



Winter Sidewalk Maintenance

Presentation to Transportation Commission

9/15/2021



Resolution 21-0421

Directing an Analysis of Potential Winter Maintenance Programs

City Council directed staff:

- Review, assess the feasibility, and propose cost estimates and strategies for a municipal sidewalk snow removal program;
- Review the City's snow removal policies and strategies and recommend adjustments to our operational model to address identified deficiencies that would make the pedestrian transportation network safe and consistently accessible to all users during the winter. An immediate goal should be to eliminate snow piles in crosswalks, sidewalk ramps, crossing islands and impeding access to bus stops. Recommended solutions should include, but are not limited to:
 - Strategies for addressing problems by zone/area of the City (e.g., DDA, residential neighborhoods, commercial and transit corridors); and
 - Immediate remedies that can be implemented by the winter of 2021-2022, such as changes to city ordinances, enforcement strategies, and/or changes in city operations.

And to:

- Pilot solutions, preferably along a major transit corridor(s) and in the DDA, during the winter of 2021-2022 and report back to Council on the success of these pilot operations; and
- Conduct community engagement strategies to determine the level of community support for municipal sidewalk snow removal and preferences for a funding source, such as a millage or user fee.



Baseline Operations

Current operations for snow response

- When more than 4” of snow falls, the city begins street plowing activities on 350 lane miles of major streets and 400 lane miles of residential streets.
- City prioritizes trunk lines, major roads, school routes, hills, known trouble spots for poor driving conditions, and the next day’s trash collection routes.
- Parks Operations also clears 35 miles of sidewalks in city parks and 22.2 miles of other city sidewalks near parks, city owned facilities, and other properties.
 - When street plowing operations start, Public Works borrows staff from Parks Operations for street duty.
- The City converts to 12 hour shifts during snow clearing operations, and can activate a maximum of 29 staff during the day and 20 during the night.



Four City Zones

01

Downtown / DDA District

Generally, this service is provided by the merchant associations, institutional buildings, and individually business owners.

02

Major Thoroughfares

47 miles of sidewalks and related pedestrian infrastructure along major transit routes.

03

Parks

Parks Operations focuses on plowing through paths at each city park, totaling 35 miles of plowing at each snow event.

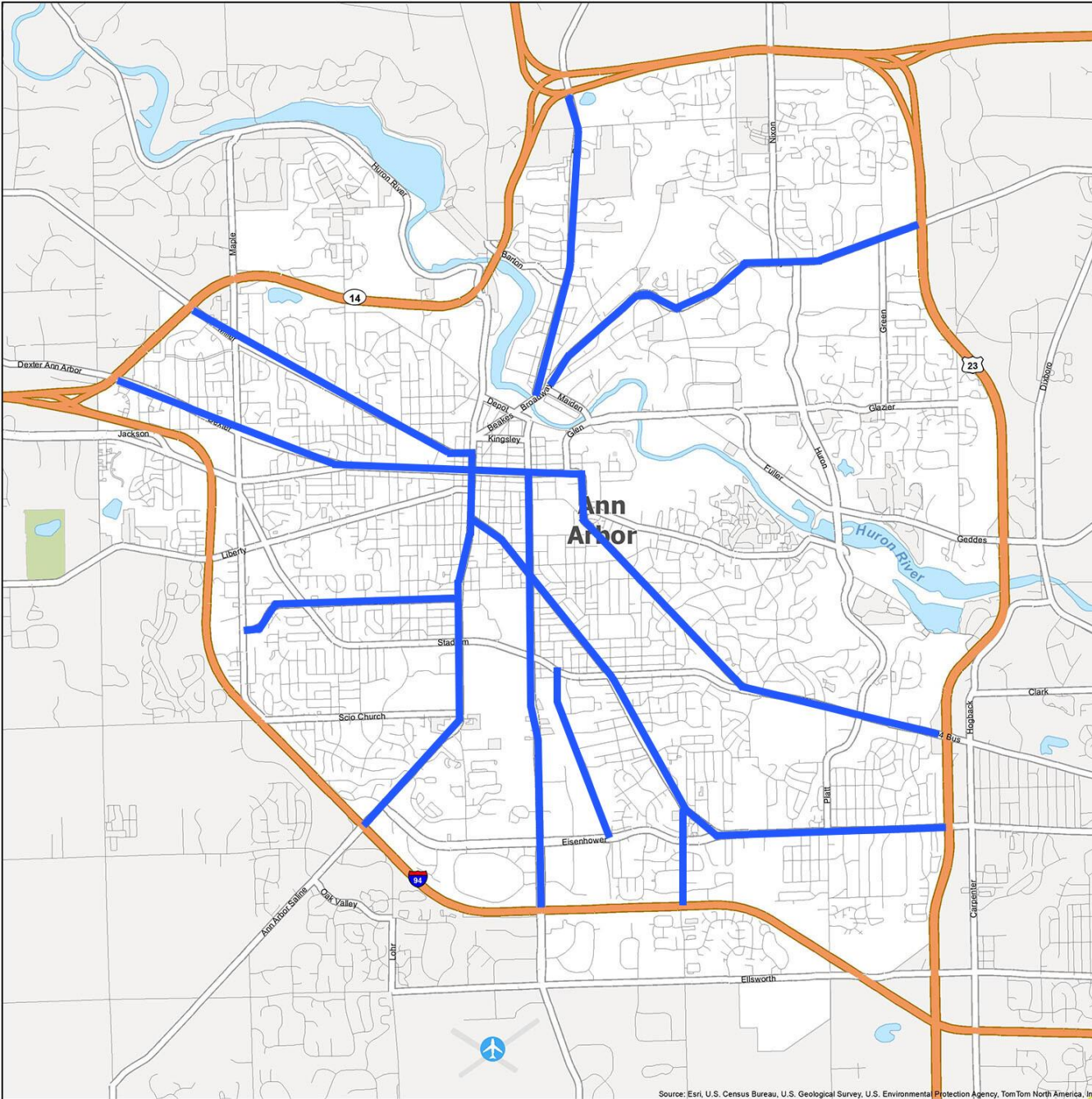
04

Residential Sidewalks

385 miles of sidewalks not included in the DDA district, along major thoroughfares, in parks, or on college campuses.

Major Thoroughfares

- Dexter Road
- Huron Street
- Industrial Highway
- Miller Avenue
- Packard Street
- Pauline Boulevard
- Pontiac Trail
- South Main Street
- Stone School Road
- Washtenaw Ave





Assumptions

Standardized decisions incorporated into our six scenarios

- We present six different scenarios, but each are based on the following assumptions:
 - Service starts at 1” of snow;
 - We model operations to have all covered pedestrian infrastructure cleared within 24 hours after the end of snow fall.
- We assume 25 such snow events a year.
- Modeled costs for labor, equipment acquisition, operations and maintenance, and have shown costs for a two-year period. Contractor model has high elasticity.
- Analysis is provided without regard for budget constraints, labor market favorability, or contractor capacity and instead we focus only on analyzing the size and scope of new city programs that would be needed to meet the additional services the City Council is considering.
- **In all scenarios, the city will need additional revenue to pay for expanded programs.**

Contracted Labor on Major Streets

01

- City contracts labor for 47 miles of major streets and 35 miles of parks sidewalks;
- Hire two supervisors to manage contractors, work with downtown stakeholders to improve outcomes in the DDA district, and support an education and enforcement campaign in the neighborhoods.
- No capital acquisition costs.
- Contractor capacity and collective bargaining could cause issues with this option.

Major Thoroughfares	\$237,832
Parks	\$177,109
Public Works Supervisors	\$221,108
Year 1 Costs	\$636,049
Year 2 Costs	\$655,130
Total Two-year Cost	\$1,291,179

Contracted Labor on Neighborhood And Major Streets

02

- City contracts labor for 383 miles of neighborhood streets, 47 miles of major streets and 35 miles of parks sidewalks;
- Hire two supervisors to manage contractors and work with downtown stakeholders to improve outcomes in the DDA district;
- No capital acquisition costs;
- Contractor capacity and collective bargaining could cause issues with this option.

Neighborhoods / Major Thoroughfares	\$2,186,028
Parks	\$177,109
Public Works Supervisors	\$221,108
Year 1 Costs	\$2,584,245
Year 2 Costs	\$2,661,772
Total Two-year Cost	\$5,246,017

Temp Staff on Major Streets

03

- City hires nine seven-month temp employees for 47 miles of major streets and 35 miles of parks sidewalks;
- Hire two supervisors to manage temp staff, work with downtown stakeholders to improve outcomes in the DDA district, and support an education and enforcement campaign in the neighborhoods.
- Significant capital acquisition costs;
- Labor market challenges and collective bargaining could cause issues with this option. Will cause other cost increases related to other work.

Major Thoroughfares and Supervisors	\$737,693
Parks	\$371,026
Operating, Maintenance, and Fleet Costs	\$366,667
Startup Costs	\$1,119,250
Year 1 Costs	\$2,227,970
Year 2 Costs	\$1,519,648
Total Two-year Cost	\$3,747,618

Full-time Staff on Major Streets

04

- City hires nine full-time employees for 47 miles of major streets and 35 miles of parks sidewalks;
- Hire two supervisors to manage staff, work with downtown stakeholders to improve outcomes in the DDA district, and support an education and enforcement campaign in the neighborhoods.
- Significant capital acquisition costs;
- Labor market challenges could cause issues with this option. Will cause other cost increases related to other work.

Neighborhoods, Major Thoroughfares and Supervisors	\$1,313,069
Parks	\$946,402
Operating, Maintenance, and Fleet Costs	\$366,667
Startup Costs	\$1,119,250
Year 1 Costs	\$3,378,721
Year 2 Costs	\$2,704,923
Total Two-year Cost	\$6,083,644

Temp Staff on Neighborhood And Major Streets

05

- City hires 49 seven-month temp employees for 383 miles of neighborhood streets, 47 miles of major streets and 35 miles of parks sidewalks;
- Hire two supervisors to manage staff, work with downtown stakeholders to improve outcomes in the DDA district.
- Significant capital acquisition costs;
- Labor market challenges, collective bargaining issues could cause issues with this option. Will cause other cost increases related to other work.

Neighborhoods, Major Thoroughfares and Supervisors	\$3,441,138
Parks	\$371,026
Operating, Maintenance, and Fleet Costs	\$1,645,767
Startup Costs	\$4,922,000
Year 1 Costs	\$8,734,164
Year 2 Costs	\$5,621,669
Total Two-year Cost	\$14,355,834

Full-time Staff on Neighborhood And Major Streets

06

- City hires 49 full-time employees for 383 miles of neighborhood streets, 47 miles of major streets and 35 miles of parks sidewalks;
- Hire two supervisors to manage staff, work with downtown stakeholders to improve outcomes in the DDA district.
- Significant capital acquisition costs;
- Labor market challenges could cause issues with this option. Will cause other cost increases related to other work.

Neighborhoods, Major Thoroughfares and Supervisors	\$6,605,195
Parks	\$946,402
Operating, Maintenance, and Fleet Costs	\$1,645,767
Startup Costs	\$4,922,000
Year 1 Costs	\$12,473,597
Year 2 Costs	\$9,473,286
Total Two-year Cost	\$21,946,883



Recommendations

Next Steps to Continue Pursuing this Project

- Discuss the report and options for future work with the Transportation Commission and City Council.
- As directed in resolution 21-0421, carry out a public engagement process to determine community interest and determine community opinions of acceptable costs.
- Carry out an RFP or RFI process to determine contractor capacity, interest, and cost that could be used to further determine feasibility of using contractors for portions of this work.
- Convene a working group of downtown merchants and major institutional building owners to begin discussions and implement solutions for better snow clearing operations in the DDA district.
- Work with the Police Department and Community Standards to build a more robust education and enforcement campaign for snow clearing in our residential neighborhoods. Work with the Attorney's Office to amend City Code related to sidewalk clearing to ensure that the code allows for an education campaign related to violations of the code.
- Engage in a staff driven study of snow clearing compliance during the winter of 21-22 to determine the extent of the problem as it exists before a significant investment of resources.



Providing Feedback and Next Steps

Next Steps to Continue Pursuing this Project

- Members of the Commission are encouraged to provide feedback now, or in writing to me at jfournier@a2gov.org. I would ask for feedback to be received before September 24th.
- Staff will evaluate feedback and make appropriate edits to the memo and this presentation, and then provide the final documents to City Council. We will also share them with the Transportation Commission.
- We are happy to receive requests to evaluate different configurations of service, adjustments to the financial models, or more detail on some aspects of the report.



THANK YOU
for your time
