



2026 Mill and Overlay

Council Budget Committee Meeting: July 22, 2026



Agenda

- What is Mill and Overlay
- Funding sources
- 2021-YTD projects
- Benefits and shortcomings
- Challenges
- Need for budget priority
- Risk of Inaction
- Q&A





What is Mill and Overlay?

A “mill & overlay” is a street rehabilitation technique that requires the removal of the top layer (~2") of a street by the grinding action of a large milling machine. After the top layer is removed, a new layer of bituminous pavement is put in its place. Mill & Overlays are assessable as a structural improvement that extends the life of the road.

[Video: What Is Mill and Overlay?](#)

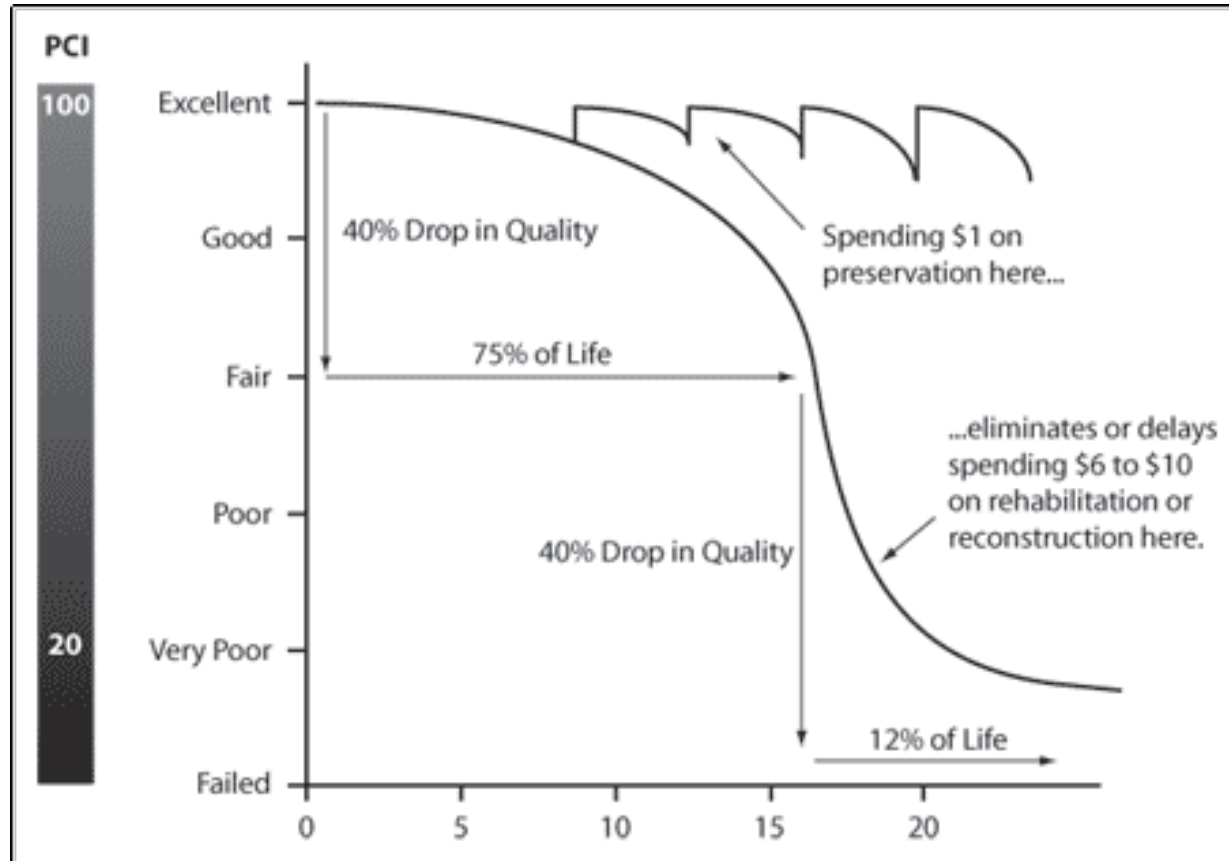


What is Mill and Overlay?





Mill and Overlay Extends Life of the Street





Mill and Overlay Expenses

- Mill and Overlay costs on the order of \$4 per Square Foot*
- Reconstruction costs on the order of \$40 per Square Foot
- ADA pedestrian ramps, sidewalk repairs, traffic calming, signing, tree protection/mitigation are additional variable costs to improve safety

*=Only surfacing-related improvements and costs included for M/O.



Capital Funding Sources for Mill and Overlay

- Street Reconstruction Bonds
 - Issued annually for street infrastructure
 - Used for *residential* mill and overlay
- General Fund
 - Used for *arterial* mill and overlay
- Assessments
 - Used to service bond debt on residential mill and overlay
 - Additional funding for arterial mill and overlay
 - Limited by policy and special benefit
 - Cover a portion (up to 25%) of project costs
 - Cover larger portion of costs than reconstruction (10-15%)





Mill and Overlay: Arterial Streets

Annually, 3-5 miles of city and county arterial streets are paved through mill and overlay each year, depending on funding.

- 10+ years ago, \$10M budget for arterial work
 - Reduced to \$4M general fund + \$1M assessment fund for 2026
 - Legal challenges for maintenance and for assessment component
 - Deferred M&O rehabilitation means more costly maintenance
- Pavement preservation extends the life of the road
- ADA and pedestrian safety improvements included
- Traffic calming measures and on-street bicycle lanes can be considered
- Prior work completed by city street maintenance staff
 - 2026 arterial now done by contractors
 - City forces now perform residential mill and overlays



Mill and Overlay: Arterials

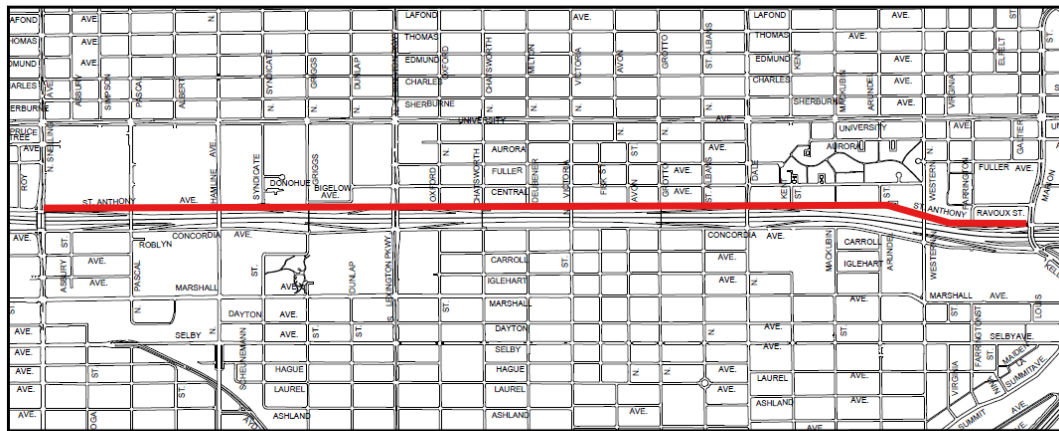
Year	Project	Project Area Square Yards	Project Cost (Street Maintenance Only)
2021	Fillmore Avenue: Robert Street to East Lafayette Hamline Avenue: Randolph Avenue to Highland Parkway (Rescheduled to 2022) Jefferson Avenue: West 7th to Victoria St. Paul Avenue: Edgumbe to West 7th Downtown Paving & Sidewalks Improvement Project West Side Flats Are	106,040	Equipment: \$174,462 Materials: \$734,257 Labor Straight Time: \$330,697 Labor Overtime: \$44,784 Milling: \$215,925 Total Project: \$1,500,124
2022	Highland Parkway: Mississippi River Boulevard to Cleveland Avenue Mississippi River Boulevard: Randolph Avenue to West 7th/Hwy 5 Summit Avenue: Snelling Avenue to Lexington Parkway Wheelock Parkway: Arcade Street to Johnson Parkway	111,293	Equipment: \$221,713 Materials: \$787,899 Labor Straight Time: \$387,693 Labor Overtime: \$82,742 Milling: \$239,142 Total Project: \$1,719,189
2023	East Shore Drive: Wheelock Parkway to Larpenteur Avenue Fairview Avenue: Randolph Avenue to Edgumbe Road Front Avenue: Western Avenue to Rice Street (moved to 2025) Ruth Street and Algonquin Avenue: Burns Avenue to Stillwater Avenue (moved to 2025) Victoria Avenue: Summit Avenue to Concordia Avenue	60,089	Equipment: \$131,558 Materials: \$400,563 Labor Straight Time: \$213,887 Labor Overtime: \$52,934 Milling: \$136,396 Total Project: \$935,339



Mill and Overlay: Arterials

12	Project	Project Area Square Yards	Project Cost (Street Maintenance Only)
2024	Concordia/Rondo Avenue: Snelling Avenue to Marion Street Front Avenue: Western Avenue to Rice Street (moved to 2025)	38,985	Equipment: \$81,206 Materials: \$324,486 Labor Straight Time: \$148,019 Labor Overtime: \$30,070 Milling: \$153,648 Total Project: \$737,428
2025	Front Avenue: Western Avenue to Rice Street Ruth Street and Algonquin Avenue: Burns Avenue to Stillwater Avenue George Street: Cherokee Avenue to State Street/Cesar Chavez Street		Equipment: \$143,920 Materials: \$676,327 Labor Straight Time: \$289,010** Labor Overtime: \$not available Milling: \$353,088 Total Project: \$1,462,346 ** Data not yet available due to cyberattack
2026	St. Anthony Avenue - Snelling Avenue to Marion Street (moved to 2027) Selby – Snelling to Summit		In Progress

2026 Mill and Overlay: Arterial



2026 St. Anthony (\$4.5M)

- Arterial Mill & Overlay
- MnDOT Coordination
- Reduced: 2-to-1 lane conversion
- Restripe for on-street bike lane
- ADA-compliance improvements
- Bump-outs
- Parking remains on north side

Before and after photos of Concordia/Rondo Avenue
Similar changes planned on St. Anthony/Rondo Avenue



Before



After



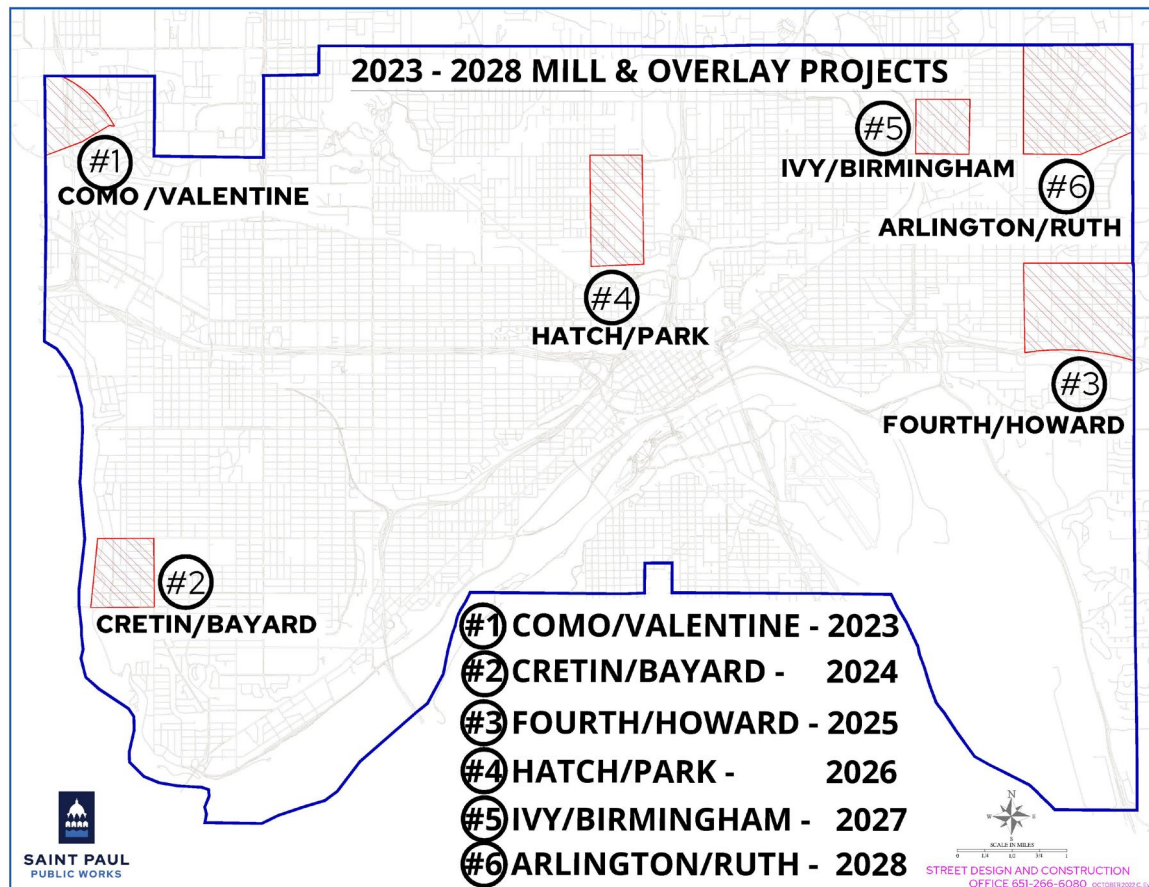
Mill and Overlay: Residential Streets

- Residential Mill & Overlay program started in 2023
- Street Reconstruction Bonds
 - \$3.5M annually
- Working chronologically through past residential reconstructions
- Focused on pavement restoration and preservation
- Mill is done by contractor; overlay paving by street maintenance staff





Mill and Overlay Residential Areas: 2023 -2028

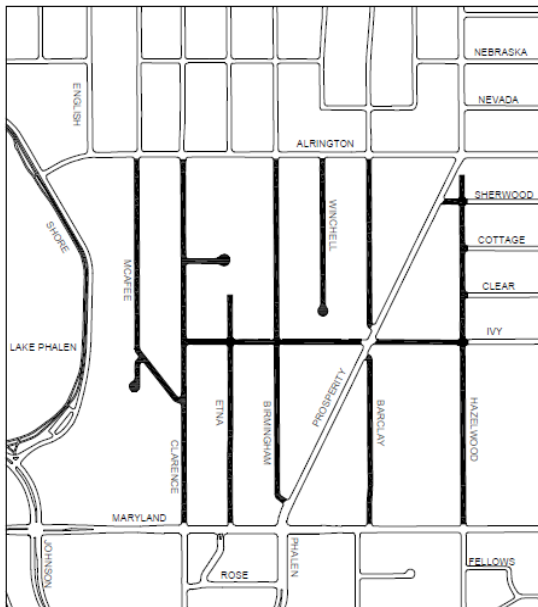




2026 Mill and Overlay: Residential



City of Saint Paul
Department of Public Works
Street Design and Construction Division



2026

IVY/BIRMINGHAM RESIDENTIAL MILL AND OVERLAY



CONSTRUCTION IN 2026

2026 Ivy/Birmingham (\$1.75M)

- Residential Mill & Overlay
- Single project covers multiple streets
- ADA compliant pedestrian ramps
- Sidewalk repairs
- City forces paving and striping



Mill and Overlay Benefits

- One of few affordable options
- Structural rehabilitation extends road life
- Assessable up to 25% of project costs
- If purely for resurfacing...
 - Cheaper than reconstructing (~10%)
 - Smoother, quieter surface
 - Reconfiguration opportunity
 - More visible markings
 - Reduces maintenance demand
- ADA-compliant pedestrian ramps
- Pedestrian safety (bump-outs, islands)
- Approved annually as part of 5-Year CIP
- Less disruption to public vs reconstruction
- Can mill and overlay more than once





Limitations of Mill and Overlay

- Shorter lifespan when compared to reconstruction
 - Varies by numerous factors
- Not always appropriate
 - Severely degraded or aged roads
 - Concrete pavement
 - Utility needs
 - Does not address underlying foundation issues



Current Departmental Challenges: Mill and Overlay

- **Equipment**

- Current equipment is smaller than optimal, requiring additional work
 - Bigger roller equipment is rented when budget allows; increased equipment funding would reduce this need and, over lifespan, reduce expenses.
 - Trailers can only carry one piece of equipment at a time, resulting in multiple trips to mobilize
- City lacks equipment to perform QA/QC pavement testing

- **Staffing**

- We don't have enough workforce to pave and fill potholes simultaneously

- **Materials**

- Our asphalt plant is not MnDOT certified – we can't supply ourselves for Fed-funded and State-aid projects

- **Asphalt Plant operations**

- Built in 1962, many components are at the end of their life and in need of replacement



Impact of Decreased Funding for Mill and Overlay

- Accelerated road deterioration (pavement deteriorates fast in last 25% of life cycle)
- Structural and subgrade failures from moisture intrusion
 - Causes potholes and alligator cracking
 - Underlying good pavement and subgrade is not protected (loss of assets)
- Increased city maintenance costs (repairs, potholes and skimming)
- Increased complaints, vehicle damage, expenses, and claims to city



Other Pavement Improvement Strategies

- Reconstruction
- Reclamation
- Full Depth Pavement Replacement
- Mill and Overlay
- Rejuvenating (maintenance)
- Sealing, filling, patching, potholing (maintenance)

Questions and Discussion

