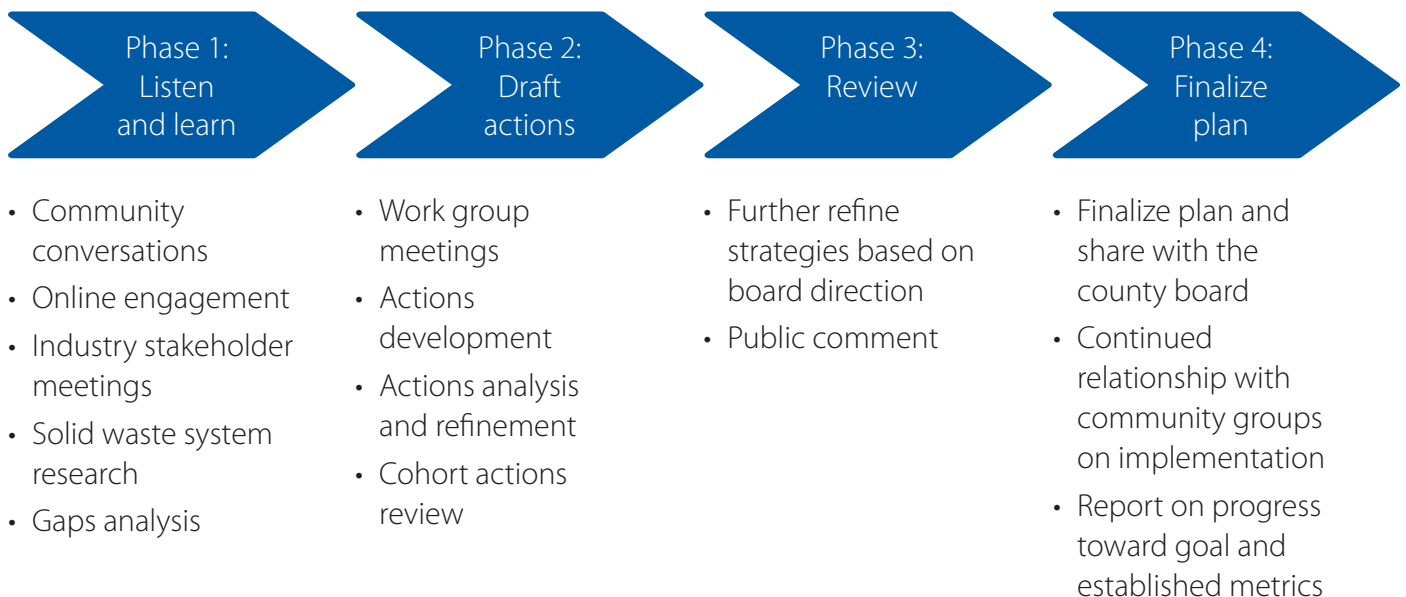
Phase IV: Finalize plan

After considering the feedback, the final plan was finalized and shared with the board in June 2023. The team will continue to work with community groups on implementation and will report on progress toward goals.

More information, including summary reports of the process to develop the Zero Waste Plan and key findings from engagement efforts, are available online at BeHeardHennepin.org.



Figure 1: Plan development process



Using the Racial Equity Impact Tool

The plan's development process was guided by Hennepin County's Racial Equity Impact Tool (REIT) to ensure the plan aligns with the county's goals to reduce disparities. Two county REIT Champions served on the core planning team, and staff from the county's Engagement Services department participated in consultant and community contract selection and provided input throughout the process.

Defining desired results: The first step of applying the REIT is clearly defining the plan's goals, objectives, and measurable outcomes. This was outlined by the county board for this plan: develop an operational plan to map Hennepin County to an equitable zero-waste future that includes a broad community engagement process with a strong focus on equity and disparity reduction. The measurable outcome is 90% diversion of waste from incinerators or landfills.

Analyzing the data: Another step in the REIT process is considering who benefits and who is burdened. Based on experience and data around low participation and lack of access, staff identified Black, Indigenous and other people of color as well as low-income residents and residents with disabilities as commonly not benefiting from and being more burdened by the current solid waste system. This is most prevalent for residents living in cities with solid waste facilities, multifamily housing or rental units, areas with high rates of illegal dumping and litter, densely populated communities that experience more trash truck traffic, and areas affected by cumulative health impacts from multiple sources of pollution and other social conditions. The county's youth were also identified as being more burdened by the system because they will live with impacts of the solid waste management decisions made today. The waste industry, large waste generators, residents in single family homes, and product manufacturers were identified as benefiting from the current system. Community cohort members and other stakeholders were asked during listening sessions to further consider who is burdened and who has benefited. There was agreement with the initial assessment of who is most burdened by the current system and who is currently benefiting from it. Residents who spoke English as a second language, had limited space for collection, and had limited transportation options were also mentioned as more burdened by the

system. Additionally, participants noted that those who benefit, including product manufacturers and large waste generators, aren't doing enough to reduce and better manage materials while those most burdened don't have equitable access to waste programs.

Community engagement: Design of the community engagement process for the plan was guided by the understanding of who is currently burdened by the solid waste system. To center the voices of those burdened and traditionally left out of the decision-making process, the county contracted with 18 community groups representing diverse communities to develop engagement plans for their communities, host community listening sessions, and communicate updates to their members on the process and feedback opportunities. County staff also sought feedback and help with promoting engagement opportunities through established county engagement networks, including the Trusted Messengers and Community Engagement Community of Practice.

Developing strategies for racial equity: With the help of the facilitator, the community group cohort met 11 times to collaborate, gain a broader understanding of the solid waste system, provide input on the process, develop community-identified solutions, and define themes for use in the subsequent plan development phase. Meeting with the community group cohort throughout the process provided staff and consultants the opportunity to check in at multiple points and adjust based on the cohort's feedback. The ideas and themes that emerged from their community engagement efforts provided the foundation for the action planning work group structure and initial list of actions to consider. Many representatives from the cohort organizations participated in the action planning process.

Implementation, communications, and accountability: Once the draft actions were refined, they were presented to the community group cohort to ensure they both aligned with the themes that emerged from their community conversations and addressed issues identified by their communities. Their feedback provided clarity on the actions and informed elements in the plan focused on the last two steps of REIT: implementation and communication and accountability.

Section 2: Reaching zero waste

Hennepin County is committed to achieving a zero-waste future. A zero-waste future is defined as a waste management system where all materials are designed to become resources for others to use, the volume and toxicity of waste and materials is systematically eliminated, and all resources are conserved and recovered and not burned or buried. The key performance measure is diverting 90% or more of all discarded materials from landfills, incinerators, and the environment¹.

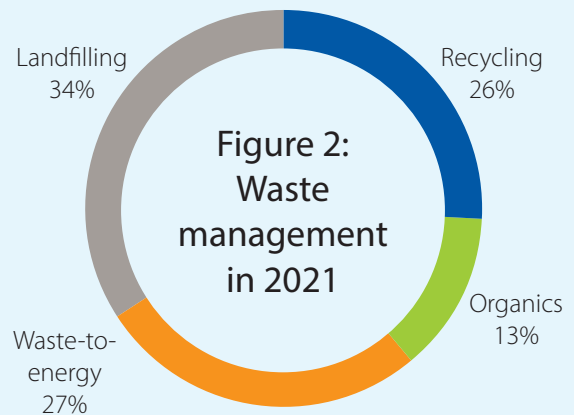
Despite implementing many progressive programs and policies aimed at reducing waste and increasing recycling over the past several decades, achieving a recycling rate greater than 50% has been challenging for Hennepin County.

Waste touches all our lives, but historically the system to manage it hasn't been equitable to all residents and businesses. Shared responsibility is needed, but we also must shift who benefits from the system to ensure those currently burdened by the system are able to participate in ways that reduce disparities and advance equity.

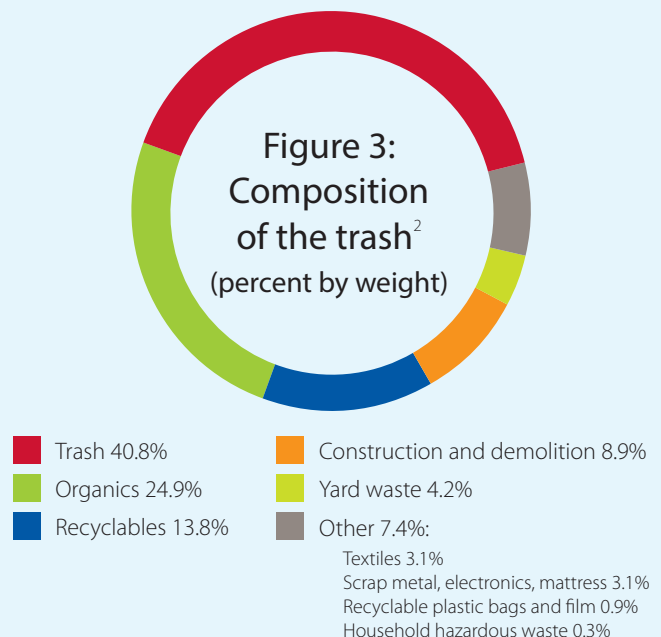
Reaching zero waste will require significant changes to current solid waste policies, programs, product design, consumption habits, and resources. It will require engaging and supporting communities and local businesses in new and creative ways to build momentum and spur collective action to advance a more equitable zero-waste future.

Waste in Hennepin County

About 1.3 million tons of waste was generated in Hennepin County in 2021. Of that, 39% was recycled or composted, and the rest was managed as trash.



Waste composition studies show that about 25% of what is currently trashed is compostable, 15% is recyclable, 20% is potentially divertible, and 40% has no current viable diversion options.



¹ As defined by Zero Waste International Alliance (www.zwia.org)

² Results from the 2016 Hennepin County residential waste sort study

2.1 Actions for achieving zero waste

While achieving zero waste will be challenging, there is demonstrated support for this goal within the county. More than 98% of the stakeholders engaged in the planning process supported the county's aim of achieving zero waste and recognized the benefits of the transition to zero waste³. The Zero Waste Plan contains actions that increase the recovery of recyclables and organics, address hard-to-recycle materials such as bulky items and construction debris, reduce consumption and increase circularity, bolster and expand end markets, encourage or incentivize behavior change, and look upstream to reduce waste by influencing what is sold into the regional market. Change is achieved through optimizing existing programs, developing new programs, investing in infrastructure, engagement, and grants, passing local and regional policy, and increasing partnerships with local community groups and others.

The plan includes 62 total actions to transition the county to a zero-waste system. Collectively, the actions have the potential to more than double the county's current diversion rate (39% in 2021). If the county were to achieve an 80% diversion rate, it would be the highest performing county in the United States and one of the highest performing locations in the world.

However, this is not true zero waste. A pathway for diverting the last 10% and reaching the true definition of zero waste is outlined in this plan. Diverting the last 10% will require changes in technology, consumption, and manufacturing that are not available today. As a result, the specific actions to achieve the last 10% are not specifically detailed or modeled in the plan.

Modeling the impacts

The project team used a dynamic zero-waste planning model to calculate the potential impacts of the plan's actions on the county's overall diversion rate. The model is based on Hennepin County's two-year average generation, disposal, and diversion tonnages, relies on U.S. Census data for population and household counts, and incorporates data on waste composition from past studies conducted in Hennepin County, the City of Minneapolis, surrounding counties, and the State of Minnesota.

Each of the 62 actions were included in the model to estimate each action's impact on generation, diversion, source reduction, and disposal. Model impacts are cumulative and include dependencies. For example, modeling the impacts of the adoption of the local policy in action C.7. *Single use ban and zero-waste packaging for food service* first requires the county to successfully complete action C.13. *Advocate for the repeal of the state's ban on bag bans*.

The underlying zero-waste model assumes that all the actions have not only been implemented, but that they have been implemented successfully and effectively. For example, the modeled impacts assume that extended producer responsibility (EPR) legislation is not just advocated for, but that a well-designed and effective EPR policy is adopted at the state level and implemented across Minnesota. The model outputs, including the range of estimated impacts for each action, is included in Appendix B.

³ Based on the results of the Hennepin County Industry Stakeholder Meeting surveys and voting conducted from April to May 2022.

2.2 Action planning

The community members and stakeholders involved in the plan's development recognized that the systemic changes needed to truly reach zero waste will take years and significant resources to achieve, and thus, recommended that the county take action towards zero waste as soon as possible⁴. The county does not have the resources to implement the full plan at once, so actions are mapped to be implemented over time.

Some of the actions in the plan can be adopted as soon as possible and can be implemented simultaneously (for example, *A.6. Establish and maintain community equity panel* and *B.7. Expand reach of county waste education programming*).

The action plan considers that some programs require a complementary action to be implemented first and that others are better suited for successful implementation only after a foundational program has been established (for example, *C.6 Mandate participation in recycling and composting programs*).

Additionally, the action plan aims to create a system that is equitable and accessible for all Hennepin County residents and businesses while also focusing on the largest gaps and opportunities in the system (for example, *A.5 Increase access to organics recycling options for multifamily residents*). Once these needs and gaps have been addressed, actions that recover significant tons, increase circularity, expand the reach of programs, or support infrastructure and markets are recommended for adoption.

The action plan presents the programs in three phases: low-hanging fruit, system transformation, and approaching zero waste. A summary of the phases and their impacts is presented on the following page. The full listing of actions in the Zero Waste Plan, their implementation phase, and their impacts is included in Appendix B.

Map to a zero-waste future

Low-hanging fruit

Number of actions: 21
Additional tons diverted: 107,000 to 120,000
Additional diversion rate: 8.4% to 9.4%
Total diversion rate: 49% to 50%



System transformation

Number of actions: 30
Additional tons diverted: 183,000 to 211,000
Additional diversion rate: 14.5% to 16.8%
Total diversion rate: 64% to 67%



Approaching zero waste

Number of actions: 11
Additional tons diverted: 159,000 to 188,000
Additional diversion rate: 12.7% to 15.0%
Total diversion rate: 77% to 83%



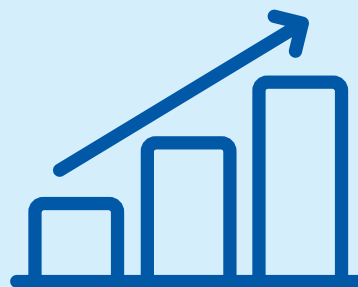
⁴ Two-thirds of stakeholders believed it would take at least until 2040 for the county to achieve zero waste, and over one-third (35%) believed it will take until 2050 or beyond to achieve the goal.

Zero Waste Plan action phases

The actions in the plan are mapped to be implemented in three broad phases – low-hanging fruit, system transformation, and approaching zero waste. The plan includes a description of each action, the phase it belongs to, and the estimated impact it will have on moving the county toward zero waste.

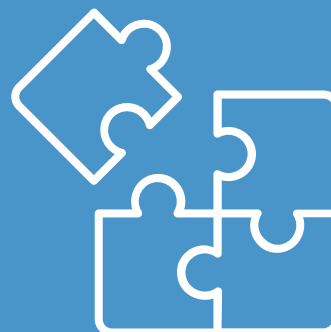
Low-hanging fruit

This is the first set of actions that should be implemented. They directly address equity, improve access, and fill gaps in the existing system. These actions are generally easier to implement and are not contingent upon the completion of other actions. There are 21 total actions in this category that, when fully implemented, will divert between 106,900 and 119,800 additional tons from landfill and incineration.



System transformation

This is the largest set of recommended actions that collectively work to transform the system from its current state to one in which zero waste will eventually be possible. These actions have an increased focus on policy and infrastructure, including organics and mixed waste processing. They also target food waste, consumption, upstream materials, and building materials. This group includes 30 actions that combined will keep as much as 211,100 tons from disposal.



Approaching zero waste

The last set of actions move the county as close as possible to zero waste using state-of-the-art technologies, mandates, state legislation, and investments in innovation. The last set includes 11 actions that have the potential to divert between 158,800 and 187,700 additional tons



2.3 Plan impacts

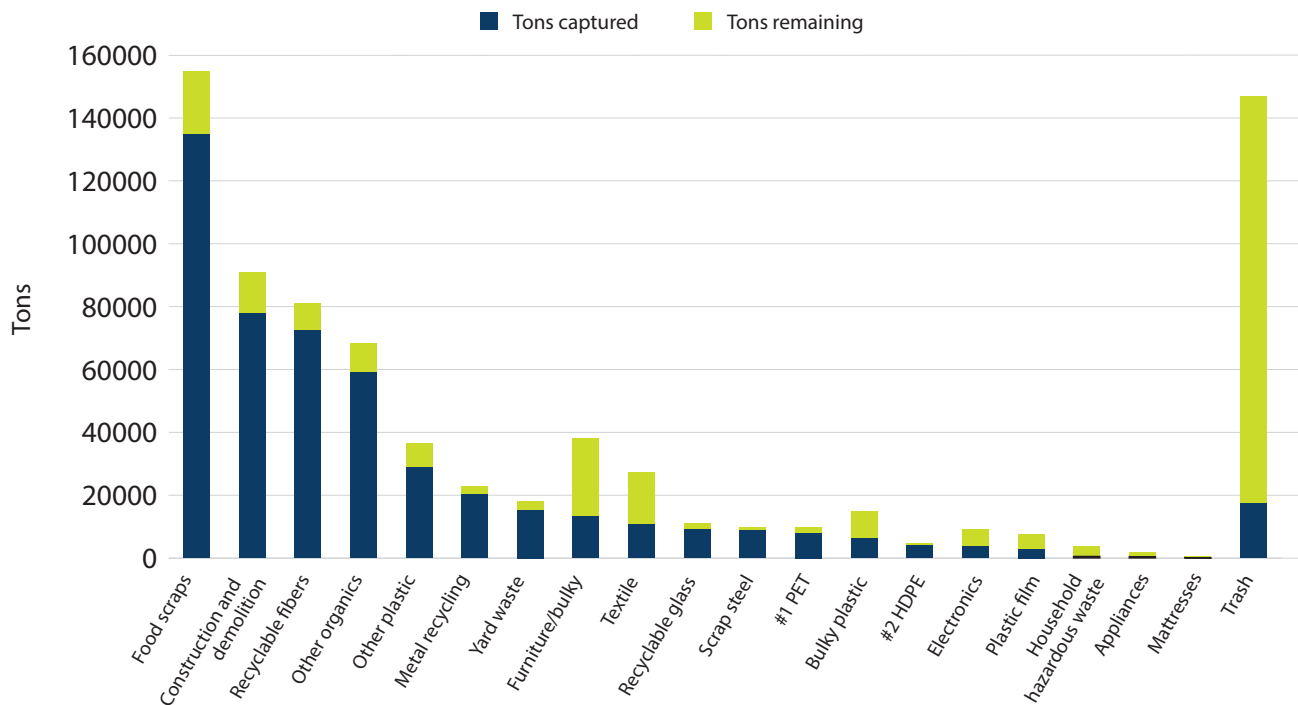
Collectively, the actions in the Zero Waste Plan are estimated to achieve between a 77% to 83% diversion rate. Nearly half of this diversion is from increases in organics recovery (45% of new tons diverted), and another 31% comes from increased recovery of construction and demolition debris and fibers (including paper, carboard, paperboard, cartons, and others). The actions aimed at increasing reuse and source reduction, which are both harder to influence and measure, are estimated to contribute 4% to 7% of the total impacts.

In addition to potential diversion, the potential capture rate for different materials was estimated. Capture rate is a measure of the proportion of a material that is recovered compared to generated. It differs from diversion rate since it looks at a single material rather than the full waste stream. For example, a county may have a diversion rate of 50% (meaning half of the materials discarded are kept out of the trash) that is achieved by capturing 90% of the available carboard, aluminum, and plastics and 25% of the available organics. Capture rates can help a community both gauge the relative success of their programs and identify additional potential for recovery.

Combined, the actions in the Zero Waste Plan have the potential to capture 80% to 90% of the currently recyclable materials and 83% to 91% of the currently compostable materials, depending on the material and the generator sector. For harder to recycle materials, such as bulky plastics, textiles, and household hazardous wastes, potential capture rates for Zero Waste Plan actions are in the range of 30% to 45% due to limitations in collection, sorting technologies, and viable end markets.

Figure 4 displays the total tons diverted by material type and the remaining tons in the waste stream once the Zero Waste Plan actions have been implemented. The proportion of the two is the material's capture rate. The figure shows that although there would be additional tons available to capture to potentially help the county reach zero waste, the opportunities are limited. The majority of available tons are those that remain in the trash (items that are currently not recoverable or may never be recoverable) and materials such as textiles, plastic films, bulky plastics, and others with limited technologies for recovery today.

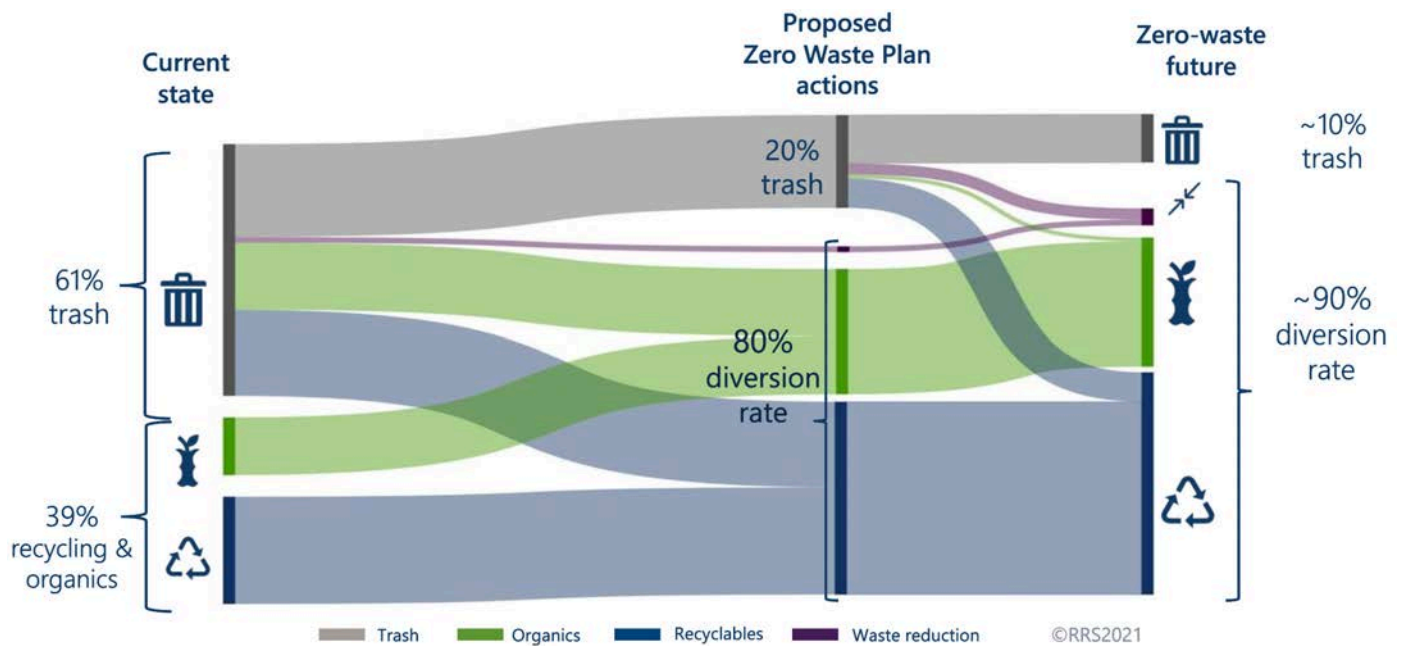
Figure 4: Potential capture rate with plan actions implemented



2.4 Moving beyond 80%

To achieve a diversion rate of 90%, the county will need to divert an additional 147,000 tons from disposal annually. This is above the approximately 500,000 tons that would potentially be diverted through the full implementation of the actions outlined in the plan. Despite the challenges, there are potential viable pathways to achieving zero waste. As shown in the Sankey diagram in Figure 5, the pathway to zero waste would require increased recovery of currently hard-to-recover items in the trash and changes in consumption and waste reduction. The pathway to achieving the last 10% is discussed in more detail below.

Figure 5: Pathway to zero waste



The path to recovering the last 10% includes the following:

Maximizing recovery: To reach zero waste, capture rates for all recyclable and compostable materials would need to be approximately 85% to 90%. If the Zero Waste Plan were fully implemented, the county would achieve or be close to achieving this metric for many materials. Additional technologies, end markets, educational programs, and collection solutions would need to be identified to reach this rate for the harder to recycle materials in the stream.

Adoption of new technologies in sorting, recovery, and processing: There are currently no technologies used widely in the U.S. for the efficient recovery of materials like multi-layer laminates, very small items, and multiple other non-recoverable items currently in Hennepin County's waste stream. The industry is constantly evolving to innovate and incorporate new technologies to recover more materials. This includes expanded use of artificial intelligence and robotic separation, improved optical sorting, chemical recycling technologies, secondary sorting facilities for plastics, and improvements in mixed waste processing.

Reaching zero waste depends on the advancement and implementation of these new technologies, some of which are already being tested in the marketplace but not available at scale.

Changes in consumption: There are several programs in the action plan that focus on changing consumption habits through expanded education, awareness, and behavior change. Reducing consumption has impacts that go far beyond waste diversion and is integral in the county's approach to zero waste and circularity. To have major impacts on consumption and reach zero waste, the county will need to identify and implement a viable program to significantly change consumer behavior. This will need to go well beyond what other communities around North America have been able to achieve.

Upstream impacts: The materials sold and consumed in Hennepin County impact the county's ability to achieve zero waste. The county can somewhat influence what is sold by supporting local sustainable manufacturers, offering incentives and grants, flexing its procurement power, and expanding education efforts. All of these actions are included in the Zero Waste Plan. However, the county's ability to impact change at the scale needed is quite limited. Hennepin County operates as part of the global market and has limited influence on what is manufactured and sold in the region. This extends beyond just consumer packaged goods and includes clothing, food, furniture, electronics, appliances, and other consumer goods. This also includes the built environment and the materials that go into the homes and buildings in the county. To reach the highest rates of diversion, the county is reliant on macro-scale marketplace influences to change what is bought, sold, and built.

Section 3: Zero-waste actions

The recommended zero-waste aims and actions presented in this plan were driven by community and industry stakeholder engagement, are technically and economically feasible, and were identified to maximize environmental and social benefits.

Core aims

The actions are organized around four core aims:



Create a materials management system that reduces racial disparities and advances equity



Expand the reach of county waste education, grants, and programs



Adopt policies that accelerate the transition to a zero-waste future



Implement programs to advance circularity, reduce waste, and support reuse

Within each aim, the actions are further organized by the system need they address based on what was heard during engagement.

Action phase and impact

For each action, the zero-waste action phase it belongs to and the estimated impact on tons diverted (represented by one to four recycling symbols) are identified. Tons diverted estimates include impacts on waste reduction, composting, recycling, and other activities that divert materials from landfill or incineration. The estimated amount of tons diverted for each action are included in Appendix B.

Figure 6: Zero-waste actions and estimated impact on tons diverted

Impact on tons diverted	Estimated amount of waste diverted annually
	Less than 826 tons
	826 to 3,300 tons
	3,301 to 6,675 tons
	More than 6,675 tons



Aim: Create a materials management system that reduces racial disparities and advances equity

Throughout the zero-waste planning process, county staff, community members, and industry stakeholders identified the following communities as being unfairly burdened by the current system: Black, Indigenous and other people of color (BIPOC), low-income families, residents with disabilities, and youth. This is especially prevalent for residents who live in cities with solid waste facilities, multifamily housing units or rentals, areas with high rates of illegal dumping and litter, densely populated communities or those by busy roads that experience more trash truck traffic, and areas affected by cumulative health impacts from multiple sources of pollution.











Inequity in the system places unfair economic burdens or costs on some communities, results in uneven access to services and opportunities, and creates pollution that is unfairly borne by certain communities and neighborhoods. This includes the impacts that facilities such as the Hennepin Energy Recovery Center (HERC) have on their adjacent communities.

Creating an equitable zero-waste system will require all communities in the county contribute equitably to the effort. If only a portion of the county has access to programs that lead to zero waste or all the negative impacts of waste diversion are borne by a sector of the community, zero waste will not be achievable nor will the system be equitable.

The aim of the following set of actions is to reduce disparities, improve equity and participation, and ensure that future actions continue to promote equity in a zero-waste materials management system. It is important to note that these are not the only actions that are designed to address system inequities; actions listed under other aims also contribute to a more equitable system.

In total, there are 14 actions recommended to specifically address equity in the future zero-waste system.

Zero-waste equity and access actions

Action	Phase	Impact
A.1 Expand drop-off options	Low-hanging fruit	
A.2 Increase bulky item reuse and recycling	Low-hanging fruit	
A.3 Expand collection and drop-off options for hard-to-recycle items	System transformation	
A.4 Add waste and recycling bins in public spaces	System transformation	
A.5 Increase access to organics recycling options for multifamily residents	Low-hanging fruit	
A.6 Establish and maintain a community equity panel	Low-hanging fruit	
A.7 Expand workforce development for living-wage, green jobs	Low-hanging fruit	
A.8 Improve measurement to track progress and ensure accountability	Low-hanging fruit	
A.9 Evaluate HERC upgrades to reduce impacts on community in the short term	Low-hanging fruit	
A.10 Establish milestones to phase out the use of HERC as county approaches zero waste	Low-hanging fruit	
A.11 Expand funding and support for community-centric solutions	Low-hanging fruit	
A.12 Provide financial incentives to increase participation in targeted communities	System transformation	
A.13 Implement low-income rate assistance	Low-hanging fruit	
A.14 Launch multifamily recycling champions program	Low-hanging fruit	

Zero-waste equity and access actions

System need: Provide convenient and equitable access to recycling, composting, and other materials management services for all county residents

The gaps analysis identified lack of equal access to recycling, composting, and diversion options as a limitation to an equitable zero-waste system. Although access was generally available for residents in single-family homes and the majority of businesses, significant gaps were identified in access for residents in multifamily settings, particularly around organics recycling. Gaps were also identified for those without easy access to transportation and to services beyond conventional recycling. Collectively, these gaps contribute to system inequities since diversion options are not equally available to all community members. The following set of actions seek to expand access to services, reduce inequities, and increase diversion.



A.1 Expand drop-off options

Low-hanging fruit

- Evaluate locations of existing drop-offs in relation to areas with high proportion of residents in multifamily settings, dense urban areas, rural areas with limited access to curbside services, and communities that do not have equal access to curbside services.
- Establish evaluation criteria to identify locations for investments in improved or expanded drop-off options. Use partnerships, such as with libraries, city or county buildings, schools, and businesses to expand the number of drop-offs in county.
- Evaluate options to support (with technical, financial, regulatory, or other assistance) neighboring businesses or properties that choose to consolidate and share services for recycling and composting (such as a shared dumpster) and consider allowing and providing financial incentives to those that share service with community to increase local access. Note that allowing shared dumpsters may require changes to local ordinances or regulations and will be a multiphase action.
- Expand the materials accepted to include a wider range of items, potentially including food waste.

A.2 Increase bulky item reuse and recycling

Low-hanging fruit

Work with cities, communities, and nonprofit organizations in the county to increase collection and reuse opportunities for bulky items, such as by:

- Expanding collection opportunities either at the curb or via additional drop-offs.
- Hosting or financially supporting drop-and-swap events.
- Supporting community-led efforts to address transportation barriers and expand access for multifamily residents with mobility barriers.

A.3 Expand collection and drop-off options for harder to recycle items

System transformation

Expand collection opportunities via curbside and drop-offs for harder to dispose items, including clothes and other textiles, household hazardous waste, plastic wrap, and appliances.

Zero-waste equity and access actions

A.4 Add waste and recycling bins in public spaces

System transformation

- Add new collection stations or increase the number of existing public trash and recycling bins in areas of high need, which include areas with significant amounts of litter, limited curbside recycling options, and higher density of people.
- Work with cities, park districts, and transit providers to identify areas with high rates of illegal dumping and work to improve cleanup efforts.
- Expand and improve access to public collection containers to reduce litter and illegal dumping.

A.5 Increase access to organics recycling options for multifamily residents

Low-hanging fruit

Increase organics recycling options available to multifamily residents by:

- Providing and evaluating incentives to property managers.
- Expanding the county's existing grant program that covers the initial start-up costs of collection, countertop bins, and compostable bags.
- Expanding organics drop-off site options in multifamily-dense areas.
- Considering longer term actions for partnering with cities to adopt requirements for service to multifamily properties or expand the scope of existing requirements in the county's recycling ordinance (Ordinance #13).

Zero-waste equity and access actions

System need: Ongoing community engagement in zero-waste processes to ensure transparency and accountability and reduce disparities

The community group cohort and industry stakeholders identified the need for increased transparency in zero-waste planning as well as a continued and expanded focus on equity in future planning. The following actions seek to capitalize on the momentum gained during the zero-waste planning process and build upon best practices identified in the community scan.



A.6 Establish and maintain a community equity panel

Low-hanging fruit

Establish a diverse community panel to provide input on future county zero-waste programs, actions, and facilities to help ensure the county waste systems will not put environmental justice areas of concern at greater risk or result in increased inequities. The panel will capitalize on the existing energy and engagement with the county's diverse communities and will be charged with:

- Hosting zero-waste community listening sessions on a regular basis and in a variety of formats (including online, in person, and in different parts of the county).
- Supporting collaboration on implementation.
- Raising awareness of county programs and facilitating the delivery of resources to communities.

County staff will continue to include its Racial Equity Impact Tool analysis in significant zero-waste decisions prior to implementation.

A.7 Expand workforce development for living-wage, green jobs

Low-hanging fruit

Expand the county's existing workforce development programming (such as mattress and battery recycling and deconstruction) to provide training, skills development, and job certifications to people hoping to work in the recycling industry. Workforce development will be centered around addressing gaps in the system, reducing racial disparities in income and employment, and creating new green jobs.

A.8 Improve measurement to track progress and ensure accountability

Low-hanging fruit

- Continue to advocate for increased compliance with state reporting requirements, improve data sharing, support consistent county reporting methodologies, and develop additional metrics for benchmarking (such as for waste prevention, climate impacts, and economic impacts) to ensure accountability.
- Present data in a manner that is accessible, transparent, and understandable to the public.

Zero-waste equity and access actions

System need: Reduce reliance on incineration and landfill disposal and create a more equitable system for managing waste

The Hennepin Energy Recovery Center (HERC) is a waste-to-energy facility located in downtown Minneapolis. The facility incinerates garbage and recovers energy and metal from trash. The HERC is a part of the county's integrated solid waste system. Although it is above landfill disposal in the state's hierarchy of waste management, it falls below all other options including waste reduction, recycling, and composting.

Throughout the community and industry stakeholder engagement process, the HERC was identified by some as a barrier to the formation of a fully equitable zero-waste system. The point-source pollution, noise, and truck traffic associated with the facility were specifically identified as concerns. In Hennepin County, residents and businesses put over 800,000 tons of stuff in the trash per year, with approximately 45% being sent to the HERC. Until the county can achieve zero waste, the need for an end-of-life destination for non-recovered items, whether it is an out-of-county landfill, incinerator, or some other option, remains. As the county approaches zero waste, the need for disposal will be reduced but will not disappear entirely. The following set of actions is aimed at reducing reliance on the HERC and increasing equity.



A.9 Evaluate HERC upgrades to reduce impacts on community in the short term

Low-hanging fruit 

Continue to evaluate the potential for short-term upgrades and operational improvements at the HERC, including improvements in the capabilities for pre-sorting trash to increase material recovery and eliminate hazardous items from incineration, increases in pollution control measures, traffic reduction measures, or other operational improvements to the facility.

A.10 Establish milestones to phase out the use of the HERC as county approaches zero waste

Low-hanging fruit 

Establish specific milestones for the long-term phase out of the HERC that are tied to performance metrics and include the identification of suitable alternatives for disposal of trash generated in Hennepin County.

Base the milestones on progress toward state goals, reduction in disposed tons, reduction in per capita trash generation, and diversion rates for materials such as organics, paper, and plastics.

Zero-waste equity and access actions

System need: Encourage participation in Hennepin County materials diversion programs by addressing system costs and barriers

Implementing actions that leverage and financially support local organizations and leaders, harness the power of the community, reduce financial barriers, and incentivize participation were highly supported by the action planning work groups. The following set of actions advance the connections and networks established during the zero-waste planning process, encourage participation, and reduce economic barriers.



A.11 Expand funding and support for community-centric solutions

Low-hanging fruit

Provide funding and technical support to local organizations to support engagement with residents, businesses, and property managers and harness the power of community-centric solutions for zero waste.

- Projects would be developed and led by community partners and may range from providing recycling education sessions to developing locally managed reuse clinics or organics drop-offs for multifamily residents.
- Promote success stories of community-driven actions to engage more partners and share lessons learned and best management practices.

A.12 Provide financial incentives to increase participation in targeted communities

System transformation

Explore and pilot models to provide direct financial incentives to residents and small businesses in low diversion areas. Incentives will be aimed at increasing participation in recycling, preventing waste, and reducing litter.

A.13 Implement low-income rate assistance

Low-hanging fruit

Work with cities to design and implement payment assistance programs for trash and recycling collection service. Programs will be designed to reduce participation barriers. Eligibility requirements may include age, income, disability, need, or others. Look to cities such as Denver, Los Angeles, Seattle, and Tucson for leading practices in implementation.

A.14 Launch multifamily recycling champions program

Low-hanging fruit

Launch a multifamily recycling champions program to provide direct support to both renters and property managers through recycling champions who live at the property. Focus on properties in areas with low recycling participation and compensate residents for their time as recycling champions.







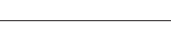











Aim: Expand the reach of county waste education, grants, and programs

Community members and industry stakeholders identified both the need for and the challenge of significant behavior change on the path to zero waste. Lack of awareness on where, how, and what to recycle, services available, and how to participate were noted as some of the biggest barriers to achieving zero waste in Hennepin County.

Identified gaps include the need to address consumption and waste generation and to educate the community on the impacts that consumer choices have on the environment.

The following set of 15 actions rely on expanded engagement, technical assistance, and the growth and optimization of Hennepin County's existing grant programs to move the county closer to zero waste by raising awareness and impacting behaviors. They include actions designed to increase participation in existing and expanded programs. The need for additional organics processing capacity in the county is also addressed.

Zero-waste education, grants, and program expansion actions

Action	Phase	Impact
B.1 Improve marketing of grant programs	Low-hanging fruit	
B.2 Expand grants to businesses	System transformation	
B.3 Expand grants for deconstruction and building reuse	System transformation	
B.4 Support upgrades to improve performance at material recovery facilities	System transformation	
B.5 Improve compliance with recycling requirements for multifamily and commercial generators	Low-hanging fruit	
B.6 Increase compliance with organics requirements in the recycling ordinance (Ordinance #13) and expand requirements	Low-hanging fruit	
B.7 Expand reach of county waste education programming	Low-hanging fruit	
B.8 Expand partnerships to provide culturally relevant outreach	Low-hanging fruit	
B.9 Improve new resident education	System transformation	
B.10 Launch a broad consumer campaign on food waste prevention	Low-hanging fruit	
B.11 Help schools prevent and divert more waste	System transformation	
B.12 Help businesses and multifamily properties prevent and divert more waste	System transformation	
B.13 Expand deconstruction and building material reuse	Approaching zero waste	
B.14 Develop large-scale organics processing infrastructure	System transformation	
B.15 Support growth of community-scale composting sites	System transformation	
B.16 Increase capacity of transfer stations to manage organics	Approaching zero waste	

Zero-waste education, grants, and program expansion actions

System need: Enhance the county’s grant programs to help businesses, schools, and institutions achieve zero waste while supporting neighborhoods and communities

Hennepin County provides funding and support to advance recycling and waste reduction in the community through a wide range of grant offerings. Examples of existing grants programs include business waste prevention grants, deconstruction and building material reuse grants, Green Partners environmental education grants, multifamily recycling grants, and school waste reduction and recycling grants. The following set of actions looks to build upon the existing grant programming to collectively increase the impact of the grants, expand their reach, and add new targets.



B.1 Improve marketing of grant programs

Low-hanging fruit 

- Develop and implement a countywide marketing strategy to raise awareness of existing and future grant programs.
- Include a pathway to provide grant writing and application assistance to those who need it, increase community storytelling to share successes, and get the assistance of local community partners for marketing.
- Leverage community partnerships to increase awareness of the grants with an emphasis on neighborhoods, communities, and businesses that have historically been underrepresented in grant applications.

B.2 Expand grants to businesses

System transformation 

- Evaluate the existing business grant programs and identify pathways to expand the grant funding available for commercial generators.
- Design the grants to help businesses launch new organics recycling and food waste reduction programs as well as improve the effectiveness of existing programs.

B.3 Expand grants for deconstruction and building reuse

System transformation 

Expand grants and incentives for commercial and residential building demolition and remodeling projects to encourage deconstruction techniques, building moves, incorporation of used building materials, and deconstruction training.

B.4 Support upgrades to improve performance at material recovery facilities

System transformation 

Evaluate opportunities for upgrades at material recovery facilities in the county to expand material collection and the use of robotics and artificial intelligence for sorting and data collection by:

- Considering financial assistance, incentives, or grants to offset costs of equipment upgrades.
- Prioritizing facilities and projects that commit to providing a living wage.

Zero-waste education, grants, and program expansion actions

System need: Optimize the implementation and enforcement of the the county’s recycling ordinance (Ordinance #13) to increase recycling, organics recycling, and diversion

The Hennepin County Recycling Ordinance (Ordinance #13) regulates the separation of recyclable materials, including organics, from solid waste in the county. The ordinance was most recently updated in 2018. The ordinance requires that cities have an ordinance to ensure curbside collection of recyclables from all residents and that cities provide residents of single-family homes the opportunity to participate in organics collection⁴. The ordinance requires that commercial generators implement programs for mixed recyclables. Commercial generators that produce more than one ton of waste per week must also implement a food scraps collection program. Food scraps may be diverted through donation, collection for animal feed, anaerobic digestion, or composting. The ordinance requires that multifamily property owners provide recycling services and education for tenants. It does not address organics recycling for multifamily.

The requirements for diversion and access are clearly laid out in the ordinance, and the ordinance follows best practices from the community scan. However, the gaps analysis found that enforcement of the ordinance is not as robust as needed and there are opportunities to expand the ordinance’s reach. The following actions are designed to eliminate these gaps and increase the positive impacts of the ordinance.



B.5 Improve compliance with recycling requirements for multifamily and commercial generators

Low-hanging fruit 

Provide additional county resources to improve compliance with recycling requirements at multifamily properties and businesses. As a complement to increased compliance efforts:

- Increase technical support to building property managers and business owners to implement requirements and to increase program participation.
- Provide incentives through the expanded grant offerings.

B.6 Increase compliance with organics requirements in the county’s recycling ordinance (Ordinance #13) and expand requirements

Low-hanging fruit 

- Increase staffing to support the implementation of business food waste recycling requirements.
- Evaluate other resources to improve compliance and participation, such as incentives and technical assistance.
- Consider expanding the applicability of the organics portion of the ordinance to maximize diversion of organics, including a gradual reduction in the minimum thresholds for commercial generators, adding multifamily properties to the organics requirement, and eventually requiring all generators to have organics service.
- Place an emphasis on the food rescue and donation option for compliance to deliver food to the best and highest uses whenever possible.

⁴Opportunity can be provided through contractor hauler or private, open market haulers, or a drop-off site for Class 4 cities.

Zero-waste education, grants, and program expansion actions

System need: Provide consistent and relevant messaging and programming to fully engage residents, businesses, neighborhoods, and communities on the path to zero waste

Recycling systems continue to evolve as new programs are adopted, material composition changes, and processing technologies improve. Thus, county residents need regular information delivered in a variety of ways to ensure material recovery facilities, organics processors, and end markets receive good quality material while continuing to decrease the amount of disposed materials. To reach zero waste, engagement must also address consumption and encourage behaviors that reduce waste, increase reuse, and minimize litter and pollution.

Despite the strong outreach and education programs already implemented by the county, the gaps analysis and community and industry stakeholder engagement identified expanded education as a key action for the Zero Waste Plan. Additionally, the county's Climate Action Plan calls for expanded education around the climate impacts of consumption and reducing the environmental impacts of waste. These themes should be amplified in the zero-waste engagement.

B.7 Expand reach of county waste education programming

Low-hanging fruit 

Expand the reach of existing waste education programs and partnerships to ensure clear and consistent information on what is recyclable, compostable, and reusable, how to participate, who provides services, why zero waste is important, why certain materials cannot be recycled, and the impact of the materials we throw away.

- Expand collaborations with the private sector and nonprofit partners.
- Identify new marketing channels.
- Develop clear, consistent marketing collateral that identifies actions steps for community members and supports behavior change practices.
- Use research on the barriers and benefits of reducing wasted food at home to develop and implement a consumer campaign on food waste prevention.

- Increase participation in organics recycling programs by developing a broad campaign to promote the benefits, provide a call to action, and share helpful tips for getting started.
- Support youth environmental education programs that foster a connection to the natural world, promote a better understanding of our relationship to the environment, and motivate environmental stewardship.

B.8 Expand partnerships to provide culturally relevant outreach

Low-hanging fruit 

- Expand partnerships with local, community-based organizations and networks to understand what zero waste means for different communities and how to customize strategies, approaches, and messaging to resonate with different audiences.
- Provide culturally appropriate strategies based on community needs, such as recycling training sessions in different languages and interpreters for technical assistance to non-English speaking business owners.



Zero-waste education, grants, and program expansion actions

B.9 Improve new resident education

System transformation

Partner with or incentivize cities, property managers, and realtors to deliver consistent recycling and diversion information to people and businesses who move to a new address. Make it easy for residents and business owners to understand service options and requirements where they live and work.

B.10 Launch a broad consumer campaign on food waste prevention

Low-hanging fruit

- Use research on the barriers and benefits of reducing wasted food at home to develop the campaign.
- Use the campaign to support existing initiatives around food waste prevention.

Zero-waste education, grants, and program expansion actions

System need: Provide technical assistance to support diversion

The following set of actions are designed to provide hands-on technical assistance to businesses, contractors and developers, nonprofit organizations, multifamily properties, and schools. The technical assistance will help these generators set up new programs, address contamination, review contracts, and troubleshoot issues with odors, pests, or participation. Assistance will address gaps in resources, technical knowledge, and contracting for schools, help commercial generators and multifamily property owners comply with the the county’s recycling ordinance (Ordinance #13) and expand service offerings, and target deconstruction.



B.11 Help schools prevent and divert more waste

System transformation

Expand funding and staffing to increase technical assistance resources for schools:

- Consider supporting waste champions at school districts in lower income areas.
- Focus resources on helping school staff with solid waste contracting, setting up and optimizing school diversion programs, and engaging with students, staff, and families.

B.12 Help businesses and multifamily properties prevent and divert more waste

System transformation

- Expand technical support to commercial generators, business owners, and property managers.
- Support compliance with recycling requirements for recycling and organics diversion, help set up successful multifamily recycling programs, and provide marketing collateral to support education and engagement.

B.13 Expand deconstruction and building material reuse

Approaching zero waste

Connect contractors, building owners, architects, and developers to deconstruction and used building material resources. Resources could include funding, local outlets for used materials, deconstruction training, sample project specifications, and used building material design guides to support the growth of deconstruction and building material reuse.

Zero-waste education, grants, and program expansion actions

System need: Address the need for increased capacity for processing organics

Organic materials make up the largest portion of Hennepin County's trash. The tons of organics diverted from the waste stream will continue to increase as the county implements new programs, such as enforcing and expanding organics requirements in the county's recycling ordinance (Ordinance #13). The following actions are recommended to ensure that there is both enough processing capacity for additional diversion and cost-effective access for haulers and generators.



B.14 Develop large-scale organics processing infrastructure

System transformation

Increase the capacity of organics processing through direct development, establishment of partnerships, or support of private, commercial-scale processors. Include the potential to develop a county anaerobic digester facility and private/public design-build for organics processing.

B.15 Support growth of community-scale composting sites

System transformation

Support the development and growth of community-scale composting sites (less than 5,000 cubic yards per year) and expand backyard composting through financial, technical, and educational assistance.

B.16 Increase capacity of transfer stations to manage organics

Approaching zero waste

- Support investments in transfer stations that complement the needs of organics collection programs and organics processing facilities.
- Consider the expansion of transfer capacity, the ability to manage different streams of organics, or the use of technology to implement innovative new methods that increase organics diversion.







Aim: Adopt policies that accelerate the transition to a zero-waste future

To reach zero waste, policy will need to be crafted to ensure responsible recovery of material is standard practice throughout the community, not just the best practice. In the global community scan, well-designed policy at both the local and state/provincial level was identified as a key component of successful zero-waste systems. The gaps analysis found that while an open market system, like Hennepin County's current system, does provide some benefits to generators and the industry, it also results in inequities in costs, service offerings, and data reporting. A fully open market system also creates an efficiency gap, results in multiple vehicles servicing the same street, and has adverse impacts on pollution, safety, and noise.

The following set of 17 zero-waste policy actions are designed to move the county closer to an equitable zero-waste system. They also complement the actions in Hennepin County's Climate Action Plan. For example, the Climate Action Plan identifies reducing food waste as one of the most effective solutions to addressing climate change and acknowledges the role that public purchasing has in advancing sustainability. The following zero-waste actions includes recommendations around addressing food waste and procurement.

Local, county, and state policies for advancing zero waste

Action	Phase	Impact
C.1 Support the transition to organized collection across the county	System transformation	
C.2 Expand regional coordination for policies, facilities, and education	System transformation	
C.3 Evaluate adding multifamily to single-family residential service	Approaching zero waste	
C.4 Require haulers to track and report multifamily waste data	System transformation	
C.5 Require events to be zero waste	System transformation	
C.6 Mandate participation in recycling and composting programs	Approaching zero waste	
C.7 Adopt a single-use ban and zero-waste packaging requirements for food service	Approaching zero waste	
C.8 Establish food waste reduction targets and timeline	Low-hanging fruit	
C.9 Develop and implement a county plan to eliminate food waste	System transformation	
C.10 Implement county procurement policies that support circularity	System transformation	
C.11 Require cart and dumpster color coding and labels	System transformation	
C.12 Prioritize extended producer responsibility	System transformation	
C.13 Advocate for the repeal of the state's ban on bag bans	System transformation	
C.14 Support adoption of truth in labeling legislation	Approaching zero waste	
C.15 Advocate for minimum diversion requirement for construction and demolition projects	System transformation	
C.16 Support adoption of right-to-repair legislation	Approaching zero waste	
C.17 Secure more state recycling funds	System transformation	
C.18 Support changes to product stewardship for electronics recycling	System transformation	
C.19 Reduce barriers for businesses to use refillable containers	System transformation	
C.20 Revise building codes and zoning ordinances that inhibit recycling	System transformation	

Local, county, and state policies for advancing zero waste

System need: Propose and adopt county-level policies to reach zero waste, reduce pollution, and increase equity

The following set of policy recommendations can be implemented the county level. The policies address the county's open market collection system, food waste, procurement and purchasing, packaging, and generator behaviors. Collectively, the policies create a system in which zero waste can be achieved in Hennepin County.



C.1 Support the transition to organized collection across the county

System transformation

Work alongside cities and haulers to define roles and responsibilities and establish a roadmap to transition the county to more organized hauler collection systems. This transition will help reduce hauling impacts on infrastructure and neighborhoods, increase cost efficiency, improve access and equity for rate payers, reduce climate impacts, reduce pollution, and provide consistency in service options. Depending on the city and sector, this may include the adoption of hauler contracts, franchising, expanded licensing requirements, or other organized collection schemes for multifamily and commercial. The future organized collection system should:

- Incorporate hauler incentives, such as pay-as-you-throw, that favor reuse, hard-to-recycle items, increased diversion, and reduced contamination.
- Include a pathway for local and regional haulers to continue to operate within the system regardless of their size.
- Be used as a mechanism to explore a pilot for every-other-week trash collection combined with weekly organics collection.
- Support a transition to increased prevalence of alternative fuel sources for collection, such as compressed natural gas or electric vehicles, complemented by county funding or other financial incentives.

C.2 Expand regional coordination for policies, facilities, and education

System transformation

- Expand coordination with neighboring counties to advance regional planning for zero waste, such as with the Partnership on Waste and Energy, Solid Waste Administrators Association, or Recycling Education Committee.
- Areas of collaboration includes grants to support end market development, market development accelerators and matchmaking, regional planning for waste facilities, and regional agreements on acceptance of a common set of materials with labeling and consistent engagement.

C.3 Evaluate adding multifamily to single-family residential service

Approaching zero waste

Evaluate requiring cities to add all multifamily properties to their residential waste programs.

- Cities could work with private haulers to provide the service.
- Consider using state recycling (SCORE) or other funds to support the transition for capital equipment (trucks and dumpsters), contracting, marketing, or technical assistance.

Local, county, and state policies for advancing zero waste

C.4 Require haulers to track and report multifamily waste data

System transformation

- Modify hauler licensing language or work with cities to require haulers to report tonnage (disposal and diversion) from the multifamily routes they service for trash, recycling, and organics.
- Work alongside haulers to develop an effective tracking and reporting methodology that aligns with the existing state reporting structure while minimizing hauler impacts.

C.5 Require events to be zero waste

System transformation

Work with cities to establish a countywide requirement that all events over a minimum size threshold (for example, 500 people) are required to be zero waste (have recycling, composting, and trash stations with limits or bans on single-use and non-compostable products).

C.6 Mandate participation in recycling and composting programs

Approaching zero waste

Work with cities to adopt mandatory recycling and organics participation requirements for all generators. The requirements would ban recyclable or organic materials from the trash and mandate source separation. Enforcement would occur through on-call generator inspections and at the point of disposal. Include exceptions for lack of space, provide financial support for those that need it, and develop a monitoring/enforcement plan.

C.7 Adopt a single-use ban and zero-waste packaging requirements for food service

Approaching zero waste

Design, adopt, and implement a policy to transition to zero-waste food service packaging and eliminate single-use, non-compostable, non-recyclable items in a phased approach:

- Ban the sale and use in county facilities and hosted county events.
- Work with cities and vendors to design a countywide ban for designated generators.
- Include language to transition to zero-waste packaging in ways that encourages the use of reusable containers or no-waste food service packaging.

C.8 Establish food waste reduction targets and timeline

Low-hanging fruit

Establish a baseline and target metrics to guide the identification of the largest areas of food waste and how to track progress in those areas.

Local, county, and state policies for advancing zero waste

C.9 Develop and implement a county plan to eliminate food waste

System transformation 

Develop and implement a county food waste prevention and rescue plan. Strategies may include increasing use and sale of imperfect produce, supporting federal and state tax incentives for food donation, encouraging school waste reduction programs such as shared lunches, longer lunch periods, and student engagement, considering regulations on food production to reduce waste, improving data tracking, supporting community food hubs, and providing education on food labels and expiration dates.

C.10 Implement county procurement policies that support circularity

System transformation 

Develop and implement a county sustainable purchasing policy on par with other leading public entities and provide sustainable purchasing best practices:

- Provide model language for cities in the county and support widespread adoption of circularity-focused procurement.
- Address county procured electronics (computers, phones, others) and electronics waste.
- Ensure that policies align with and can be integrated into Climate Action Plan strategies.

C.11 Require cart and dumpster color coding and labels

System transformation 

Use hauler licensing, the county's recycling ordinance (Ordinance #13), and local city ordinances to require haulers operating in the county adopt phased deployment of a consistent cart color and labeling scheme.

- The colors would be coded by materials stream (blue for recycling and green for organics) to reduce confusion for users in the county.
- During the phase-in period, haulers would be required to provide up-to-date, easy-to-read stickers or other labels for carts and dumpsters that have yet to be replaced.

Local, county, and state policies for advancing zero waste

System need: Support state laws that advance zero waste and materials circularity

The following policies must be passed at the state level. If adopted, they will help to advance zero waste across the entire state, not just in Hennepin County. Drafting, passing, and implementing these laws is not solely in the control of the county, so following through with these recommendations requires working across county and city borders, building coalitions, and planning for the long term. The state-level polices address access, upstream manufacturing, labeling, and construction and demolition debris, among others. Their implementation will require Hennepin County to collaborate with partners, stakeholders, and lawmakers to advocate for the adoption of the policies at the state legislature.



C.12 Prioritize extended producer responsibility

System transformation 

- Lead the development of a state law for extended producer responsibility (EPR) for packaging and printed paper at the state level. EPR places responsibility for the end-of-life management of a product or material on the producers, importers, and/or wholesalers of that product or material. Under full EPR, producers are charged with designing, financing, and managing the systems for the end-of-life of goods.
- Consider the inclusion of eco-modulation fees, which, if properly implemented, send an economic signal to manufacturers that incentivizes recyclable and compostable packaging over non-recoverable plastic and paper packaging.

C.13 Advocate for the repeal of the state’s ban on bag bans

System transformation 

Work with state legislators, neighboring counties, and regional stakeholders to repeal Minnesota statute 471.9998 Merchant Bags, a state preemption prohibiting bans. The repeal would allow the county to support and adopt bans at city and county level.

C.14 Support adoption of truth-in-labeling legislation

Approaching zero waste 

Support the adoption of truth-in-labeling legislation, similar to those adopted in California and Oregon⁵. The legislation would require manufacturers to clearly, consistently, and accurately identify local recyclability and compostability of packaging label claims.

⁵For example, the Oregon legislation requires that the state Department of Environmental Quality establish a task force to study and evaluate misleading or confusing claims regarding the recyclability of products made on a product or packaging. The California legislation (SBS 343) prohibits the use of the chasing-arrows symbol and the term “recyclable” on products that are not recyclable.

Local, county, and state policies for advancing zero waste


C.15 Advocate for minimum diversion requirement for construction and demolition projects

System transformation    

Work with state legislators to adopt a mandatory minimum diversion requirement for construction and demolition projects. Continue to investigate alternative pathways to adopt the policy at a county or city level. Under the policy, construction and demolition projects over set thresholds and types (for example, residential remodels larger than 1,000 square feet and all new construction) would be required to recycle or divert a minimum percentage of total materials (for example, 50% required diversion) from landfill disposal.

- Use best practices, such as incentives, fully refundable deposits, and certificate of occupancy final approvals, to increase compliance.
- Consider how to incorporate mixed construction and demolition waste processing certifications into construction projects to reduce logistical and cost challenges for contractors.

C.16 Support adoption of right-to-repair legislation

Approaching zero waste  

Support state level efforts on right-to-repair as laid out in the county's Climate Action Plan.

C.17 Secure more state recycling funds

System transformation 

Advocate for increased state funding for SCORE, including solid waste management tax funds that are currently diverted to the general fund, evaluate permissible SCORE expenditures (115A.557, sub. 2), and advocate for deconstruction and reuse as eligible programs.

C.18 Support changes to product stewardship for electronics recycling

System transformation 

Amend e-waste statutes to cover collection and recycling program costs and expand access to electronics recycling for all residents.

C.19 Reduce barriers for businesses to use refillable containers

System transformation 

Support revisions to the food code that allow and prioritize the switch to reusables for takeout containers and food storage

C.20 Revise building codes and zoning ordinances that inhibit recycling

System transformation    

Work to revise building codes and zoning ordinances that create barriers to providing recycling and organics service. Building codes should require adequate space for recycling in new construction, and those space requirements should extend to organics recycling, particularly in buildings that must have organics recycling to comply with the county's recycling ordinance (Ordinance 13). Zoning ordinances should allow flexibility for recycling infrastructure, specifically with respect to exterior enclosures.



Aim: Implement programs to advance circularity, reduce waste, and support reuse

Maximizing recycling, composting, and waste diversion alone will not be enough for the county reach zero waste. To truly reach a point at which 90% or more of all discarded materials are diverted from landfills, incinerators, and the environment, the county must broaden its focus to include upstream impacts, consumption, reuse, waste minimization, and the built environment. The materials sold and consumed, the buildings demolished and built, and the waste that is not generated in the first place will determine how close Hennepin County can get to zero waste.

Looking upstream will influence the county's ability to achieve broader climate goals and help to build resilient and robust local economies. The U.S. Environmental Protection Agency's systems-based greenhouse gas emissions inventory, which accounts for the emissions that result from the production, transportation, use, and disposal of materials, shows that 42% of the greenhouse gas emissions in the U.S. are from materials

management. On a global perspective, the 2019 Global Resources Outlook from the United Nations Environment Programme's International Resource Panel states that "up to half the global greenhouse gas emissions stem from the extraction and processing of materials, fuels, and food"⁶.

Reducing waste and supporting reuse also has the potential to create local sustainable jobs. For example, Humanim, a nonprofit workforce development organization in Baltimore, MD, reports that for every one job that demolition creates, deconstruction creates 6 to 8.⁷ A recent study conducted for the City of Austin, TX, found that circular economy activities in the city, which include waste reduction and reuse activities, contribute over \$1.1 billion in total economic activity to the region and creates approximately 6,300 permanent jobs⁸.













The following set of 12 actions related to circularity, waste reduction, and reuse are aimed at creating a resilient system that is good for people, the planet, and business.

⁶ <http://www.resourcepanel.org/reports/global-resources-outlook>

⁷ <https://humanim.org/news/humanim-announces-closure-of-details-deconstruction/>

⁸ The Recycling and Reuse-Related Economy of Austin, Summer 2020. TXP Inc., www.TXP.com

Zero-waste actions for circularity

Action	Phase	Impact
D.1 Advocate for sustainable building codes	Approaching zero waste	
D.2 Support and encourage city adoption of deconstruction policies	System transformation	
D.3 Require building demolition notifications	Low-hanging fruit	
D.4 Assess the feasibility of a building material reuse exchange warehouse and yard	System transformation	
D.5 Host and support expanded reuse, repair, and fix-it events and clinics	Low-hanging fruit	
D.6 Establish brick-and-mortar reuse and repair centers	System transformation	
D.7 Support innovation on zero waste	Approaching zero waste	
D.8 Evaluate feasibility of providing tax benefits or other financial incentives for the reuse industry	System transformation	
D.9 Develop local and regional end markets for recyclable commodities	System transformation	
D.10 Develop local and regional end markets for construction and demolition materials	Approaching zero waste	
D.11 Adopt city and county specifications and policies to increase demand for finished compost	Low-hanging fruit	
D.12 Study options for recovering recyclable materials from the trash	Approaching zero waste	

Zero-waste actions for circularity

System need: Adopt programs to improve circularity of the built environment and reuse, recover, and divert construction and demolition debris

When it comes to the built environment, the county estimates that 80% of construction and demolition waste could be diverted, but only 30% is currently being diverted. The U.S. Green Building Council reports that buildings account for 40% of all greenhouse gas emissions, which makes addressing the built environment an imperative for both zero waste and climate action.



D.1 Advocate for sustainable building codes

Approaching zero waste

- Advocate for research-informed changes to building codes and other regulations to increase use of reused and deconstructed materials in new construction and significant remodels.
- Investigate the potential to adopt requirements, incentives, or other actions that create a preference for reusing materials, including green/sustainable materials in construction, and phasing in quality materials that can be disassembled in the future.

D.2 Support and encourage city adoption of deconstruction policies

System transformation

- Work with cities to develop model language and adopt policies that prioritize and incentivize building deconstruction over demolition.
- Work with industry representatives to educate policymakers on the value of deconstruction related to climate change and zero waste.

D.3 Require building demolition notifications

Low-hanging fruit

Require cities to notify the county of demolition permits and include data on project type and size. The county will publish the building demolition permit application data to increase salvage of reusable materials.

D.4 Assess the feasibility of a building material reuse exchange warehouse and yard

System transformation

Assess the feasibility of a private/public partnership for a construction and demolition material exchange warehouse and yard. The facility could:

- Create a construction materials bank where materials can be examined, repaired, and shared. Examples of materials that can be amassed and shared include rubble, fill, bricks and pavers, stone and boulders, clean dimensional lumber, and compost.
- Include a retail area for reusable materials, such as cabinets, lighting, doors, and others.

Zero-waste actions for circularity

System need: Increase reuse, repair, and waste reduction actions countywide

The gaps analysis and community and industry stakeholder engagement identified the need for the county to invest in reuse-focused businesses, activities, and programs. Equitable access to reuse infrastructure, like stores, and resources, like durable goods, was identified as a gap. These resources are especially needed in low-income and rural areas. The following actions will help reduce waste, increase reuse, support local economic opportunities and job creation, and foster innovation in local and regional circularity.



D.5 Host and support expanded reuse, repair, and fix-it events and clinics

Low-hanging fruit

Increase support for existing repair and reuse mobile and temporary events like Fix-It Clinics.

- Expand programs to reach more neighborhoods and community members. Include clinics for sewing, bike repair, small electronics, and tool sharing.
- Tie programs into county job creation and workforce training programming and skill sharing. Include virtual options and partnerships with existing organizations to expand reach.

D.6 Establish brick-and-mortar reuse and repair centers

System transformation

Expand reuse and repair clinics to establish fixed-location neighborhood reuse or repair hubs, a reuse mall, or other facilities for upcycling, sharing, refurbishing, and reusing. Similar to the mobile events, connect efforts with workforce development and job training to supporting local green jobs.

D.7 Support innovation on zero waste

Approaching zero waste

Support existing zero-waste businesses, identify gaps, and develop innovation hub and districts to engage with local entrepreneurs and incubate new ideas and activities that can lead to a more circular economy.

- Explore options for the co-location of reuse, recycling, manufacturing, and retail businesses in a central facility or area, sometimes called a resource recovery park.
- Reserve space for tenants focused on using recycled materials, including both conventional recyclables and organics as well as harder to recycle materials such as plastic films and textiles, as feedstock.
- Establish through partnerships and include maker spaces, small business support services, mid-scale manufacturing spaces, and a retail component.

D.8 Evaluate feasibility of providing tax benefits or other financial incentives for reuse industry

System transformation

Evaluate pathways and options to provide tax benefits for reuse and repair businesses.

- Determine feasibility at the county level and advocate at the state level if needed.
- Include restaurants that implement reusable to-go programs and companies that offer takeback programs.

Zero-waste actions for circularity

System need: Improve circularity through the support and development of regional end markets

A successful circular economy depends on thriving end markets for the recycling and organics that are collected. By supporting end markets, the county can help increase demand and create a pull for additional materials that, in turn, drives supply. Supporting economic circularity on a regional level also creates local jobs and businesses by keeping valuable resources local. The following set of programs is focused on supporting end market development in the region.



D.9 Develop local and regional end markets for recyclable commodities

System transformation

Complement state efforts to develop local and regional end markets through grants and public/private partnerships.

- Grants can range from mini seed grants (less than \$10,000) for rapid support of local business development to large-scale grants for development of regional end markets.
- Look to programs in Colorado, Michigan, and Washington that couple end market development support with elements from accelerator programs to leverage public sector grants with private sector investment to grow regional circular projects.
- Include road construction to spur the use of reusable and recycled materials in municipal road construction and maintenance projects.

D.10 Develop local and regional end markets for construction and demolition materials

Approaching zero waste

Support and incentivize the growth of end markets for construction and demolition materials (such as asphalt shingles, gypsum board, ceiling tiles, carpet, and dimensional lumber) through collaboration with agencies, financial support, and other actions.

D.11 Adopt city and county specifications and policies to increase demand for finished compost

Low-hanging fruit

Work with cities to implement a set of actions to increase the use of finished compost in city and county activities. Actions include:

- Model language for ordinances that require the use of soil amendment with sod installation and landscape projects (for example, contractors must apply 4 cubic yards of STA-certified compost for every 1,000 square feet of project area).
- City specifications for the use of compost in green infrastructure, parks, top dressing, and capital projects including roadside revegetation and run-off control.
- Local government buyback requirements.
- Engagement with city staff, landscapers, and landscape architects to share best practices for compost application and address concerns and barriers related to compost application.
- Establishment of test plots and storytelling to demonstrate the advantages of compost use.

Zero-waste actions for circularity

D.12 Study options for recovering recyclable materials from the trash

Approaching zero waste

Study options for recovering reusable and recyclable materials that remain in the trash after residents and businesses have separated out their recyclables.

Mixed waste processing facilities use a variety of technologies and manual sorting to recover reusable, recyclable, and compostable materials from the trash. Combining mixed waste processing with existing source separation programs has the potential to significantly increase recycling rates. Leading zero-waste cities and counties have incorporated post-collection processing into their efforts to advance their diversion programs.

Conduct a cost/benefit evaluation and feasibility analysis to determine whether the county should invest in the post-collection recovery of reusable and recyclable materials from the trash. This may be particularly useful for sectors of the county that struggle to source-separate materials, such as multifamily properties and small businesses.

- The operation could occur at an existing transfer station or an off-site location.
- Could be limited to high value, easily recoverable items (such as cardboard, ferrous metals, and plastics #1 and #2)
- Would be a supplement, not a replacement, to programs focused on increasing source-separation behaviors by generators.

Appendix A: Bibliography

Item	Date
Hennepin County zero-waste baseline assessment	July 2022
Comparative system scan	July 2022
Industry stakeholder summary report	July 2022
Hennepin County gaps analysis	July 2022
Phase 1 community cohort report	July 2022
Online engagement findings	July 2022
Zero-waste actions draft memo	October 2022
Zero-waste future board briefing presentation	January 2023
Zero Waste Plan summary of process report	January 2023

Appendix B: Impact analysis results

ID	Name	Tons low	Tons high	Source redux low	Source redux high	% Diversion low	% Diversion high
Low hanging fruit (106,900 to 119,800 tons diversion, 3,900 to 4,100 tons source reduction)							
B.1	Improve marketing of grant programs	5,000	5,600	-	-	0.40%	0.40%
B.5	Improve compliance with recycling requirements (Ordinance 13) for multi-family and commercial generators	17,400	19,200	-	-	1.40%	1.50%
B.6	Increase compliance with Ordinance 13 organics requirements and expand requirements	32,100	36,300	-	-	2.50%	2.90%
B.7	Expand reach of county waste education programming	4,800	5,800	300	300	0.40%	0.50%
B.8	Expand partnerships to provide culturally relevant outreach	3,600	4,400	700	700	0.30%	0.30%
B.16 (new)	Launch a broad consumer campaign on food waste prevention	400	400	1,200	1,400	0.00%	0.00%
C.8	Establish food waste reduction targets and timeline	-	-	-	-	0.00%	0.00%
A.1	Expand drop-off options	7,000	7,800	-	-	0.50%	0.60%
A.2	Increase bulky item reuse and recycling	3,200	3,600	-	-	0.30%	0.30%
A.5	Increase access to organics recycling options for multi-family residents	5,300	5,900	-	-	0.40%	0.50%
A.6	Establish and maintain community equity panel	-	-	-	-	0.00%	0.00%
A.7	Expand workforce development for living wage green jobs	-	-	-	-	0.00%	0.00%
A.8	Improve measurement to track progress and ensure accountability	-	-	-	-	0.00%	0.00%
A.9	Evaluate herc upgrades to reduce impacts on community in short term	9,400	10,400	-	-	0.70%	0.80%
A.10	Establish milestones to phase out the use of herc as county approaches zero waste	-	-	-	-	0.00%	0.00%
A.11	Expand funding and support for community-centric solutions	2,600	2,800	500	500	0.20%	0.20%
A.13	Implement low-income rate assistance	900	900	-	-	0.10%	0.10%
A.14	Launch multi-family recycling champions	600	600	-	-	0.00%	0.00%
D.3	Require building demolition notifications	1,700	1,900	700	700	0.10%	0.10%
D.5	Host and support expanded reuse, repair, and fix-it events and clinics	300	300	500	500	0.00%	0.00%
D.11	Adopt city and county specifications and policies to increase demand for finished compost	12,600	13,900	-	-	1.00%	1.10%

ID	Name	Tons low	Tons high	Source redux low	Source redux high	% Diversion low	% Diversion high
System transformation (183,300 to 211,100 tons diversion, 9,200 to 10,200 tons source reduction)							
B.2	Expand business organics grants	8,400	9,400	-	-	0.70%	0.70%
B.3	Expand grants for deconstruction	3,100	3,500	1,400	1,600	0.20%	0.30%
B.4	Support upgrades to improve performance at material recovery facilities	4,400	5,000	-	-	0.30%	0.40%
B.9	Improve new resident education	700	700	100	100	0.10%	0.10%
B.10	Help schools prevent and divert more waste	1,400	1,600	100	100	0.10%	0.10%
B.11	Help businesses and multi-family properties prevent and divert more waste	3,900	4,500	600	600	0.30%	0.40%
B.13	Develop large scale organics processing infrastructure	-	-	-	-	0.00%	0.00%
B.14	Support growth of community scale composting sites	2,300	2,500	-	-	0.20%	0.20%
C.1	Support the transition to organized collection across the county	9,300	10,500	-	-	0.70%	0.80%
C.2	Expand regional coordination for policies, facilities, and education	2,900	3,300	-	-	0.20%	0.30%
C.4	Require haulers to track and report multi-family waste data	-	-	-	-	0.00%	0.00%
C.5	Require events to be zero waste	400	400	100	100	0.00%	0.00%
C.9	Develop and implement county plan to eliminate food waste	37,800	44,400	2,100	2,500	3.00%	3.50%
C.10	Implement county procurement policies that support circularity	-	-	800	1,000	0.00%	0.00%
C.11	Cart and dumpster color and label requirements	3,200	3,600	-	-	0.30%	0.30%
C.12	Prioritize extended producer responsibility	30,300	37,100	1,500	1,700	2.40%	2.90%
C.13	Advocate for the repeal of the state's ban on bag bans	-	-	-	-	0.00%	0.00%
C.15	Advocate for minimum diversion requirement for construction and demolition projects	44,000	49,600	-	-	3.50%	3.90%
C.17	Secure more score funds	-	-	-	-	0.00%	0.00%
C.18 (new)	Support changes to product stewardship for electronics recycling	600	600	300	300	0.00%	0.00%
C.19 (new)	Reduce barriers for businesses to use refillable containers	-	-	400	400	0.00%	0.00%
C.20 (new)	Revise building codes and zoning ordinances that inhibits support and increase recycling	11,200	12,600	-	-	0.90%	1.00%

ID	Name	Tons low	Tons high	Source redux low	Source redux high	% Diversion low	% Diversion high
System transformation (183,300 to 211,100 tons diversion, 9,200 to 10,200 tons source reduction)							
A.3	Expand collection and drop-off options for hard to recycle items	6,100	6,900	-	-	0.50%	0.50%
A.4	Add waste and recycling bins in public spaces	800	800	-	-	0.10%	0.10%
A.12	Provide financial incentives to increase participation in targeted communities	3,300	3,700	-	-	0.30%	0.30%
D.2	Support and encourage city adoption of deconstruction policies	1,400	1,600	700	700	0.10%	0.10%
D.4	Assess the feasibility of a building material reuse exchange warehouse and yard	3,100	3,500	600	600	0.20%	0.30%
D.6	Establish brick-and-mortar reuse and repair centers	1,400	1,600	200	200	0.10%	0.10%
D.8	Evaluate feasibility of providing tax benefits and other financial incentives for reuse industry	2,000	2,200	300	300	0.20%	0.20%
D.9	Develop local and regional end markets for recyclable commodities	1,300	1,500	-	-	0.10%	0.10%

ID	Name	Tons low	Tons high	Source redux low	Source redux high	% Diversion low	% Diversion high
Approaching zero waste (158,800 to 187,700 tons diversion, 4,600 to 5,400 tons source reduction)							
D.12	Conduct feasibility study of recovering recyclable materials from the trash	82,600	97,200	-	-	6.50%	7.60%
B.12	Expand deconstruction and building material reuse	5,900	6,900	1,200	1,400	0.50%	0.50%
B.15	Increase capacity of transfer stations to manage organics	2,900	3,300	-	-	0.20%	0.30%
C.3	Evaluate adding multi-family to single family residential services	1,100	1,300	-	-	0.10%	0.10%
C.6	Mandate participation in recycling and composting programs	52,900	63,300	-	-	4.20%	5.00%
C.7	Adopt a single use ban and zero waste packaging for food service	200	200	300	300	0.00%	0.00%
C.14	Support adoption of truth in labeling legislation	1,900	2,200	-	-	0.10%	0.20%
C.16	Support adoption of right to repair legislation	900	1,100	200	200	0.10%	0.10%
D.1	Advocate for sustainable building codes	7,000	8,200	2,200	2,600	0.60%	0.60%
D.7	Establish a county-wide innovation hub	2,100	2,500	700	900	0.20%	0.20%
D.10	Develop local and regional end markets for C&D materials	1,300	1,500	-	-	0.10%	0.10%

Appendix C: Zero Waste Actions – Full Listing

All zero waste actions and programs discussed during the Phase 2 engagement (work groups) are presented below. Actions are organized by work group. As a result, individual actions discussed in multiple work groups are repeated.

ADVANCING CIRCULARITY

3 - C&D - END MARKETS - Support / incentivize growth of end markets for C&D materials (e.g., asphalt shingles, gypsum board, ceiling tiles, carpet, dimensional lumber) through collaboration with agencies, financial support, siting, and others. Provide reliable storage of salvaged material, explore innovative reuse options.

4 - C&D - DECONSTRUCTION POLICY - Work with cities and state agencies to educate policy maker on the value of deconstruction, adopt policies that prioritize and incentivize building deconstruction over demolition. Include model codes for cities, work with public housing authorities and institutions (schools, hospitals, etc.).

5 - C&D - SALVAGE BUILDING MATERIALS POLICY - Require cities to notify county of demolition permits & publish building demolition permit applications so deconstruction firms can better salvage reusable materials, county to provide list of preferred deconstruction firms at time of permit application.

6 - C&D - MINIMUM DIVERSION REQUIREMENT POLICY - Require construction and demolition projects over a size threshold to recycle or divert a min. % of total materials; diversion could be source separated or sorted at a mixed waste processing facility. Potential details: deposit fee system, C.O. based on proof, submission of waste management plans, amp up requirements over time, options for fees based on project type and size, construction emissions standards, excluding concrete in measured weight.

20 - HAULING - EV AND EMISSIONS - Provide incentives, rebates, requirements for to accelerate a transition of collection vehicles and other rolling stock to electric and/or the clean alternatives.

27 - ENGAGEMENT - DECONSTRUCTION AND BUILDING DESIGN - Connect demolition contractors /owners / developers with reuse options and resources; educate architects on design for deconstruction; develop resources for how to write salvage into specs; help developers better understand cost/ benefit with more sustainable materials.

33 - ENGAGEMENT - WASTE PREVENTION COMMERCIAL - Expand commercial engagement on waste prevention actions, incentivize local businesses to use compostable materials, incentivize local purchases to minimize packaging and transportation.

37 - GRANTS - BUILDING MATERIALS - Offer rebate programs, tax breaks, or other incentives to encourage use of more durable or reused building materials and support local green jobs; ensure inspectors/plan reviewers are aware of reuse priorities and support them; build into RFP/Contract proposals a necessity to reuse building materials.

39 - GRANTS – DECONSTRUCTION - Continue to offer (or expand) grants and incentives for small commercial projects to use deconstruction techniques, structural move projects that relocate entire properties, projects that install used building materials. Fund deconstruction training programs to increase deconstruction workforce with diversity emphasis

52 - CIRCULARITY - INNOVATION HUB - Develop innovation hub or districts to incubate new businesses using recycled materials as feedstock; consider innovation challenge around specific waste streams, partner with cities for funding, partner with innovation grants for business to provide space.

62 - PROCUREMENT - COUNTY LEVEL - Leverage County and city spending power to improve circularity by partnering with suppliers with favorable circular economy offerings; adopt a county sustainable purchasing policy to lead by example, consider materials marketplace platform

65 - FINANCIAL - TAX BENEFITS FOR REUSE - Provide tax benefits for reuse and repair businesses, include restaurants that implement reusable to-go programs, consider sales tax reduction option for repair services, include incentives for companies that offer take back programs.

70 - SHARING ECONOMY - C&D - Establish or support reuse warehouses for building materials, evaluate county-run options alongside C&D landfills; create a material 'bank' for temporary storage of construction materials where the materials are examined, repaired, and shared.

71 - SHARING ECONOMY – REPAIR - Offer more repair / reuse events like Fix-It Clinics, sewing, and bike repair, offer after school training job program, provide workshop space with access to tools, advertise skill sharing, offer virtual options. Programs provided by county or financially supported by county

78 - ZERO WASTE - BLOCK PILOT - Get one small zone (a block or two) to fully implement a local zero waste model as a test pilot / example of what a local reuse economy could look like, encourage a zero waste multi-unit pilot as well.

84 - SHARING ECONOMY – REUSE HUBS - Develop neighborhood reuse or repair hubs, a ‘reuse’ mall, or other facilities for upcycling, sharing, refurbishment, and reuse and building local green jobs, partner with food shelves, parks with rec centers, ensure proximity to transit, aggregate a map/guide of all facilities.

116 - EQUITY - COMMUNITY OWNERSHIP OF ABANDONED AREAS - Community groups take over abandoned properties for community benefits (e.g., composting, community gardens etc.). Consider utilizing abandoned facilities as educational malls/ interactive spaces to discuss waste.

135 - BY-PRODUCT SYNERGY - Promote statewide exchange program for large manufacturers / businesses who have excess of a specific type of waste that can be input for another business.

BLUE STREAMS

10 - CODES - SPACE FOR RECYCLING - Advocate for requirements for new and significant remodels of multifamily buildings to have a recycling/organics room and/or chutes that are accessible and convenient for all residents; modify building codes to allow for more collection space and access for haulers. Provide incentives, grants, or tax breaks. Expand requirements to all commercial buildings, all local govt. buildings.

11 - COLLECTION - HARD TO RECYCLE - Expand collection opportunities (either via curbside or drop off) for hard-to-dispose items, i.e., textiles, clothes, household hazardous waste, plastic wrap, and others

25 - ENFORCEMENT - ORD 13 RECYCLING - Enforce the Ordinance 13 recycling requirements for multifamily and commercial; require or offer incentives for building/property managers/owners to provide quarterly education/reminders to tenants and residents; develop incentive program to reward positive behavior change.

30 - ENGAGEMENT - NEW RESIDENTS - Partner with or incentivize cities and/or haulers to deliver consistent recycling and diversion information to people who move to a new address, create mapping tool so new residents can see requirements and who to contact, create contact form for renters to request recycling, requirement literature be sent to property managers, deliver info through door-knocking

54 - MANDATORY PROGRAMS – RECYCLE - Require that households and / or businesses properly separate recyclables from the trash; consider accompanying this with a disposal ban; consider incentives so small businesses and schools are not disproportionately impacted; develop education, a monitoring plan and eventually a program to provide feedback for improper recycling (e.g., oops tags, etc.).

59 - POLICY - MULTI-FAMILY PAYT - Enact a volume-based pay-as-you-throw fee structure for trash for multifamily with rebates and incentives at the building level.

60 - POLICY - SINGLE FAMILY PAYT - Enact a volume-based pay-as-you-throw fee structure for trash for single family residential across entire county, ensure that rates differentials are significant enough to encourage diversion behaviors; consider system that is equitable and doesn't financially burden certain households more than others.

69 - COLLECTION - SHARED DUMPSTERS / SERVICE RECYCLING - Help neighboring businesses or properties consolidate and share services for recycling and composting; consider allowing and providing financial incentivize to those that share with community; provide certification and other recognition tools to promote those that share service.

86 - HAULING - CART COLOR / LABEL REQUIREMENTS - Require haulers to phase in color coded collection carts and dumpsters by material stream to reduce confusion for users; provide up-to-date, new, easy-to-read labels for carts that are not up for replacement yet.

102 - CODES - BUILDING CODES - Develop codes addressing the materials in the built environment - establish requirements and / or incentives for reusing materials when possible, including green materials in construction, and phasing in quality materials that can be dissembled in the future.

110 - ZERO WASTE - FRIENDLY STORES - Audit and incentivize stores to carry easier-to-recycle packaging and packaging with better labeling (e.g., How to Recycle labels); publish list of “recycling friendly” stores.

111 - JOBS - WORKFORCE DEVELOPMENT - Workforce development program to provide training, upskilling, certification, etc. to people hoping to work in the recycling industry.

112 - ENGAGEMENT - PUBLIC COMMITMENT - Create an opportunity for the public to evaluate businesses and multifamily residences commitment to sustainability; consider giving them a ‘sustainability grade’ based on certain criteria; recycling and organics could be an easier way to start.

121 - ENGAGEMENT - JANITORIAL STAFF - Engage with janitorial staff, through property managers and/or unions, at office buildings, schools, event spaces, malls, institutions etc. to ensure waste is properly disposed in the correct receptacle.

133 - COMMERCIAL - GREEN BUSINESS RECOGNITION - Create a Green Business recognition program to highlight how business are successfully implementing recycling/organics programs, work with cities to promote these events.

EQUITY AND ACCESS

- 2 - SHARING ECONOMY - BULKY ITEM REUSE - Expand opportunities for bulky item reuse and donation, increase access, address transportation barriers, create community bulky item drop offs, partner with community donation orgs, subsidize hauling for swap events, dedicate County location for swap, 'how to' kits for hosting swaps, promote with social media channels
- 14 - EQUITY - COMMUNITY PANEL - Establish diverse community panel to provide input county zero waste programs; pay community members to be on board; board to voice residents' needs and concerns; ensure waste systems will not put environmental justice areas of concern at greater risk; include racial equity impact analysis in zero waste decisions, provide transparency and accountability, ensure authentic diversity beyond just race.
- 16 - DROP-OFF SYSTEM - EXPANDED ACCESS - Improve / increase drop offs (recycle, organics) in multifamily dense, urban, and rural areas; align drop offs with public transportation routes and/or link with community resources; explore mobile drop-off sites or events, encourage / incentivize businesses and stores to be in drop-off network, use sliding scale payment options for drop-offs
- 17 - DROP-OFF SYSTEM - HARD TO RECYCLE - Increase opportunities for hard-to-recycle item drop-offs, including collection events for hard-to-recycle items in urban, multi-family, rural, and areas with limited access.
- 18 - DROP-OFF SYSTEM – POLICY - Advocate for better access to drop offs by eliminating city/county residential requirements for drop-offs ("You can drop things off here only if you live in this city"), work with transportation companies (Uber, Lyft, Nice Ride, Transit) to provide rides to or near the drop offs.
- 28 - ENGAGEMENT - COMMUNITY LED SOLUTIONS - Leverage and financially support local leaders to: harness the power of community; identify cultural values and connections; raise awareness of available services and supports; increase participation, focus on communities that have historically been underserved, tap into faith-based groups to share messaging, market programs through neighborhood associations, invest in community groups to support engagement, provide incentives for adults to take education classes, provide ongoing funding to local environmental organizations
- 44 - HAULING - CONTRACTS / FRANCHISE - Investigate potential for cities or the county to adopt hauler contracts, franchising, or other organized collection scheme for multifamily and commercial; establish a roadmap to organize collection to reduce impact on the infrastructure and neighborhoods; provide hauler incentives in agreements (incentives for diversion, reduced contamination, others).
- 47 - HAULING - MULTI-FAMILY REPORTING - Require haulers to report on the multifamily properties they service for recycling and organics
- 48 - HAULING - SCHEDULES AND OUTREACH GUIDES Leverage the hauler licensing ordinance to develop clear schedules and outreach guides; guides should be consistent with the guidance provided by the Recycling Education Committee (REC); consider county / municipal use of online lookup tools, such as Recollect, clear consistent messaging posted in buildings, offered to agencies serving unhoused populations.
- 49 - HERC - PHASE OUT - Establish milestones to phase out the Hennepin Energy Recovery Center (HERC) as county approaches higher levels of diversion; includes identification of alternatives for disposal of MSW generated in Hennepin County. Milestones for phasing out acceptance of materials at HERC that have higher / better use elsewhere or cause inefficient / high pollution combustion. Milestones to include a definitive shut down.
- 50 - HERC - EVALUATION AND UPGRADES - Evaluate upgrades at the Hennepin Energy Recovery Center (HERC) to increase pre-sorting of MSW and material recovery, reduce hazardous items from incineration, increase pollution control measures, and other operational improvements to the facility.
- 55 - MULTI-FAMILY – BULKY - Expand bulky-item programs for multifamily and encourage reuse / donation for bulky items that could be targeted at specific audiences, provide a county pick up / reuse center for large items.
- 56 - MULTI-FAMILY - ORGANICS COLLECTION - Increase access to hauler-provided curbside composting for multifamily buildings; Options include: offer incentives or rebates for property managers and residents; long term consideration of requirement for service, incentives for remodels to create bin space, property tax credit for multifamily property owners who participate in organics recycling.
- 79 - ENGAGEMENT – MULTIPLE LANGUAGES - Provide community recycling training sessions in different languages; provide interpreters and not just translations; offer commercial technical assistance for non-English speaking business owners. Connect culturally on what recycling looks like, incorporate community knowledge, get people that look like the audience to engage, work with cultural centers within cities, provide education/assistance/financial support to individuals at multifamily properties, provide a translators
- 87 - FINANCIAL - SUBSIDY FOR SERVICE - Subsidies, rebates, or bill discount to reduce burden of recycling and organics service costs for low-income customers and improve participation,
- 88 - MANDATORY PROGRAMS - MULTI-FAMILY - Require cities to add all multi-unit properties to their residential waste programs, if they opt out provide list of alternatives rather than a fee.

93 - FINANCIAL - RESIDENTIAL INCENTIVES - Reward residents and provide incentives to increase participation, especially for low-income families (ideas: stipends for recycling captains, reward programs for recycling, financial incentives for neighbors hosting backyard composting for their street, etc.)

94 - ENGAGEMENT - INFORMATION SHARING - Widely share information with the public on the costs, benefits, and burdens of the solid waste system, who generates materials, who is paying for the system, who is profiting, increase funding to expand education and outreach channels, emphasize school education, partner with private partners to promote.

130 - EQUITY - COMMUNITY LISTENING - Host 'Zero Waste' community listening session on a more regular basis and in variety of formats (online, in person, in different parts of the county etc.) to encourage continued participation and feedback.

GREEN STREAMS

9 - CIRCULARITY – ORGANICS - Adopt policy to procure finished compost to support end market. Require cities to do the same, look to advance the requirement at the state level. Consider pairing with market study of end users

10 - CODES - SPACE FOR RECYCLING - Advocate for requirements for new and significant remodels of multifamily buildings to have a recycling/organics room and/or chutes that are accessible and convenient for all residents; modify building codes to allow for more collection space and access for haulers. Provide incentives, grants, or tax breaks. Expand requirements to all commercial buildings, all local govt. buildings.

13 - POLICY - ZERO WASTE PACKAGING REQUIREMENTS - Adopt a county zero waste packaging ordinance, enforce the use of reusable, recyclable, and BPI certified compostable materials by businesses, events, stadiums, institutions, restaurants, foodservice vendors; include recycling signage requirements. Offset costs with grants.

22 - END MARKETS – ORGANICS - Suite of actions to grow compost uses such as: requirement for soil amendment for sod installation, landscape projects; inclusion in municipal climate resiliency planning; support / grants for carbon farm projects, public education program (uses and benefits of compost), grants for businesses that collect and/or use their own compost, engagement with landscapers

24 - ENFORCEMENT - ORD 13 ORGANICS - Enforce the Ordinance 13 commercial organics requirements; consider reducing threshold levels to below 1 ton per week (or 8 cubic yards) in the future and ramp up to require all generators to comply; Potential details: hire enforcement staff, enact fines, provide awards to entities that compost/divert organics, partner with ethnic chamber of commerce / business councils for outreach, create easy way to report non-compliance.

30 - ENGAGEMENT - NEW RESIDENTS - Partner with or incentivize cities and/or haulers to deliver consistent recycling and diversion information to people who move to a new address, create mapping tool so new residents can see requirements and who to contact, create contact form for renters to request recycling, requirement literature be sent to property managers, deliver info through door-knocking

35 - FOOD WASTE – PLANNING - Develop and adopt a county food waste reduction, resiliency, recovery plan; Strategies examples: using imperfect produce; supporting federal / state tax incentives for donation; school food waste reduction; changing regulations on food production; improving data tracking; community food hubs/fridges; education on - food labels, expiration dates, recovery and rescue program, storage, menu planning; create network of food donors and recipients; encourage restaurants to offer 'normal' portions, increase/change requirements of larger generators.

36 - FOOD WASTE - SCHOOL WASTE MINIMIZATION - Establish a school policy to allow students to place uneaten, pre-packed food into donation area / share table for other students to eat, refrigerate excess food for reuse.

38 - GRANTS - COMMERCIAL ORGANICS - Re-evaluate (and potentially expand) grants to launch composting (organics collection) at businesses, details include: mailer / email outreach to property managers / tenants, grants specific to nonprofits, virtual session for applicants on how to apply, grant success case studies, base grant on diversion, decrease funds if stream is heavily contaminated.

53 - MANDATORY PROGRAM – COMPOST - Require that households and / or businesses properly separate food scraps and food soiled paper from the trash; consider accompanying this with a disposal ban. Include exceptions for lack of space. Details include incentivize by making it 'free', tied in with pay-as-you-throw system, education resources and bins, require large commercial producers first before households / smaller businesses.

56 - MULTI-FAMILY - ORGANICS COLLECTION - Increase access to hauler-provided curbside composting for multifamily buildings; Options include: offer incentives or rebates for property managers and residents; long term consideration of requirement for service, incentives for remodels to create bin space, property tax credit for multifamily property owners who participate in organics recycling.

58 - ORGANICS - LARGE SCALE PROCESSING - Increase available capacity for organics composting through large or regional facilities, could include public-private partnership, colocation at wastewater treatment plant, county / city run, or other options, research potential sites early to ensure environmental justice is served.

89 - FOOD WASTE – TRACKING - Work with food establishments (grants, incentives, or requirements) to use food waste tracking/ inventorying software, evaluate if County can make the food waste tracking products available for free to the public and / or food establishments

104 - FOOD WASTE - MANDATORY RESCUE - Mandatory food rescue / donation program for large generators.

119 - ENGAGEMENT - AD FACILITY TOURS - Host student field trips and community events at the anaerobic digestion facility.

120 - FOOD WASTE – PARTNERSHIPS - Partner with food justice orgs, farms and produce distributors to glean excess/imperfect produce for use in schools, county foodservice, unhoused residents, and for county events. Utilize Master Recyclers/Composters for volunteer gleaning / distribution hours.

121 - ENGAGEMENT - JANITORIAL STAFF - Engage with janitorial staff, through property managers and/or unions, at office buildings, schools, event spaces, malls, institutions etc. to ensure waste is properly disposed in the correct receptacle.

125 - ENGAGEMENT - LANDFILL LANGUAGE - Mandate the use of the word 'landfill' or 'incineration' in commercial and multifamily settings to increase awareness around disposal, provide information around pollution and trade-offs with options.

132 - PROCUREMENT – RESTAURANTS - Cooperative purchasing agreements for restaurants to purchase BPI certified compostable products.

NEIGHBORHOOD SOLUTIONS

2 - SHARING ECONOMY - BULKY ITEM REUSE - Expand opportunities for bulky item reuse and donation, increase access, address transportation barriers, create community bulky item drop offs, partner with community donation orgs, subsidize hauling for swap events, dedicate County location for swap, 'how to' kits for hosting swaps, promote with social media channels

16 - DROP-OFF SYSTEM - EXPANDED ACCESS - Improve / increase drop offs (recycle, organics) in multifamily dense, urban, and rural areas; align drop offs with public transportation routes and/or link with community resources; explore mobile drop-off sites or events, encourage / incentivize businesses and stores to be in drop-off network, use sliding scale payment options for drop-offs

26 - ENGAGEMENT – COMMERCIAL - Expand technical assistance pgm. for business owners; example details: onboarding and training for new employees; monthly lunch and learns; recording trainings; signage for participating businesses; platform to connect businesses with each other for support / mentorship; include property owners / multi-family businesses in program.

28 - ENGAGEMENT - COMMUNITY LED SOLUTIONS - Leverage and financially support local leaders to: harness the power of community; identify cultural values and connections; raise awareness of available services and supports; increase participation, focus on communities that have historically been underserved, tap into faith-based groups to share messaging, market programs through neighborhood associations, invest in community groups to support engagement, provide incentives for adults to take education classes, provide ongoing funding to local environmental organizations

31 - ENGAGEMENT - GENERAL EDUCATION - Provide clear and consistent information on what is recyclable and reusable, available services, why recycling is important, why certain materials cannot be recycled, the impact of the materials we throw away; ensure messages and messengers are tailored to resonate with specific audiences, use local leaders to deliver culturally specific engagement, community-based efforts at the neighborhood level, offer trainings in other languages, provide videos and tours of facilities, leverage digital resources for residents; utilize social media to reach new/younger audiences, partner with 'influencers', school groups, community colleges, and social orgs.

32 - ENGAGEMENT – SCHOOLS - Improve technical assistance resources for schools, support for developing and understanding waste hauling contracts; emphasize organics recycling, reducing food waste, reusable service ware, school gardens; partner and provide resources / outreach to families, parent groups, PTO boards and school boards; facilitate feedback system for teachers / admin to identify gaps; establish a 'Green Liaison' per school; provide sufficient compost / recycling bins; create turnkey lessons for different grades.

41 - GRANTS - MICROGRANTS FOR BUSINESS - Expand micro-grants to businesses to make the transition to circularity; grants for small businesses working in reuse and repair - not just for nonprofits, support local green jobs / economic development, open ended grant for unique projects.

57 - ORGANICS - SMALL SCALE COMMUNITY - Support small-scale organics infrastructure including; technical assistance/resources/ badges for home/backyard composting; composting sites at the block, opportunities for community gardening and composting; incentives/rebates to purchase compost bins/tumblers; tie in with Master Gardeners program; partner with senior centers as garden/compost sites; have local groups build and sell / donate bins; grant support for neighborhood / backyard composting; network for finished compost sharing; compost giveaways, provide financial incentives for neighbors hosting backyard composting for their street, give starter kit bins / bags at no cost.

66 - FINANCIAL - INCENTIVES FOR REUSE - Provide financial incentives for private businesses focused on repair and circularity, eliminate or reimburse sales tax for used items.

69 - COLLECTION - SHARED DUMPSTERS / SERVICE RECYCLING - Help neighboring businesses or properties consolidate and share services for recycling and composting; consider allowing and providing financial incentivize to those that share with community; provide certification and other recognition tools to promote those that share service.

79 - ENGAGEMENT – MULTIPLE LANGUAGES - Provide community recycling training sessions in different languages; provide interpreters and not just translations; offer commercial technical assistance for non-English speaking business owners. Connect culturally on what recycling looks like, incorporate community knowledge, get people that look like the audience to engage, work with cultural centers within cities, provide education/assistance/financial support to individuals at multifamily properties, provide a translators

80 - ENGAGEMENT - MULTIFAMILY - RECYCLING CHAMPIONS - Expand multifamily technical assistance to include cohort of residential ambassadors from cities; include composting assistance and education focused on commercial property managers (note that some of this is already underway in the County); provide funding for meetings/presentations at buildings; encourage property managers to recruit residents as recycling ambassadors.

81 - ENGAGEMENT - MULTIFAMILY GO GREEN - Develop a 'green apartment' program to model success / best management practices - recycling, composting engagement, and reuse programs within multifamily buildings; develop education and certification program for commercial property managers, target property owners who own lots of properties; other hyper-local programs for multi-family complexes; encourage properties to form sustainability committees

87 - FINANCIAL - SUBSIDY FOR SERVICE - Subsidies, rebates, or bill discount to reduce burden of recycling and organics service costs for low-income customers and improve participation.

93 - FINANCIAL - RESIDENTIAL INCENTIVES - Reward residents and provide incentives to increase participation, especially for low-income families (ideas: stipends for recycling captains, reward programs for recycling, financial incentives for neighbors hosting backyard composting for their street, etc.)

105 - DROP-OFF SYSTEM - MANDATORY POLICY - Policy that every neighborhood should have a smaller collection site / drop-off within a certain distance (walkable and bikeable).

108 - ORGANICS - COMMUNITY SCALE SITES - Support the development (grants, technical, permitting) of community scale composting sites to increase access to compost and overall processing capacity.

114 - MULTI-FAMILY - HAULING PROBLEM SOLVING - Problem solving (beyond 311) solution for multi-family residents & neighbors when private waste haulers are not emptying dumpsters.

115 - FINANCIAL - COMMUNITY-BASED SOLUTIONS - Add a surcharge on tipping fee to pay for community -based solutions and for coordinated community, city and county to address cumulative pollution impacts.

116 - EQUITY - COMMUNITY OWNERSHIP OF ABANDONED AREAS - Community groups take over abandoned properties for community benefits (e.g., composting, community gardens etc.). Consider utilizing abandoned facilities as educational malls/ interactive spaces to discuss waste.

130 - EQUITY - COMMUNITY LISTENING - Host 'Zero Waste' community listening session on a more regular basis and in variety of formats (online, in person, in different parts of the county etc.) to encourage continued participation and feedback.

POLICY

1 - FINANCIAL - ADVANCE DISPOSAL FEE - Adopt ordinance that places a fee on the sale of certain disposables, potential litter, or toxic items (ex. disposable shopping bags, fast food wrappers, cigarettes, pesticides, batteries (vape pens)). Fee covers end of life, creates disincentive for purchase. Focus on items where a consumer has a choice between alternatives.

4 - C&D - DECONSTRUCTION POLICY - Work with cities and state agencies to educate policy maker on the value of deconstruction, adopt policies that prioritize and incentivize building deconstruction over demolition. Include model codes for cities, work with public housing authorities and institutions (schools, hospitals, etc.).

6 - C&D - MINIMUM DIVERSION REQUIREMENT POLICY - Require construction and demolition projects over a size threshold to recycle or divert a min. % of total materials; diversion could be source separated or sorted at a mixed waste processing facility. Potential details: deposit fee system, C.O. based on proof, submission of waste management plans, amp up requirements over time, options for fees based on project type and size, construction emissions standards, excluding concrete in measured weight.

10 - CODES - SPACE FOR RECYCLING - Advocate for requirements for new and significant remodels of multifamily buildings to have a recycling/organics room and/or chutes that are accessible and convenient for all residents; modify building codes to allow for more collection space and access for haulers. Provide incentives, grants, or tax breaks. Expand requirements to all commercial buildings, all local govt. buildings.

12 - COMMERCIAL - SINGLE USE WARES - Advocate for an update to health codes to allow reuse models in foodservice where wares are washed offsite by a third party. Clearly define what is / isn't reusable and provide support (grants, incentives, others) to help restaurants offset costs.

53 - MANDATORY PROGRAM – COMPOST - Require that households and / or businesses properly separate food scraps and food soiled paper from the trash; consider accompanying this with a disposal ban. Include exceptions for lack of space. Details include incentivize by making it 'free,' tied in with pay-as-you-throw system, education resources and bins, require large commercial producers first before households / smaller businesses.

54 - MANDATORY PROGRAMS – RECYCLE - Require that households and / or businesses properly separate recyclables from the trash; consider accompanying this with a disposal ban; consider incentives so small businesses and schools are not disproportionately impacted; develop education, a monitoring plan and eventually a program to provide feedback for improper recycling (e.g., oops tags, etc.).

60 - POLICY - SINGLE FAMILY PAYT - Enact a volume-based pay-as-you-throw fee structure for trash for single family residential across entire county, ensure that rates differentials are significant enough to encourage diversion behaviors; consider system that is equitable and doesn't financially burden certain households more than others.

73 -POLICY - RESTAURANT SINGLE USE BAN - Prohibit foodservice establishments from providing expanded polystyrene (Styrofoam) takeout containers; require single-use takeout containers be recyclable or compostable; encourage used of reusable containers and ban or fee on plastic bags for to-go orders. Include incentives and financial support for restaurants to offset costs. Ramp up program over time to allow businesses time to plan.

74 - POLICY - COUNTY SINGLE USE BAN - Ban single-use items in county facilities and hosted county events.

75 - STATE POLICY – EPR - Lead the development and adoption of producer responsibility policies at the state level - evaluate pairing program with a bottle bill, a value added tax, eco modulation fees, or other options. Ensure policy covers imported and distributed goods.

76 - STATE POLICY - PREEMPTION REPEAL - Repeal state preemption to allow/support bans at city/county level.

77 - STATE POLICY - TRUTH IN LABELING, REPAIR INDEX, COMPOSTABILITY - Support MNCC's composting labeling bill and / or other 'truth in labeling' legislation to identify recyclability / compostability of packaging; consider adopting requirement for publication of repair scores/indexes.

85 - MANDATORY PROGRAMS - LARGEST CITIES - Requirements for the largest cities such as multifamily composting program, commercial collection franchise zones including education for generators, increased city involvement in commercial organics recycling collection, provide more drop off options, food donation and prevention of wasted food, or others.

90 - POLICY - GENERAL SINGLE USE BAN - Ban single-use plastics and / or require fee for single-use goods across entire county, include event centers, concert venues, and sports arenas.

92 - STATE POLICY - ORGANIZED COLLECTION - Amend the organized collection statute so that it applies only to municipal solid waste.

100 - POLICY - E-WASTE - Suite of policies to address e-waste in the county including EPR or advance disposal fees, requirements for disassembly, county contracting, and / or prohibition from exporting waste.

101 - MEASUREMENT - CITY TRANSPARENCY - Policy that cities must provide a website that shows amount of material collected for garbage, recycling, organics, etc. The transparency page would include the specific end market for each recyclable commodity. Require that haulers or MRFs provide end market info to cities that contract with them.

102 - CODES - BUILDING CODES - Develop codes addressing the materials in the built environment - establish requirements and / or incentives for reusing materials when possible, including green materials in construction, and phasing in quality materials that can be dissembled in the future.

104 - FOOD WASTE - MANDATORY RESCUE - Mandatory food rescue / donation program for large generators.

105 - DROP-OFF SYSTEM - MANDATORY POLICY - Policy that every neighborhood should have a smaller collection site / drop-off within a certain distance (walkable and bikeable).

106 - MANDATORY PROGRAMS - ZERO WASTE EVENT REQUIREMENT - Events over a minimum size threshold are required to be zero waste.

107 - NATIONAL POLICY – PLASTICS - Support national standards for plastic to encourage producers to manufacture and sell packaging that can be recovered in the existing recycling system.

117 - FINANCIAL - WASTE SURCHARGE - Establish new or increase existing waste surcharge to capitalize recycling and recycling businesses, revenues go into economic development / job training.

128 - STATE POLICY – LOBBYING - Lobby the state legislature to pass laws that help with the County's zero waste efforts.

136 - MANDATORY WASTE AUDIT & PLAN - Mandatory completion of waste audits and submission of waste reduction for largest generators in County - include public and private sector.

SYSTEMS AND INFRASTRUCTURE

8 - PROCESSING - CHEMICAL RECYCLING / ADVANCED RECYCLING - Evaluate feasibility of chemical recycling or advanced recycling technologies for hard-to-recycle plastics, textiles and other items currently destined for the landfill.

21 - END MARKETS - LOCAL AND REGIONAL - Support local / regional end market development through grants and innovative programs (could neighborhood, county, regional or state level effort), increase local green job opportunities. Include reuse and alternatives to high carbon intensity products in end markets.

42 - GRANTS – MRFS - Provide grant funding to material recovery facilities (MRFs) for equipment upgrades that help to reduce contamination and increase recovery, prioritize grant funding for facilities / projects that provide living wage.

46 - MEASUREMENT – REPORTING - Collaborate to increase compliance with state reporting requirements, improve data sharing, consistent county reporting methodologies, and develop additional metrics beyond traditional weight-based measurement. Examples include generation, source reduction, GHG impacts, job creation, or other metrics. Present data in a manner that is accessible, transparent, and understandable.

49 - HERC - PHASE OUT - Establish milestones to phase out the Hennepin Energy Recovery Center (HERC) as county approaches higher levels of diversion; includes identification of alternatives for disposal of MSW generated in Hennepin County. Milestones for phasing out acceptance of materials at HERC that have higher / better use elsewhere or cause inefficient / high pollution combustion. Milestones to include a definitive shut down.

50 - HERC - EVALUATION AND UPGRADES - Evaluate upgrades at the Hennepin Energy Recovery Center (HERC) to increase pre-sorting of MSW and material recovery, reduce hazardous items from incineration, increase pollution control measures, and other operational improvements to the facility.

51 - HERC - INFORMATION SHARING - Provide more information about HERC and the impact on the surrounding community. Include cost / investment information, impacts on different demographics and community members, add Continuous Emissions Monitoring (CEMS) data. Ensure data is from a trusted sources and presented in a language / format that is accessible to the public.

52 - CIRCULARITY - INNOVATION HUB - Develop innovation hub or districts to incubate new businesses using recycled materials as feedstock; consider innovation challenge around specific waste streams, partner with cities for funding, partner with innovation grants for business to provide space.

58 - ORGANICS - LARGE SCALE PROCESSING - Increase available capacity for organics composting through large or regional facilities, could include public-private partnership, colocation at wastewater treatment plant, county / city run, or other options, research potential sites early to ensure environmental justice is served.

61 - PROCESSING - POST-COLLECTION SORTING OF TRASH - Evaluate efficacy of sorting trash after collection; look at options to develop or contract with existing facilities to remove and recover reusable, recyclable, and compostable materials from source-separated trash.

63 - COLLECTION - PUBLIC SPACE RECYCLING - Make it standard to have a recycling paired with every public trash can, phase to organics in the future. All bins clearly labeled with visuals and text. Ensure county-wide consistency. Adopt standard colors and lids for these bins.

64 - ENGAGEMENT - REGIONAL COORDINATION - Coordinate with neighboring counties/states to encourage consistent education and best practices; collaborate on the development of end markets and infrastructure; get involved with regional planning for siting facilities and planning how materials will be processed, regional acceptance of materials with labeling and engagement.

67 - END MARKETS - ROAD CONSTRUCTION - Incorporate reusable and recycled materials into municipal road construction and maintenance projects, support adoption regionally. Include recycle glass in road specs (where appropriate) and use of compost in roadside revegetation, run-off control, or medians.

68 - STATE POLICY - SCORE FUNDS - ADVOCATE for increased state funding for SCORE, including solid waste management tax funds that are currently diverted to the general fund; evaluate permissible SCORE expenditures (115A.557, sub. 2) and advocate for deconstruction and reuse as an eligible program.

70 - SHARING ECONOMY - C&D - Establish or support reuse warehouses for building materials, evaluate county-run options alongside C&D landfills; create a material 'bank' for temporary storage of construction materials where the materials are examined, repaired, and shared.

82 - LANDFILL - PHASE OUT - Establish milestones, resources, and funding mechanisms to phase out the use of landfills as county reaches zero waste, start with a phase out period that prevents landfills from expanding and then move to full phase out.

84 - SHARING ECONOMY – REUSE HUBS - Develop neighborhood reuse or repair hubs, a 'reuse' mall, or other facilities for upcycling, sharing, refurbishment, and reuse and building local green jobs, partner with food shelves, parks with rec centers, ensure close proximity to transit, aggregate a map/guide of all facilities.

91 - FINANCIAL - Landfill Fees - Increase landfill fees to fund waste reduction and recycling, include C&D landfills and mechanism to prevent any new fees having undue burden on lower income portions of county.

108 - ORGANICS - COMMUNITY SCALE SITES - Support the development (grants, technical, permitting) of community scale composting sites to increase access to compost and overall processing capacity.

109 - ORGANICS - TRANSFER STATIONS PROCESSING - Expand capacity for accepting and consolidating organics at existing transfer stations or building new transfer stations.

117 - FINANCIAL - WASTE SURCHARGE - Establish new or increase existing waste surcharge to capitalize recycling and recycling businesses, revenues go into economic development / job training.

126 - ENGAGEMENT – HAULERS - Engage with haulers to identify the ways they can improve current service and capacity, provide rebates/incentives and support for haulers.

127 - HAULING - CART TAGGING REQUIREMENTS - Require haulers to tag residents' curbside bins that have contamination to further education residents.

STAFF REPORT

Agenda Item 9a.

Council Meeting January 11, 2024	Prepared By Jay Tobin
Topic 2022 Audit Update	Action Required Notification

Summary

The 2022 audit DRAFT will be completed on January 8, 2024, with information provided to Council on January 11, 2024 in order to provide report to Moody's by their January 12, 2024 suspense.

Staff will send the audit information as soon as it is available.

It is expected that escrows will be identified as a material weakness in the 2022 audit, and staff have already been proactively working to address and resolve the issues with our financial consultant Abdo.

Once the audit is finalized, copies of the Annual Financial Report will be available on the City's website at www.corcoranmn.gov. A hard copy of the materials is available for review at City Hall during normal business hours.

Financial/Budget

Increased cost to resolve complexity of 2022 Audit to be reported once final invoice received.

Options

1. Approve DRAFT of 2022 Audit to submit to Moody's by January 12, 2024, suspense.
2. Other suggestions/alternatives from Council members.

Recommendation

Review 2022 audit information as presented to provide the information to Moody's by the January 12, 2024, suspense.

Council Action

Consider a motion to approve the 2022 DRAFT audit.

STAFF REPORT

Agenda Item: 10a.

Council Meeting January 11, 2024	Prepared By Jessica Christensen Buck
Topic City Park Ice Rinks Direction	Action Required Direction

Summary

Due to unseasonably warm weather conditions, there has been a delay in the flooding process caused by temperatures consistently remaining above the necessary point for ice creation. Staff have been closely monitoring the weather forecasts, and it appears the current warm trend may continue for the near future. With the potential for continued warm weather, staff are looking for guidance from City Council regarding a timeline for the ice rinks.

The consensus among cities in the metro has been to hold off on flooding ice rinks, with many cities cutting back on the number of rinks they intend to flood. With the City of Corcoran having one location for ice rinks, this option is not applicable.

Another area of discussion was setting a deadline date for flooding. Each year, the goal is to flood rinks mid-December and open the rinks around late December. The intention is for the rinks to remain open until mid-to-late February. As the window for the 2023-2024 ice rink season continues to diminish, staff are looking for guidance from Council as to a possible “deadline” for flooding the rinks. One deadline that has been seen in other cities is Thursday, January 11.

Staff recommendation would be the following action plan:

- Continue monitoring the weather.
- If weather is accommodating for ice creation by Tuesday, January 16, begin flooding:
 - Should weather remain uncooperative, a decision to not open the rinks would be made at this time.

With the potential to still open this season, staff is working to define what operations would look like with a shorter season. Direction from City Council is requested to determine if staff should move forward with hiring for the condensed season or explore alternative options to rink attendant hiring. One alternative to hiring would be similar to the 2022 – 2023 season with a portable restroom, benches, and rink lights on a timer. This alternative would result in the warming house remaining closed for the season.

Financial/Budget

Funds are budgeted for the ice rink attendants and operations. Due to the limited amount of time for the season, Council should consider the cost-benefit associated with the ice rinks and hiring for the 2023-2024 season.

Options

1. Direct staff to monitor weather and decide on Tuesday, January 16 to:

- a. Create ice, should the forecasted conditions allow for it, and hire rink attendants for the warming house.
 - b. Create ice, should the forecasted conditions allow for it, and provide alternative restrooms and seating areas outdoors, upon opening the ice rinks.
 - c. Closing the ice rinks for the season, should conditions not allow for ice creation.
2. Direct staff to not open ice rinks for the 2023-2024 winter season.
 3. Provide staff with alternative direction.

Recommendation

Direct staff to continue monitoring weather and determine on Tuesday, January 16, 2024, the feasibility of flooding the rinks and hiring ice rink attendants.

Council Action

Consider a motion to direct staff on flooding the ice rinks and hiring Ice Rink Attendants.

Attachments

N/A

STAFF REPORT

Agenda Item: 10b.

Council Meeting January 11, 2024	Prepared By Michelle Friedrich
Topic North Hennepin Pioneer Society Request for Funds	Action Required Direction

Summary

The North Hennepin Pioneer Society has submitted a letter to the City requesting financial assistance for their organization. The letter is attached to this report.

Per Minnesota Statute 138.053, any historical society affiliated and approved by the Minnesota Historical Society may receive funding annually from a governing body of any home rule charter or statutory city of town through specific funding options. The funding must be paid directly to the historical society of its respective city, town or county and be used for the promotion of historical work and aid in defraying the expense of carrying on the historical work in the city, town, or county. The historical society must be affiliated with and approved by the Minnesota Historical Society. However, in the past, gambling funds which the City receives, could be used for this type of purpose. Council approved a portion of gambling funds for a re-roof for the Burschville School in July 2016.

It is requested the City Council consider the request and direct staff on further action. Any decision to assist the organization financially would need to be further vetted with the City Attorney for final review.

At the time the gambling ordinance was adopted, staff recommended using the funds on “activities and facilities for youth” which is one of the approved expenditures. The Council, however, did not adopt a resolution specifying the use, so providing funds to the North Hennepin Pioneer Society is an option.

Financial/Budget

It is anticipated that the City will receive approximately \$30,000-\$40,000 per year and the current balance in the fund is \$230,393.00.

Options

1. Direct staff to draft documents necessary to commit funds towards the North Hennepin Pioneer Society.
2. Take no action.
3. Send back to staff for further review.

Recommendation

Staff recommends financial support to the North Hennepin Pioneer Society through the gambling fund. Staff does feel that some guidance to the gambling funds should be adopted at some point in the near future, so the funds are used effectively.

Council Action

Consider a motion to direct staff to draft documents necessary to commit funds towards the North Hennepin Pioneer Society.

Attachments

1. North Hennepin Pioneer Society Request
2. St. John's newsletter
3. Repair Quote



North Hennepin Pioneer Society-Burschville School

City of Corcoran
8200 County Rd 116
Corcoran, MN 55340

December 26, 2023

Dear Corcoran City Council,

I am writing on behalf of the North Hennepin Pioneer Society. We are an organization that has maintained and cared for the Burschville School, District #107 since the society was founded in 1967. For over 55 years we have preserved and watched over the school and would hate to see it in disarray.

Over the years we have raised money for insurance, electricity, yard maintenance, repair, and replacement of damaged exterior wood, repainting the interior and exterior of the school. We have kept watch on maintenance issues that would need to be addressed in the future. The foundation repair was just one of the big expenditures coming up. We have a roof that will need replacement of wood shakes soon. It has been over 25 years since that was replaced.

We asked for a quote from several foundation companies 3 years ago knowing this would be a project coming forward. This summer we went back for another quote and found the cost had exceeded the first quote quite a bit. The school needed structural repair on the foundation. The center of the floor needed a steel beam installed the full length of the school and we would have to open the floor to get access. We do not have a crawl space. We received a donation of \$21,000 from a family who live in Corcoran and are members of the Society. Yet that still was not enough to cover the cost. It was an additional \$8,187.

Our school was one of the last operating schools in Hennepin County until it consolidated with the Buffalo School District in 1967. The then empty school was sold to our historical society to resupply with school items and reopen its doors to visitors. At one time there were a total of 8 one-room schools in Corcoran. At present time there are 3 used as private homes, 4 destroyed and only the Burschville School still standing and open as a one-room school of bygone years.

We are a 501©3 organization and we were accepted into the National Register of Historic Sites with the Minnesota Historical Society in 2018. It was a 4-year process, but we were able to qualify and be accepted.

We feel we are and can be an asset to the community now and in the future. Each spring we open our school to the St. John's Lutheran School to be used as a classroom for the 2nd grade class, to experience the life and times for the school children. For over 20 years St. John's have graced our doors with little ones and brought laughter back in the school. We would like to expand on this idea to open our doors for visits from other schools in the area in the future. We hold Summerfest each August to bring back former students, fundraise and hold an open house to all who come to see what school was like in the early 1900's.



North Hennepin Pioneer Society-Burschville School

Last June we were featured in Lakeland PBS Schoolhouse documentary intitled, "Monuments on Our Landscape." You can find us on: <https://1ptv.org/local-shows/local-specials/>

Our school was one of 5 selected one-room schools in Minnesota to be in this documentary. It is quite an honor for us and Corcoran.

We have continued to raise money at our annual Summerfest in August, but we feel we need to come forth and ask for your help by using the gambling funds the City has received. We want to complete the foundation and finish the floor. Three members of our society took out the center of the flooring, put down a subfloor and set the oak flooring back in place to save money. They put in more than 225 hours of combined time working on the floor. The flooring now needs to be sanded and finished to complete the project. We have a quote from a floor sanding company to add to our request.

We want to keep the school open and available to the citizens of Corcoran and the surrounding areas. Please assist us in doing just that. Thank you.

Sincerely,

Bonnie Maue, President
Dale Pomerleau, Vice-President
Deb Weinand-Secretary
Dee Cain-Treasurer

138.053 COUNTY HISTORICAL SOCIETY; TAX LEVY; CITIES OR TOWNS.

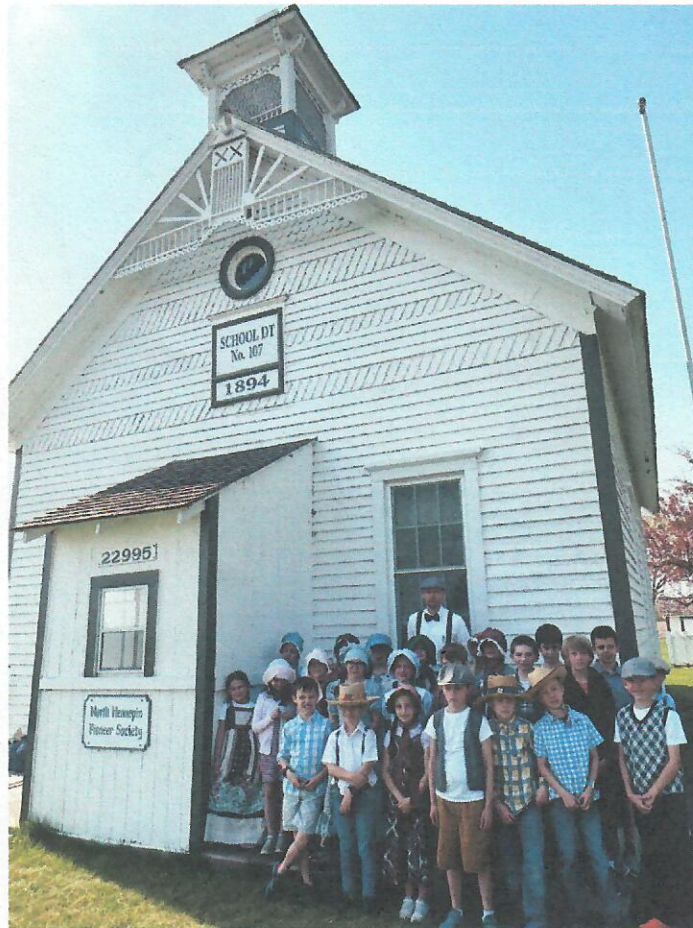
The governing body of any home rule charter or statutory city or town may annually appropriate from its general fund an amount not to exceed 0.02418 percent of estimated market value, derived from ad valorem taxes on property or other revenues, to be paid to the historical society of its respective city, town, or county to be used for the promotion of historical work and to aid in defraying the expenses of carrying on the historical work in the city, town, or county. No city or town may appropriate any funds for the benefit of any historical society unless the society is affiliated with and approved by the Minnesota Historical Society.

History: *1963 c 129 s 1; 1973 c 123 art 5 s 7; 1973 c 773 s 1; 1983 c 315 s 1; 1988 c 719 art 5 s 84; 1989 c 277 art 4 s 11; 1994 c 505 art 3 s 4; 2008 c 158 s 1; 2013 c 143 art 14 s 16; 1Sp2019 c 6 art 4 s 3*

The EAGLE CONNECTION

ALL-SCHOOL WEEKLY NEWSLETTER

Old School Days



Girls wore bonnets and dresses, and boys put on overalls, straw hats, and flannel shirts. Students carried lunch pails or baskets, waiting for the bell to ring to be let inside the old schoolhouse. Once inside they'd hang up their coats, put their lunch pails away, and then stand by their desks until the teacher walked into the room. After excusing the students to sit down, the lessons for the day began. These lessons have not changed for hundreds of years, but the way students learn has changed over time. This is what students learn about each year when they attend the Burschville Old School House.

This is a 2nd grade field trip tradition that has been going on for over 20 years. It started back when Mrs. Cummins took her classes there 24 years ago, and I continued the tradition when I started teaching here. The

first couple of years took some learning and getting used to on my part because I am the one who acts the part of the "Old Time Teacher."

The week prior to the visit, our class discussed what it was like for students in school hundreds of years ago, up to the days when their grandparents may have been in a one-room school. In a one-room school, students were all different ages and grades. The older students would often teach the younger students lessons that the teacher would share. Our students are especially surprised to hear about some of the discipline practices that were used – from the "dunce" hat, to wearing signs about how bad you were, to getting rapped on the knuckles with a ruler, or just a plain ol' spanking. I typically have a student that asks if they can wear the dunce hat once they get there, or if the teacher there will be really mean. (not yet realizing I'm the teacher that plays that part)!



OLD SCHOOL DAYS CONT.

Our 2nd grade class learns about the way things in a school have changed over time. Back in the old days, older boys would not be in school in the spring and fall as they would be helping on the farm with planting and harvesting. In the old days, students would have to write with a quill and ink on birchbark, or in later times on a slate with chalk. Memorization was the way of learning many things compared to nowadays when we can look up whatever we want on the internet. In the "old" days, even in the public school, students would begin each day by saying the pledges and prayer (including the Lord's Prayer). Fortunately, here at St. John's we can continue to pray and say the pledges daily.

The trip to the Burschville school house is a fun experience for 2nd grade. Mrs. Klersey always has some good stories to tell about what it was like for her attending Burschville school. The students learn math and reading lessons like past students would have with a slate and chalk. We eat lunch out on the grass, or under the shelter they recently built. After lunch we play an old-fashioned game such as tag, "Red Rover", or "Duck Duck Grey Duck". Students learn about history through an experience they wouldn't get in another place.

Although the "Old School Days" were much different than they are now, the one constant remains: our students are at a great school and are learning. At St. John's, we continue to teach students about all the subjects people have been studying for hundreds of years. More importantly, we are able to teach our students about Jesus and what it means to live as a child of God!

[During this year's field trip, we were videotaped by a person who is doing a documentary for PBS about one-room schools! Look for this year's 2nd grade to be on the PBS station once the documentary is completed!]

Mr. Jeremy Koosman



Quotes & Bills for the foundation repair of the Burschville School-Fall 2023

DBS Residential Solutions, Inc.

Stabilize Floor-	\$21,796.32
Labor & material for the installation of Smartjack XT	<u>\$ 8,187.34</u>

Dave's Floor Sanding

Sand & finish Red Oak floor 1 ½" Entry & classroom	\$ 4,600.00
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Menards

Subfloor, 2x2-8's and screws	\$ 356.00
Old red oak flooring-replacement	\$ 200.00

<u>Cost of repairing floor foundation</u>	<u>\$35,139.66</u>
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The North Hennepin Pioneer Society is requesting help of \$15,000 of the gambling funds to get the school open again for children to come and visit and explore the past!

Thank you!

STAFF REPORT

Agenda Item: 10c.

Council Meeting January 11, 2024	Prepared By Jay Tobin
Topic 2023 Year in Review	Action Required None

Summary

January 11, 2024, marks the first City Council regular meeting of the year. Staff reviewed the progress the City made in 2023 and offers the following recap of some of the activity that took place in 2023.

Administrative Services:

- Completed 4 City newsletters.
- Continued social media presence: 1,376 followers on Facebook; 200 followers on Twitter.
- Added 210 utility billing customers and averaging 30 new homes a month.
- Completed 23 Data Practice Requests.
- Coordinated the annual Clean Up Day event hosted at Public Works with approximately 131 cars/trucks/trailers.
- Implemented BS&A Miscellaneous Receivables module.
- Coordination of escrow reconciliation for various projects was completed.
- Completed 107 Resolutions.
- Created and Adopted Chapter 119: Cannabis, Edible Cannabinoids, and Drug Paraphernalia Ordinance 2023-496.
- Implemented Juneteenth Holiday.
- Implemented Earned Safe and Sick Time Policy.
- Implemented CIT User End city-wide process.
- Updated the Employee Handbook.
- Hired Police Officer Aaron Burns.
- Hired Communications Assistant Aaron Headrick.
- Hired Seasonal Recreation Coordinator Jackson Shipley.
- Hired Public Works Maintenance Worker Mackenzie Alger.
- Hired Public Works Administrative Assistant Kelsey Meer.
- Hired 2 part-time Police Officers.
- Hired Police Sergeant Dan Wilcox.
- Hired 2 seasonal Public Works Maintenance Workers.
- Appointed Matt Gottschalk as Interim City Administrator.
- Appointed City Administrator Jay Tobin.
- Hired 2 Snowplow Operators.
- Received Council approval to incorporate Granicus agenda building software into City processes.

- Completed second phase of archival scanning project including planning documents. Over 200,000 scanned pages.
- Approved the largest Bond 2023A Series in the history of the City of Corcoran for \$25,545,000 for street, utility, and road improvements to Hackamore Drive, City Center Drive and 79th Place, Horseshoe Road, and Horseshoe Bend.
- Received a \$10 million federal grant for infrastructure.

Public Works

- Aided with emergency management by assisting local fire departments.
- Prepared and maintained the ice rinks and ballfields for use
- Washed, maintained, and repaired City owned equipment and fleet.
- Coordinated maintenance and repairs on City buildings.
- Installed numerous mailboxes, distributed water meetings, and completed many utility locates.
- Coordinated road restrictions.
- Coordinated the dust control program.
- Completed crack sealing, seal coating, and overlays.
- Completed monthly water meter readings.
- Maintained the lift stations
- Graded and snowplowed roads
- Completed various site visits and items related to MS4, SWPPP, and Watershed Commission compliance.
- Coordinated developments at Ravinia, Bass Lake Crossing, Bellwether, Amberly, Tavera, Rush Creek Reserve, Bechtold Farms, St. Therese, Kariniemi Meadows, Pioneer Trail Business Park, Walcott Glen, Garages Too, and Cook Lake Highlands.
- Construction began on the Hackamore Road Improvements
- Construction began on the City Center Drive Utility and Street Improvements
- Construction began on the Horseshoe Bend Drainage Improvements
- Construction began on the Water Treatment Plant and Storage Tower sites
- Robbie Kottke celebrated 5 years of service with the City of Corcoran.
- Hired Mackenzie Alger to the position of Maintenance Worker
- Hired Kelsey Meer to the position of Administrative Assistant

Parks and Recreation

- Coordinated youth athletic programs that approximately 715 kids participated in.
- Coordinated the 2023 Holiday Toy and Food Drive with 6 neighborhoods, approximately \$15,000 in Toys, and an estimated 1,100 pounds of food donated.
- Work continued on the boardwalk in Bellwether boardwalk planning.
- Appointed Jackson Shipley to the position of seasonal Program Coordinator.

- Coordinated Night to Unite events, working closely with all departments and the Council to attend 10 neighborhood parties throughout the community, and hosting the City-wide party at the Public Works facility.
- Staff hosted a training session for the Parks and Trails Commission to better define roles and abilities of the Commissioners.
- Assisted in the coordination of the annual tree giveaway, providing 650 saplings to residents.
- Toured the open space and neighborhood parkland in the Bellwether neighborhood as a work session for the Parks and Trails Commission.
- Discussed the opportunity for collaboration with the Wacker/Espeseth family for the playground portion of the City Park Remaster project.
- Reviewed purchase request for the beautification of the Memorial Garden by the Garden Club.
- Coordinated the Diamond Lake Regional Trail cooperative agreement between the City and Three Rivers Park District.
- Appointed HKGi as the Park Master Planning and Development consultant.

Public Safety

- Assisted with neighboring communities as needed.
- Hosted and attended several RMS demo informational gatherings with the LMAC Group.
- Hosted the 15th annual Truck Safety Seminar at the Public Works facility with 280 registered participants.
- Hosted the youth firearms training for 55 registered students.
- Officers Abby and Jesse attended the Alexandria Technical & Community College Job Fair.
- Received and install the new Key Tracer key box.
- Police Department Recruitment and Retention policy was reviewed and adopted.
- Detective Spellacy hosted a Victim of Financial Fraud presentation in Bellwether.
- Conducted our first BWC Audit with MNSec.
- Assisted the Northwest Area Jaycees with various events, such as their Annual Easter Egg Hunt, Corcoran Country Daze where we did more than 118 child IDs on Family Day.
- Hosted a K-9 Training Event
- I-94 West Chamber of Commerce First Responder Luncheon honoring Sgt. Corey Andress and Reserve Jim Shoulak and Officer Lawson.
- Mothers Against Drunk Driving Recognition of Clay Decker.
- Conducted alcohol and tobacco compliance checks.
- Took part in various Towards Zero Deaths (TZD) initiatives.
- Loretto Fire and Hamel Fire Departments merged to West Suburban Fire District.
- Assisted with the Hamel Rodeo and the Hamel Rodeo Parade.

- Coordinated Night to Unite events, working closely with all departments and the Council to attend block parties throughout the community.
- Appointed Darren Bohlsen and Levi Siljander to the position of Part-Time Officer.
- Recognized Reserve Sergeant John Kieffer for his 40 years of volunteer service in July.
- Attended the annual Ravinia Fall Festival.
- Corcoran Resident Makena Prevost received the Emerging Leader Award from MN TZD/Sgt Peter Ekenberg was recognized by the MN Office of Traffic Safety for his work with Makena in getting her law passed.
- Appointed Kailee Jarland to the position of Reserve Officer.
- Held the Annual Holiday Toy and Food Drive.
- Continued social media presence: approximately 3,200 followers on Facebook; 263 Twitter followers.
- Recognized Paula Steelman for 15 years of service with the City.
- Coordinated the Annual Shop with a Cop Event.

Planning/Development

- Staff hosted a training session for the Planning Commission to provide and overview of land use, review the 2040 comprehensive plan, and discuss regulations of Homeowners Associations.
- Creation and adoption of the Rental Dwelling Ordinance and Property Maintenance Code.
- The part-time Planning Administrative Assistant role was changed to the full-time Planning Technician role (appointed to Dwight Klingbeil). This position brought code enforcement inspections in-house, completes entry level planning review, and assists with the administration of the new Rental program (including rental inspections).
- Reviewed a Conditional Use Permit for an Accessory Dwelling Unit for George Gmach.
- Reviewed a Conditional Use Permit and an Interim Use Permit for an accessory structure for Tyler Heidecker.
- Reviewed and recommended approval of a Conditional Use Permit for an accessory structure for Lee Bennett.
- Reviewed a Preliminary Plat, Conditional Use Permit, Rezoning, Site Plan, and Variance for Corcoran Storage II.
- Discussed zoning options for the sale of low potency adult-use cannabis.
- Reviewed a Comprehensive Plan Amendment, Rezoning, Preliminary Plat, Conditional Use Permit, and Site Plan for Red Barn Pet Retreat.
- Reviewed an Interim Use Permit for Ryan Sunram.
- Adopted the following ordinance amendments: Transition/Buffer yard requirements, Planned Unit Development Standards, administrative approvals of expansions of certain nonconforming buildings, reduce eave and overhang requirements on accessory structures, a comprehensive update of the subdivision and zoning ordinance to address various errors and inconsistencies.

- Staff created a new Development Updates StoryMap for the website.
- An interactive Zoning Map was created and is now available on the website.
- Staff updated the Development Rights Map.

Staff proudly worked to accomplish these things and much more in 2023 and looks forward to the opportunities that lie ahead in 2024.

Financial/Budget

N/A

Council Action

N/A

Attachments

N/A

STAFF REPORT

Agenda Item: 10d.

Council Meeting January 11, 2024	Prepared By Jay Tobin
Topic 2024 Core Strategies-Short term Goals-Measurables	Action Required Approve 2024 Goals-Measurables

Summary

January 3, 2024, City Council met in work session focused on strategic planning with the intended outcome of verifying 2024 goals and measurables for the City.

Staff has updated the goals and measurables to reflect work session discussions, requesting that council review and update as appropriate in order to approve and the 2024 Core Strategies, Short-term Goals, and Measurables.

Financial/Budget

N/A

Council Action

Review and update goals and measurable as appropriate in order to approve the 2024 Core Strategies, Short-term Goals, and Measurables.

Attachments

1. 2024 Core Strategies, Short-term Goals, Measurables
2. 2023 Planning Commission Annual Report and 2024 Priorities
3. 2024 Planning Staff Priorities
4. 2023 Planning Commission Annual Report and 2024 Priorities



CITY OF CORCORAN

2024 City of Corcoran Core Strategies, Short-Term Goals, and Measurables

Core Strategy Enhancing Corcoran’s sense of place and identity.			
<p>Strategic Objectives</p> <ol style="list-style-type: none"> 1. Engage residents through proactive outreach and communication. 2. Provide and/or support high quality community events for community gathering. 3. Identify and develop a place where people identify with Corcoran. 	<p>Short-Term Goals</p> <ol style="list-style-type: none"> 1. Identify/Plan City trail corridors, including off-road trail plan, more input/direction from Parks and Trails & Planning Commission. 	<p>Measurables</p> <ol style="list-style-type: none"> 1a. Create a map of existing trails that can be utilized for reviewing <u>future</u> trails by end of Q1. 1b. Parallel planning City Park and Boardwalk in Bellwether with update to Council Q2 	
Core Strategy Provide diverse community amenities and recreational opportunities.			
<p>Strategic Objectives</p> <ol style="list-style-type: none"> 1. Plan for and provide multi-seasonal and multi-use trail and park systems. 2. Provide high quality parks that are unique, innovative, and accessible. 	<p>Short-Term Goals</p> <ol style="list-style-type: none"> 1. Continue defining and refining park development and design standards. 2. Review Parks & Trails resourcing and timing. 	<p>Measurables</p> <ol style="list-style-type: none"> 1. Update Park standards adding OSP - Q1 2. Brief Parks & Trails funding sources/uses - Q1 3. Joint work session: Parks & Trails Commission – Q2 	

Core Strategy			
Maintain excellence in safety and security for our community.			
Strategic Objectives	Short-Term Goals	Measurables	
<ol style="list-style-type: none"> Promote public safety engagement with the community. Maintain position as one of the safest cities in Minnesota. 	<ol style="list-style-type: none"> Continue exploring potential of automatic license plate readers for use by Police/Public Safety. Intentional future planning for fire, rescue, and first responder services. 	<ol style="list-style-type: none"> Plan/execute brief on potential of automatic license plate readers – Q1 Review and reassess Fire Service Action Plan with focus on patient outcomes – Q3 	

Core Strategy			
Ensure high quality, market driven growth.			
Strategic Objectives	Short-Term Goals	Measurables	
<ol style="list-style-type: none"> Be innovative in molding market forces and organic growth into the community. Protect natural character, environmental features, and agricultural roots. Preserve our distinguishing features through market driven development. Be responsive to the needs of businesses, both current and prospective. 	<ol style="list-style-type: none"> Continue to review zoning, land uses, and commercial/industrial alternatives. Continue to review code to ensure it aligns with desired outcomes. Explore potential of “financial modeling” to inform zoning and guiding in development. 	<ol style="list-style-type: none"> Joint work session with Planning Commission to discuss zoning – Q1 Code update addressing city discretion to allow density less than 3 – Q2 Identify “financial modeling” firms – Q1 	<ol style="list-style-type: none"> .

Core Strategy

Provide high quality, innovative municipal services.

Strategic Objectives

1. Maintain fiscal stability and affordability.
2. Perform exceptionally within the structure of limited government services.
3. Excel at managing change.

Short-Term Goals

1. Maximize interest income.
2. Plan intentionally for future city facility needs.
3. Identify and prioritize current and future staffing needs.

Measurables

1. Brief on investments and use/potential uses of interest – Q2
2. Sub-committee meet and update – Q3
3. Brief staffing as part of budgeting process – Q3/Q4



CITY OF CORCORAN

8200 County Road 116 • Corcoran, MN 55340
763-420-2288 • www.corcoranmn.gov

MEMO

Meeting Date: December 18, 2023
To: City Council
From: Planning Commission
Re: Planning Commission 2023 Annual Report and 2024 Priorities

As requested by the City Council, the Planning Commission is to update the Council on activities of the previous year and priorities for 2024.

The following are some of the activities completed by the Planning Commission in 2023:

2023 Summary:

- Reviewed a Conditional Use Permit for an Accessory Dwelling Unit for George Gmach.
- Reviewed a Zoning Ordinance Amendment for Transition/Buffer yard requirements between land uses.
- Reviewed a Zoning Ordinance Amendment for Planned Unit Development Standards.
- Participated in a training session which included a brief overview of land use, reviewing the 2040 comprehensive plan, and discussed regulations of Homeowners Associations.
- Reviewed a Zoning Ordinance Amendment which gave staff the ability to administratively approve expansions of certain nonconforming buildings.
- Reviewed a Conditional Use Permit and an Interim Use Permit for an accessory structure for Tyler Heidecker.
- Reviewed and recommended approval of a Conditional Use Permit for an accessory structure for Lee Bennett.
- Reviewed a Preliminary Plat, Conditional Use Permit, Rezoning, Site Plan, and Variance for Corcoran Storage II.
- Discussed zoning options for the sale of low potency adult-use cannabis.

- Reviewed a Comprehensive Plan Amendment, Rezoning, Preliminary Plat, Conditional Use Permit, and Site Plan for Red Barn Pet Retreat.
- Reviewed an Interim Use Permit for Ryan Sunram.
- Reviewed a Zoning Ordinance Amendment to reduce eave and overhang requirements on accessory structures.
- Reviewed a Zoning Ordinance Amendment addressing various typographical errors and inconsistencies in the zoning ordinance.

Totals:

Conditional Use Permits: 5

Zoning Ordinance Amendments: 5

Preliminary Plats: 2

Rezoning: 2

Site Plans: 2

Variances: 1

Comprehensive Plan Amendments: 1

Interim Use Permits: 2

2023 Priorities

At the end of 2022, the Planning Commission identified a number of goals to achieve during the 2023 year. The following are some of the goals that were addressed by this Commission:

- Review the ADU Standards:
 - The Commission reviewed an application to amend the zoning ordinance addressing the ADU standard during the December 1, 2022, meeting.
- Review the Nonconformities section of the Zoning Ordinance:
 - The Commission reviewed and recommended a Zoning Ordinance Amendment that allowed more administrative approvals of certain residential expansion during the June 1, 2023, meeting.
- Receive training to better understand the role of Homeowner Associations and their ability to place more restrictions on property than the city:
 - A training session was held during the May 4, 2023, meeting, which included a brief overview of land use, a review of the 2040 comprehensive plan, and discussed regulations of Homeowners Associations.

2024 Priorities

In addition to the Commission's role to review land use applications, the Planning Commission proposes the following priorities for 2024:

- Training Session(s)
 - The role of and legislation surrounding the Metropolitan Council.
 - Break down the City Code and Comprehensive Plan.
 - State laws relevant to planning and the Planning Commission.
- Review Landscaping Standards
 - How can we preserve a diversity of environmental habitats through these standards other than requiring planting of trees and shrubs?
 - Can we credit projects for preservation of existing trees and habitats.

- Provide support to the City Council in updating Commercial and Industrial standards.
- Community Farms, Community Gardens, and Agri-businesses
 - How can we support and encourage these uses within the Zoning Ordinance?
 - Also discussed encouraging the creation of “agrihoods”.
 - Is this supported through the existing Open Space and Preservation plat?
 - Are additional Subdivision Ordinance/Zoning Ordinance changes needed?
 - Is this feasible to incorporate within the MUSA?
- Review Home Occupation Ordinance
 - Encourage and support businesses that are compatible with residential neighborhoods.
 - Make the ordinance clearer/easier to navigate for residents.
 - Where can the current process be improved?

The Planning Commission appreciates the support of the City Council and requests feedback on its proposed priorities for 2024.



CITY OF CORCORAN

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MEMO

Meeting Date: December 18, 2023

To: Jay Tobin, City Council

From: Natalie Davis McKeown, Kendra Lindahl

Re: Planning Staff 2024 Priorities

This is an update to staff's ordinance update priority list shared with the City Council in recent years. The updates are focused on short-term priorities in the 2040 Comprehensive Plan implementation chapter and notes staff has compiled within the City Code.

The following is a list of City-identified and staff-identified priorities that were completed in 2022:

1. Rental Dwelling Ordinance with a Property Maintenance Code.
2. Creation of required buffer yards.
3. Creating standards for Planned Unit Development (PUD) districts.
4. MS4 Ordinance updates specific to salt storage.
5. Administrative approvals to expand non-conforming buildings in some instances.
6. Simplified eaves and overhang requirements for accessory structures.
7. "Minor" Subdivision and Zoning Ordinance Edits

The following is a list of projects that planning staff is currently processing in addition to land use applications:

1. Commercial and Industrial Standards Update
2. City Maps – the following maps are being updated and expected to be made available to the public by Q1 of 2024.
 - a. Zoning Map – An interactive web-based map in addition to the traditional static map.
 - b. Land Use Map.
 - c. Development Rights Map
 - d. Rental Block Density Map – An interactive web-based map.
 - e. Map of park land, city-owned property, and trails/trail easements.

The following is the ongoing list of other updates staff has identified:

1. Update Landscaping Performance Standards.

- a. Consider a preferred tree list to be implemented city-wide (preferred tree list approved in 2022 specific to the NE District).
- b. Consider allowing landscaping credit for retaining existing trees.
- c. Standards for downtown and urban districts (reduce number of trees).
- d. Create a policy to implement 1060.070, Subd. 2(G)4 which allows the City to accept cash for off-site planting of trees when vegetation cannot be located on-site due to constraints.

2. Sign Ordinance.

- a. Consider allowing temporary sign flexibilities for “community events” (in response to a 2022 request from Corcoran Lions).
- b. Develop and implement City Construction Hours Sign policy.
- c. Section 84.06, Subd. 1(C)iii – change farm stand to seasonal produce stand.
- d. Section 84.06, Subd. 1(D) – delete duplicate.
- e. Delete comma before Statute 325D.71 in Section 84.05, Subd 3(B).
- f. Consider changes to sign ordinance to allow two canopy signs on opposite ends of canopy to count as one sign (or increase amount of allowed signage).

3. Nuisance Ordinance Clean-up.

- a. Consider allowing temporary dumpsters.
- b. Clarify shipping containers and semi-trailers are prohibited.
- c. Garbage service edits from City Attorney.

4. Subdivision Updates.

- a. Section 945.020, Subd. 5 - references minor arterials and minor collectors, but not major collectors.
- b. Section 926 - lot consolidation in header but not clear in text.
- c. Section 945, Subd. 20(A)2.a – look at road length standard vs. fire code.
- d. Fix TOC format in Section 950.
- e. Change minor subdivision to lot line adjustment in Section 926, Subd. 3.
- f. Section 945, Subd. 19 – update temporary cul-de-sac standards?
- g. Consider Lennar’s request regarding temporary D&U easements on temporary outlots.
- h. Fix Open Space & Preservation plat.
 - i. Require at least 2 development rights (cannot be done with just 1 assigned or implied development rights)

i. Review and clean-up Lot Line Adjustment/Lot Consolidation Process

5. Development Rights Program.

- a. Clarify language that a development right is for subdivision and buildability is related but separate.
 - b. Clarify language as to whether development rights are also applied to commercial subdivisions/non-residential uses.
 - c. Create a fact sheet to explain the program internally and externally.
 - d. Update Development Rights Map.
6. Update submittal requirements. This applies across zoning and subdivision ordinance.
- a. Delete requirement for electronic CAD files.
7. Wetland Ordinance.
- a. Do we keep it? Should we remove and let watershed regulations prevail?
 - b. Fences in wetland buffer.
 - c. Wetland buffer maintenance.
 - d. Native landscape/wetland buffers standards for inspection and warranty
 - e. Wetland buffer planting standards (5 PLS per acre for forbs is not standard – accept MNDOT 34-261 or 35-241).
 - f. Existing vegetation standards.
8. Shoreland Ordinance – update to current DNR model and to reflect ditch buffers.
- 9. Consider changes to Telecommunications.**
- a. Setbacks - Inhabitable structures only? Reduce?
 - b. Compliance with Federal Law.
 - c. Develop a telecommunications tower leasing policy to implement with water tower.
10. Update Accessory Structures.
- a. Changes to Accessory Structure size limits in PI and CR.
 - b. Eaves, overhangs are allowed to encroach into setback because setbacks are measured by foundation. Discuss allowed encroachments and update code if needed.
 - c. Consider changes to standards.
 - i. Do we want to continue to limit sidewall height?
 - ii. Should it be footprint versus total square feet?
 - iii. Should we allow as a principal use?
- 11. Review and Update Home Occupation Ordinance (previous Council request).**
- 12. Update Zoning District Standards (other than Commercial/Industrial)**
- a. Comp Plan task – Review and update residential zoning districts and requirements in subdivision regulations as needed to ensure that the densities envisioned in the Plan can be achieved.

- b. Review residential architectural standards for compliance with case law (per previous City Administrator in Feb 2020).
 - c. Comp Plan Task – Continue to review and update site and building design standards as needed to ensure high-quality development in the community.
 - d. Comp Plan Task – review and update zoning districts with associated uses and all site and design requirements.
 - e. Essential services
 - i. Update standards and districts.
 - ii. Update 1030.090, Subd. 4 – remove term “Agricultural district”.
13. Comp Plan Task – Prepare and adopt a Growth Management Policy consistent with the Metropolitan Council approved forecasts for sewerred and unsewerred growth. The plan will utilize a rolling average over five year increments so that a lower level of development can occur in some years and a higher level in other years, provided that the average annual residential permits does not exceed 230 units/year on average. If growth exceeds this rate, the City will coordinate with Metropolitan Council staff to discuss whether or not a forecast change or amendment is needed.
14. Comp Plan Task – Encourage use of innovative development concepts where appropriate, such as mixed use development and cluster housing to provide life-cycle housing opportunities, minimize the need for automobiles, protect natural resources and maintain open space.
15. Wind Ordinance.
16. Manure management ordinance.
17. Water reuse option.
18. Consider allowing Agricultural Preserve applications to be reviewed administratively.
19. Addressing Inconsistencies.
 - a. Fir Lane N is south of Fir Lane
 - b. Bridle Path addressing is not logical
 - c. Accessory Dwelling Unit addressing prior to ADU update
20. Review how to handle farmhand housing in the Zoning Ordinance in conjunction with new Rental Dwelling Ordinance. Either need to exempt farmhand housing from the Rental Dwelling Ordinance, or remove the requirement in the Zoning Ordinance that farmhand housing cannot be used as a rental property. Otherwise, there is a conflict between the two ordinances.

In addition to finishing the ongoing projects, staff identifies the following priorities to begin work on in 2024 (in no particular order of importance):

- Update landscaping performance standards.
- Updating sign ordinance to allow flexibility for “community event” advertising and develop City Construction Hours Sign Policy.
- Telecommunications Ordinance and Leasing Policy.
- Home Occupation Ordinance.
- Update zoning district standards (other than Commercial/Industrial).
- Review and clean-up Lot Line Adjustment/Lot Consolidation Process
- Review how to handle farmhand housing in the Zoning Ordinance in conjunction with new Rental Dwelling Ordinance.



CITY OF CORCORAN

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MEMO

Meeting Date: December 19, 2023
To: Parks and Trails Commission
From: Jessica Christensen Buck, Recreation Supervisor
Re: 2023 Year in Review and 2024 Priorities

December 19, 2023, marks the final Parks and Trails Commission meeting of the year. Staff looked back at the progress the Commission made this past year and opens discussion to the priorities for 2024. The following are some of the activities completed in 2023:

- Received a presentation from the Police Department.
- Received a presentation from the Public Works Department.
- Received a presentation from the Administration Department.
- Received a presentation on the Watershed District.
- Appointed Chairperson Anderson and Vice-Chairperson Christenson for 2023.
- Received regular Parks and Trails Commission meeting minutes, active planning applications, Recreation Supervisor/Program Coordinator updates, park dedication fee updates, City Council updates, and Garden Club updates.
- Attended the City Council meetings as liaisons from the Commission.
- Coordinated the annual tree giveaway.
- Reviewed the 2024 fee schedule and Parks and Recreation budget.
- Toured the open space and neighborhood parkland in the Bellwether neighborhood.
- Provided feedback regarding the potential Corcoran Meat Locker property sale.
- Received updates on the progress for the RFPQ and consultant selection for master park planning.
- Accepted resignations from Commissioners Wyffels and Meister.

- Welcomed two new Commissioners during 2023; Gary Erzberger and Jonathan Schmidt.
- Received an update regarding the Hennepin County Youth Sports Facility Grant being awarded at \$300,000 to the City of Corcoran.
- Discussed the opportunity for collaboration with the Wacker/Espeseth family for the playground portion of the City Park Remaster project.
- Reviewed plans for Red Barn Pet Retreat Preliminary Plat and provided a recommendation to Council for park dedication on the project.
- Created a subcommittee to assist in the selection of the master park planning consulting firm.
- Reviewed the RFPQ for master park planning and design services.
- Reviewed a purchase request for beautification of the Memorial Garden by the Garden Club.
- Participated in Commissioner training covering expectations, comp plan, park dedication, etc.
- Discussed future signage in the parks, including wayfinding and education signage.
- Received requests from residents for a dog park in the Bellwether development.
- Reviewed the Pedestrian Crossing Policy and provided feedback to staff.
- Reviewed the Snow Removal/Ice Policy and provided feedback to staff.
- Reviewed and recommended approval of the Three Rivers Park District's Diamond Lake Regional Trail cooperative agreement with the City.
- Discussed potential future programming opportunities with the amenities included in 30% designs for City Park.
- Received a request from a resident requesting a bike rack at Wildflower Park.
- Recommended working with HKGi for master park planning and design services.
- Recommended support of Hennepin County's 2024 regional solicitation regarding the County Road 116 Bikeway Project.

In 2024, the Parks and Trails Commission have the following priorities:

- Diamond Lake Regional Trail: Continue working with Three Rivers Park District to develop trails through the City that align with the cooperative agreement.
- Open space park and boardwalk in Bellwether: Work with the staff from HKGi to further plan the boardwalk, including design, cost, and timeline for installation.
- City Park remaster: Work with the staff from HKGi to further the work on the City Park remaster, including 70% & 100% designs, cost, and timeline for construction. Additional funding sources will continue to be explored.
- Wayfinding: Creation of a wayfinding policy for the signage at the parks, including directional and monument signs.

- Future financial obligations: Further define the upcoming projects, project upcoming park dedication funds, and earmark funding for specific projects.
- Development/park standards update: Develop a vision of what the Commission would like for various types of park standards (i.e., neighborhood parks, open space parks, etc.) regarding amenities, space, location, etc.

Attachments:

9a1. 2024 Parks and Trails Commission Meeting Schedule

City of Corcoran
2024 Parks and Trails Commission Schedule

Dates and items listed are subject to change

January 18, 2024

- Commissioner Re-Appointment
- Chairperson and Vice-Chairperson Elections
- HKGi Introduction?
- Minutes
- Active Planning Applications
- Recreation Supervisor Update
- City Council Report
- Commissioner Term Update
 - Val Nybo and Judy Strehler terms expire in 2024
- Garden Club Report
- Park Dedication Fund

February 15, 2024

- Minutes
- Administration Annual Presentation
- CPD Annual Presentation
- PW Annual Presentation
- City Park Remaster Update
- Active Planning Applications
- Recreation Supervisor Update
- City Council Report
- Garden Club Report
- Park Dedication Fund

March 21, 2024

- Commissioner Training?
- Wildflower Park Bike Rack
- Minutes
- Active Planning Applications
- Recreation Supervisor Update
- City Council Report
- Garden Club Report
- Park Dedication Fund

April 18, 2024

- Minutes
- Future Financial Obligations

City of Corcoran
2024 Parks and Trails Commission Schedule

Dates and items listed are subject to change

- Active Planning Applications
- Recreation Supervisor Update
- Program Coordinator Introduction and Update
- City Council Report
- Garden Club Report
- Park Dedication Fund

May 16, 2024

- Minutes
- Active Planning Applications
- Recreation Supervisor Update
- Program Coordinator Update
- City Council Report
- Garden Club Report
- Park Dedication Fund

June 20, 2024

- Minutes
- 2024 Budget & Fee Schedule
- Educational Signs at Wildflower Park
- Active Planning Applications
- Recreation Supervisor Update
- Program Coordinator Update
- City Council Report
- Garden Club Report
- Park Dedication Fund

July 18, 2024

- Minutes
- Active Planning Applications
- Recreation Supervisor Update
- Program Coordinator Update
- City Council Report
- Garden Club Report
- Park Dedication Fund

August 15, 2023

- Minutes
- Active Planning Applications

City of Corcoran
2024 Parks and Trails Commission Schedule

Dates and items listed are subject to change

- Recreation Supervisor Update
- Program Coordinator Update
- City Council Report
- Garden Club Report
- Park Dedication Fund

September 19, 2024

- Minutes
- Active Planning Applications
- Recreation Supervisor Update
- Program Coordinator Update
- City Council Report
- Garden Club Report
- Park Dedication Fund

October 17, 2024

- Minutes
- Active Planning Applications
- Recreation Supervisor Update
- City Council Report
- Garden Club Report
- Park Dedication Fund

November 21, 2024

- Minutes
- Active Planning Applications
- Recreation Supervisor Update
- City Council Report
- Garden Club Report
- Park Dedication Fund

December 19, 2024

- Minutes
- Active Planning Applications
- Recreation Supervisor Update
- City Council Report
- Park Dedication Fund

City of Corcoran
2024 Parks and Trails Commission Schedule

Dates and items listed are subject to change

OTHER POTENTIAL ITEMS

- Memorial Bench Program
- Park Signs Plan
- Watershed Work Session?
- Winter Trail Maintenance
- City Park Remaster Updates
- Boardwalk/OSP – Bellwether Neighborhood
- Wayfinding
- Diamond Lake Regional Trail

DRAFT

City of Corcoran 2024 City Council Schedule

Agenda Item: 12.

Below is a tentative schedule for City Council meetings. The items and schedule are subject to change.

January 25, 2024

- Construction Hours Review – Annually After Change in 2021
- Commission Appointments
- Calling of Bonds in 2024
- Set Sale of Bonds
- Holiday Toy and Food Drive – Budget and Date Selection
- Park Signs Discussion
- Hennepin County Signal Agreements Hackamore and County Road 101 and Hacakamore Road and County Road 116
- 2022 Audit Results
- Preliminary Retention and Recruitment
- Cropland Bids
- Minks PP, FP, and Variance at 6925 Old Settlers Road

February 8, 2024 Work Session

- LPR Cameras

February 8, 2024

- Swearing in – Oath of Office for Dan Wilcox
- Acknowledge Officer Zeke (Check with Clayton)
- Hope CPA RZ, PP, PUD (City File 23-028)
- Pioneer Trail FP and FPUD
- Funding Plan for Hackamore and City Center Drive and 79th Place – 2023A bonds and ARPA
- Public Works Utility Supervisor Job Description

February 22, 2024

- Long Range Planning Fund / 2023 Transfers
- RFP – History and Discussion of RFP Schedule
- Calling of Bonds in 2024
- Re-appoint Commissioners to Expired Commission Seats (Consent)
- Retention and Recruitment
- Award Cropland Bids
- 2023A Bond Sale Review
- Watershed Letter of Support (Consent)
- Grading Permits for Lakeview Development

- Hennepin County Signal Agreements

March 14, 2024 Work Session

- Parks Fund – Review Interest Options

March 14, 2024

- Park Signs Plan
- MS4 – Salt Storage Ordinance
- Firearms Ordinance Review
- Street Management Snow and Ice Policy (City File 23-026)

March 21, 2024

Host Special Charter Commission Meeting – March 21, 2024 at 5:30pm

March 28, 2024

- NW Trails Resolution of Support DNR Trails Funding
- THC Regulations Follow Up

April 11, 2024

April 25, 2024

- Proclamation – National Public Service Week

May 9, 2024

- Proclamation – National Police Week

May 23, 2024

- Proclamation – National Public Works Week

June 13, 2024

-

June 27, 2024

-

July 11, 2024

-

July 25, 2024

August 8, 2024

August 22, 2024

September 10, 2024

- Annual Charter Commission Meeting

September 12, 2024

September 26, 2024

- Communications Assistant – Transition to FT

November 14, 2024

- Tort Liability Coverage Waiver
- Certification of General Election 2024

November 25, 2024

December 16, 2024

- MS4 Permit

Additional Future Meeting Items