

Report on the

Cost Participation Policy Update

February 2026

Prepared by:

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Cover Letter

February 13, 2026

The Honorable Jon Koznick, Co-Chair
House Transportation Finance & Policy Committee
2nd Floor, Centennial Office Building
Saint Paul, MN 55155

The Honorable Scott Dibble, Chair
Senate Transportation Committee
3107 Minnesota Senate Building
Saint Paul, MN 55155

The Honorable Brad Tabke, Co-Chair
House Transportation Finance & Policy Committee
5th Floor, Centennial Office Building
Saint Paul, MN 55155

The Honorable John Jasinski
Ranking Minority Member
Senate Transportation Committee
2227 Minnesota Senate Building
Saint Paul, MN 55155

Dear Legislators:

The Minnesota Department of Transportation is pleased to present this report to the Legislature on the department's efforts to update the cost participation policy.

Since 2024 the department has been working collaboratively with local units of government to update the policy and the associated "Cost Participation and Maintenance Responsibilities with Local Units of Government Manual." As required by [Minnesota Laws 2025, First Special Session, Chapter 8, Article 2, Section 113](#), this report includes copies of the updated draft policy and manual, identifies the local units of government consulted during the process, and provides summaries of the options explored. It also proposes legislation to enable the department to cover the cost of relocating utilities owned by local units of government with remaining service life when necessitated by a trunk highway construction project led by the department.

The changes to the policy and draft manual represent the most significant changes to the policy since the enactment of Administrative Policy 85-1 "Cooperative Construction Projects with Local Units of Government" in August 1985.

In particular, the draft manual includes a new clause consistent with the Legislature's direction that "the policy may consider a local unit of government's ability to pay as a factor in determining the amount of local contribution, if any." The updated policy will cap a local unit of government's responsibility for trunk highway eligible items on the scope determined by MnDOT on MnDOT-initiated projects to no more than 0.8% of their five-year average Adjusted Net Tax Capacity. Any non-trunk highway eligible costs and any additional items a community may request to add to the scope would not be covered by this maximum. This new ability to pay clause alone is estimated to cut in half the total amount of local contributions toward trunk highway eligible items on state highway construction projects initiated by MnDOT.

The department and steering committee are currently completing reviews of some sections, so the final policy and manual may be slightly different than the drafts contained in this report. When finalized, the policy and

manual will be posted at: <https://www.dot.state.mn.us/policy/financial/fm011.html> Implementation of the policy will begin in State Fiscal Year 2027.

Please let me know if you have questions. You can also contact Erik Rudeen, at erik.rudeen@state.mn.us, or 612-430- 2487.

Sincerely,

A handwritten signature in blue ink that reads "Nancy Daubenberger". The signature is fluid and cursive, with the first name "Nancy" and last name "Daubenberger" clearly legible.

Nancy Daubenberger, P.E. (MN)
Commissioner

Local Agency Workgroup Letter

January 26, 2026

The Honorable Jon Koznick, Co-Chair
House Transportation Finance & Policy Committee
2nd Floor, Centennial Office Building
Saint Paul, MN 55155

The Honorable Brad Tabke, Co-Chair
House Transportation Finance & Policy Committee
5th Floor, Centennial Office Building
Saint Paul, MN 55155

The Honorable John Burkel
Minnesota House of Representatives
2nd Floor, Centennial Office Building
Saint Paul, MN 55155

The Honorable Scott Dibble, Chair
Senate Transportation Committee
3107 Minnesota Senate Building
Saint Paul, MN 55155

The Honorable John Jasinski
Ranking Minority Member
Senate Transportation Committee
2227 Minnesota Senate Building
Saint Paul, MN 55155

Honorable Legislative Leaders:

As members of the Cost Participation Policy Local Agency Workgroup, we express strong support for the proposed revisions to the Minnesota Department of Transportation's Cost Participation Policy and Manual, as directed by the Legislature in the 2025 Laws of Minnesota, 1st Special Session, Chapter 8, Article 2, Section 113.

We sincerely thank the Legislature for its leadership in recognizing the long-standing challenges faced by cities, counties, and townships when participating in trunk highway projects and for advancing policy direction that promotes fairness, flexibility, and fiscal sustainability. Your commitment to better aligning local cost participation with the true needs of the state transportation system is both timely and impactful.

Since May 2024, representatives of the Local Agency Workgroup have met monthly in extended working sessions and have actively engaged additional local agency partners through established committees of the Minnesota County Engineers Association, the City Engineers Association of Minnesota and the Minnesota Association of Townships. This inclusive and collaborative process ensured that the perspectives of communities of all sizes and capacities were thoughtfully considered.

We also wish to formally acknowledge and commend MnDOT staff for their professionalism, transparency, and genuine spirit of partnership throughout this effort. Their outreach extended well beyond the formal workgroup, fostering open dialogue and mutual understanding. This approach exemplifies the type of state-local collaboration that strengthens trust and ultimately delivers better outcomes for all Minnesotans.

The proposed policy updates reflect the Legislature's clear intent to reduce local financial burdens by clarifying that project elements required to deliver MnDOT's trunk highway scope will involve significantly reduced local cost participation, except where locally requested scope expansions occur.

The consideration of De Minimis thresholds and a local agency's ability to pay appropriately recognizes that Minnesota's communities vary widely in size, resources, and fiscal capacity, while still honoring the constitutional framework governing the use of trunk highway funds. In addition, we support the necessary statutory changes for the inclusion of local utilities impacted with trunk highway improvements. Also, while the new policy will reduce local agency construction cost share on trunk highway projects, local agencies, per the policy, will still be performing maintenance on certain aspects on the trunk highway.

When a state highway project moves through a city, county, or township, it represents more than an infrastructure investment. It is a visible demonstration of how MnDOT and local governments can work collectively for the good of all Minnesotans. The work of MnDOT's Steering Committee and the resulting policy revisions will increase predictability and reduce financial strain on local agencies, allowing cities, counties, and townships to maintain the investment in their own transportation systems. We also acknowledge that these policy changes will impact MnDOT's budget and will require increased and sustained state investment to maintain and enhance transportation project delivery across Minnesota at the same level we see today.

We respectfully encourage the Legislature's continued funding support to ensure that MnDOT and local governments can fulfill their shared responsibility to provide a safe, efficient, and interconnected transportation network that serves residents, businesses, and travelers alike.

Thank you for your leadership, partnership, and dedication to the people of Minnesota.

Sincerely,

Cost Participation Local Agency Workgroup

City Engineer Representatives

Steven Jahnke, Albert Lea
 Julie Long, Bloomington *
 Will Manchester, Minnetonka
 Jenifer Hager, Minneapolis
 Bob Zimmerman, Moorhead *
 Michael Thompson, Plymouth
 Kristin Asher, Richfield
 Deb Heiser, St. Louis Park *
 Steve Bot, St. Michael
 Nick Peterson, St. Paul

County Engineer Representatives

Darrick Anderson, Cass County
 Brian Giese, Pope County
 Tony Winiecki, Scott County *
 Jim Foldesi, St. Louis County *
 Dave Kramer, Winona County
 AJ Pirkel, Lake of the Woods
 County
 Rich Sanders, Polk County

Township Representative

Madeline Cash, Minnesota
 Association of Townships *

** The Local Agency Workgroup provided feedback through our members serving as Local Representatives on MnDOT's Steering Committee.*

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Legislative Request

This report is issued to comply with Minnesota Laws 2025, First Special Session, Chapter, 8, Article 2, Section 113.

Sec. 113. DEPARTMENT OF TRANSPORTATION; COST PARTICIPATION POLICY UPDATE REQUIRED.

Subdivision 1. Definitions.

For purposes of this section, the following terms have the meanings given:

- (1) "commissioner" means the commissioner of transportation;
- (2) "cost participation policy" is the policy between the Department of Transportation and local units of government to determine the potential expenditure of trunk highway funds on elements of cooperative construction projects and maintenance responsibilities between the department and local units of government; and
- (3) "department" means the Department of Transportation.

Subd. 2. Policy update.

By March 1, 2026, the commissioner, in consultation with representatives of local units of government, must update and adopt the department's cost participation policy. The updated policy must identify the circumstances where local units of government will not be responsible for any trunk highway fund eligible construction project costs to deliver the project scope the department deems necessary. The policy may consider a local unit of government's ability to pay as a factor in determining the amount of local contribution, if any.

Subd. 3. Report.

By February 1, 2026, the commissioner must submit a report to the chairs and ranking minority members of the legislative committees with jurisdiction over transportation finance and policy. The report must:

- (1) contain the department's draft cost participation policy;
- (2) identify the local units of government consulted in developing the updated cost participation policy;
- (3) identify and analyze all cost participation options explored by the commissioner and local units of government in determining the cost participation policy adopted by the commissioner; and
- (4) propose legislation to enable the department to cover the cost of relocating utilities owned by local units of government with remaining service life when necessitated by a trunk highway construction project led by the department.

The cost of preparing this report is less than \$5,000. This does not include any costs associated with updating the Cost Participation Policy and associated Cost Participation and Maintenance with Local Units of Government Manual

Summary

The Minnesota Department of Transportation's Cost Participation Policy provides a framework and guidance to determine cooperative construction costs and maintenance responsibilities between MnDOT and local units of government for projects that affect the trunk highway system. The policy and associated "Cost Participation and Maintenance with Local Units of Government Manual" help to ensure that MnDOT's use of trunk highway funds are limited to trunk highway purposes.

Since 2024, MnDOT has been working to update the policy and manual in consultation with local units of government. The last time the policy and manual were updated was in 2016. This update has been guided by a steering committee composed of both MnDOT and representatives of local units of government. The committee has been meeting approximately monthly to discuss potential changes to the manual since May 2024. In addition to the steering committee meetings, a larger local agency workgroup also met approximately monthly to discuss and provide feedback to the steering committee on potential changes to the policy and manual.

The steering committee discussed changes related to the following topics:

- Ability to Pay
- Aesthetics
- Bridges and Interchanges
- De Minimis
- Drainage and Stormwater Management
- Frontage Roads
- Green Infrastructure
- Lighting
- Maintenance
- Parking
- Rectangular Rapid Flashing Beacons
- Roundabouts
- Sidewalks, Shared Use Paths, Bikeways and Pedestrian Bridges
- Traffic Signals

Hundreds of edits have been drafted with many that will result in lower costs for local units of government.

Consistent with Minnesota Laws 2025, First Special Session, Chapter 8, Article 2, Section 113, MnDOT has agreed to establish a new ability to pay clause. This would limit a local unit of government's responsibility for trunk highway eligible items on the scope determined by MnDOT on MnDOT-initiated projects to no more than 0.8% of their five-year average Adjusted Net Tax Capacity. Based on a high-level review of fiscal years 2024 and 2025, this new clause may cut in half total local trunk highway eligible contributions to MnDOT-initiated construction projects.

The committee also discussed and drafted potential legislation that would enable MnDOT to cover the cost of relocating utilities owned by local units of government with remaining service life when necessitated by a trunk highway construction project led by the department.

A copy of the draft updated policy and manual are included as appendices to this report. As edits are still underway, these are subject to change prior to final adoption.

Local Consultation

MnDOT consulted with local units of government throughout the update process, including through a steering committee, local agency workgroup, briefings with the city and county engineers’ associations and meeting with all city and county engineers at their fall pre-screening board meetings in every MnDOT district.

Steering Committee

The update was guided by a Steering Committee that met approximately monthly to discuss potential changes to the policy. Membership of the committee was 50% MnDOT and 50% local units of government. The committee recommended changes to MnDOT’s Governance Council and Commissioner.

Local Representatives on Steering Committee:

- Madeline Cash, Minnesota Association of Townships
- Jim Foldesi, St. Louis County
- Julie Long, Bloomington
- Deb Heiser, St. Louis Park
- Tony Winiecki, Scott County
- Bob Zimmerman, Moorhead

Local Agency Workgroup

In addition to the Steering Committee meetings, a larger local agency workgroup met approximately monthly to discuss and provide feedback to the steering committee on potential changes to the policy and manual.

Figure 1: Local Agency Workgroup Membership

City Engineer Representatives	County Engineer Representatives	Township Representative
• Steve Jahnke, Albert Lea • Julie Long, Bloomington • Will Manchester, Minnetonka • Jeni Hager, Minneapolis • Bob Zimmerman, Moorhead • Michael Thompson, Plymouth • Kristin Asher, Richfield • Deb Heiser, St. Louis Park • Steve Bot, St. Michael • Nick Peterson, St. Paul	• Darrick Anderson, Cass County • AJ Pirkl, Lake of the Woods County • Brian Giese, Pope County • Tony Winiecki, Scott County • Jim Foldesi, St. Louis County • Dave Kramer, Winona County	• Madeline Cash, Minnesota Association of Townships

Additional Local Consultation

Local Utilities Work Group

To help inform this legislative report, MnDOT formed a work group to help develop options to “enable the department to cover the cost of relocating utilities owned by local units of government with remaining service life when necessitated by a trunk highway construction project led by the department.” The work group included the following local representatives:

- Kristin Asher, Richfield
- Will Manchester, Minnetonka
- Chad Millner, Edina
- Michael Thompson, Plymouth

MnDOT staff also consulted with local agency staff on policy issues at the following events:

- Minnesota County Engineers Association (MCEA) Board 11/6/23
- City Engineers Association of Minnesota (CEAM) Executive Committee 12/15/23
- CEAM Executive Committee 6/28/24
- MCEA Board 10/2/24
- Metro Counties Pre-Screening Board Meeting 10/7/24
- Districts 7 and 8 Cities Pre-Screening Board Meeting 10/8/24
- District 3 Cities Pre-Screening Board Meeting 10/9/24
- Districts 2 and 4 Counties Pre-Screening Board Meeting 10/9/24
- District 6 Counties Pre-Screening Board Meeting 10/10/24
- District 6 Cities Pre-Screening Board Meeting 10/11/24
- District 3 Counties Pre-Screening Board Meeting – 10/14/24
- Metro Cities Pre-Screening Board Meeting 10/15/24
- District 7 Counties Pre-Screening Board Meeting 10/16/24
- District 1 Cities Pre-Screening Board Meeting (Districts 2 and 4 invited) 10/16/24
- District 8 Counties Pre-Screening Board Meeting 10/17/24
- District 1 Counties 10/21/24
- CEAM Executive Committee 11/25/24
- Brooklyn Center Public Works Staff 12/16/24
- Minnesota Active Transportation Advisory Committee 1/16/25
- CEAM Executive Committee 3/17/25
- CEAM Executive Committee 6/2/25
- MCEA Summer Conference 6/12/25
- League of Minnesota Cities staff 7/17/25
- League of Minnesota Cities Improving Local Economies Committee 8/19/25
- Association of Minnesota Counties Transportation and Infrastructure Policy Committee 9/11/25
- Transportation Alliance Legislative Committee 9/22/25
- South Central Area Transportation Partnership 10/17/25
- Transportation Alliance Annual Meeting and Construction Forecast 11/3/25
- MCEA Board 11/24/25
- CEAM Executive Committee 12/19/25
- MCEA Annual Conference 1/20/26
- CEAM Annual Conference 1/30/26

Summary of Options Considered

The Steering Committee discussed and considered a wide range of topics as part of the update. As part of each topic, potential changes were considered for both construction cost sharing and maintenance responsibilities. The Steering Committee used a consensus-based decision-making process—votes were not taken.

The topics below are listed in alphabetical order and include a summary of the primary discussion points. Key draft changes that will reduce local cost shares are also noted.

Ability to Pay

One of the key issues discussed as part of the policy update was how to reduce the financial burden on small or economically distressed communities. MnDOT recognizes that cities, counties and townships are in different positions in respect to their financial capacity to contribute to state highway construction projects. Even larger communities may struggle to provide their local share on larger state highway projects and the collective impact of multiple highway projects in the same city or county over a short period can also be hard to manage.

Minnesota Laws 2025, First Special Session, Chapter 8, Article 2, Section 113, Subdivision 2, stated “the [cost participation] policy may consider a local unit of government's ability to pay as a factor in determining the amount of local contribution, if any.” The Steering Committee discussed a range of options to evaluate and incorporate ability to pay in the policy. Ultimately the committee agreed to establish an individual maximum contribution for a state highway construction project.

What Should an Ability to Pay Clause Apply to?

Local agency contributions on state highway construction projects cover a variety of items, not all of which are trunk highway eligible. As trunk highway funds cannot be used to pay for non-trunk highway eligible items, this new maximum could only apply to trunk highway eligible items.

The Steering Committee also noted that this clause was intended to reduce the financial burden assigned to local agencies by the policy and should not be viewed as a requirement that MnDOT pay for every item a community may wish to add to a project. Therefore, the maximum would apply to trunk highway eligible items assigned a local cost responsibility in the policy, on MnDOT-initiated projects. Locally initiated projects on state highways would not be covered by the ability to pay clause. Further, the maximum would be applied to the scope determined by MnDOT; any additional items a community may request to add to the scope would not be covered by the maximum.

Method to Determine a Local Unit of Government’s Ability to Pay

The Steering Committee discussed the wide range of funding sources local units of government use to fund infrastructure improvements (e.g. state aid for transportation, property taxes, franchise fees, bonding, local option sales taxes, wheelage fees, etc.). The committee agreed that determining a local unit of government’s ability to pay should be based on a consistent, simple and transparent method using easy to find, publicly available data.

Considering feedback from the Local Agency Workgroup, the Steering Committee ultimately agreed to use a five-year average of the Adjusted Net Tax Capacity (ANTC) provided annually by the Minnesota Department of Revenue as a proxy for financial resources.

The next question was what percentage of ANTC would be appropriate. The Steering Committee evaluated several factors including 0.8%, 1% and 2%. MnDOT provided the Local Agency Workgroup members the resulting values for their communities as well as a sample of other communities of various sizes throughout the state. MnDOT also analyzed the potential impact of these factors on the two most recently completed fiscal years (2024 and 2025).

Figure 2: Costs Assigned to Local Agencies in Fiscal Years 2024 and 2025 that MnDOT Would Have Covered Under an Ability to Pay Clause

Fiscal Year	Additional MnDOT Cost (0.8% of ANTC)	Additional MnDOT Cost (1% of ANTC)	Additional MnDOT Cost (2% of ANTC)
2024	\$23.4 million	\$21.7 million	\$14.3 million
2025	\$13.8 million	\$ 12.8 million	\$10.9 million
2 Year Total	\$37.2 million	\$34.6 million	\$25.2 million
Average Per Year	\$18.6 million	\$17.3 million	\$12.6 million

Based on the recommendation of the Local Agency Workgroup, MnDOT agreed to use 0.8% of ANTC as the methodology to determine a project maximum, which equaled approximately half of the trunk highway eligible costs paid for by local units of government on MnDOT-initiated projects in Fiscal Years 2024 and 2025.

Aesthetics

Proposed changes related to aesthetics considered by the Steering Committee primarily focused on creating greater clarity and right-sizing aesthetic investments based on the nature of the project and the surrounding context.

To help reduce confusion, the draft update includes a new definition:

“Aesthetics refers to the visual enhancement of structural or functional elements that are part of the project scope and goals, such as pavement, sidewalks, railings, walls, barriers, or pilasters. Aesthetics focuses on the form, scale, color, and texture of these elements to create a cohesive, context sensitive, and visually appealing environment.”

A new section of the manual was also drafted to discuss functional items like handrails and benches that had previously only been discussed under the aesthetics section. These items can have aesthetic treatments but are primarily included in a project for functional reasons.

The current manual sets different aesthetic participation levels for new construction and reconstruction projects. Local agency representatives noted that a new construction project and a reconstruction are essentially the same from a community standpoint in terms of level of impact and longevity of the investment. The Steering Committee agreed to combine these two categories.

The Steering Committee also agreed to establish a new level of aesthetic impact category for projects with limited visual impact, which would have lower aesthetic participation from MnDOT.

Bridges and Interchanges

The Steering Committee discussed a variety of edits to provide greater clarity on bridge ownership responsibilities, including revision to language regarding bridge replacements and maintenance responsibilities.

In terms of changes that would result in lower cost share, the discussion primarily focused on new local road interchanges or new grade separations on expressways. Under the current policy, MnDOT would cover up to 85% of the cost of a new interchange or grade separation based on a series of factors. The Steering Committee discussed options for MnDOT to pay up to 100% and recommended modifying the factors to focus on safety considerations.

Figure 3: Draft Key Changes to Bridges and Interchanges That Would Reduce Local Participation

Current Policy	DRAFT Proposed Revisions
MnDOT participation on cost prudent interchange designs will begin at 50% unless the local unit of government has not developed an adequate supporting local roadway system or unless the interchange is proposed primarily to serve local development, as described later in this section. For interchanges or grade separations where MnDOT participation begins at 50%, MnDOT may participate up to 85%, based on the criteria below. Ten percentage points may be added to MnDOT's share for each of the criteria met below, up to a maximum of 85% if the proposed interchange: • Is on a National Highway System (NHS) route; • Is on an underperforming NHS route; • Reduces or consolidates local roadway access to the trunk highway, consistent with the MnDOT Access Management Manual; • Eliminates one of the intersections that meets the requirements of a sustained crash location at the time of programming; • Eliminates a traffic control signal or a future planned and warranted signal on the trunk highway	MnDOT participation will begin at 50% unless the local unit of government has not developed an adequate supporting local roadway system or unless the interchange is proposed primarily to serve local development, as described later in this section. For interchanges or grade separations where MnDOT participation begins at 50%, additional percentage points may be added to MnDOT's share as follows: • 15 percentage points may be added if the proposed interchange reduces or consolidates local roadway access to the trunk highway, consistent with the MnDOT Access Management Manual; • 30 percentage points may be added if the proposed interchange eliminates one or more intersections that have a Fatal and Serious Injury Crash Rate Index of 1.5 or greater; 25 percentage points may be added if the intersections have a FAR Index between 1.0 and 1.5; or 15 percentage points may be added if the proposed interchange eliminates one or more intersections that have lower FAR Index values but meet the requirements of a sustained crash location at the time of programming; • 10 percentage points may be added if the proposed interchange eliminates a traffic control signal or a future planned and warranted signal on the trunk highway

Detours

The Steering Committee reviewed updated analysis of gas tax rates and current vehicle fuel economy to ensure that MnDOT payments to local agencies for using a local roadway as an official detour reflect the gas tax revenue generated by the detour.

Figure 4: Estimated State Gas Tax Revenue Generated for Trunk Highway Purposes by Detours

YEAR	Light-Duty Stock (Miles Per Gallon)	State Motor Fuels Excise Tax (Cents Per Gallon)	Multiplier for Trunk Highway Portion	FACTOR
2026	23.4	32.6	0.571	0.00795
2027	23.9	32.9	0.571	0.00786
2028	24.4	33.8	0.571	0.00790
2029	25.1	33.8	0.571	0.00769
2030	25.9	34.7	0.571	0.00765
2026-2030 Average	24.6	33.6	0.571	0.00781

Additional discussion focused on updating language regarding unofficial detours and methods for MnDOT to reimburse local agencies for trunk highway traffic that may not follow the official detour and cause damage to local roads.

Figure 5: Draft Key Changes to Detours That Would Reduce Local Participation

Current Policy	DRAFT Proposed Revisions
The detour route and payments are determined in accordance with the 1991 Detour Management Study Report and updated by Technical Memorandum No. 10-09-TS-03 and as follows: Gas Tax Income Generated by the Detour = ADT of traffic diverted x Length of detour (miles) x Duration (days) x 0.00513	The detour route and payments are based on an estimate of the gas tax revenue generated by the detour as follows: Gas Tax Income Generated by the Detour = ADT of traffic diverted x Length of detour (miles) x Duration (days) x 0.00781

The committee recommended waiting to make any additional edits until the results of [a Local Road Research Program study](#) on the impact of MnDOT haul routes and detours on local roads is completed.

De Minimis

Previous versions of the Cost Participation Policy had a De Minimis clause such that below \$5,000, the project sponsor would cover the cost for the other agency in order to avoid the work needed to negotiate, develop and approve a cooperative construction agreement. The clause was removed to prevent the possibility of trunk highway funds paying for a non-trunk highway eligible expense. However, significant effort goes into developing cooperative construction agreements and the Steering Committee discussed the value of having a De Minimis clause. To prevent trunk highway funds from paying for non-trunk highway eligible expenses, the committee

agreed it should be limited to trunk highway eligible items and only apply if there were no other costs for a local agency.

Drainage and Stormwater Management

Drainage and stormwater management are complicated topics. The Steering Committee discussed a variety of challenges local agencies and MnDOT faces when trying to manage water, including a variety of regulatory requirements. In general, MnDOT is responsible for the cost to perpetuate the existing drainage system and to drain the trunk highway right of way. Local units of government are generally responsible for any costs necessitated by local road improvements or other drainage improvements not required for a trunk highway improvement.

The committee discussed the need to make this section of the manual easier to use and understand and considered a variety of edits to that end. Other edits discussed include options for flexible maintenance agreements, different methods of calculating cost shares depending on whether infrastructure was needed to manage the rate of flow or to treat the runoff. Who should be responsible when a one agency's project necessitates repairs to another agency's infrastructure and how to assign regulatory credits were also discussed.

The committee recommended assigning construction cost for stormwater management facilities based on which agency initiated the need for the facility and the function of the facility. The committee agreed on the need to use stormwater water management studies to determine responsibilities in complicated situations.

Frontage Roads

The Steering Committee discussed the value of frontage roads and challenges associated with implementing access closures. The committee agreed that full access elimination should not be the standard for MnDOT participation in the construction of a new frontage road and that the existing access ratio calculation was confusing and unnecessary. Finally, the committee recommended removing a defined width that MnDOT would participate in the costs of building and instead MnDOT participation should be based on existing design guidance, including options for intersection design that may be wider to accommodate various turning movements.

Green Infrastructure

Green Infrastructure is the use of vegetation and soils in combination with built structures to support transportation functions. Examples of green infrastructure functions include but are not limited to:

- Blowing and drifting snow control
- Erosion and sedimentation control
- Flood mitigation
- Headlight glare screening
- Safety buffers and delineators

- Traffic calming and speed management

The current Cost Participation Policy manual does not discuss green infrastructure other than what would be considered under stormwater management. The Steering Committee discussed how traditional methods are not always sufficient for resolving modern stormwater issues and that MnDOT and local agencies are increasingly using green infrastructure to address a variety of infrastructure issues.

The draft includes guidance for assigning cost and maintenance responsibilities for green infrastructure.

Lighting

While lighting is clearly identified as a utility in Minnesota Statutes 161.46, the Steering Committee discussed the importance of lighting to creating a safe transportation system. The committee discussed lighting in a variety of circumstances, including at intersections, under bridges, and through urban corridors. One of the key points of discussion was maintenance of lighting and the challenges both MnDOT and local agencies face in maintaining light poles and luminaires in rural and isolated contexts. The updated language provides greater clarity on responsibilities in various circumstances and identifies opportunities for MnDOT to cover a greater share of responsibilities where the district engineer has identified a strong safety concern.

Another key point of discussion related to continuous lighting systems within corporate city limits. Under the current Cost Participation Policy, MnDOT pays for 50% of the cost to install a new system based on standard equipment. Any increased cost for decorative or aesthetic lighting would be covered under the aesthetic budget or would be a local responsibility. As part of the update, MnDOT has agreed to pay 100% of the cost to install a new system based on standard equipment.

The Steering Committee also discussed the possibility of MnDOT paying to relocate lights disturbed by trunk highway construction, but Minnesota Statutes 161.46 prohibits the agency from using trunk highway funds to relocate a utility.

Figure 6: Draft Key Changes to Lighting That Would Reduce Local Participation

Current Policy	DRAFT Proposed Revisions
If a local unit of government desires to install a continuous or intersection lighting system on the trunk highway within corporate city limits and the MnDOT District Traffic Engineer agrees with the installation, MnDOT participation may be up to 50% of the MnDOT standard construction costs for continuous or intersection lighting systems on trunk highways, or up to 100% of the construction costs for trunk highway intersections with trunk highways.	If a local unit of government desires to install a continuous or intersection lighting system on the trunk highway within corporate city limits, MnDOT proposes to participate in the costs to furnish and install the lighting unless the MnDOT District Engineer disagrees and submits a written justification to the local unit of government. MnDOT participation may be up to 100% of the MnDOT standard lighting construction costs.

Maintenance

In addition to the specific items related to maintenance called out under each topic in this report, the steering committee discussed maintenance responsibilities broadly and under each topic. Both MnDOT and local agencies highlighted challenges associated with maintaining the transportation system. Similar to previous updates to the cost participation policy, MnDOT can more easily assume a greater share of construction costs than it can increased maintenance responsibilities. MnDOT is often not well positioned in terms of equipment and personnel to maintain specific infrastructure within communities and therefore looks to local agencies as partners in maintaining an interconnected transportation system. The committee discussed instances where local agencies are also not well positioned to help maintain infrastructure on the state highway system (for example, at isolated intersections or if the local agency does not employ electricians). A variety of edits to the maintenance sections were made to help clarify responsibilities and allow for flexible arrangements in some instances.

Parking

The Steering Committee discussed a variety of edits to help clarify cost responsibilities for parking on trunk highways, as well as what MnDOT will cover when relocating up to an equal number of parking spaces off the trunk highway in order to reduce or eliminate parking on the trunk highway itself.

Pedestrian Hybrid Beacons and Rectangular Rapid Flashing Beacons

When the Cost Participation Policy was last updated, Rectangular Rapid Flashing Beacons (RRFBs) were not authorized as a standard safety countermeasure. As they are now a lower cost, proven treatment, MnDOT and local units of government are increasingly installing RRFBs, which are typically less expensive than pedestrian hybrid beacons and other pedestrian flashers. The current policy indicated MnDOT could pay for up to half of the cost for a pedestrian flasher. Given the lower costs of RRFBs and MnDOT's complete streets policy and endorsement of the Safe System Approach, the Steering Committee discussed MnDOT covering a greater share of RRFBs. The draft policy identifies the circumstances that MnDOT will be up to 100% of the cost for pedestrian flashers.

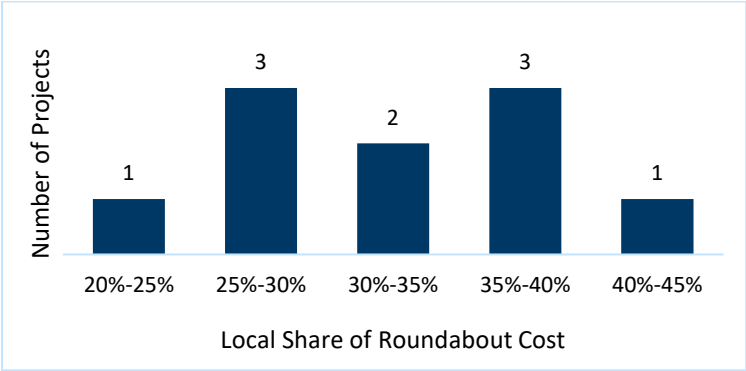
Figure 6: Draft Key Changes to Pedestrian Hybrid Beacons (PHBs) and Rectangular Rapid Flashing Beacons (RRFBs) That Would Reduce Local Participation

Current Policy	DRAFT Proposed Revisions
MnDOT may participate in up to 50% of costs for pedestrian hybrid beacons or pedestrian flashers on a trunk highway where the MnDOT District Traffic Engineer determines it meets the pedestrian volume warrant or the school crossing warrant.	DOT proposes to cover up to 100% of the cost to install PHBs, RRFBs and other flashers at locations identified as high risk in a district safety plan, identified as a high priority by the district engineer, or those required to meet Public Right-of-Way Accessibility Guidelines (ADA requirements). In other situations, MnDOT proposes to cover up to 90% based on context considerations, including but not limited to at locations: - Where the locally responsible agency is non-state aid city or township - Within a designated school zone or within ½ mile of a college or university If the crossing is identified in an adopted: local plan, Metropolitan Planning Organization’s regional transportation plan, or Safe Routes to School plan.

Roundabouts

The current Cost Participation Policy manual assigns cost for roundabouts based on the geometry of the roundabout. MnDOT is responsible for the circle and each agency is responsible for their legs of the roundabout. The Steering Committee discussed the possibility of shifting to a set percentage basis. To inform that discussion, MnDOT analyzed ten roundabouts constructed between 2020 and 2024. The local share of the total roundabout cost ranged from 24% to 41%.

Figure 7: Local Share of Roundabout Costs (Sample of 10 projects; 2020 to 2024)



Given the range of reasons roundabouts are installed and the relatively higher cost of roundabouts, the Steering Committee agreed MnDOT should consider covering a higher share when there is a clear safety issue at the intersection.

The Steering Committee also discussed the current policy’s clause that the cost for a low volume leg (one that does not contribute more than 5% of the entering traffic volume) would be shared by all other legs of the roundabout. This clause had resulted in the cost of one local unit of government being partially assigned to a different local unit of government. MnDOT agreed to cover the cost of low volume leg and increase the threshold to 10% of entering volume.

Figure 8: Draft Key Changes to Roundabouts That Would Reduce Local Participation

Current Policy	DRAFT Proposed Revisions										
MnDOT will be responsible for the cost of the roundabout circle to the outside edge of the pavement (up to the curb). Beyond the outside edge of the pavement, each agency will be responsible for the construction of its leg(s). The lighting, drainage, sidewalk, and shared use path costs are included in the cost splits. Where one leg of approach to the roundabout does not contribute more than 5% to the entering traffic volume, costs for that leg will be divided among the other legs of approach.	MnDOT may participate at a higher amount in the following situations: • If a local unit of government is responsible for only one leg of approach to the roundabout and that leg does not contribute more than 10% to the entering traffic volume, costs for that leg will be covered by MnDOT. • When there is a significant safety concern demonstrated by a Fatal and Serious Injury Crash Rate Index (FAR Index) of 0.5 or greater and the intersection has been identified as a priority location in a district safety plan or adopted local safety plan, specific cost splits are described in the following table: <table> <tr> <th>Situation</th><th>Minimum Local Share of Total Cost (Per Leg)</th></tr> <tr> <td>FAR Index ≥ 1.5</td><td>5%</td></tr> <tr> <td>FAR Index between 1.0 and 1.5</td><td>10% or standard guidance, whichever is less</td></tr> <tr> <td>FAR Index of at least 0.5 but less than 1.0, AND identified as a priority location in a district safety plan or adopted local safety plan</td><td>15% or standard guidance, whichever is less</td></tr> <tr> <td>All other intersections</td><td>Standard guidance</td></tr> </table>	Situation	Minimum Local Share of Total Cost (Per Leg)	FAR Index ≥ 1.5	5%	FAR Index between 1.0 and 1.5	10% or standard guidance, whichever is less	FAR Index of at least 0.5 but less than 1.0, AND identified as a priority location in a district safety plan or adopted local safety plan	15% or standard guidance, whichever is less	All other intersections	Standard guidance
Situation	Minimum Local Share of Total Cost (Per Leg)										
FAR Index ≥ 1.5	5%										
FAR Index between 1.0 and 1.5	10% or standard guidance, whichever is less										
FAR Index of at least 0.5 but less than 1.0, AND identified as a priority location in a district safety plan or adopted local safety plan	15% or standard guidance, whichever is less										
All other intersections	Standard guidance										

Sidewalks, Shared Use Paths, Bikeways and Pedestrian Bridges

The Steering Committee discussed the evolution of MnDOT’s design guidance related to sidewalks, shared use paths and bikeways to be more context driven over the last decade. They also discussed ongoing challenges both MnDOT and local units of government face in providing winter maintenance. Additional points of discussion included clarifying who determines the need for a facility, clarification for certain kinds of repair, and how to address situations where the right of way line bisects the middle of a sidewalk.

Figure 9: Draft Key Changes to Sidewalks, Shared Use Paths, Bikeways and Pedestrian Bridges That Would Reduce Local Participation

Current Policy	DRAFT Proposed Revisions
MnDOT will pay for a standard width sidewalk. The local unit of government will be responsible for any additional width. The local unit of government is responsible for the cost of building sidewalks or shared use paths on frontage roads. The local unit of government is responsible for the cost of new pedestrian bridges (or underpasses) above what MnDOT would have paid for an at-grade improvement when the new bridge or underpass is not part of a freeway conversion. Local units of government are responsible for all routine maintenance of sidewalks and shared use paths.	MnDOT will pay for the width of a sidewalk, shared use path or bikeway the agency determines is appropriate for the context and may participate in a wider facility to accommodate local maintenance equipment or snow storage. MnDOT may participate in the cost of a sidewalk or shared use path on a new frontage road constructed as part of an access closure if MnDOT and the local unit of government agree it is the safest option for people walking, rolling and bicycling. MnDOT will be responsible for up to 100% of the costs to construct new pedestrian bridges or underpasses on existing freeways or multi-lane divided highways where MnDOT determines existing access spacing is insufficient. Local units of government will not be responsible for winter maintenance at isolated intersections outside of an incorporated municipality that do not have connecting shared use paths or sidewalks.

Traffic Signals

The Steering Committee discussed recent increases in the costs of traffic signals and challenges associated with accelerating individual signal replacement projects. Local agencies raised concerns about paying for private entrance legs and circumstances where one of the legs of an intersection is not driving the need for the signal.

Figure 10: Draft Key Changes to Traffic Signals That Would Reduce Local Participation

Current Policy	DRAFT Proposed Revisions
The cost of signals is pro-rated by the number of legs of the intersection. Private entrances are considered the responsibility of a local unit of government.	MnDOT will cover the cost of a local leg if both of the following are true: • There are no private entrance legs. • The local unit of government is responsible for only one leg and that leg contributes less than 10% of the entering traffic volume. The cost for private entrances will be shared by all the other legs of approach. MnDOT recognizes local agencies have capital improvement plans covering multiple years. If MnDOT first notifies a local unit of government in writing that it is adding a new standalone signal project or standalone ADA project that will necessitate signal work: • Within three (3) years of the construction season, MnDOT will cover 50% of what would have been the local share for trunk highway eligible items. Within one (1) year of the construction season, MnDOT will cover 100% of the trunk highway eligible cost for the signal.

Other Topics

In addition to the topics highlighted above, the Steering Committee discussed but was not able reach resolution due to time constraints on the following topics:

- Ability for local agencies to pay their share over a longer period of time instead of up front.
- When to finalize a local share.

Locally Owned Utilities with Remaining Service Life

In developing proposed “legislation to enable the department to cover the cost of relocating utilities owned by local units of government with remaining service life when necessitated by a trunk highway construction project led by the department,” the Steering Committee considered a variety of questions. These included what should constitute a local unit of government for this provision, how should remaining service life be calculated and what utilities should be covered. The committee noted that some utilities are owned by joint powers agreement or other special purpose districts. Additionally, Tribal governments may own some utilities within highway right of way. The committee also identified light, water, sanitary sewer and storm sewer as the most common utilities affected by highway construction projects that are owned by local units of government.

In terms of calculating remaining service life, typical design life for utilities can vary by type of utility and by material or design, so the committee recommended any legislation direct the commissioner to develop a methodology similar to how the cost participation policy handles bridge replacements when there is remaining service life on the structure.

Figure 11: Example of Typical Design Life of a Utility (Water Main)

Material	Typical Design Life	Notes
Ductile Iron	75-100 years	Life expectancy depends on corrosion protection (lining, coating, soil resistivity). Commonly referenced in AWWA C150/C151.
Cast Iron	50-75 years	
PVC (C900 Pressure Pipe)	50-75 years	Life can exceed 75 years in stable soils and proper burial. AWWA C900 standard
Steel	50-100 years	Longevity depends on coating, cathodic protection, and soil environment (AWWA M11)
Concrete Pipe	75-100+ years	Durable with proper joint and corrosion protection; used widely for large mains
High Density Polyethylene (HDPE)	50-100+ years	Flexible and corrosion-resistant (Uni-Bell/TEPPFA). Best for flexible or trenchless installations. Requires proper backfill to prevent deformation

Proposed Legislation

161.46 REIMBURSEMENT OF UTILITY

Subd. 2. **Relocation of facilities; reimbursement.** (a) Whenever the commissioner determines that the relocation of any utility facility is necessitated by the construction of a project on the routes of federally aided trunk highways, including urban extensions thereof, that are included within the National System of Interstate Highways, the owner or operator of the utility facility must relocate the utility facility in accordance with the order of the commissioner. Except as provided in section 161.45, subdivision 6, paragraph (d), or 7, upon the

completion of relocation of a utility facility, the cost of relocation must be ascertained and paid out of the trunk highway fund by the commissioner, provided the amount paid by the commissioner for reimbursement to a utility does not exceed the amount on which the federal government bases its reimbursement for the interstate highway system.

(b) When a local unit of government, as defined in section 18B.01, subdivision 14a, or tribal government, as defined in section 10.65, subdivision 2, owns a utility system for supplying light, water, sanitary sewer service, or storm sewer service if such system be authorized by law to use a public highway for the location of its facility, the remaining service life of the utility will be determined by the commissioner and must be paid out of the trunk highway fund whenever the commissioner determines that a relocation of the system is necessitated by the construction of a project on the trunk highway system.

For Reference

MN Statutes 18B.01

*Subd. 14A. **Local unit of government.***

"Local unit of government" means a statutory or home rule charter city, town, county, soil and water conservation district, watershed district, another special purpose district, and local or regional board.

MN Statutes 10.65

*Subd. 2. **Definitions.***

(4) "Minnesota Tribal governments" means the federally recognized Indian Tribes located in Minnesota including: Bois Forte Band; Fond Du Lac Band; Grand Portage Band; Leech Lake Band; Mille Lacs Band; White Earth Band; Red Lake Nation; Lower Sioux Indian Community; Prairie Island Indian Community; Shakopee Mdewakanton Sioux Community; and Upper Sioux Community;

Implementation

MnDOT is on track to adopt the updated Cost Participation Policy in March 2026. The updated policy will first apply to construction projects in state fiscal year 2027. MnDOT is developing a training plan to ensure department staff and local agency partners understand the updated policy and the changes that have been made.

Appendix A: List of Acronyms

- ADT – Average Daily Traffic
- ANTC – Adjusted Net Tax Capacity
- AWWA – American Waterworks Association
- CEAM – City Engineers Association of Minnesota
- FAR – Fatal and Serious Injury Crash Rate
- MCEA – Minnesota County Engineers Association
- MnDOT – Minnesota Department of Transportation
- NHS – National Highway System
- PHB – Pedestrian Hybrid Beacon
- RRFB – Rectangular Rapid Flashing Beacon
- SRC – State Road Construction
- STIP – State Transportation Improvement Program

Appendix B: Draft Policy

Cost Participation Policy for Cooperative Construction Projects and Maintenance Responsibilities Between MnDOT and Local Units of Government

Policy Owners:

- Director, Office of Transportation System Management
- Director, Office of Project Management and Technical Support

Policy Contact: Cooperative Agreements Engineer, Office of Project Management and Technical Support

Policy Statement

Where a mutual benefit and a demonstrated transportation need exist, the Minnesota Department of Transportation (MnDOT) may share cost and maintenance responsibilities for cooperative construction projects with local units of government. MnDOT's financial contributions with State Road Construction funding is limited to trunk highway purposes. Cost participation and maintenance responsibilities are finalized in cooperative construction agreements and maintenance agreements between MnDOT and local units of government for each project.

Cooperative construction projects may be initiated by MnDOT requesting local participation in a trunk highway project, or by a local unit of government either:

- Requesting improvements or otherwise indicating its willingness to share the cost of a MnDOT project; or
- Requesting MnDOT cost participation in a locally initiated project.

This policy does not provide any claim or expectation of legal entitlement to financial participation, except where MnDOT has specifically contracted at its sole discretion for such participation. MnDOT retains the final authority to determine whether it will participate in the cost of any project.

Cost Participation and Maintenance with Local Units of Government Manual

MnDOT has developed a Cost Participation and Maintenance with Local Units of Government Manual ("Manual"). The Manual includes details for applying the policy to projects for cost participation and maintenance responsibilities, methods for computing cost shares, and relevant agreement procedures. To understand the policy and to avoid misinterpretation, the policy and Manual must be read and used together.

Exceptions to Policy

Exceptions to policy details contained in the Manual may be granted for project work that meets trunk highway purposes and is eligible for trunk highway expenditures. Districts must document requests for exceptions beyond the decision-making authority assigned to district engineers in the Manual. The district engineer must

submit justification for the exception to the Cooperative Agreements Unit, which forwards the request to the Assistant Commissioner for Engineering Services Division and the Assistant Commissioner for Operations Division for concurrence, then to the Chief Financial Officer for approval. The merits of such requests will be determined on a case-by-case basis.

Reason for Policy

This policy provides a framework to determine the potential expenditure of trunk highway funds as well as local responsibilities for cooperative construction projects and maintenance. The basis of this policy is to ensure that MnDOT use of the trunk highway fund is limited to trunk highway purposes.

MnDOT developed this policy in accordance with Minnesota statutes and rules and in coordination with applicable MnDOT policies. The *Resources and Related Information* section of this policy lists relevant references.

Applicability

Application of Policy

- This policy applies to all trunk highway funds and, in particular, funds in the State Road Construction (SRC) account.
- This policy applies to the determination of:
 - The extent to which local unit of government funding participation is necessary for portions of a MnDOT initiated trunk highway construction project;
 - The extent to which MnDOT may participate in a locally initiated project that affects the trunk highway system; and
 - Maintenance responsibilities resulting from the cooperative construction project.

Scope of Policy

- MnDOT participation using trunk highway funds, in accordance with this policy, is limited to the project scope necessary to address the trunk highway purposes as determined by the district and approved as required. Unless otherwise documented in the Manual, costs for items requested by local units of government, beyond those determined as necessary by the district, will be the responsibility of the local unit of government.
- Program documentation for MnDOT special funding programs (such as the TED program, Highway Freight program, Corridors of Commerce program, etc.) may modify and/or clarify cost participation and eligibility.
- This policy specifically applies to the use of trunk highway funds. Other MnDOT funding programs that do not use trunk highway funds are not subject to this policy.

Stakeholders

All MnDOT employees must comply with this policy. The following individuals must be aware of the policy:

- MnDOT personnel and local agency representatives involved in determining funding sources, planning, and executing agreements for cooperative construction projects between MnDOT and local units of government.
- Anyone involved in planning, designing, constructing, or maintaining a MnDOT or local federal-aid project, including but not limited to, MnDOT personnel, local agency representatives, and consultants.

Key stakeholders with responsibilities under this policy include:

- Office of Transportation System Management – Funding Program Coordinator
- Office of Transportation System Management – STIP Coordinator
- Chief Financial Officer
- Office of Financial Management
- Office of Project Management and Technical Support – Cooperative Agreements Engineer
- Office of Project Management and Technical Support – Cooperative Agreements Unit
- MnDOT District Engineers
- MnDOT District Project Managers

Definitions

Cooperative Construction Agreement

An agreement between MnDOT and a local unit of government pursuant to [Minnesota Statutes §161.20: General Powers of Commissioner](#), [Minnesota Statutes §161.38: Special Agreements for Highways in Municipalities](#), and/or [Minnesota Statutes §161.45: Utility on Highway Right-of-Way; Relocation](#), concerning construction or maintenance in which both parties have an interest.

Cooperative Construction Project

A construction project that includes trunk highway and local road improvements in which costs or maintenance responsibilities are shared between MnDOT and local units of government.

Locally initiated Project

A project in which the need, scope, or means to accomplish the project is predominantly a determination of and priority for the local unit of government.

MnDOT-initiated Project

A project in which the need, scope, or means to accomplish the project is predominantly a determination of and priority for MnDOT.

State Road Construction

The actual construction, reconstruction, and improvement of trunk highways, including right-of-way.

State Road Construction Account (SRC)

The biennial appropriation of funds by the legislature for state road construction purposes only. This appropriation is comprised of federal aid funds made available to MnDOT and state funds dedicated to the trunk highway fund. All funds allocated to the SRC are subject to requirements and restrictions of the account, specifically that funds are for trunk highway purposes only, regardless of the original source of the funds.

State Transportation Improvement Program (STIP)

A four-year plan that identifies the schedule and funding of transportation projects by state fiscal year (July 1 through June 30). It includes all state and local transportation projects with federal highway and/or federal transit funding along with 100% state funded transportation projects.

Trunk Highway Fund

MnDOT's primary operating fund which consists of:

- 62% of the net highway user tax distribution fund, as provided in Article 14 of the Constitution of the State of Minnesota;
- Proceeds of any bond sale authorized by Article 14 of the Constitution;
- Monetary aid from the federal government for the construction and maintenance of trunk highways; and
- Any other money otherwise allotted, appropriated, or legislated.

Trunk Highway System

All roads established or to be established under the provisions of [Constitution of the State of Minnesota, Article XIV, section 2](#). This system includes highways that are constructed, improved, and maintained as public highways under the jurisdiction of the Commissioner of Transportation, including highways on the Interstate system.

Responsibilities

Office of Transportation System Management (Central Office)

- **Funding Program Coordinator** - Serve as a liaison and ensure compliance and oversight for application of this policy.
- **STIP Coordinator** - Work with districts to ensure that cost estimates for MnDOT and local shares of projects are correctly identified in the State Transportation Improvement Program (STIP) and that appropriate anticipated funding sources are identified for each participating agency share.

Chief Financial Officer and the Office of Financial Management (Central Office)

- Provide financial oversight and help determine trunk highway purpose where there is no precedence or clarity.
- The Chief Financial Officer, in consultation with the Chief Counsel, is ultimately responsible for interpreting trunk highway purpose as stated in the Constitution and state law and ensuring MnDOT is compliant.

Office of Project Management and Technical Support (Central Office)

- **Cooperative Agreements Engineer**
- Serve as a liaison and ensure compliance and oversight for application of this policy.
- Ensure that construction plan information and cooperative agreement documents are consistent with the STIP, with the cost participation responsibilities developed during project development, and with this policy.
- **Cooperative Agreements Unit**
- Assist with application of this policy during project development, as requested by the districts.
- Review documentation of project cost responsibilities and notify the districts of cost participation responsibilities that may be inconsistent with this policy.
- Facilitate the review and approval of requests for exceptions to the application of this policy.
- Make the final determination of cost participation eligibility, in cooperation with the district and policy owners, during the agreement development process.

MnDOT District Engineers and Project Managers

- Work with the MnDOT Cooperative Agreements Unit and local units of government to apply this policy to projects.
- Request and document exceptions to the policy, as appropriate
- Maintain copies of maintenance agreements.

Policy Owners (Office of Transportation System Management Director and Office of Project Management and Technical Support Director)

- Review the policy every two years, or sooner as necessary, to ensure the policy remains up to date.
- Review the Cost Participation and Maintenance with Local Units of Government Manual every five years, or sooner as necessary, and other documents and training associated with the policy to ensure they remain current.
- Monitor state, federal, enterprise, agency, or other requirements that apply to the policy or procedures.
- Consult with the Office of Chief Counsel and Office of Financial Management to ensure the policy and procedures remain compliant with all state, federal, enterprise, agency, or other requirements.
- Facilitate cross-division review of internal disagreements on interpretation or concerns regarding consistency of implementation of this policy or the Cost Participation and Maintenance with Local Units of Government Manual.
- Work with the Policy Coordinator to revise the policy and/or confirm its accuracy.
- Communicate policy revisions, reviews, and retirements to stakeholders.

Resources & Related Information

Processes, Procedures, and Instructions

- Cost Participation and Maintenance with Local Units of Government Manual

Resources

This policy's procedures and requirements were developed in accordance with the following:

- **2025 Minnesota Laws, 1st Special Session, Chapter 8, including:**
 - Article 1, Section 2, Subdivision 3 (c), which limits the State Road Construction Account to “...the actual construction, reconstruction, and improvement of trunk highways, including design-build contracts, internal department costs associated with delivering the construction program, consultant usage to support these activities, and the cost of actual payments to landowners for lands acquired for highway rights-of-way, payment to lessees, interest subsidies, and relocation expenses...” This limitation is subject to change with each appropriation but remains substantially constant over time.
 - Article 2, Section 113, Subdivision 2, which states “The [Cost Participation Policy] may consider a local unit of government’s ability to pay as a factor in determining the amount of local contribution, if any.”
- **Minnesota Constitution**
 - [Constitution of the State of Minnesota, Article XIV, section 2](#) Establishes “... a trunk highway system which shall be constructed, improved and maintained as public highways of the state,”
 - [Constitution of the State of Minnesota, Article XIV, section 6](#) Establishes “... a trunk highway fund which shall be used solely for the purposes specified in section 2 of this article.”
- **Minnesota Statutes**
 - [Minnesota Statutes § 161.20](#) “General Powers of the Commissioner”
 - [Minnesota Statutes § 161.20, subdivision 2](#) “Property acquisition; agreements and contracts”
 - [Minnesota Statutes § 161.20, subdivision 3](#) “Trunk highway fund appropriations”
 - [Minnesota Statutes § 161.21](#) “Location and Design of Highways; Cooperation with other Governmental Units”
 - [Minnesota Statutes § 161.24](#) “Changes Required by Construction of Trunk Highway”
 - [Minnesota Statutes § 161.25](#) “Temporary Trunk Highway Detour; Haul Road”
 - [Minnesota Statutes § 161.38, subdivision 1](#) “Highway width or capacity”
 - [Minnesota Statutes § 161.38, subdivision 3](#) “Frontage Road”
 - [Minnesota Statutes § 161.38, subdivision 5](#) “Definition of municipalities”
 - [Minnesota Statutes § 161.38](#) “Special Agreements for Highways in Municipalities”
 - [Minnesota Statutes § 161.39](#) “Aid to Other Road Authorities and State Departments”
 - [Minnesota Statutes § 161.45](#) “Utility on Highway Right-of-Way; Relocation”
 - [Minnesota Statutes § 161.46](#) “Reimbursement of Utility”
 - [Minnesota Statutes § 162](#) “State Aid Road System”
 - [Minnesota Statutes § 169.04](#) “Local Authority”
 - [Minnesota Statutes § 169.35](#) “Parking”
- **Minnesota Rules**
 - [Minnesota Administrative Rules Parts 8810.3100 - 8810.3600](#) “Utilities and Equipment”
 - [Minnesota Administrative Rules Chapter 8820](#) “Local State-Aid Route Standards, Financing”
- **MnDOT Policies**
 - [Art on the Trunk Highway Right of Way](#)
 - [Complete Streets Policy](#)
 - [Contract Management Policy](#)

- [Minnesota Tribal Nations Government-to-Government Relationship with MnDOT Policy](#)
- [Utility Accommodation on Highway Right-of-Way Policy](#)
- **MnDOT Manuals**
 - [MnDOT Traffic Engineering Manual](#)
 - [Minnesota Manual on Uniform Traffic Control Devices](#)
 - [MnDOT Utility Accommodation and Coordination Manual](#)
 - [MnDOT Access Management Manual](#)
 - [Facility Design Guide](#)
 - [MnDOT Load and Resistance Factor \(LRFD\) Bridge Design Manual \(LRFD\)](#)
 - [MnDOT ADA Transition Plan](#)

History & Updates

Initial Adoption

Date: 2-14-2014

Comments: Policy #FM011 adopted

Superseded:

- Policy #6.1 – Administration No. 85-1, Cooperative Construction Projects with Local Units of Government
- Effective: 8-7-1985
- Revised: June 2001 and April 2004
- Guideline #6.1-G-1 – Cooperative Construction Projects with Local Units of Government Procedures (revised 2004)
- Policy #6.84-2 – Cooperative Bridge Widening Projects
- Effective 12-5-1984
- Guideline #6.84-2G1 – Cooperative Bridge Widening Projects Division of Costs
- Effective 12-5-1984

First Revision

Date: 2-24-2016

Comments: None

Second Revision

Date: [Anticipated March 2026]

Comments:

Appendix C: Draft Manual

Cost Participation and Maintenance Responsibilities with Local Units of Government Manual

DRAFT February 2026

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1. Introduction

The Cost Participation and Maintenance Responsibilities with Local Units of Government Manual (Manual) is a technical complement to the [MnDOT Policy FM011 Cost Participation for Cooperative Construction Projects and Maintenance Responsibilities between MnDOT and Local Units of Government Policy](#).

The Policy and Manual documents must be used together in order to fully understand the internal policy and procedures for such cooperative projects. Like the Policy, the Manual is for internal purposes only and is not intended to provide any claim or expectation of legal entitlement to financial participation except where MnDOT has specifically contracted at its sole discretion for such participation.

The Manual includes details for applying the Policy to projects, methods for computing cost shares, and relevant procedures including agreements and permits.

Project Managers are encouraged to coordinate with MnDOT's Cooperative Agreements Engineer and District Maintenance staff early in the project development process to determine cost participation and maintenance responsibilities in accordance with the Policy and this companion Manual.

2. Determination of MnDOT Participation

MnDOT participation, in accordance with the Policy and this Manual, is determined by applying three considerations.

1. Activities or items funded with Trunk Highway or State Road Construction account funds must be eligible under the Minnesota Constitution and a variety of other contributing statutes and case law. Primarily, eligibility is governed by the constitution which says that trunk highway funds can only be used to construct, improve, and maintain the trunk highway system.
2. Where activities or items to be constructed on the Trunk Highway System have multiple purposes, resulting in both Trunk Highway system benefits and local community benefits, the costs for those activities or items are appropriately shared between MnDOT and local agencies. The level of MnDOT participation should be commensurate with the amount of benefits accruing to the trunk highway system with due respect given to the restrictions in law, applied engineering principles and the context in which the project is located.
3. Activities or items to be funded are limited to the project scope necessary to address the trunk highway needs as determined by the MnDOT district and approved as required. The project scope must be consistent with investment priorities established in the [20-year Minnesota State Highway Investment Plan](#) (MnSHIP). MnSHIP investment priorities help to guide programming and project selection and are based on MnDOT policy goals and objectives, technical information on system conditions, system needs, performance management, revenue projections, consideration of key risks, and public outreach. Consistency with MnDOT investment priorities and limited funds may prevent MnDOT from participating fully in an otherwise eligible cost.

The Policy and this Manual are written for application to MnDOT projects. MnDOT participation will be applied at the amount identified in this policy for MnDOT projects. Costs for items requested by local units of government, beyond those determined as within the scope and necessary by the district, will typically be the responsibility of the local unit of government.

MnDOT's cost participation identified in the Policy and this Manual may also be applied to a locally initiated project, with eligible trunk highway items. However, trunk highway funding is not available to address all trunk highway system needs or opportunities presented by locally initiated projects. MnDOT determines the priority, scope, and extent of participation in a locally initiated project during development of the district transportation improvement program. This project programming process is guided by MnSHIP investment priorities and completed in cooperation with [Area Transportation Partnerships](#) (ATPs) and [Metropolitan Planning Organizations](#) (MPOs). Details of the MnDOT project programming process are addressed in Guidance for the Development of the [State Transportation Improvement Program](#) (STIP).

Actual MnDOT participation may be less than the stated limits in this manual for any project element. The willingness of a local agency to participate in excess of cost participation identified in the Policy and this Manual may influence MnDOT programming priorities because of the opportunity to address recognized needs at a reduced cost to MnDOT.

Cost participation from local units of government will be required for locally requested project elements, for design beyond what MnDOT has determined as necessary for the trunk highway project scope, and for designs beyond applicable standards. Local cost participation is also likely for locally requested replacement of the existing trunk highway infrastructure in advance of obsolescence. Locally owned utility relocation costs are determined in accordance with applicable Minnesota statutes and rules.

It is recognized that many projects will have both trunk highway and local purposes. In many situations, those purposes may not be easily assigned as either MnDOT or local responsibility. In these cases, costs are assigned on the basis of jurisdictional ownership or as a cooperative construction item as identified in [Section 4 Application of Policy to Projects](#).

Trunk highway improvements directly necessitated by a specific development adjacent to the trunk highway, by other projects, or by locally initiated projects, may be required by MnDOT at 100% local unit of government cost responsibility. Refer to [Appendix E](#) for Cooperative Agreement Process steps. In the case of special funding programs, further clarification of cost participation will be provided in the program criteria, as approved by MnDOT's [Transportation Programming and Investment Committee](#) (TP&IC).

Existing cooperative construction agreements are to remain in effect under the terms and conditions specified in those agreements, unless specifically superseded by reference in a new agreement. The procedures within this document apply only to the development of new cooperative construction agreements with local units of government.

Wherever practical, MnDOT's cost participation responsibilities should be developed using a holistic approach that includes all items required for the particular project, in accordance with the Policy and this Manual.

3. Funding

MnDOT biennially requests an appropriation of funds from the legislature based on the estimate of state funds dedicated to the trunk highway fund and federal aid formula funds for each of two fiscal years. The appropriation which consists of MnDOT's portion of funds from these sources comprise the State Road Construction (SRC) account. SRC account dollars may be expended only on projects or those elements of projects that are necessary for trunk highway purposes and for the actual construction, reconstruction, and improvement of trunk highways, including design-build contracts and consultant usage to support these activities. This includes the cost of actual payment to landowners for lands acquired for highway rights-of-way, payment to lessees, interest subsidies, and relocation expenses.

Funds apportioned to MnDOT outside of the SRC account may not be governed by the same statutes and rules that apply to SRC account funds.

Projects or project elements not eligible for Trunk Highway funds or SRC account funds are identified by the Policy and this Manual as the responsibility of local units of government. The local units of government are responsible for identifying funding to be used for local shares of cooperative construction projects.

MnDOT should make project scope and cost participation estimates and maintenance scenarios available to local units of government as soon as possible in the project development process. This information should be available early enough to enable local governments to seek other funding sources to assist in paying their share of the project costs.

3.A. Federal Aid Formula Funds

3.A.1. Federal Funds used by MnDOT

Federal funds used by MnDOT include Federal funds allocated directly to MnDOT by MnDOT's current resource distribution method and those Federal funds selected by an Area Transportation Partnership for MnDOT projects.

State appropriation laws authorize spending of Federal funds on the Trunk Highway system through the State Road Construction (SRC) account. Thereafter, all Federal funds so authorized carry the same limitations as state funds from the SRC.

MnDOT may not apply federal aid funds from the SRC account towards the local share of cooperative construction projects. Such expenditures violate State law, which limits expenditure of SRC account funds to trunk highway purposes.

Federal funds used by MnDOT must also be spent in accordance with Federal laws. In most cases, federal aid funds may be spent only on roadways classified as rural major collectors, urban collectors, or higher functional classifications, and federal aid funding eligibility varies by specific federal funding source.

3.A.2. Federal Funds used by Local Units of Government

In most cases, federal aid funds may be spent only on roadways classified as rural major collectors, urban collectors, or higher functional classifications. In general, federal aid funds may pay for almost anything that is eligible under the state trunk highway or state aid programs. However, federal aid funding eligibility varies by specific federal funding source.

Federal aid funds applied toward the local share of a cooperative construction project are identified through the ATP process. MnDOT and local units of government are strongly encouraged to develop traffic control signal and other cooperative construction projects as a single project and jointly pursue any federal aid funds that may be applied.

3.B. Advanced Construction

Advance Construction is a federal financing tool that allows MnDOT or a local government to fund a project with their own funds and be reimbursed with federal funds at a later date when those federal funds are available. The project must be treated as a federal project from its inception and must receive all federal approvals/authorizations prior to letting. MnDOT projects utilizing Advance Construction must also treat the advanced funds as coming from the SRC account.

Use of Advance Construction is addressed in [MnDOT Policy FM008 Advance Construction](#).

1.A. Debt Management

Debt Management is another financing tool that is used to advance project construction. Debt Management is used where a local government constructs a project in advance of the projects' scheduled date in MnDOT's program. MnDOT pays back the local government during the fiscal year in which the project was scheduled to be let for construction in MnDOT's program.

Use of Debt Management is addressed in [MnDOT Policy FM007 Debt Management](#).

1.B. State Funds

1.B.1. State Road Construction (SRC)

State funds include all state trunk highway funds constitutionally dedicated for trunk highway purposes and identified in the SRC account. The Policy and this Manual may also apply to other state funding sources, such as bonds or general funds appropriated by the legislature for transportation purposes. However, these funding sources may have greater or reduced flexibility for application due to statutory requirements for their use.

1.B.2. Non-State Road Construction (Non-SRC)

Trunk highway funds not from the SRC, sometimes referred to as operating dollars, must still be spent on trunk highway purposes, but do not have the restrictions of dollars in the SRC. Operating dollar uses include maintenance activities and non-project related planning studies.

1.C. Local Funds

Local funds include all federal aid funds made available for a local unit of government project or for a portion of a cooperative construction project through ATP procedures, county and municipal state aid funds, and other local funds provided by a local unit of government.

4. Application of Policy to Projects

4.A. Studies, Preliminary Engineering, and Design

The commissioner's ability to undertake studies for the location and design of highways and to cooperate with local units of government is defined in [Minnesota Statutes § 161.21](#) "Studies," subdivision 1 "Location and design of highways" and subdivision 2 "Cooperation with other government units."

MnDOT will typically be responsible for all study, preliminary engineering, value engineering, and design costs for MnDOT initiated projects, except that local units of government will be responsible for all study, preliminary engineering, value engineering, and design costs for project elements that do not have a trunk highway purpose.

Studies, preliminary engineering, and design are usually not included in a cooperative agreement, but project-specific circumstances may warrant joint MnDOT and local participation in a study, preliminary engineering or design. The extent of MnDOT cost participation will be decided by the district on a case-by-case basis relative to trunk highway needs and priorities. For further information regarding agreement procedures for studies, preliminary engineering, and design, contact MnDOT's Consultant Agreements Office.

4.A.1. Cooperative Construction Agreement

Project-specific circumstances may warrant inclusion of studies, preliminary engineering, and design costs in the cooperative construction agreement for subsequent trunk highway construction. These costs are paid for with construction program funds. Project-specific circumstances may include:

- MnDOT reimbursement of all direct costs for studies, preliminary engineering, and design by local units of government staff, provided they are preparatory to subsequent trunk highway construction that is included in the same agreement.
- Costs for studies, preliminary engineering, and design prepared by a consulting firm retained by a local unit of government when such costs are relatively small and incidental to the cost of the subsequent trunk highway construction, and preparation of a separate agreement for these costs is not cost-effective. The district must ensure that selection of the consultant was conducted in a fair, open and competitive process in accordance with applicable federal and state laws and regulations.

Justification for use of construction program funds for such costs must be documented by the district, concurred with by the director of the Operations Division, and submitted to the director of the Engineering Services Division for approval on a case-by-case basis. Any reimbursement for studies, preliminary engineering, or design costs will be included in the cooperative construction agreement as a lump sum amount.

4.A.2. Joint Powers Agreement and Master Partnership Contracts

Cooperative cost sharing for studies, preliminary engineering, and design costs typically are administered through MnDOT's Consultant Services Unit by development of a Joint Powers Agreement between MnDOT and

the participating local unit of government. As an alternative to a Joint Powers Agreement, a work order to a Master Partnership Contract can be written. Master Partnership Contracts are administered by MnDOT's Contract Management Section. Joint Powers Agreements or work orders to Master Partnership Contracts should be in place prior to requesting studies, preliminary engineering, or design.

4.B. Right-of-Way Acquisition

For MnDOT initiated projects, MnDOT will typically acquire all necessary right-of-way for the entire portion of the cooperative construction project. MnDOT participation in such right-of-way costs will be in the same ratio as the construction work requiring the right-of-way acquisition if such work is necessitated by locally requested construction beyond the project scope, such as additional lanes or width. The local unit of government will acquire and fund necessary right-of-way for any portion of construction in which MnDOT has no cost participation. Project-specific conditions may warrant MnDOT acquisition of such right-of-way. In such cases, the local unit of government is responsible for right-of-way costs associated with construction work in which MnDOT has no participation.

For locally initiated projects, the local unit of government will acquire the necessary right-of-way. The width of trunk highway right-of-way necessary for a cooperative construction project is subject to MnDOT approval. The local unit of government will obtain all locally acquired, permanent right-of-way, fee title, permanent easements, and temporary easements and permits, including the right to discharge drainage, in the name of the local unit of government. The documents showing that the local unit of government has obtained the property rights needed for the project must be transmitted to MnDOT when the plan and other documents are submitted for preparation of the cooperative construction agreement. Information as to form and acceptability can be obtained from the district. It is advised that the local unit of government contact and coordinate with the district Right-of-Way Office prior to right-of-way activities, especially when it is necessary to relocate residences or businesses. Where MnDOT deems it appropriate, MnDOT may incorporate all or portions of such locally acquired right-of-way into the trunk highway system. MnDOT may also participate in acquisition of right-of-way required for frontage road construction. MnDOT may reimburse the local unit of government for right-of-way conveyed to MnDOT in the same ratio as MnDOT's participation in the construction work requiring the trunk highway or frontage road right-of-way acquisition.

Project-specific circumstances may warrant local unit of government acquisition of the cooperative construction portion of a MnDOT-initiated project. MnDOT may reimburse the local unit of government for such right-of-way conveyed to MnDOT. Acquisition of right-of-way by local units of government will be on a case-by-case basis. The amount, location, acquisition process, and cost of right-of-way to be acquired by a local unit of government must be approved by the district right-of-way engineer and the Director of the MnDOT Office of Land Management prior to acquisition. The local unit of government may not conduct right-of-way condemnation on behalf of MnDOT. Similarly, project-specific circumstances may warrant MnDOT acquisition of right-of-way for a locally initiated project. Such situations will be addressed on a case-by-case-basis.

The local unit of government will be responsible for 100% of the right-of-way costs for right-of-way not acquired for frontage road construction or incorporated into the trunk highway right-of-way.

The Environmental Due Diligence (EDD) process guides decisions regarding property transactions as a means to address project needs and manage environmental costs and risks. The risks are generally associated with

historical chemical use at the property and adjacent properties (potential for historical chemical use to have impacted soil and groundwater on the property). The goal of the process is to identify potential contamination issues early so that informed decisions can be made regarding the acquisition, and appropriate actions can be completed in a timely fashion. Acquisitions that will become MnDOT property will not be approved until the EDD process has been completed.

The EDD process requires early involvement with Environmental Investigation Unit (EIU) personnel in the MnDOT Office of Environmental Stewardship and should be initiated during project planning and scoping. This early involvement helps to identify property acquisitions with environmental conditions (contaminated and regulated materials), especially properties that present a high risk to MnDOT and to the project budget. See the [MnDOT Regulated Materials Management document](#) for information about the soil/groundwater contamination and regulated material review process for state aid projects. The EDD process is initiated through completion of the form, EDD-1.

Following is a summary of the [three EDD forms](#):

- EDD-1: project proposer provides general project area information.
- EDD-2: project proposer provides specific parcel information as soon as it is known.
- EDD-3: only used for parcels that present a high environmental risk to the department. The document summarizes benefits and risks of the acquisition, all feasible and practicable risk reduction options (such as property avoidance and/or project design changes), and available regulatory agency program liability protections.

Completion of various investigations may be necessary to assess risk associated with proposed acquisition of contaminated parcels. Most projects will end after completion of EDD-2.

The outcome of the EDD process will be a recommendation on acquisition and liability protection:

- Don't acquire the property
- Acquire the property
- Acquire the property after obtaining liability protection.

Right-of-way acquisition for projects which include any local federal aid funds, SRC funds, or any property that will be conveyed to MnDOT must be reviewed and certified by MnDOT. This certification is to ensure that all property needed for any portion of the project was acquired in accordance with applicable state and federal statutes and policies. This certification must be completed prior to approval of the construction plan by the director of the Office of Land Management and the State Design Engineer and is a condition for payment of construction costs by MnDOT.

4.C. Cooperative Construction Costs

The Policy and this Manual apply to all construction items included in cooperative construction projects.

Unless otherwise stated in this Manual, MnDOT funding participation on local roadways, including frontage roads and bridges, is limited to the applicable design criteria, as determined by MnDOT, in coordination with the local unit of government. All costs for project elements beyond what is required for these design criteria will be 100% the responsibility of the local unit of government.

Construction cost responsibility for cooperative construction projects are determined in accordance with the procedures outlined below regarding:

- [Roadways](#)
- [Bridges, Interchanges and Grade Separations](#)
- [Drainage, Stormwater and Wetlands](#)
- [Green Infrastructure](#)
- [Lighting, Traffic Control Signal Systems, and Intelligent Transportation Systems](#)
- [Sidewalks, Shared Use Paths, Bikeways and Pedestrian Bridges](#)
- [Additional Functional Design Elements](#)
- [Transit Facilities](#)
- [Aesthetics and Art](#)
- [Utilities owned by local units of government.](#)

Some sections of this manual reference an original agreement as the basis for future cost sharing responsibilities. If the original or most recent agreement cannot be located, the District Engineer may negotiate a new agreement using the guidance in this manual for that subject related to new construction as a starting point.

4.D. Maintenance

Cooperative construction projects often result in infrastructure that serves multiple purposes and provides benefits to both trunk highway users and to local communities. Local units of government are engaged by MnDOT in the project development process, to provide input on the local context and to communicate needs and preferences. Because the infrastructure resulting from a cooperative construction project has shared uses and benefits, some responsibilities for maintaining the resulting infrastructure are shared with local units of government after construction, as documented in an agreement.

Maintenance needs for cooperative construction items should be considered early in the project development process. The maintenance responsibilities of the local unit of government for cooperative construction projects will be documented in the cooperative construction agreement or in a separate maintenance agreement. Maintenance responsibilities specified in this Manual apply to cooperative construction projects and to construction projects in which MnDOT is responsible for 100% of the cost. Even if MnDOT is 100% responsible for construction costs, a separate maintenance agreement is required because a cooperative construction

agreement would not be created. Maintenance agreements will include all necessary costs, including but not limited to personnel, equipment, and materials.

Maintenance responsibilities not incorporated into a cooperative construction agreement as identified in this Manual, included but not limited to continuation of pre-existing agreement conditions, or ongoing cost reimbursement for maintenance activities will require a separate maintenance agreement.

4.E. De Minimis

When a local unit of government's total estimated responsibility for trunk highway eligible items totals [dollar amount pending final review of Steering Committee] or less and there are no other non-trunk highway eligible local costs on the project, MnDOT will cover those trunk highway eligible costs that would otherwise be the local unit of government's responsibility. This clause does not permit MnDOT to pay for items it cannot legally pay for using the trunk highway fund, such as local utilities. A determination of eligibility under this clause will be made based on the designer's estimate and MnDOT may continue to cover the trunk highway eligible items even if the final cost is above [insert final amount].

MnDOT will not participate in the cost of a local project that impacts that trunk highway system when MnDOT's estimated responsibility for trunk highway eligible items totals [insert final amount] or less in county and state-aid city-led projects or \$10,000 or less in non-state aid, township, or tribal-led projects. This does not include items MnDOT is legally required to pay for such as detours. A District Engineer may waive this requirement if they wish to contribute in such a situation.

4.F. Individual Project Maximum Contribution

MnDOT recognizes that cities, counties and townships are in different positions in respect to their financial capacity to contribute to state highway construction projects. Consistent with [Minnesota Laws 2025, First Special Session, Chapter 8, Article 2, Section 113](#), a local unit of government's responsibility for trunk highway eligible items on the scope determined by MnDOT on MnDOT initiated projects will not exceed 0.8% of their five-year average Adjusted Net Tax Capacity.

$$\begin{aligned} & \text{Individual Project Maximum Contribution (rounded to nearest \$1,000)} \\ & = \text{Adjusted Net Tax Capacity (5 year average)} \times 0.008 \end{aligned}$$

The individual project maximum will be based on the most recent five years of Adjusted Net Tax Capacity values available from the Minnesota Department of Revenue on September 1 during the prior Fiscal Year.¹ For example, the individual project maximum for FY 2027 projects will be based on the data available on September 1, 2025.

- The scope determined by MnDOT will be based on the agency's standard project development and public engagement processes.

¹ <https://www.mndor.state.mn.us/ReportServer/Pages/ReportViewer.aspx?/Property+Tax/ANTC>

- Any non-trunk highway eligible costs and any additional items a community may request to add to the scope would not be covered by the maximum.
- If there are no additional local costs on a project, the De Minimis clause would apply and could result in zero cost for a local unit of government.
- A local unit of government may voluntarily contribute more than the individual project maximum.

Current individual project maximum values for all cities, counties and townships are available at [insert website link when available].

[Appendix F](#) includes examples of determining an individual project maximum and how it would apply to projects.

For projects in the 2026-2029 State Transportation Improvement Program (STIP) that have local federal funds programmed in the STIP (e.g. local HSIP, local STPBG, TA, etc.), the individual project maximum will apply only to the local match to the federal funds and to any other eligible local funding on the project (i.e. the local federal funds will not count toward the individual project maximum). Any local federal funds secured by local agencies after the adoption of the 2026-2029 STIP may be applied to the individual project maximum if used to cover trunk highway eligible items included in the scope determined by MnDOT.

4.G. Greenhouse Gas Emission and Vehicle Miles Traveled Offsets

Until a portfolio process is established, the cost for offsets of greenhouse gas emissions and vehicle miles traveled under [MN Statutes 161.178, Subd. 4](#) for locally initiated capacity expansion projects on the trunk highway system will be 100% the responsibility of the local unit of government.

Maintenance of any new infrastructure constructed within trunk highway right of way for GHG or VMT offsets for locally initiated capacity expansion project may be considered on a case-by-case basis, but the maintenance sections of this manual should be used as a starting point for negotiations.

MnDOT and the [Transportation Impact Assessment Technical Advisory Committee](#) are currently developing additional guidance related to GHG and VMT offsets. Future guidance may provide additional detail on cost sharing responsibilities.

5. Roadways

5.A. Background

MnDOT may participate in roadway projects on the trunk highway and on roadways under the jurisdiction of a local unit of government if the projects directly improve the safety, operation or maintenance of the trunk highway system through access control or trunk highway intersection improvements, or if the projects affect changes in the local roadway design, location or operation required by other trunk highway improvements.

5.B. Roadway Construction

For the purposes of this section of the Manual, roadway costs include all items necessary for construction of the roadway.

5.B.1. Trunk Highways

MnDOT will be responsible for up to 100% of all roadway costs for MnDOT initiated and programmed trunk highway improvements to applicable design criteria as determined by MnDOT. Additional items requested by a local agency beyond the applicable design criteria for the trunk highway must be approved by MnDOT, and all associated costs, except for aesthetic elements in accordance with [Section 13 Aesthetics and Art](#), will be the responsibility of the local unit of government.

5.B.2. Local Roadways

MnDOT will be responsible for up to 100% of local roadway construction costs, including frontage roads and right-of-way costs, required as a result of trunk highway construction. MnDOT's participation will be in the same ratio as the trunk highway improvement necessitating the local roadway construction in accordance with the following:

- [Minnesota Statutes § 161.24 "Changes Required by Construction of Trunk Highway,"](#) subdivision 1 "Grade at intersections," for costs associated with reconstruction of local roadway as necessitated by a change of grade at an intersection with a trunk highway to the original geometric and structural section, to a reasonable touchdown point.
- [Minnesota Statutes § 161.24 "Changes Required by Construction of Trunk Highway,"](#) subdivision 2 "Relocation of Highway," for costs associated with changing the location of a highway or street, and any damages occasioned thereby, when the change in location is due to the establishment, construction, or reconstruction of a trunk highway.
- [Minnesota Statutes § 161.24 "Changes Required by Construction of Trunk Highway,"](#) subdivision 3 "Detours during construction," for costs associated with improvements necessary to adequately accommodate trunk highway traffic detoured onto a local roadway during trunk highway construction.

- [Minnesota Statutes § 161.24 “Changes Required by Construction of Trunk Highway,”](#) subdivision 4, “Access to isolated property,” for costs associated with relocation and construction of portions of the local roadway system to provide for its continuity and operation at a level that approximates its condition prior to construction. This includes costs for new local roadways, frontage roads, and improvements necessary to adequately accommodate diverted traffic when a MnDOT trunk highway project modifies traffic patterns on local roadways.
- For costs to improve local roadways to adequately accommodate traffic turning from the trunk highway onto a local roadway due to the addition of turn lanes on the trunk highway.

MnDOT may participate in the costs to close a local access on to the trunk highway.

Participation by MnDOT and a local unit of government in other local roadway construction costs, not required as a result of trunk highway construction, will be in accordance with the following:

- If a local roadway intersecting a trunk highway is to be reconstructed to a design different from that of the existing roadway, such as the adding of medians, turn lanes, through-lanes or other additional width, the local unit of government may be responsible for 100% of those costs.
 - MnDOT may participate in costs for reconstruction of local roadways at intersections with trunk highways to a design different from that of the existing roadway. MnDOT participation will be limited to those situations where the local roadway project directly improves the operation or safety of the trunk highway. MnDOT participation will be limited to costs associated with local roadway construction beyond the existing condition that result in net benefits to the trunk highway system. The benefits will be limited to crash reduction and delay reduction on the trunk highway that directly result from the local road improvement. MnDOT participation may not exceed 100% of the local roadway improvement cost.
- MnDOT will participate in costs for roadway construction on local roadways necessitated by frontage road construction in the same proportion as MnDOT’s responsibility for participation in the frontage road construction.
- The local unit of government will be responsible for 100% of the costs to improve the trunk highway to adequately accommodate the traffic turning from the local roadway onto a trunk highway due to the addition of turn lanes on the local roadway or due to the addition of a new local roadway accessing the trunk highway, except as noted in the bullets above.

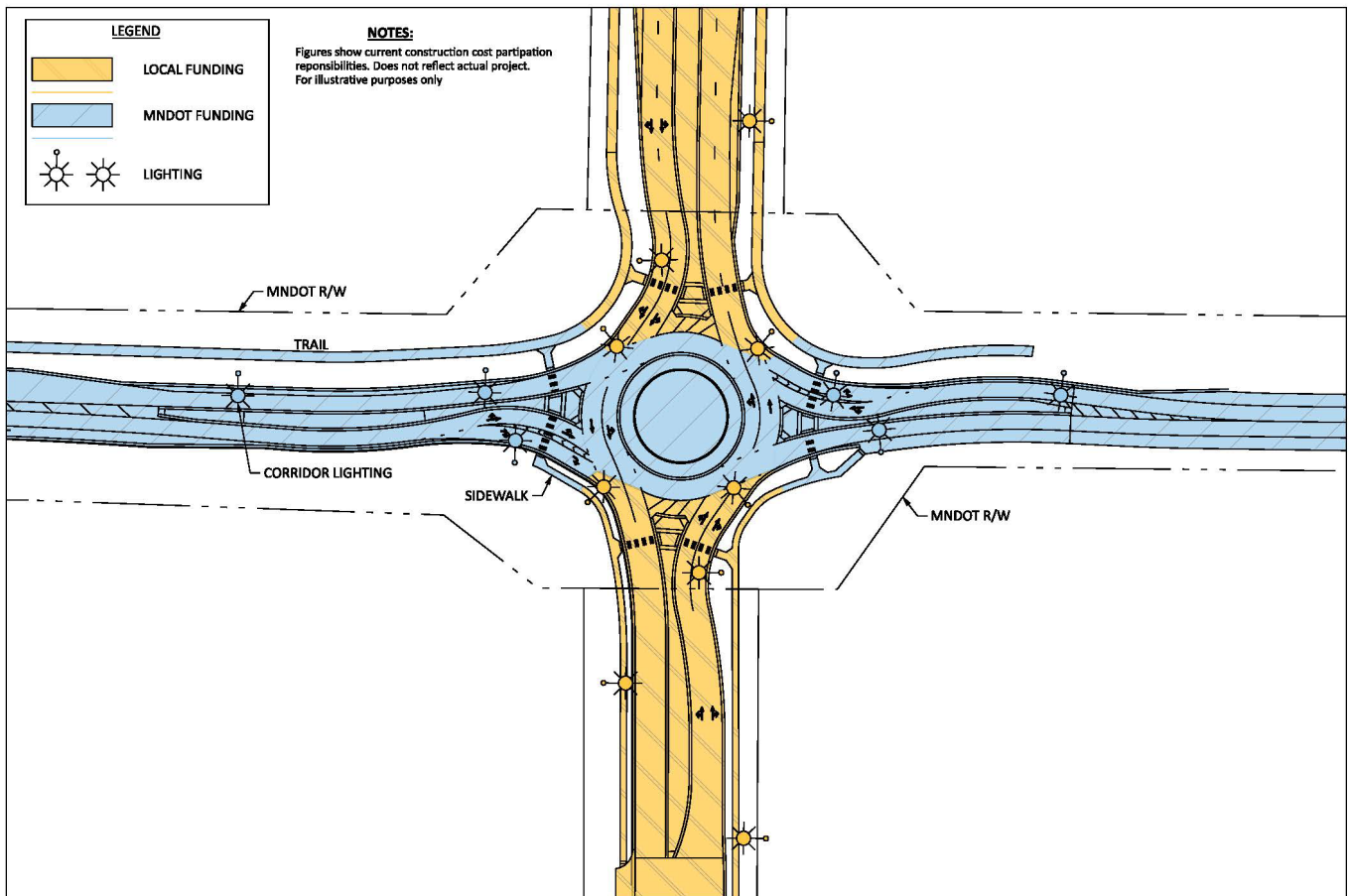
The local unit of government will be responsible for 100% of all local roadway construction costs not identified above.

5.B.3. Roundabouts

Construction costs for roundabouts will be shared by MnDOT and local units of government as follows (see Figure 1 for diagram):

- MnDOT will be responsible for the cost of the roundabout circle to the outside edge of the pavement (up to the curb). Beyond the outside edge of the pavement, each agency will be responsible for the construction of its leg(s). The lighting, drainage, sidewalk, and shared use path costs are included in the cost splits. The costs for any Rectangular Rapid Flashing Beacons (RRFBs) will follow [Section 9.C.1 Pedestrian Hybrid Beacons, Rectangular Rapid Flashing Beacons and other Pedestrians Flashers](#). The cost to build any ponds that may be necessary will be shared in the same proportion as the overall roundabout costs.

Figure 1: Diagram of Roundabout Cost Responsibilities



- MnDOT may participate in the cost of a roundabout to a higher amount in the following situations:
 - A. If a local unit of government is responsible for only one leg of approach to the roundabout and that leg does not contribute more than 10% to the entering traffic volume, costs for that leg will be covered by MnDOT.

- B. When approach grading and surfacing costs are disproportionally located on the local approach legs to reduce the need for alignment change on the Trunk Highway legs, the cost of the approach legs will be split equally.
- C. When there is a significant safety concern demonstrated by a Fatal and Serious Injury Crash Rate Index (FAR Index) of 0.5 or greater and the intersection has been identified as a priority location in a district safety plan or adopted local safety plan, specific cost splits are described in Table 1.

Table 1: Local Share of Roundabout Construction Costs

Situation	Minimum Local Share Per Leg
FAR Index ≥ 1.5	5%
FAR Index between 1.0 and 1.5	10% or standard guidance, whichever is less
FAR Index of at least 0.5 but less than 1.0, AND identified as a priority location in a district safety plan or adopted local safety plan	15% or standard guidance, whichever is less
All other intersections	Standard guidance

- In situations where MnDOT participates at a higher share, the cost of the roundabout includes the local legs up to a reasonable touchdown point.
- Final MnDOT participation will be determined on a case-by-case basis, as determined by district priorities and available funding.

5.B.4. J-Turns and Non-Traditional Intersection Modifications

MnDOT will be responsible for up to 100% of the costs to construct J-turns and median closures on the trunk highway system.

Cost participation for any non-traditional intersection modifications will be determined on a case-by-case basis

5.B.5. Frontage Roads

MnDOT's ability to participate in the construction and maintenance of frontage roads as part of trunk highway improvements is defined in [Minnesota Statutes § 161.38 "Special Agreements for Highways in Municipalities,"](#) subdivision 3 "Frontage Road." MnDOT may participate in frontage road costs for improvements to the operation and safety of the adjacent trunk highway by appropriately limiting access to the trunk highway and accommodating predominately local traffic on the frontage road.

The jurisdiction of frontage roads included in cooperative construction projects should be addressed early in the project development process. New frontage roads and any frontage road under MnDOT jurisdiction in which

MnDOT participates in construction that a local unit of government agrees to assume ownership for will be released to the local unit of government upon completion of construction activities, either as part of the cost sharing agreement or as part of a separate turnback agreement that must be in place prior to the beginning of the construction project.

MnDOT's participation in frontage road construction on a locally initiated project will not exceed the cost of acquiring access control for the adjacent trunk highway.

MnDOT will participate up to 100% of the frontage road costs, including right-of-way costs in accordance with [Section 4.B Right of Way Acquisition](#), when the access to the trunk highway is being reduced, the improvements provide safety and operational improvements to the trunk highway, and the access spacing is in compliance with the [MnDOT Access Management Manual](#).

- Frontage roads required as a result of other trunk highway improvements, such as interchange construction that may have a local participation, will be cost shared in the same ratio as the interchange.
- For new frontage roads, MnDOT participation will be limited to the applicable design criteria for the volume of traffic forecasted to use the frontage road agreed upon by MnDOT and the local unit of government.
- MnDOT will not participate in the reconstruction of an existing frontage road that does not provide safety or operational improvements to the trunk highway system, except for improvements to a frontage road on trunk highway right-of-way necessary for release of the frontage road to a local unit of government.
- In the absence of other frontage road improvements, MnDOT participation will be up to 100% for costs necessary to improve frontage roads, currently under MnDOT jurisdiction, to applicable design criteria and satisfactory structural integrity, prior to release of the frontage road to the local unit of government.

The local unit of government will be responsible for 100% of frontage road costs, including all parking costs, not identified as MnDOT participation above.

5.B.6. Trunk Highway Parking

MnDOT will participate in the perpetuation of existing parking along the trunk highway. Parking lane construction includes pavement, aggregate base, striping, borrow items, and removals. Participation will be in accordance with the following:

- Where parking currently exists on a trunk highway and the local agency wishes to perpetuate parking:
 - **Resurfacing and Rehabilitation Projects:** MnDOT will participate up to 100% for the roadway width from outside edge of the traffic through-lane to the back of curb.

- **Reconstruction Projects:** MnDOT will participate up to 90% of the parking lane reconstruction, up to 12 feet for parallel parking, and up to 22 feet for angled parking as measured from the outside edge of the traffic through-lane. All other costs will be local costs.
- MnDOT may participate in the construction costs for relocating up to an equal number of parking spaces off the trunk highway, including grading, base, pavement, initial striping, and equipment and installation costs for lighting. All additional costs, including any right of way costs that might be necessary, and all future maintenance will be the responsibility of the local unit of government. The individual project maximum will not apply to right of way costs and any additional costs associated with relocating parking off the trunk highway.
- The cost of locally requested striping other than a fog line will be a local responsibility.
- Curb and gutter, when required for the project, will be up to 100% MnDOT responsibility.
- MnDOT will be responsible for up to 100% of all construction costs related to the removal of parking from the trunk highway.
- Where parking does not currently exist and a local unit of government wishes to create parking on a trunk highway, the commissioner must approve the request for parking along the trunk highway in writing in accordance with [Minnesota Statutes § 169.04 “Local Authority”](#) and [Minnesota Statutes § 169.35 “Parking.”](#) All costs associated with the creation of new parking on a trunk highway will be 100% the responsibility of the local unit of government requesting the addition of parking. The Individual Project Maximum will not apply to these costs.

5.C. Roadway and Shoulder Maintenance

MnDOT will be responsible for maintenance activities associated with all trunk highway roadway and shoulder items, ramps and loops at interchanges, concrete bridge approach panels, and other portions of the trunk highway right-of-way.

Local units of government will be responsible for maintenance activities associated with all roadways and shoulders under local jurisdiction, including local roadways constructed or reconstructed due to impacts associated with trunk highway construction, in accordance with [Minnesota Statutes § 161.24 “Changes Required by Construction of Trunk Highway,”](#) subdivision 5 “Maintenance of roads outside trunk highway.”

Local units of government will also be responsible for maintenance activities on trunk highway right-of-way associated with:

- Approach legs to intersections to the outside edge of the shoulder line or outer radius of roundabouts (see [Figure 1](#) for roundabout diagram).

- Approach roadways to interchanges and grade separations up to the bridge approach panels. In instances where there is no bridge approach panel, local units of government will maintain the roadway up to the bridge joint.
 - Local units of government will still be responsible for keeping the lanes of the local road usable during winter and removing debris from the local road through the interchange or grade separation.
- Frontage roads, unless otherwise documented in an existing maintenance agreement.
- All other portions of the local road right-of-way.

Local units of government will also be responsible for removal of snow from parking lanes on trunk highways. As a part of an agreement, MnDOT may share in the cost of snow removal from the parking lane in cooperation with the local agency.

5.C.1. Signing Maintenance

MnDOT will be responsible for maintaining all signs installed by MnDOT at the following locations:

- On MnDOT roadways.
- On local roadways:
 - All signs between the ends of ramps at interchanges
 - Advance Junction Signs for the trunk highway (green background guide signs)
 - Stop and Yield Signs

Local units of government will be responsible for maintaining signs installed on local roadway right-of-way and on MnDOT right-of-way by permit.

Trail blazing signs installed on local streets will be installed and maintained by the local unit of government.

5.C.2. Markings Maintenance

At intersections, local units of government will be responsible for maintenance of markings on local roads and MnDOT will be responsible for maintenance of markings on MnDOT roads, regardless of right-of-way boundaries. The extension of the trunk highway curb face (urban design) or the extension of the trunk highway pavement surface edge (rural design) will be the defining line for the responsibility.

Local units of government will be responsible for maintenance of markings installed on MnDOT roadways by permit or agreement.

Local units of government will be responsible for maintenance of parking-related markings installed on MnDOT roadways.

Local units of government will be responsible for maintenance of the Shared Lane Pavement Marking on the trunk highway if the marking is installed at the local unit of government's request.

5.C.3. Retaining Wall and Noise Wall Maintenance

MnDOT is responsible for repairs, replacement, and painting necessary for the lifelong integrity of the noise walls and retaining walls.

Local units of government are responsible for routine maintenance on the side of a retaining wall that faces away from the highway. Routine maintenance of the non-highway side of the retaining wall includes graffiti removal, and any other maintenance activities necessary to perpetuate the walls in a safe, usable and aesthetically acceptable condition.

Local units of government are responsible for routine maintenance on the side of a noise wall that faces away from the highway. Routine maintenance of the non-highway side of the noise wall includes vegetation control, graffiti removal, and any other maintenance activities necessary to perpetuate the walls in a safe, usable and aesthetically acceptable condition.

6. Bridges, Interchanges and Grade Separations

6.A. Background

Interchanges or grade separations must be warranted and consistent with federal, regional or local policies applicable to interchanges and grade separations. MnDOT Interchange and Bridge Warrants are documented in [Chapter 7 of the Facility Design Guide](#).

This section of the Manual assigns cost participation to roadway and bridge costs as part of interchange and grade separation projects on an overall project cost basis. Participation in traffic control signal systems, additional sidewalk, additional multi-modal facilities, and aesthetic elements are identified elsewhere in this Manual.

Guidance for determining ownership and ownership responsibilities for new bridge structures is included in [Appendix B](#).

6.B. Bridge and Interchange Construction

This section of the Manual applies to the construction, replacement and improvement of interchanges, and modifications that change the interchange design. This includes grade separations with and without access between the roadways. The bridge may carry either the trunk highway or the local road.

6.B.1. Trunk Highway-to-Trunk Highway Interchanges and Grade Separations

MnDOT will be responsible for up to 100% of costs associated with trunk highway-to-trunk highway interchanges and grade separations.

Construction costs for specific local actions or for development that creates new or expands existing traffic generators that directly necessitate the need for such improvements will be viewed as cooperative construction items on a case-by-case basis.

6.B.2. New Local Road Interchanges or New Grade Separations on New Freeways or Expressways on New Alignments

MnDOT is responsible for up to 100% of the costs associated with those interchanges or grade separations supported by MnDOT as a necessary element of the trunk highway project. The local unit of government is responsible for 100% of roadway, right-of-way, and bridge improvement costs beyond those needed to accommodate a 20-year traffic forecast agreed upon by MnDOT and the local unit of government.

The local unit of government will be 100% responsible for all other new interchanges and grade separations approved by MnDOT for inclusion in the project.

6.B.3. New Local Road Interchanges or New Grade Separations on Existing Freeways

New interchanges and grade separations on existing freeways are frequently requested by local units of government to enhance local access and transportation systems. Any new interchange must be consistent with MnDOT's Access Management Manual, but even if that is true, the addition of interchanges can be detrimental to freeway operations because they introduce traffic conflicts along the trunk highway. Therefore, all costs associated with a new interchange or grade separation on an existing freeway must be approved by MnDOT and will typically be 100% local responsibility. These costs will include any improvements, such as auxiliary lanes on the existing freeway deemed necessary by MnDOT to accommodate the new interchange or grade separation.

It is recognized that in some situations, an additional interchange or grade separation may improve operation of the freeway by relieving trunk highway congestion or safety issues at adjacent interchanges. In these situations, MnDOT may financially participate up to the amount of net benefits directly attributable to the safety and operational improvements to the trunk highway system.² The net benefits calculation must account for any reduction in safety or operation of the trunk highway system caused by the addition of the new interchange or grade separation. MnDOT participation will not exceed the total cost of the new interchange or grade separation.

The [Individual Project Maximum](#) provision does not apply to this section regarding New Local Road Interchanges or New Grade Separations on Existing Freeways.

6.B.4. New Local Road Interchanges or New Grade Separations on Expressways

For the purposes of this section of the Manual, it is assumed that the new interchange or grade separation is consistent with the [MnDOT Access Management Manual](#) and replaces one or more existing at-grade intersection of a local road with a trunk highway. The term expressway includes current expressways that are being partially or wholly converted to freeway design.

MnDOT will participate in construction costs associated with those interchanges supported by MnDOT, in recognition of the safety and mobility benefits to both the trunk highway and local roadway.

MnDOT participation will begin at 50% unless the local unit of government has not developed an adequate supporting local roadway system or unless the interchange is proposed primarily to serve local development, as described later in this section.

For interchanges or grade separations where MnDOT participation begins at 50%, MnDOT may participate up to 100%, based on the criteria below. Additional percentage points may be added to MnDOT's share as follows:

- Fifteen percentage points may be added if the proposed interchange reduces or consolidates local roadway access to the trunk highway, consistent with the [MnDOT Access Management Manual](#).
- Thirty percentage points may be added if the proposed interchange eliminates one or more intersections that have a Fatal and Serious Injury Crash Rate Index of 1.5 or greater; 25 percentage

² The calculation of net benefits will be based on [a benefit-cost analysis limited to trunk highway system benefits using MnDOT's standard guidance](#).

points may be added if the intersections have a FAR Index between 1.0 and 1.5; or 15 percentage points may be added if the proposed interchange eliminates one or more intersections that have lower FAR Index values but meet the requirements of a sustained crash location at the time of programming.

- Ten percentage points may be added if the proposed interchange eliminates a traffic control signal or a future planned and warranted signal on the trunk highway.

Districts may reduce their participation from the level calculated above if the local unit of government has not developed an adequate supporting local roadway system, or if the interchange is proposed primarily to serve local development. In which case, the [Individual Project Maximum](#) provision will not apply.

- Local contributions of right-of-way necessary for project construction may be counted toward the local share of costs, as determined to be appropriate by MnDOT. The local unit of government must provide documentation to MnDOT for review and certification to ensure that the right-of-way was acquired in accordance with applicable federal and state statutes and regulations and environmental due diligence. If the local unit of government received the property as a donation, or if the property has been owned by the local unit of government for a considerable amount of time, MnDOT will determine the contributing value of the property based on the appraised market value of that property. The donated property must be dedicated for street and highway purposes by resolution of the governing entity.
- Right-of-way contributed by local units of government to accelerate a project that was paid for using funding from a MnDOT special trunk highway funding program (e.g. Transportation Economic Development Program) will not be credited toward the local unit of government's share of costs.

The local unit of government is responsible for 100% of roadway, right-of-way, and bridge improvement costs beyond those needed to accommodate a 20-year traffic forecast agreed upon by MnDOT and the local unit of government. The [Individual Project Maximum](#) provision will not apply to these costs.

The local unit of government will be 100% responsible for all interchanges or grade separations that do not replace existing at grade intersections or access as required above but are approved by MnDOT.

6.B.5. Reconstruction of an Existing Local Roadway Interchange or Reconstruction of an Existing Grade Separation with Trunk Highway Bridge Construction

For the purposes of this section of the Manual, it is assumed that MnDOT is the owner of any interchange or grade separation bridge(s) and that reconstruction includes replacement of, or modifications to, these bridge structures.

MnDOT cost participation in the reconstruction of an interchange or grade separation with trunk highway bridge construction, including replacement of existing local roadways disturbed by such construction to their original geometric and structural condition, to a reasonable touchdown point, is comprised of two components: structural participation and functional participation. MnDOT's participation in the reconstruction of an interchange or a grade separation with trunk highway bridge construction is the sum of these components.

6.B.5.1. Structural Participation

MnDOT will cover 100% of the structural participation for MnDOT initiated projects addressing trunk highway needs.

In other circumstances, MnDOT's structural cost participation percentage is based on the following equation:

$$\text{Participation \%} = 143 * (\text{Current Age} / \text{Current Expected Life of the Bridge}) - 28.6$$

Figure 2: MnDOT Bridge Replacement Structural Cost Participation

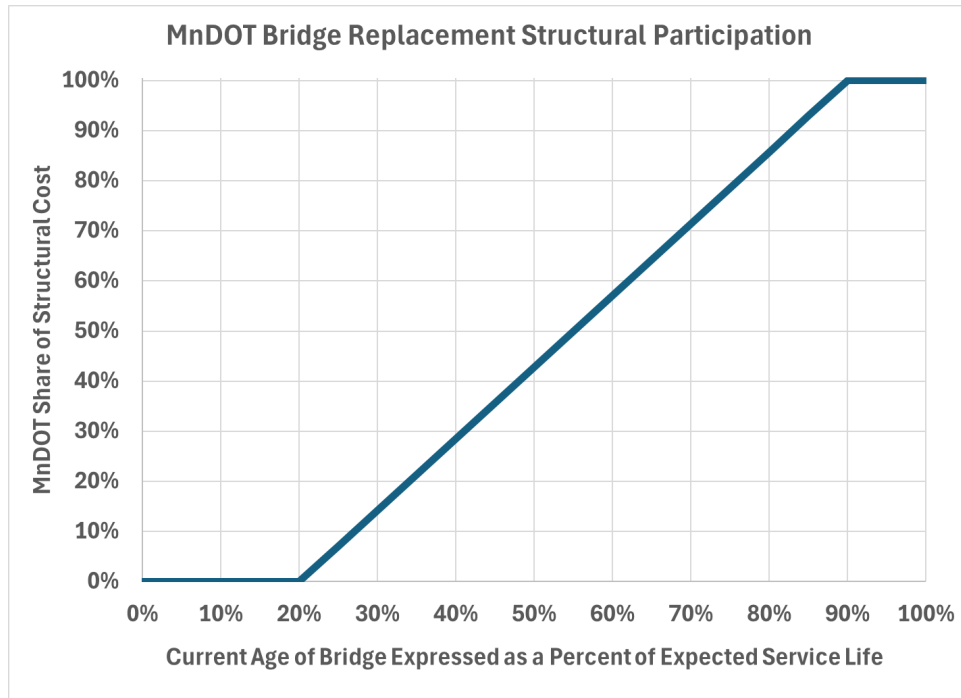


Figure 2 displays MnDOT Bridge Replacement Structural Cost Participation line graph.

This equation begins with the premise that MnDOT will pay the full cost of replacing an existing bridge, to applicable design standards to accommodate the existing number of through lanes, at the end of its current expected structural life. Meeting current design standards may include taller vertical clearance, wider shoulders, new turn lanes, and new sidewalks and shared use paths. However, if the bridge is replaced prior to the end of its structural life, MnDOT will participate at a reduced level based on the present value of the replacement cost minus the current depreciated (remaining) value of the bridge.

If the structural cost participation percentage calculated with the above equation is less than zero, then the MnDOT participation is 0%, and if greater than 100, the participation is up to 100%.

6.B.5.2. Functional Participation

The functional cost participation component addresses widening or lengthening of the existing bridge beyond width to meet current design standards for the current number of through lanes on the bridge.

The local unit of government will be responsible for at least 20% of additional bridge costs associated with bridge lengthening or widening and any additional approach panel costs necessitated by local improvements, such as additional lanes, trails or shoulder width.

The remaining MnDOT and local unit of government cost participation for the interchange due to geometric revisions may be determined using the composite percentage for structural and functional elements.

The local unit of government will be responsible for 100% of approach panel costs and of bridge widening and bridge lengthening costs associated with widening local roadways beyond the design necessary to meet current design standards for a 20-year traffic forecast agreed upon by MnDOT the local unit of government. The [Individual Project Maximum](#) provision will not apply to these costs.

The local unit of government will be responsible for 100% of the cost for additional shoulder width beyond current standard designs for the purposes of snow storage. The [Individual Project Maximum](#) provision will not apply to these costs.

Costs for widening and all other improvements to local roadways at interchanges and grade separations with trunk highway bridges beyond the touchdown point will be 100% the responsibility of the local unit of government. The [Individual Project Maximum](#) provision will not apply to these costs.

6.B.6. Improvements to Roadways, Ramps and Loops at Existing Interchanges or Grade Separations That Do Not Require Bridge Reconstruction

Improvements to existing roads at local road interchanges or grade separations at a trunk highway typically improve the operation and safety of both the local roadway and the trunk highway. For the purpose of this section of the Manual, the improvements are considered to accrue predominately for the roadway system on which they are made. Therefore:

- MnDOT will be responsible for up to 100% of the costs of improvements to trunk highways and for the costs of ramps and loops at interchanges or grade separations, including improvements to local roads necessary to accommodate the addition of turn lanes on the trunk highway, ramps or loops.
- The local unit of government will be responsible for 100% of the costs for improvements of local roadways at interchanges or grade separations, including improvements to the trunk highway, ramps or loops necessary to accommodate the addition of turn lanes on the local roads.
- When a new ramp or loop is added to an existing interchange or grade separation, the following cost responsibilities will be applied:
 - MnDOT will be responsible for up to 100% of costs for a new ramp or loop from a trunk highway onto a local roadway.
 - The local unit of government will be responsible for 100% of costs for a new ramp or loop from a local roadway onto a trunk highway.

- MnDOT's financial participation in changes to an interchange design, such as converting an existing interchange to a diverging diamond, will be in the amount of net benefits directly attributable to the safety and operational improvements to the trunk highway system.³

6.C. Bridge Maintenance

6.C.1. Bridges carrying a trunk highway over a local facility or another trunk highway

MnDOT will be responsible for:

- Bridge inspections.
- Non-structural maintenance activities on the bridge, including but not limited to, keeping the roadway, bridge deck, shoulders, medians, and gutters usable in winter, clear of litter and debris, appropriate disposal of such material, pavement markings, guardrail, and non-structurally supported signing.
- All structure-related maintenance, including painting, re-decking and rehabilitation of the bridge, including the deck, rails, sidewalk and supporting structural elements, concrete bridge approach panels, and structurally supported signing on the bridge.

Maintenance of sidewalks, shared-use paths and bikeways on bridges carrying trunk highways over a local facility or another trunk highway will follow the guidance in [Section 10.C Sidewalk, Shared Use Path, and Bikeways Maintenance](#) with the exception of structural maintenance which will be MnDOT's responsibility.

The local unit of government will be responsible for all maintenance associated with guardrail on a local road under a bridge carrying a trunk highway. Responsibility for maintenance in instances involving guardrail that extend onto ramps or loops will be considered on a case-by-case basis.

For locally initiated new interchanges or overpasses that address both trunk highway safety or capacity issues and local development access, MnDOT and the local unit of government will share the cost of bridge inspections and all structure-related maintenance, including painting, re-decking and rehabilitation of the bridge, including the deck, rails, sidewalk and supporting structural elements, concrete bridge approach panels, and structurally supported signing on the bridge.

6.C.2. Bridges carrying a local facility over a trunk highway

MnDOT will be responsible for bridge inspections and all structure-related maintenance, including painting, re-decking and rehabilitation of the bridge, including the deck, rails, sidewalk and supporting structural elements, concrete bridge approach panels, and structurally supported signing on the bridge in the following situations:

- A. Replacement of existing bridges that do not increase the number of through lanes.

³ The calculation of net benefits will be based on [a benefit-cost analysis limited to trunk highway system benefits using MnDOT's standard guidance](#).

- B. New interchanges, overpasses and pedestrian bridges over a new freeway or expressway.
- C. MnDOT-led new interchanges and overpasses.
- D. Locally led new interchanges or overpasses that primarily addresses trunk highway safety or capacity issues.

MnDOT will be responsible for all maintenance associated with guardrail on a trunk highway under a bridge carrying a local roadway.

MnDOT and the local unit of government will share the cost of bridge inspections and all structure-related maintenance, including painting, re-decking and rehabilitation of the bridge, including the deck, rails, sidewalk and supporting structural elements, concrete bridge approach panels, and structurally supported signing on the bridge in the following situations:

- A. Replacement of existing bridges that increase the number of through lanes.
- B. Locally led new interchanges or overpasses that address both trunk highway safety or capacity issues and local development access.

The local unit of government will be responsible for the cost of bridge inspections and all structure-related maintenance, including painting, re-decking and rehabilitation of the bridge, including the deck, rails, sidewalk and supporting structural elements, concrete bridge approach panels, and structurally supported signing on the bridge for locally-led new interchanges and overpasses that primarily provide local access and do not address trunk highway safety issue

The local unit of government will be responsible for non-structural maintenance activities on the bridge, including but not limited to, keeping the roadway, bridge deck, shoulders, medians, and gutters usable in winter, clear of litter and debris, appropriate disposal of such material, graffiti that is visible from the local facility, pavement markings, guardrail, and non-structurally supported signing.

- Maintenance of sidewalks, shared-use paths and bikeways on bridges carrying local facilities over trunk highways will follow the guidance in [Section 10.C Sidewalk, Shared Use Path, and Bikeway Maintenance](#).

For bridges where MnDOT is responsible for structural maintenance, MnDOT will be responsible for any structural maintenance associated with the sidewalk, shared use path or bikeway on the bridge.

6.C.3. Additional Bridge Maintenance Guidance

Lighting and aesthetic items that may be included on bridges will have maintenance and cost responsibilities in accordance with applicable sections of this Manual.

Information on the maintenance of pedestrian bridges is in [Section 10.E Pedestrian Bridge and Underpass Maintenance](#).

Additional guidance on determining bridge ownership responsibilities is included in [Appendix B](#).

6.D. Motorized Trails On and Under Bridges

Motorized trails accommodate all terrain vehicles (ATVs), utility task vehicles (UTVs) and snowmobiles.

[Minnesota Statute 84.87](#) allows snowmobiles to operate on a roadway bridge, other than a bridge carrying main travel lanes of an interstate, when required for the purpose of avoiding obstruction to travel when no other method of avoidance is possible.

A barrier separated trail may accommodate two-way snowmobile or ATV traffic on bridges and may be the safest option to accommodate ATVs, UTVs and snowmobiles instead of a shoulder. Barrier separated trails require appropriate signage indicating use and specifying yielding to non-motorized users.

6.D.1. Motorized Trail Construction

MnDOT may participate in the construction of a barrier separated trail on a bridge carrying a trunk highway or bridge crossing over a trunk highway. MnDOT participation will be limited to any increase in necessary structural elements to support the trail and the barrier. The project proposer/trail owner will be responsible for the cost of any additional paved width and the necessary signage. A limited use permit will be required for the portions of the trail within trunk highway right of way.

MnDOT may also participate in the construction of a motorized trail under a bridge carrying the trunk highway. Consistent with [Section 6.B.5.2](#), MnDOT may participate in up to 80% of the cost for any increased width or length of the bridge to accommodate the trail. The project proposer/trail owner will be responsible for the remaining costs and all costs associated with constructing the trail itself and all necessary signage. A limited use permit will be required.

Final MnDOT participation in the costs associated with motorized trails on or under bridges carry trunk highways will be considered on a case-by-case basis.

The trail sponsor/owner will be responsible for a pro-rated share of any rehabilitation or replacement costs based on the motorized trail's increased width beyond what MnDOT would have otherwise installed for people walking, rolling or bicycling.

6.D.2. Motorized Trail Maintenance

MnDOT will be responsible for inspections of the bridge and any necessary structural maintenance or repair of the bridge other than repairs to the surface of the trail and signage.

The trail owner/sponsor will be responsible for:

- Installing, maintaining and removing trail regulatory signs.
- Repair and replacement of gates and bollards installed specifically for motorized trail users.
- Routine, non-structural maintenance, including removing dirt, mud, debris, litter and dead animals.
- Trail grooming.

- MnDOT must approve the proposed grooming plan and methods. Any limitations or restrictions will be noted in the maintenance agreement.
- Monitoring snow depth on the bridge portion of the trail and physically closing the trail on the bridge when snow depth exceeds 18 inches.

7. Drainage, Stormwater Management and Wetland Impacts

7.A. Background

In a 1995 opinion, the Office of the Attorney General stated that Minnesota’s drainage law is based on a “reasonable use” doctrine:

Under this doctrine a landowner has the right to drain surface water off [their] land onto the land of another by natural or artificial means as long as it is done in a reasonable manner so as to not unnecessarily injure [their] neighbor’s land... courts empathize that what is reasonable is a question of fact not a question of law. It must be looked at in the light of all circumstances surrounding the individual case. What may be acceptable in a rural setting may not be acceptable in a [sic] urban setting.

Based on this opinion, this manual follows the general rule of law that a landowner is obligated to perpetuate the **existing drainage system**. This manual primarily addresses situations where drainage improvement costs can be reasonably assigned based on which party requested or required a drainage improvement and the entities contributing to the identified need. More complicated situations, including bringing systems up to current standards, addressing development changes over time, jurisdictional transfers, and adapting to climate change require a stormwater study, which should serve as the basis for assigning cost responsibilities.

Unless otherwise documented, two general rules apply:

- MnDOT is responsible for costs to perpetuate the existing drainage system and to drain the trunk highway right-of-way.
- The local unit of government is responsible for costs necessitated by local roadway improvements, local drainage improvements such as increased drainage capacity beyond the existing condition, or other drainage improvements not required for a trunk highway improvement.

MnDOT promotes the opportunity to work with local units of government to enhance stormwater treatment in conjunction with trunk highway projects that affect drainage.

7.A.1. Regulatory Considerations

MnDOT obtains coverage under the Phase 2 MS4 ([Municipal Separate Storm Sewer System](#)) General Permit in portions of the state subject to the MS4 coverage and therefore is subject to the same stormwater management requirements as other Phase 2 MS4 entities in defined MS4 areas.

Under the Minnesota Wetland Conservation Act (WCA) and Section 404 of the Clean Water Act, transportation projects that impact wetlands must provide compensatory mitigation after every effort has been made to avoid

and minimization impacts. MnDOT and local agencies often collaborate on projects where wetland impacts and mitigation are a shared responsibility.

MnDOT must follow [Minnesota State Statute 103E.525](#) when constructing and maintaining bridges and culverts and follow the process set out in [Minnesota State Statute 161.28](#) when altering a public drainage ditch during the construction or maintenance of a truck highway. These types of projects and cost considerations are typically handled outside of the Cost Participation Policy.

MnDOT also follows [Minnesota Statute 103D.345](#), which states that the Department of Transportation must acquire permits from watershed districts, and that a watershed district may issue general permits for public transportation projects for work on existing roads. A watershed district may have multiple rules regarding wetland mitigation, temporary and permanent stormwater treatment, fill in floodplains, etc. Project requirements to comply with all applicable rules are not covered by this manual, and cost considerations to meet permit requirements may need to be handled outside of the Cost Participation Policy.

7.B. Drainage (Conveyance) Construction

This section of the manual applies to the stormwater conveyance system, which consists of pipes, culverts, ditches, catch basins, manholes, outfalls, and other elements used to collect, convey, and discharge stormwater.

Drainage costs include:

- Work needed to reach the grading touchdown point or to a drainage outlet within the trunk highway right-of-way.
- Items related to, and necessary for, the drainage system construction, such as the removal of existing pipes and structures, riprap, culvert markers, and sod at pipe outlets. These items are considered part of the drainage system and will have the same cost participation as the rest of the drainage system.
- Cost responsibility for a stormwater drainage system will extend to an adequate outlet necessary to accommodate drainage as mutually agreed to by the responsible parties.

In general, each agency is responsible for the drainage assets they own. Unless otherwise noted below, where projects necessitate work on another agency's system, the costs on the impacted agency will be assigned to the agency whose need necessitated the work.

Costs for a storm sewer drainage system in lieu of a rural drainage system requested by a local agency for strictly aesthetic purposes, except as provided for in [Section 13 Aesthetics and Art](#), will be 100% the local unit of government responsibility. The [Individual Project Maximum](#) provision does not apply to these costs.

No party may direct any additional runoff into the stormwater drainage system that was not included in the runoff for which the system was designed, without first obtaining permission to do so from the other party.

The map of shared stormwater assets with corresponding drainage areas served by the stormwater facilities constructed for the project must be included in the maintenance agreement as the existing condition. This map

will be used to communicate maintenance and ownership responsibilities for future improvements and/or repairs. The design models and calculations must be kept on file with the agreement.

7.B.1. MnDOT Initiated Projects

For MnDOT initiated projects, MnDOT will be responsible for the cost to perpetuate the existing drainage system required for a trunk highway improvement in the most effective manner determined by MnDOT, in cooperation with local and regulatory agencies.

Except as outlined in the following sections, MnDOT will be responsible for the costs of any improvements to the existing drainage system necessitated by the project. If an existing capacity issue exists, a stormwater study will be used to negotiate cost shares.

7.B.2. Locally Initiated or Requested Improvements to Local Drainage

Costs for drainage associated with local roadway improvements, improvements to local drainage systems such as additional capacity needs for the local system over the existing condition, or other drainage improvements not required for a trunk highway improvement, will be 100% the local unit of government's responsibility. The [Individual Project Maximum](#) section does not apply to these costs.

7.B.3. Changes Requested to Another Agency's System

When a project or need is initiated by a local agency that affects or alters MnDOT's drainage system beyond in-kind repairs or replacements, the local agency will be responsible for the associated drainage construction costs (See 7.B.5 Necessary Repairs to Another Agency's Stormwater Infrastructure below).

Where MnDOT's system is part of a larger drainage area and improvements are needed to increase the capacity and/or change the routing of an existing drainage issue on the state or local drainage system, MnDOT may share in construction costs. Cost responsibilities should be determined based on a documented stormwater study. The Individual Project Maximum section does not apply to these costs.

7.B.4. Shared Project Needs

When roadway, interchange, or grade separation aspects of a project are a shared construction cost, and require drainage work, the cost of drainage will be shared in the same ratio as the roadway, interchange or grade separation. For example, if the cost of an interchange is 90% MnDOT and 10% local, the cost for drainage work associated with the interchange will be split 90% MnDOT and 10% local.

More complicated situations that involve modifying existing drainage infrastructure require a stormwater study, which should serve as the basis for negotiating cost responsibilities.

7.B.5. Necessary Repairs to Another Agency's Stormwater Infrastructure

If a repair to another agency's existing stormwater infrastructure is identified as a need during the scoping or design phases of a project, the agency who owns the asset will be responsible for the cost. Necessary repairs typically refer to the rehabilitation or in-kind replacement of system-to-system connection point(s) that are in a

poor or severe condition (e.g., a manhole connected to pipes with separate owners) and needed to perpetuate existing drainage patterns.

7.C. Drainage Maintenance

7.C.1. Routine Drainage Maintenance

Routine drainage maintenance includes:

- Removal of sediment, debris, vegetation, and ice from the grates and catch basins
- Replacement of grates or manhole covers
- Pavement repair around manholes and catch basins.

Specific guidance for routine maintenance of more complex drainage system components (e.g., a pump station) are not included in this manual, but should be addressed in a maintenance agreement.

7.C.1.1. *Routine maintenance on controlled access facilities “Freeways/expressways”*

MnDOT is responsible for routine maintenance of drainage elements including culverts carrying trunk highway water located on controlled access trunk highway right-of-way, and on partially controlled access trunk highway right-of-way not within corporate city limits. This includes all portions of trunk highway-to-trunk highway interchanges and other interchange ramps and loops, and all trunk highway right-of-way outside incorporated cities not covered by previous permit or agreement.

7.C.1.2. *Routine maintenance on other Trunk Highways*

Local units of government are responsible for routine maintenance of drainage elements, not including culverts, located on uncontrolled or partially controlled access trunk highway right-of-way within incorporated cities, frontage road right-of-way, local road approaches, and local roadway right-of-way unless otherwise documented in an agreement.

Local units of government will inform MnDOT’s District Maintenance Engineer of any needed repairs when conducting routine drainage maintenance on trunk highway right of way.

7.C.2. Non-Routine Drainage Maintenance

Non-routine drainage system maintenance includes:

- Removal of sediment from the pipes
- Replacement, repair, reconstruction, rehabilitation, or improvement of portions of stormwater drainage infrastructure such as:
 - Castings

- Manhole or catch basin structures
- Pipe segments or aprons
- Riprap

MnDOT is responsible for non-routine maintenance of all stormwater drainage system elements located on trunk highway right-of-way that carry trunk highway stormwater, including culverts, unless documented in a permit or an agreement (e.g., jurisdictional/county ditches, agricultural drain tile, etc).

Local units of government are responsible for non-routine maintenance of storm sewer system located on trunk highway right-of-way that carry only local water.

Where changes to MnDOT's stormwater system are made to address increased capacity or treatment for local drainage needs, the future cost of non-routine maintenance may be determined to be a shared cost where each agency's share will be determined based on CA at the time a future construction or maintenance project occurs, or as determined by a stormwater study. A stormwater study is recommended in advance of complicated projects or complex drainage routing.

7.D. Stormwater Management Facility Construction

This section applies to the management and treatment of stormwater required for the project. This typically consists of a stormwater management facility, which is used to provide rate control and/or water quality treatment. These facilities are used to manage changes in impervious surfaces or drainage areas modified by the project. Facility examples may include:

- Dry or wet ponds
- Filtration or infiltration basins
- Bioswales, or other ditch designs intended to provide flow attenuation and/or treatment

In general, responsibility for construction costs is based on the project need, and maintenance costs are based on the contributing area to the facility.

In some cases, stormwater management must mitigate volumes to achieve a surface drainage condition for the project area. In these cases, off-site drainage areas may contribute to capacity issues of the existing system, which should be evaluated through a stormwater study. Stormwater management added to a project that is beyond the project need should be evaluated for cost participation based on stormwater studies and negotiated on a case-by-case basis. The Individual Project Maximum section does not apply to these costs.

Where feasible, the practice for selection and design of stormwater management features is to construct the feature on the agency's right-of-way that has the majority of the project's required stormwater management. This section covers cases where stormwater management required by a project has been determined to be a shared facility residing entirely within one of the entity's right-of-way. Ownership of the facility will typically be

assigned to the landowner. MnDOT may also own facilities through an easement. Ownership may not correspond to construction cost and maintenance responsibilities.

Costs associated with the cooperative construction of stormwater treatment facilities include:

- Construction costs for all items required for the operation of the management facility, including but not limited to inlets, outlets, slope protection/stabilization, retaining walls, filters, soils, soil amendments, facility drain tile (not agricultural or road), diversion, pre-treatment, vegetation, liners, grading, over-excavation, wetland mitigation, and access.
- Costs to obtain right-of-way.
- The costs to the local unit of government for acquisition of right-of-way required for the stormwater management facility may be applied to, but may not exceed, the local share of cooperative construction costs for stormwater treatment facilities.
- The local unit of government must provide documentation to MnDOT for review and certification.
- If the local unit of government received the property as a donation, or if the property has been owned by the local unit of government for a considerable amount of time, MnDOT will determine the contributing value of the property based on the appraised market value of that property. The donated property must be dedicated for street and highway purposes by resolution of the governing entity.

This section of the manual includes green infrastructure that is required for stormwater management necessitated by a project. Other green infrastructure that may be included in a project is covered in [Section 8 Green Infrastructure](#).

7.D.1. Assigning Stormwater Management Cost Responsibilities

The assignment of stormwater management construction cost depends on the need created by the project. This section applies to where management facilities are provided for both MnDOT and local agency project needs in shared facilities.

Where drainage areas from outside the project area cannot be diverted and flow into a facility, the maintenance cost share may be different than the construction cost and will be determined by the Maintenance Cost Participation section.

The cost to construct a stormwater management facility is determined based on the need created by the project according to the following:

7.D.1.1. *MnDOT Initiated Projects*

For MnDOT initiated projects, construction costs will be shared according to the designed intent of the stormwater management facility. The calculation methods are as follows:

- A. **Stormwater management based on a change in impervious.** When the facility is primarily designed for regulatory stormwater treatment based on a depth over reconstructed and new impervious surface (e.g. 0.5" over new impervious), the construction cost will be shared according to the impervious area treated that is provided for each entity.
- B. **Stormwater management based on flow.** When the facility is designed for rate control or other flow related mitigation, the construction cost will be shared according to the designed flow management that is provided for each entity.

For stormwater management facilities that are designed for both water quality volume (i.e. changes in impervious area) and rate control needs, cost share will be calculated on which need results in the greatest facility volume:

- 1. If primary need is water quality volume, use calculation method A
- 2. If primary need is rate control, use calculation method B

For structural pollution control devices not otherwise included as pretreatment feature in a larger facility's cost, split the construction according to method A (see above).

The Individual Project Maximum will only apply to costs assigned to the local agency required for the trunk highway improvements.

7.D.1.2. *Locally Initiated Projects or Scope*

For locally initiated projects or additional work added to the scope of a project at the request of a local agency, the local agency will be responsible for the cost of the stormwater management facilities required for the locally initiated or requested portion of the project.

7.D.2. Regulatory Credits for Stormwater Management

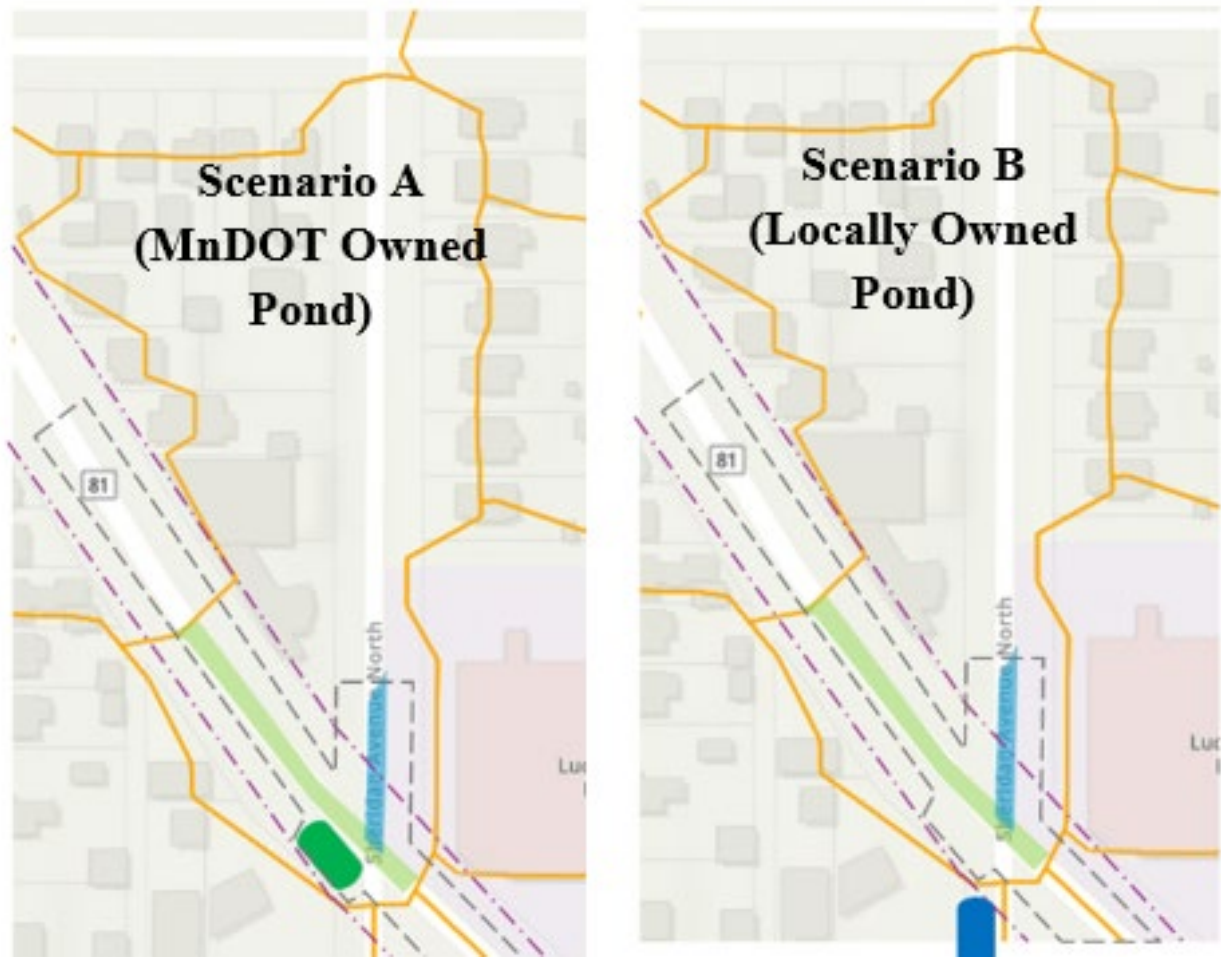
Regulatory credits necessary for the project will be assigned to the agency whose need caused the stormwater treatment. The ownership of the facility and maintenance responsibilities may be assigned differently than the credits assigned to each agency. Any additional credits created beyond what is needed for the project itself will be assigned to the owner of the facility, unless otherwise agreed to by all parties.

Situations involving more complicated credit trading within a project should be negotiated on a case-by-case basis with the intent to ensure each agency has their portion of the credits required for their portion of the project. This includes circumstances where treatment credits are split amongst multiple facilities and where various facility ownership arrangements are agreed as part of the project. Projects with complex stormwater drainage and treatment designs need to be negotiated and agreed to as part of the project design process to ensure each agency receives their respective treatment credits in order to meet regulatory requirements.

If either MnDOT or a local unit of government uses the other agency's impervious land that is not part of the project to achieve credits, the agency who created the credits may be allowed to take the credit for the off-site treated areas upon notification to the agency whose impervious is treated. If the off-site impervious area

treated by the other agency is treated later, the agency claiming the credits should be notified. The portion of the off-site drainage area that is treated for MnDOT’s project compliance will not be charged to the local for construction or maintenance cost share. The portion of MnDOT drainage area that is treated for a local’s project compliance will not be charged to MnDOT for construction or maintenance cost share.

Figure 3: Example of Credit Assignment Based on Pond Location



Credits	Required Treatment Area (Acres)	Scenario A: MnDOT Owned Pond	Scenario B: Locally Owned Pond
MnDOT	2	3	2
LGU	1	1	2
Non-Project	1	N/A	N/A
Total	4	4	4

Notes on Figure 3: MnDOT project impervious requiring treatment in green (2), local project impervious requiring treatment in blue (1). Treatment can provide 4 credits. In each case the agency with project need has their project need credits assigned to the respective agency. The additional treatment credit (1) for the non-project portion of the drainage area is assigned to the agency who owns the treatment facility.

7.E. Stormwater Management Facility Maintenance

Maintenance agreements shall document and include a figure of the stormwater management and treatment facilities including, but not limited to:

- Key features of the facility (e.g., inlets, outlets, pipe segments)
- Drainage areas showing routing to facility
- Any special features requiring additional care (e.g. liners)

Locally initiated or requested portions of a project will have maintenance responsibilities and costs for stormwater management assigned to the local agency that initiated or requested the work. When the facility is required to be located on MnDOT right-of-way, MnDOT will be the owner, and the local will be assigned maintenance responsibilities.

7.E.1. Routine Stormwater Management Facility Maintenance

Routine maintenance of stormwater management and treatment features include:

- Removing litter
- Clearing ice
- Mowing and vegetation management
- Minor erosion repairs
- Fencing repairs
- Sediment and debris removal from structural pollution control or pre-treatment devices
- Utility locates

MnDOT owns and performs routine maintenance for ponds and drainage treatment features on MnDOT right-of-way, unless requested by a local unit of government and documented in an agreement.

The local agency owns and performs routine maintenance for ponds and drainage treatment features on local agency right-of-way.

Routine maintenance for locally initiated or requested changes to MnDOT owned infrastructure will be assigned to the local agency if the request results in more than 50% of the design requirement for the facility. Similarly, for MnDOT initiated or requested changes to locally owned infrastructure, routine maintenance will be assigned to the MnDOT if the request results in more than 50% of the need for the facility.

7.E.2. Non-Routine Stormwater Management Facility Maintenance

Non-routine maintenance includes but is not limited to:

- Sediment removal beyond pre-treatment sediment removal.
- Major erosion, structure, pipe, and drain tile repair.
- Clearing drain tile.
- Replacement of filter media.

The owner of the pond or drainage feature will determine when non-routine maintenance is required and is responsible for performing the non-routine maintenance and notifying the other contributing agencies in advance of performing the maintenance for planning purposes.

Costs for non-routine maintenance of stormwater management facilities will be determined by the ratio of contributing CA as determined by multiplying the runoff coefficient (C) and contributing area (A) of each party at the time the non-routine maintenance is needed. Percentages are estimated at the time of construction and recalculated before non-routine maintenance is performed and should be included in a new or revised agreement, as needed.

Where drainage areas to a stormwater management facility are partly or fully treated, the local agency share may be reduced by the treated area. The CA reduction will be based on the amount of treatment provided based on the regulatory requirement. Reductions will not be provided where permitted compliance allowed for reduced treatment through a compliance sequence approach (e.g., pre-treatment devices such as grit chambers or hydrodynamic separators are not eligible for a volume reduction).

MnDOT does not allow increases in flow to the MnDOT system without permit. Where changes to a drainage area are not directly adjacent to MnDOT, and ultimately flow to MnDOT's system, MnDOT relies on local agencies to ensure local regulations are met, including that rates do not increase to MnDOT's system.

The local unit of government will be assigned responsibility for non-routine maintenance for treatment facilities or individual components that are not standard for MnDOT, unless approved by MnDOT. Examples include:

- Underground detention, filtration or infiltration practices
- Permeable pavement
- Proprietary devices (e.g. filter cartridges)

MnDOT will participate in the non-routine maintenance cost of non-standard facilities or components according to the assigned cost split but will not be responsible for completing required inspections and maintenance or conducting the routine maintenance.

Locally initiated or requested portions of a project will be assigned to the local agency. The local unit of government will be responsible for non-routine maintenance of facilities where the facility's project requirement is more than 50% due to locally initiated portions.

7.E.3. Flexible Maintenance Arrangements

Alternative maintenance agreements may be negotiated where mutually agreeable to all parties. These alternatives may include the following approaches and should be clearly defined in the maintenance agreement.

- A. Where offsite areas (areas not altered by the project) do not have impervious and are less than 10% of the contributing drainage area to the facility, the local agency will not have to share in the cost of non-routine maintenance, unless determined to be a source of pollution (e.g., unstable slope).
- B. The contributing flow (CA) to a facility may be reduced in the calculation if draining undeveloped, stabilized areas (e.g., forest, meadow, or prairie land covers). Agricultural land, lawns, and trails are considered developed areas. The entire drainage area still needs to be shown on the drainage area map; the portion considered undeveloped must be distinctly delineated and noted as exempt from cost share consideration.
- C. Where MnDOT contributes more than 50% of the CA, the routine and non-routine maintenance may be split so that local agencies perform all or a portion of routine maintenance and MnDOT pays for the non-routine maintenance.
- D. Where a project has multiple stormwater management features, the overall project contributions may be used to assign 100% of routine and/or non-routine maintenance of select facilities to minimize the need to have to cost share on every facility.

7.F. Wetland Impacts and Credits

MnDOT will be responsible for obtaining all wetland credits necessary to deliver the scope of trunk highway improvements determined by the MnDOT district engineer on MnDOT initiated and led projects.

Local units of government will be responsible for obtaining all wetland credits necessary to deliver the scope of any local system improvements included as part of a cooperative construction project.

In other instances, MnDOT will share in the responsibility for wetland mitigation credits required for improvements to the trunk highway system after every attempt has been made to avoid and minimize impacts to existing wetlands.

- MnDOT's share will start at 50% but may be increased or decreased based on the following considerations:
- The overall share of project cost and responsibilities between the agencies.

Any wetland credits necessary for previously planned and programmed MnDOT-led projects in the same project area, which will be 100% MnDOT's responsibility.

8. Green Infrastructure

8.A. Background

In recognition that traditional methods are not always sufficient for resolving modern stormwater and infrastructure issues, MnDOT seeks to integrate green infrastructure where feasible. Green Infrastructure is the use of vegetation and soils in combination with built structures to support transportation functions.

Green infrastructure functions include but are not limited to:

- Air/soil/water pollution abatement
- Blowing and drifting snow control
- Ecological restoration and services
- Erosion and sedimentation control
- Flood mitigation and system resilience
- Headlight glare screening
- Safety buffers and delineations
- Stormwater runoff management and reduction
- Traffic calming and speed management
- Urban heat mitigation
- Wildlife habitat and connectivity

8.B. Green Infrastructure Construction

When developing a trunk highway improvement project, the MnDOT District Engineer will determine what green infrastructure elements are appropriate or required for transportation system needs and trunk highway mitigation responsibilities in accordance with environmental regulations, the [Facility Design Guide](#), [landscape manual](#), [Seeding Manual](#), and [Green Infrastructure Toolkits](#).

Construction costs related to vegetation includes the establishment period.

- MnDOT will be responsible for up to 100% of the cost for green infrastructure required as part of formal mitigation in an environmental document and what MnDOT deems necessary for the trunk highway system.
- The local unit of government will be 100% responsible for any new green infrastructure MnDOT does not deem necessary and is not required as part of formal mitigation in an environmental document.

- If a local unit of government wishes to change the vegetation and supporting infrastructure MnDOT has identified, any additional cost will be included in the aesthetics allowance or will be the responsibility of the local unit of government.
- MnDOT will be responsible for 100% of the costs to replace existing green infrastructure disturbed as a result of a MnDOT initiated trunk highway improvement.
- The local unit of government will be responsible for 100% of the costs to replace existing green infrastructure disturbed as a result of locally identified or initiated improvements.

8.C. Green Infrastructure Maintenance

Maintenance of green infrastructure that serves primarily a stormwater management function is determined as described in [Section 7.F Stormwater Management Facility Maintenance](#).

Maintenance of green infrastructure is divided into three categories:

- **Routine Maintenance:** sweeping, removing sediment and litter, repairing minor erosion, cleaning pretreatment areas and inlets, winter maintenance, and large-scale vegetation management such as mowing, interseeding, and herbicide treatment.
- **Detailed Vegetation Work:** labor intensive vegetation management such as weeding, replacing dead or damaged plants, and pruning.
- **Non-routine maintenance:** repairing major erosion or structural damage; replacing filter media; replacing mature trees that are dying due to age, major damage, or disease; or other work that is typically needed at a frequency of less than or equal to once every ten years.

Unless otherwise documented in an agreement, maintenance responsibilities are divided up according to Table 2.

The owner of the feature will determine when non-routine maintenance is required, is responsible for performing that maintenance, and is responsible for notifying the other contributing agencies in advance of performing it.

Table 2: Summary of Green Infrastructure Maintenance Responsibilities

Circumstance/Setting	Routine	Detailed Vegetation Work	Non-Routine
On freeways & expressways	MnDOT	MnDOT	MnDOT
On other trunk highways within municipal boundaries	Local	Local	Shared
On local right of way agreed to by the local agency	Local	Local	Local
Green Infrastructure within trunk highway ROW that MnDOT did not deem necessary	Local	Local	Local
Living Snow Fences	Land Owner	MnDOT	MnDOT

9. Lighting, Traffic Control Signal Systems and Intelligent Transportation Systems

This section of the Manual assigns cost participation to traffic control signal systems, lighting, or to ITS construction costs that may be part of a roadway, interchange, grade separation, or an independent project. Any new or revised traffic control signal systems or lighting systems must be approved by MnDOT.

[Appendix C](#) provides a table summarizing lighting cost participation responsibilities for construction, ownership, power and maintenance.

9.A. Lighting Installation and Construction

MnDOT will be responsible for up to 100% of the costs to furnish and install lighting which it deems necessary for the trunk highway system, including lighting along the main traveled roadways, adjacent sidewalks, parallel shared use paths within trunk highway right-of-way and shared use path crossings of trunk highways, on ramps and loops, the intersections of ramps with cross streets at interchanges, and J-turns.

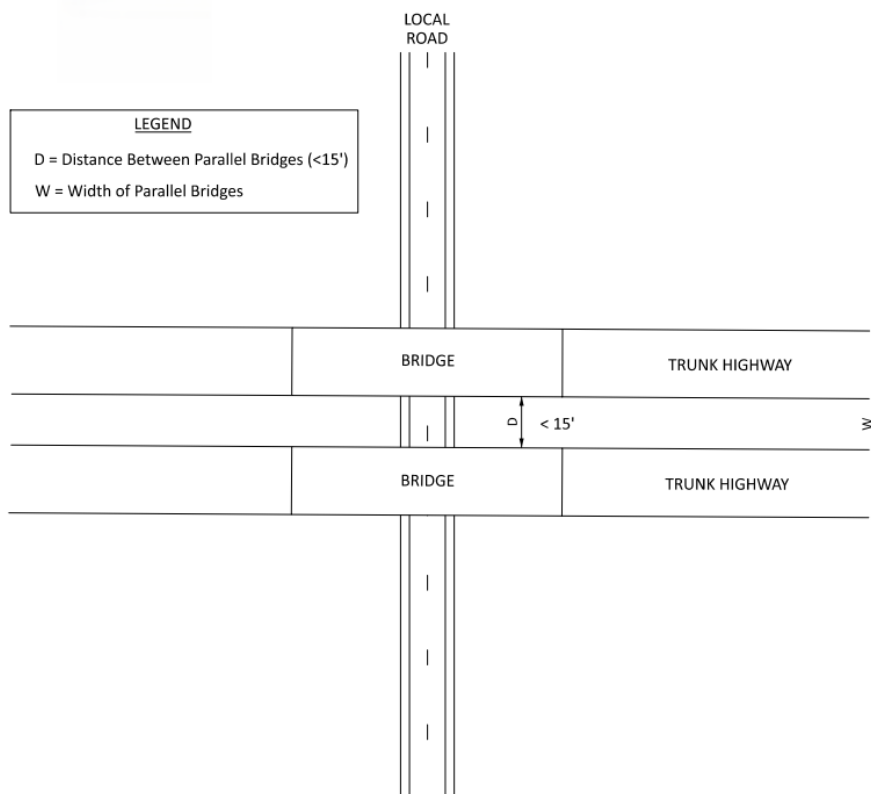
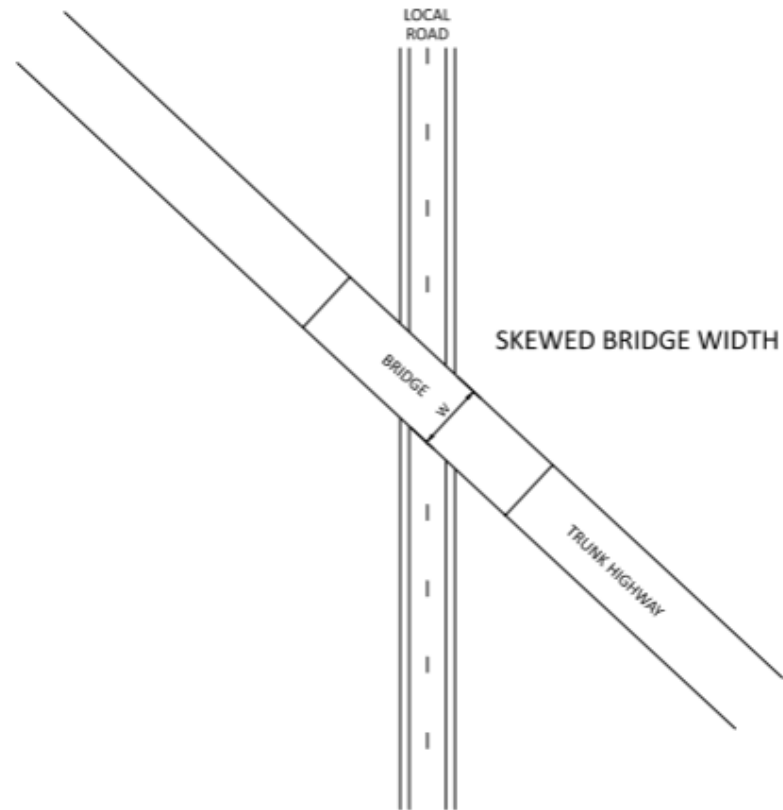
MnDOT may pay up to 100% of the cost of a standard lighting system at an isolated intersection of a trunk highway and a local road. The local unit of government will be responsible for power and all maintenance, unless otherwise agreed to be the MnDOT District Engineer.

MnDOT may participate in only those lighting systems that are justified in accordance with the [MnDOT Traffic Engineering Manual](#), meet MnDOT recommended light levels, and are approved by the MnDOT District Engineer. Lighting systems will be comprised of standard MnDOT lighting equipment unless otherwise approved by the MnDOT District Traffic Engineer. MnDOT participation is based on the cost to use standard MnDOT lighting equipment.

Cost participation for other lighting system construction will be as follows:

1. MnDOT participation in costs for lighting roundabouts at trunk highway intersections or lighting at trunk highway interchanges will be shared in the same ratio as the roundabout or interchange construction costs.
2. MnDOT will be responsible for up to 100% of the costs to furnish and install lighting on bridges that carry trunk highways over local roads. The local unit of government will be responsible for 100% of the costs to furnish and install lighting on bridges that carry a local road over a trunk highway.
3. The local unit of government is responsible for illuminating local roads under trunk highway bridges. MnDOT may participate in the cost to furnish and install underpass lighting when the width of a single bridge underpass exceeds 50 feet and underpass lighting is requested by the local unit of government. Parallel bridge structures with less than 15 feet spacing may be considered one continuous underpass for the purposes of underpass lighting. See Figure 4 for illustrations of these dimensions.

Figure 4: Under Bridge Lighting Dimensions



4. MnDOT may participate in the cost to furnish and install lighting under a bridge carrying a trunk highway to illuminate a sidewalk or shared-use path for safety and security purposes, if supported by the local unit of government.
5. The lighting of frontage roads will be 100% the responsibility of the local unit of government. In the situation where the frontage road connects the trunk highway entrance or exit ramps, such as a split diamond interchange, MnDOT will be responsible for up to 100% of the cost to furnish and install that lighting.
6. MnDOT may participate in the costs associated with installing lighting on trails outside of corporate city limits within trunk highway right-of-way. MnDOT participation in these circumstances will be considered on a case-by-case basis and is at the discretion of the MnDOT District Engineer.
7. If a local unit of government desires to install a continuous or intersection lighting system on the trunk highway within corporate city limits, MnDOT will participate in the costs to furnish and install the lighting unless the MnDOT District Engineer disagrees and submits a written justification to the local unit of government. MnDOT participation may be up to 100% of the MnDOT standard construction costs.
 - A. The lighting system design must be approved by the MnDOT District Traffic Engineer prior to installation and meet MnDOT recommended lighting levels.
 - B. MnDOT participation will be determined on a case-by-case basis, as determined by district lighting priorities and funding made available for lighting systems in the district construction program.
 - C. The cost to develop the lighting system plan will be determined on a case-by-case basis.
 - D. The local unit of government will become the owner of the system in the corporate city limits, and will be responsible for maintaining, locating, and ongoing electrical costs.
 - E. At the end of its service life (assumed to be 30 years), MnDOT may participate up to 100% in the costs to furnish and install a new system based on standard MnDOT equipment, but the local unit of government will be responsible for removing the old system.

In all lighting circumstances, any additional costs for non-standard, decorative, or aesthetic lighting will be distributed in accordance with [Section 13 Aesthetics and Art](#), where applicable, or they will be 100% the responsibility of the local unit of government. Non-standard, decorative, or aesthetic lighting must meet MnDOT recommended light levels and be approved by the MnDOT District Traffic Engineer, for inclusion in trunk highway lighting systems. All maintenance costs will also be incurred by the local unit of government for lighting systems with non-standard MnDOT lighting equipment.

Unless otherwise agreed upon by the MnDOT District Engineer, any lighting system installed within trunk highway right-of-way that is owned by a local unit of government requires the local unit of government to apply for a [utility permit Form 2525](#). The local unit of government will be responsible for locating underground utilities, maintenance, and for future electrical costs. The cost for the source of power, including electrical hook-up, will be paid by the local unit of government. See the [MnDOT Utility Accommodation on Highway Right of Way Policy](#) for additional guidance for installation of lighting on MnDOT right-of-way.

9.B. Lighting Maintenance

MnDOT will be responsible for all maintenance of lighting systems on freeways, interchange ramps and loops that use standard equipment, at intersections of two trunk highways, and any other circumstance documented in an agreement.

Maintenance of lighting systems includes everything within the system, from the point of attachment to the power source or utility, to the last light on the feed point, including but not limited to:

- Repairing or replacing luminaires due to failure related to loose connectors, defective drivers or starters, photoelectric control on luminaires, or damage to luminaire housing. Also includes luminaire replacement due to luminaire light levels falling below MnDOT recommended light levels or at end of life.
 - All luminaires must be replaced when they, or any part of them, fails or if light levels drop below MnDOT recommended light levels for the given installation.
 - Luminaires must be replaced with a luminaire with a similar light pattern that provides MnDOT recommend light levels for the location.
- Repairing or replacing damaged fuse holders, blown fuses, knocked down poles including wiring within the poles, damaged poles, pullboxes, underground wire, damaged foundations, and equipment pads.
- Installation of approved splices or replacement of wires.
- Repair or extending of conduit.
- Lighting cabinet maintenance including photoelectric cell, electrical distribution system.
- Gopher State One Call (GSOC) locates.
- Painting of poles and other equipment.

Power costs include all energy costs associated with the lighting system after the system has been turned on.

9.B.1. Diverging Diamond Interchange Lighting Maintenance

Maintenance of lighting at diverging diamond interchanges will be shared between MnDOT and the local unit of government. MnDOT will be responsible for all lighting on MnDOT ramps, and the local unit of government will own, maintain, and operate all lighting on the local roadway, including the lighting within the diverging diamond interchange. Lighting on the traffic control signal system will be maintained as specified in [Section 9.D Traffic Control Signal Systems Maintenance](#).

9.B.2. Roundabout Lighting Maintenance

Maintenance of roundabout lighting systems, which includes lighting within the roundabout and approach or exiting lighting to the end of the splitter island, painted delineation, or up to approximately 400 feet from the roundabout, will be shared between MnDOT and the local unit of government.

For MnDOT standard lighting systems on one feedpoint the local unit of government will be responsible for all power costs and luminaire repair and replacement for the entire system. MnDOT will be responsible for the remainder of the lighting system maintenance.

For roundabout lighting that has multiple feedpoints MnDOT will be the owner of and responsible for all power, luminaire repair and replacement, and lighting system maintenance of MnDOT standard lighting in the roundabout and on trunk highway legs. The local unit of government will be the owner of and responsible for all power, luminaire repair and replacement, and lighting system maintenance on the local road.

For non-standard lighting, the local unit of government will own, maintain, and pay power costs for the entire lighting system. MnDOT will have full maintenance responsibilities for a standard lighting system on roundabouts located at the intersection of two trunk highways.

9.B.3. J-Turn Lighting Maintenance

Maintenance of J-turn lighting systems will be shared between MnDOT and the local unit of government. The local unit of government will be responsible for all power costs and luminaire repair and replacement on the local legs, unless otherwise agreed to by the District Engineer. MnDOT will be responsible for luminaire repair and replacement on lights placed within the median or at U-turns and the remainder of the lighting system maintenance.

9.B.4. Other Lighting Maintenance

The local unit of government will own and be responsible for 100% of the maintenance of all non-MnDOT standard, aesthetic, and decorative lighting equipment, including structure enhancement lighting.

The local unit of government will own and be responsible for 100% of the maintenance and power costs for all other lighting systems unless otherwise agreed to by the MnDOT District Engineer and documented in an agreement.

9.C. Traffic Control Signal Systems Construction

An Intersection Control Evaluation (ICE) Report must be prepared for each proposed traffic control signal installation or revision and the MnDOT District Traffic Engineer must concur with the report. Highway traffic control signal justification criteria set forth in the Minnesota Manual on Uniform Traffic Control Devices and the MnDOT Intersection Control Evaluation (ICE) Manual, as interpreted by MnDOT, will be used in the preparation of an ICE Report.

MnDOT will enter into an agreement with the local units of government responsible for the roadway legs intersecting the trunk highway at the intersection to be signalized.

Traffic control signal system construction costs will be distributed as follows:

1. Where MnDOT determines a traffic control signal system is warranted at the intersection of a trunk highway with local roadways, the construction and state furnished material costs will be pro-rated in the same ratio as the number of roadway legs of the intersection, under each jurisdiction, to the total number of roadway legs of the intersection. This applies to all new traffic control signal systems and signal system revisions.
 - A. Legs under MnDOT jurisdiction include trunk highways, and ramps and loops at trunk highway interchanges. The combination of a ramp and loop at folded diamond interchanges will be considered as two legs.
 - B. If a leg is split by a local government boundary, that leg is equally pro-rated between bordering local governments.
 - C. The cost for private entrances will be shared by all the other legs of approach.
 - D. MnDOT will cover the cost of a local leg if both of the following are true:
 - i. There are no private entrance legs.
 - ii. The local unit of government is responsible for only one leg and that leg contributes less than 10% of the entering traffic volume as documented in the approved traffic analysis.
2. If a local unit of government believes a signal that does not meet warrants is still justified and the request has been approved by MnDOT for exception to install or replace the signal, the cost for the signal will be 100% the responsibility of the local unit of government.
3. MnDOT recognizes local agencies have capital improvement plans covering multiple years. If MnDOT first notifies a local unit of government in writing that it is adding a new standalone signal project or standalone ADA project that will necessitate signal work within three years of the construction season, MnDOT will cover 50% of what would have been the local share for trunk highway eligible items. If MnDOT first notifies a local unit of government that it is adding a new standalone signal project or

standalone ADA project that will necessitate signal work within one year of the construction season, MnDOT will cover 100% of the trunk highway eligible cost for the signal.

4. MnDOT will be responsible for up to 100% of the costs for interconnected system equipment, including the related equipment, and interconnect (hardwire, fiber optic, or wireless) for systems on a trunk highway corridor. If both trunk highway and local corridors are being served, costs will be pro-rated to each agency sharing the interconnect as stated in the [MnDOT Traffic Engineering Manual](#).
5. If a local unit of government paints the system, they will be responsible for 100% of the costs of initial and ongoing painting of the traffic control signal systems.
6. Costs of conventional signs necessary for the traffic control signal system will be proportioned in the same ratio as the signal system. The local unit of government will be responsible for 100% of the costs of internally lit signs.
7. Enforcement lights may be added to a traffic control signal system, per the [MnDOT Traffic Engineering Manual](#). The cost for enforcement lights will be pro-rated in the same ratio as the traffic control signal system.
8. Costs for battery backup systems installed on new or revised signal systems will be pro-rated at the same ratio as the traffic control signal system. Battery backup systems must be installed at new or revised signals with railroad interconnect.
9. The costs for temporary (wood pole/span wire type system) signal systems, or revision of in-place signal systems that are needed during roadway construction activities (traffic rerouting, detours and bypasses) will be 100% the responsibility of the agency causing the roadway construction activities that require the temporary signals.
10. MnDOT will be responsible for 100% of the costs for Accessible Pedestrian Signals (APS) that are added to an existing traffic control signal system for the purpose of conducting an ADA improvement to that system. Costs for APS that are added as a part of a planned stand-alone traffic control signal system construction or replacement will be prorated in the same ratio as the traffic control signal system. Any other sidewalk-related work required as part of stand-alone traffic control system will follow the guidance under [Section 10 Sidewalks, Shared Use Paths, Bikeways and Pedestrian Bridges](#).

9.C.1. Pedestrian Hybrid Beacons, Rectangular Rapid Flashing Beacons and other Pedestrian Flashers

MnDOT may participate in the costs to install and replace at the end of their useful life pedestrian hybrid beacons, rectangular rapid flashing beacons (RRFB), or other pedestrian flashers on a trunk highway. A pedestrian hybrid beacon may be installed on a trunk highway if it meets Minnesota Manual on Uniform Traffic

Control Devices guidelines for a pedestrian hybrid beacon. RRFBs and other pedestrian flashers may be installed on a trunk highway with the support of the MnDOT District Engineer.

MnDOT may cover up to 100% of the cost to install PHBs, RRFBs and other flashers at locations identified as high risk in a district safety plan, identified as a high priority by the district engineer, or those required to meet Public Right-of-Way Accessibility Guidelines (ADA requirements).

In other instances, MnDOT participation is shown in Table 3 and is based on the number of following factors present at a location:

- The locally responsible agency is non-state aid city or township
- Within a designated school zone or within ½ mile of a college or university
- Within 1/4 mile of a fixed-route transit stop
- Facilitates the crossing of a state or regional trail, US bicycle route, a designated Regional Bicycle Transportation Network alignment (Twin Cities Metropolitan Area), or if the crossing is identified in an adopted: local plan, Metropolitan Planning Organization’s regional transportation plan, or Safe Routes to School plan
- In Indian Country and/or in a census tract identified as overburdened or underserved.⁴
- In a context category with a baseline modal priority of “high” for pedestrians in [MnDOT’s Complete Streets Handbook](#).

Table 3: MnDOT maximum participation in Pedestrian Hybrid Beacons, RRFBs and other Pedestrian Flashers

Number of Factors Present	MnDOT’s Share (up to)
0	50%
1	75%
2 or more	90%

Final MnDOT participation will be determined on a case-by-case basis, as determined by district priorities and available funding.

⁴ Contact the Office of Transportation System Management for current data.

9.D. Traffic Control Signal Maintenance

The division of maintenance and operational responsibilities of traffic control signal systems located on trunk highway will be divided into two classes: cities of the first class, and all other local units of government. Maintenance and operational responsibilities are shared throughout the life of the traffic control signal system.

Non-routine maintenance of traffic control signal systems consists of maintaining all components and needs of the traffic control signal system, including the control equipment, electrical wiring, signal hardware, replacing equipment knockdowns, interconnect, cameras, utility locations, structural inspection, asset management, and operations.

Routine maintenance of traffic control signal systems consists of re-lamping, LED indication replacement, luminaire replacement, cleaning and painting, and payment responsibility for the electrical energy to operate the traffic control signal system.

- MnDOT will provide non-routine maintenance and routine maintenance of the traffic control signal system and will operate the system at trunk highway intersections with a trunk highway.
- For traffic control signal systems on trunk highway intersections with local roads within cities of the first class, the city will provide traffic control signal system non-routine maintenance, routine maintenance and operation and will be documented in an agreement.
- For all other traffic control signal systems on trunk highway intersections, including those on diverging diamond interchanges, MnDOT will provide traffic control signal non-routine maintenance and operation. The local unit of government will provide routine maintenance.
- Re-lamping of a traffic control signal system with LED indications consists of replacing the LED indication when it reaches end of life per the MnDOT Traffic Engineering Manual or fails to no longer meet MnDOT standards for light output.
- In certain larger local units of government, MnDOT may elect to have the local unit of government, by mutual agreement, maintain and operate the traffic control signal system. The local unit of government must have a qualified traffic engineer in its employ. The local unit of government must have proven capabilities to the satisfaction of MnDOT, including maintenance facilities, service equipment, standby equipment, and capable service personnel. MnDOT will reimburse the local unit of government for the actual cost of MnDOT's share of the non-routine maintenance work as specified. A separate reimbursable maintenance and operation agreement must be executed.
- In the case of coordinated traffic control signal systems, the maintenance and operation of these systems will be determined on a negotiated basis. The coordinated traffic control signal system should be maintained and operated by one agency, especially in the case of computer-monitored systems. The agency that is responsible for the most intersections in the coordinated system will typically be the

agency responsible for the maintenance, operation, timing and coordination of the coordinated traffic control signal system.

- When the local unit of government is responsible for maintenance and operation of the coordinated traffic control signal system, it must have a qualified traffic engineer in its employ. The local unit of government must have proven capabilities to the satisfaction of the MnDOT including maintenance facilities, service equipment, standby equipment, and capable service personnel. Either MnDOT or the local unit of government will be reimbursed for the actual cost of maintaining the traffic control signal system for which the other agency is responsible. A separate reimbursable maintenance agreement will be prepared for these situations.
- When a battery backup system is installed at an intersection where a trunk highway intersects a local roadway, MnDOT will be responsible for purchasing and installing new batteries and discarding of the old batteries when they fail. Local units of government will be billed for 100% of the actual cost of this work and material. If MnDOT approved the system and participated in the installation cost or if the battery backup system is warranted by railroad preemption, MnDOT will maintain the remainder of the system at its cost. If the installation was 100% local unit of government cost, the local unit of government will be billed for 100% of the actual cost of maintenance. Maintenance of battery backup systems installed at the intersection of two trunk highways will be 100% MnDOT responsibility.
- Local units of government will be responsible for maintenance and power of internally lit signs.
- Maintenance of enforcement lights will follow the same maintenance as the rest of the traffic control signal system.
- Local units of government are responsible for all non-routine maintenance and routine maintenance and operation of pedestrian hybrid beacons and rectangular rapid flashing beacons. MnDOT may perform non-routine maintenance at a reimbursable cost to the local unit of government if agreed upon in a separate maintenance agreement. If the system is coordinated with adjacent signals, the agency responsible for the signal coordination will also coordinate the pedestrian hybrid beacon.

9.E. Intelligent Transportation Systems (ITS)

ITS is the application of advanced technologies, information systems, and management techniques to improve the safety and operation of transportation systems.

Some elements of ITS may include traffic signal control, electronic fare payment, freeway management, railroad crossings, transit management, emergency response, incident management, regional and statewide multimodal traveler information, electronic toll collection, or intelligent vehicle initiatives. These elements continually change with technology.

For projects with other cooperative construction costs, cost participation for individual components of ITS projects should, to the extent possible, be pro-rated to each agency involved, in the same proportion as cost responsibility for the element of the project to which the ITS elements are being applied.

Stand-alone ITS projects that involve participation by a local unit of government will be handled on a case-by-case basis.

10. Sidewalks, Shared Use Paths, Bikeways and Pedestrian Bridges

10.A. Background

MnDOT recognizes sidewalks, shared use paths and bikeways as important elements of the transportation system. MnDOT will participate in costs associated with these items to support the safe and convenient movement of people walking, rolling, bicycling and using similar transportation modes on or crossing the trunk highway system and when they are affected by a trunk highway project. The [Complete Streets policy](#) requires that the principles of Complete Streets are to be considered at all phases of planning and project development in the establishment, development, operation, and maintenance of a comprehensive, integrated, and connected multimodal transportation system. Complete Streets considers the needs of motorists, pedestrians, transit users and vehicles, bicyclists, and commercial and emergency vehicles moving along and across roads, intersections, and crossings in a manner that is sensitive to the local context and recognizes that the needs vary in urban, suburban, and rural settings.

While the term bikeway typically includes shared use paths, for the purposes of this manual, bikeways are facilities that designate separate space for the use of bicycles and similar micro-mobility devices like scooters distinct from pedestrians, cars and trucks. Examples include bicycle lanes, buffered bicycle lanes, protected bicycle lanes, and sidewalk-level separated bicycle lanes.

The term pedestrian bridge also includes bridge structures that carry shared use paths or bikeways.

10.B. Sidewalks, Shared Use Paths and Bikeways Construction

When developing a trunk highway improvement project, the MnDOT District Engineer will determine what facilities are necessary to safely accommodate people walking, rolling, bicycling and using other similar transportation modes in accordance with the Complete Streets Policy, [MnDOT Facility Design Guide](#), and [MnDOT Bicycle Facility Design Manual](#). This will include a consideration of facilities identified in an adopted local or regional plan.

When determining cost participation, the sidewalk width MnDOT will participate in will be as specified for the land use context in the MnDOT Facility Design Guide or the [MnDOT Load and Resistance Factor Design \(LRFD\) Bridge Design Manual](#). Sidewalk width includes the pedestrian access route, and any necessary buffer and frontage space. The shared use path width MnDOT will participate in will be as specified in the MnDOT Bicycle Facility Design Manual or the MnDOT LRFD Bridge Design Manual. MnDOT may participate in a wider sidewalk, shared use path or bikeway facility if necessary to accommodate local maintenance equipment or snow storage.

Figure 5: Illustration of Sidewalk Zones

Sidewalk Zones

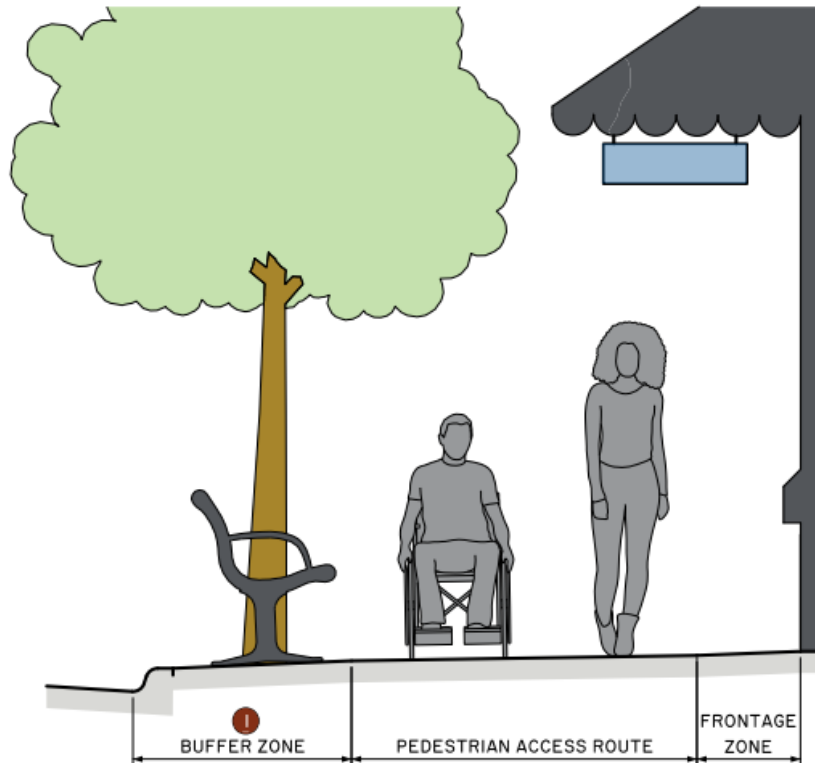


Figure 5 displays an illustration of various sidewalk zones (buffer, pedestrian access route, and the frontage zone).

10.B.1. New Sidewalk, Shared Use Path or Bikeway (where none currently exists)

- MnDOT will be responsible for up to 100% of the construction costs of new sidewalk, pedestrian ramps and pedestrian refuge islands, shared use paths, bikeways and related facilities where MnDOT determines that a new facility is necessary for the safe operation of the trunk highway and accommodation of pedestrians, bicycle riders and users of similar transportation modes. Costs for additional width beyond what MnDOT determines is appropriate for the context will be 100% responsibility of the local unit of government.
- MnDOT may participate in the costs to construct a shared use path facility or sidewalk on a new frontage road as part of an access closure/ consolidation or a grade separation project if MnDOT and the local unit of government agree the safest option is to provide access for people walking, rolling, bicycling and using similar transportation modes on the frontage road and not directly adjacent to the trunk highway.
- When constructing a roadway bridge where no connecting sidewalks, shared use paths or bikeways currently exist, MnDOT may participate in a wider or longer bridge to accommodate a future facility that is included in an adopted plan.

- The local unit of government will be responsible for 100% of the construction costs for a new sidewalk, shared use path or bikeways where MnDOT determines that the facility is not necessary for the safe operation of the trunk highway or the safe accommodation of pedestrians, bicycle riders and users of similar transportation modes.
- MnDOT will participate in costs for new sidewalk, shared use paths and bikeways on bridge replacement and new bridge projects in the same ratio as MnDOT participation in the rest of the bridge project when MnDOT, in cooperation with the local unit of government, determines that the facility on the bridge is necessary.

10.B.2. Reconstruction of Existing Sidewalks, Shared Use Paths and Bikeways:

- Costs to reconstruct sidewalks, shared use paths and bikeways at the end of their useful life will follow current guidance for new construction.
- MnDOT will be responsible for up to 100% of the costs to replace existing sidewalks, pedestrian ramps, shared use paths and bikeways disturbed as a result of trunk highway improvements. MnDOT participation in reconstruction will be limited to the existing-width or the width MnDOT determines is appropriate for the context, whichever is greater.
 - If MnDOT and the local unit of government agree, MnDOT may replace an existing sidewalk with a shared use path.
- The local unit of government will be responsible for 100% of costs to reconstruct existing sidewalks, pedestrian ramps, shared use paths and bikeways disturbed as a result of local improvements.
- MnDOT will be responsible for 100% of the construction costs of sidewalk, pedestrian ramps and shared use paths that are constructed wholly or partially within the trunk highway right-of-way where MnDOT determines they are not compliant per the MnDOT ADA Transition Plan. MnDOT may also contribute up to 100% of the construction cost to cover additional sidewalk or shared use path work within locally owned right of way to a logical terminus to achieve ADA compliance on the trunk highway.

10.C. Sidewalks, Shared Use Paths and Bikeways Maintenance

Routine maintenance of all sidewalks, shared use paths and pedestrian refuge islands, including but not limited to patching, removing trip hazards (other than panel replacement), keeping the facilities usable during winter to the local standard, sweeping, debris removal, vegetation control, signs, and pavement markings will be the responsibility of the local unit of government, as assigned in an agreement or limited use permit.

- For facilities at isolated intersections outside of an incorporated municipality that do not have connecting shared use paths or sidewalks, the local unit of government will not be responsible for winter maintenance.

Maintenance of bikeways located on a trunk highway roadway or shoulder will be MnDOT's responsibility, unless specified in an agreement. If bikeway pavement markings other than MnDOT typical or standard are installed per a local unit of government's request, maintenance of said markings will be the local unit of government's responsibility.

Costs for non-routine maintenance such as resurfacing, seal coating, panel replacement, and bridge rehabilitation, will be proportioned to MnDOT and the local unit of government in the same ratio as the initial cost of construction, unless documented otherwise in an agreement.

10.D. Pedestrian Bridges and Underpass Construction

MnDOT will be responsible for up to 100% of the costs to construct new pedestrian bridges or underpasses on existing freeways or multi-lane divided highways where MnDOT determines existing access spacing is insufficient.

MnDOT may participate in construction costs for a reasonable number of pedestrian bridges or underpasses, as determined by MnDOT, to replace at-grade pedestrian or shared use access severed by conversion of an expressway to a freeway or a grade separation project. MnDOT's financial contribution to the pedestrian bridges or underpasses will not exceed MnDOT's financial participation in the adjacent interchange or grade-separation construction required to convert the expressway to a freeway.

In other circumstances, MnDOT may participate in costs for a pedestrian bridge or underpass constructed in lieu of an at-grade crossing improvement, at the request of the local agency. MnDOT participation will be limited to the cost of a safe and compliant at-grade crossing improvement, as determined by MnDOT. All remaining costs will be local agency costs. The [Individual Project Maximum](#) section will not apply to these costs.

MnDOT participation in the cost to reconstruct a pedestrian bridge or underpass will be in the same ratio as the original construction project, unless documented otherwise in an agreement.

10.E. Pedestrian Bridge and Underpass Maintenance

The local unit of government will be responsible for non-structural maintenance activities on the bridge or underpass, unless otherwise documented in an agreement. This includes but is not limited to, keeping the bridge and approaches usable in winter, clear of litter and debris, appropriate disposal of such material, removal of graffiti on the structure that is visible from the local facility, pavement markings and non-structurally supported signing.

For locally initiated pedestrian bridges or underpasses, the local unit of government will be responsible for bridge inspections and all structure-related maintenance, including painting, re-decking and rehabilitation of the bridge, including the deck and supporting structural elements, approaches, retaining walls and structurally supported signing.

In other circumstances, MnDOT and the local unit of government will share the cost of bridge inspections and all structure-related maintenance. Cost responsibilities should be documented in an agreement.

Additional information related to pedestrian bridge ownership responsibilities is in [Appendix B](#).

11. Additional Functional Design Elements

11.A. Background

[Minnesota State Statute 174.01](#) establishes the Department of Transportation and identifies 16 goals for the transportation system. In addition to more traditional transportation goals, these include “ensure economic well-being and quality of life without undue burden placed on any community,” “enhance economic development,” and “encourage tourism.” MnDOT has also been developing a Livability Framework that articulates the relationship between the state highway system and health, environment, economic vitality, sense of place, safety, connections, equity and trust. State highway construction projects provide opportunities to support these goals as well as local and regional goals through functional design elements.

Functional design includes project elements that support walking and rolling for all ages and abilities, quality of life, economic vitality, public health, community safety and tourism. Examples include benches, bicycle parking, handrails, planters, plazas, structured shade, waste receptacles, wayfinding, kiosks, and other signage reflecting specific features of the area.

11.B. Additional Functional Design Element Construction

When developing a trunk highway improvement project, the MnDOT District Engineer will determine what additional functional design infrastructure elements are appropriate or required to support statutory transportation system goals and trunk highway mitigation responsibilities in accordance with environmental regulations, MnDOT ADA standards, complete streets policy, the Facility Design Guide, MnDOT Livability Framework, the Safe System Approach, and adopted state and local plans.

- MnDOT will be responsible for any functional design elements required as part of a formal mitigation in an environmental document and may participate in the cost for constructing the following if included in the scope determined by MnDOT:
 - A. Elements that support walking and rolling for all ages and ability, including but not limited to benches, handrails, structured shade, and waste receptacles.
 - B. Additional items that provide a safety barrier or reduce the environmental impact of the trunk highway system.
- Final MnDOT participation will be determined on a case-by-case basis, as determined by the relationship to the trunk highway system, district priorities and available funding.
- The local unit of government will be responsible for all other functional design elements supported by the local agency

11.C. Additional Functional Design Element Maintenance

MnDOT will conduct all maintenance on functional design elements at highway rest areas.

The local unit of government will be responsible for all other routine maintenance of functional design elements agreed to by the local unit of government as part of the scope of the project, including waste removal, graffiti removal, debris and vegetation management, unless otherwise documented in an agreement.

Responsibility for all non-routine maintenance for each element will be informed by Sections [6.C Bridge Maintenance](#), [8.C Green Infrastructure Maintenance](#), [10.C Sidewalks, Bikeways, and Shared Use Paths Maintenance](#).

- If the responsibility for an element cannot be determined based on the guidance in those sections, the cost for non-routine maintenance for that element will be proportional to the initial cost of construction, unless otherwise documented in an agreement.

12. Transit Facilities

MnDOT recognizes the need for transit facilities as an element of the trunk highway system. Varying degrees of safety and operational improvement to the trunk highway result from inclusion of these facilities. MnDOT participation in construction of transit facilities will be considered based on each facility's function and on the anticipated safety and operational improvements and the multimodal accessibility to the trunk highway system that will result from the facility. This section is not intended to address independent bus stop shelters and associated signing.

MnDOT participation is limited to the right-of-way and construction of the roadways, and to the parking necessary for these facilities. MnDOT participation in costs for shelters, structures, lighting, and other above-ground elements of these facilities will be determined on a case-by-case basis.

The jurisdiction or the operation, maintenance and security responsibilities of transit facilities included in cooperative construction projects should be addressed early in the project development process and be documented in an agreement. Any transit facility that is constructed on MnDOT right-of-way will require an agreement (not a permit) for a limited use of the highway right-of-way or will be released immediately to the transit authority upon completion of construction activities. An agreement for release of a facility to a transit authority must be in place prior to the beginning of the construction project.

12.A. Park-and-Ride/Park-and-Pool Lots

MnDOT may contribute to the construction of park-and-ride/park-and-pool lots that are determined to improve operation of the trunk highway system by reduction of single occupancy vehicle (SOV) use on the trunk highway system through the use of carpool, van pool, or ride-share sites. The lot may be located on MnDOT right-of-way or on property owned by the local unit of government, provided that the same trunk highway improvement is achieved.

MnDOT participation is limited to the right-of-way and construction of the parking necessary for these facilities. MnDOT participation in costs for shelters, structures, lighting, security, and other above-ground elements will be determined on a case-by-case basis.

The jurisdiction or the operation, maintenance and security responsibilities of lots included in cooperative construction projects should be addressed early in the project development process and documented in the cooperative construction agreement. Lots that are constructed on MnDOT right-of-way will either be constructed with a limited use permit, an agreement, or will be released to the local unit of government upon completion of construction activities, either as part of the cost sharing agreement or as a separate agreement that must be in place prior to the beginning of the construction project.

13. Aesthetics and Art

13.A. Background

The National Environmental Policy Act of 1969 (NEPA) established the continuing responsibility of federal and state governments to “use all practical means...to assure all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.” In response, USDOT and subsequently FHWA issued policies and guidance that integrated aesthetics and visual quality management into their programs and documentation. These federal policies formed the foundation for MnDOT’s context sensitive solutions (CSS) approach to project development. CSS integrates aesthetics and visual quality considerations to preserve and enhance the state’s environmental, scenic, historic and cultural values while addressing transportation objectives.

Aesthetics, as a part of broader visual quality management, should be considered early in the project development process, beginning with initial project scoping and budgeting. MnDOT’s Visual Impact Assessment (VIA) process is consistent with FHWA’s guidance including the January 2015 issuance of updated [Guidelines for the Visual Impact Assessment of Highway Projects](#). With regards to regulatory context, VIAs are typically conducted as part of a project’s environmental review process to comply with NEPA. VIA is a tool and methodology to inform visual resource inventory, analysis, and design, for the purposes of mitigating negative impacts, and enhancing the affected visual resources associated with transportation projects. The VIA process guidance is included on MnDOT’s Transportation Project Development Process Website: [Subject Guidance - Visual Quality](#).

Aesthetics are an integral component of a highway corridor experience. However, expenditures for aesthetics must be balanced with available funding needed to meet the construction and maintenance needs of the trunk highway system. MnDOT districts, in consultation with coordinating and partnering agencies, local units of government, and the public, need to balance aesthetic needs with all other needs of the project and district. The extent of MnDOT aesthetic participation will be determined on a project-by-project basis by the district, and when applicable the MnDOT Bridge Office.

13.B. Aesthetics Eligibility

Aesthetics refers to the visual enhancement of structural or functional elements that are part of the project scope and goals, such as pavement, sidewalks, railings, walls, barriers, or pilasters. Aesthetics focuses on the form, scale, color, and texture of these elements to create a cohesive, context sensitive, and visually appealing environment.

Aesthetic elements eligible for MnDOT cost participation include, but are not limited to:

- A. **Design Decisions:** Selection or alteration of highway or bridge location, alignment, profile, cross-section or and or structural form made solely for the purpose of visually enhancing the project context or corridor character. Examples include upgrading a rural trunk highway design to an urban design, modifying a bridge pier shape, or replacing a recommended concrete girder bridge with a steel truss bridge strictly for aesthetic purposes

- B. **Physical Features:** Aesthetic features and components such as pilasters, ornamental railings, enhancements to structural elements, lighting units beyond MnDOT standards or not required for transportation purposes, and other components incorporated to enhance the visual quality of a project's structural or functional elements. Other components include but are not limited to GFCI outlets and poles or banner holders.
- C. **Surface Treatments:** Aesthetic treatments such as concrete form liners, pavement stamping, multi-color surface finishes, anti-graffiti coatings, or pavement coloration applied to enhance the appearance of project elements beyond the standard base treatments required for the project.

MnDOT reserves the right to decline, modify or limit the use of aesthetics to maintain safety, operations, maintainability, or durability.

13.C. Aesthetics Construction

MnDOT limits for participation in eligible aesthetic elements of a trunk highway project are determined by applying the appropriate participation factor to MnDOT's share of the estimated project costs. The participation factors are a function of the project's level of impact, specific project items and project type category. Funding for aesthetics is not an additional component beyond the total project budget.

More than one aesthetic participation factor may apply within a single project. For example, individual bridges, retaining walls, and noise walls within the same project may have different aesthetic levels of impact and therefore different participation factors. Similarly, one segment of a project may fall within an area that warrants a different level of impact than the rest of the project, such as an urban section within a predominantly rural project, or a visually sensitive location along a longer project. In these cases, the project may be divided into segments to determine the level of impact and project type category in order establish the appropriate MnDOT cost participation factors for each setting. In these cases, participation factors and costs are applied on a segment-by-segment basis.

- **Bridges:** The amount of MnDOT cost participation for bridge aesthetics is determined on a structure-by-structure basis and is not transferable to other project items. Bridges within the same level of impact category may be considered collectively to allow for uniform treatments within a corridor. Aesthetic considerations for bridge preservation and maintenance projects are limited but should maintain consistency with adjacent corridor design aesthetics and applicable corridor design guidance.
- **Walls:** The amount of MnDOT cost participation for retaining wall and noise wall is determined based on the total estimated cost of all items of each type within the same level of impact in the project. This is intended to allow uniform aesthetic treatment while accounting for cost variability due to height and structural requirements.
- **Other Project Elements:** MnDOT's aesthetic cost participation for the remaining project elements will be based on the application of the appropriate project type category participation factor to the remaining

estimated project cost. The remaining project cost equals the total estimated cost of MnDOT's share of the project, excluding bridge, retaining wall, and noise wall costs.

- MnDOT's aesthetic cost participation under the project type category may be applied to eligible aesthetic costs for bridges, retaining walls and noise walls included in the project under limited circumstances and must be approved by the District Engineer and State Bridge Engineer.

Costs for aesthetic elements supported by local units of government beyond those established as eligible for MnDOT participation, or exceeding MnDOT's maximum participation as specified in this manual, will be the responsibility of the participating local units of government. Participation percentages for aesthetic elements will not be modified or adjusted based on bid prices of the successful bidder.

13.C.1. Aesthetic Level of Impact

The level of impact the project has on the existing setting will be determined as one of the following levels:

LEVEL A: High Visual Impact

For projects of major state or federal significance located in visually prominent or contextually significant settings that exhibit unique or sensitive characteristics. The project has a high level of visual impact on the surrounding setting and will strongly influence the visual experience of the area. Aesthetic considerations may substantially influence the design of the project or project elements. The aesthetic impacts are typically addressed in partnership with other federal and state agencies, local units of government, tribal governments, and key stakeholders.

Level A designation requires the approval of the District Engineer and, when applicable, the State Bridge Engineer.

LEVEL B: Moderate Visual Impact

For projects located in urban and suburban settings or adjacent to state or regional parks, often with frequent pedestrian and bicycle activity, particularly near schools, downtown districts, or community gathering areas that are visually important but not highly sensitive. The project has a moderate level of visual impact on the surrounding setting and is noticeable but does not function as a primary visual element. Aesthetic considerations are not primary drivers of decision decisions. The aesthetic impacts are typically addressed in coordination with local units of government and key stakeholders.

LEVEL C: Limited Visual Impact

For projects located in areas with limited or no pedestrian or bicycle activity but may be visible by adjacent properties or state waterways. The project has some visual impact on the surrounding setting but to a lesser extent than Level B projects. Aesthetic considerations may be used to achieve visual compatibility with the surrounding environment but are not central to the design. The aesthetic impacts of may require some coordination with local units of government.

LEVEL D: Minimal Visual Impact

For projects located in non-sensitive or undeveloped areas with no pedestrian or bicycle activity and limited visibility from any homes, businesses or public gathering spaces. The project has minimal visual impacts on the surrounding setting. The aesthetic impacts can often be addressed without coordination with other agencies.

Additional information, including examples, will be available in the MnDOT Aesthetics Manual.

The MnDOT Bridge Office has sole discretion to determine the aesthetic level for bridges classified as Levels B, C, and D. In all other circumstances, the MnDOT District Engineer will determine the aesthetic level as part of the visual quality evaluation process.

13.C.2. Specific Item Categories for Aesthetic Cost Participation

Specific item categories apply to bridges, retaining walls, and noise walls due to their prominent visual impact. Participation factors and limits define MnDOT's allowable share for these specific items. These factors are applied to MnDOT's share of the estimated cost of the specific item to determine MnDOT maximum allowable aesthetic cost participation for that item. Participation factors and limits apply individually to each item, and funds cannot be transferred or reallocated between items within the same project. The aesthetic cost participation applies to aesthetic enhancements beyond the basic structural and functional elements included as a part of the project scope.

13.C.3. Project Type Categories

The project type category is determined based on the type, the intent and the program funding category of the project in the following fashion:

Project Type Category 1: Major Construction / Reconstruction

The intent of major construction projects is to improve or increase the capacity and the operational characteristics of a highway by adding lanes, by building new roadways or bridges, or by converting at-grade intersections to interchanges.

The intent of reconstruction projects is to reconstruct segments of the highway system current standards. These projects involve grading, base, resurfacing, and bridge replacement. They may involve new lanes, auxiliary lanes, turn lanes, increased shoulder width, bridge widening and access management improvements. Right-of-way acquisition is common. Replacement of lighting, signals, and other infrastructure is also common.

Category 1 projects also include preservation projects with additional reconstruction level work, such as moving curbs lines to address ADA.

Project Type Category 2: Preservation, Safety, and Maintenance

The intent of preservation, safety, and maintenance projects is to repair or preserve the roadway infrastructure or to address specific safety issues. Minor grading in the form of shoulder widening, grade corrections and turn lanes may be undertaken with these projects, but do not involve major changes to the roadway cross section.

They may also involve the replacement of roadway infrastructure such as culverts and guardrail. These projects usually have minimal impact on the surrounding environment and involve little or no right-of-way acquisition.

13.C.4. Aesthetic Participation Factors

MnDOT aesthetic cost participation factors for eligible aesthetic elements of a trunk highway project are determined by the level of impact, specific item, and project type categories according to Tables 4 and 5.

Table 4: Maximum MnDOT Aesthetic Cost Participation Factors and Limits for Specific Item Categories as a Percentage of Estimated MnDOT Project Construction Costs

Specific Item	Level A	Level B	Level C	Level D
Bridges	*	7%; not to exceed \$500,000 per bridge	5%; not to exceed \$200,000 per bridge	Base or standard only
Retaining Walls	*	12%	10%	1% or standard treatment
Noise Walls	4%	4%	N/A	N/A

*Due to the unique and complex requirements and coordination involved in Level A bridges and retaining walls, aesthetic cost participation factors will be determined on a project-by-project basis by the District Engineer and the State Bridge Engineer.

Table 5: Maximum MnDOT Aesthetic Cost Participation Factors and Limits Based on Project Type as a Percentage of Estimated MnDOT Project Construction Costs

Project Type Category	Level A	Level B	Level C	Level D
Category 1 - Major Construction / Reconstruction	4%	3%	2%	Base treatments
Category 2 - Preservation, Safety & Maintenance	0%	0%	0%	0%

Any aesthetic costs above the limits included in Tables 1 and 2 are the responsibility of the local unit of government. The [Individual Project Maximum](#) provision does not apply to these costs.

Preservation, safety, and maintenance projects and associated funding sources are intended to address specific infrastructure and safety needs of the trunk highway system. These types of projects and associated funding are not used for standalone aesthetic enhancements of a trunk highway corridor. However, aesthetics related to core structural and functional elements of the project should be considered during development of these projects to be consistent with other corridor design features or any applicable corridor design guidance.

See [Appendix D](#) for an example of how to determine MnDOT and local aesthetic participation on a project.

13.D. Art

MnDOT will allow the installation of art in its right of way, in accordance with the [MnDOT Policy OE007 Art on Trunk Highway Right of Way](#). Artists may be involved as members of visual quality and community advisory committees and focus groups. All other project involvement by artists will not be eligible as an aesthetic component on cooperative construction projects, and all costs for art will be 100% responsibility of the applicant.

13.E. Aesthetics and Art Maintenance

MnDOT does not maintain aesthetic features or treatments solely to address their visual appearance (for example, MnDOT won't conduct maintenance only to address a fading color). Aesthetic elements are maintained as part of preservation, safety, and maintenance projects only when those elements are included in the project scope and are necessary to maintain the functional or structural integrity of the trunk highway.

Local units of government will be responsible for all other maintenance activities for aesthetic elements of cooperative construction projects, unless otherwise documented in agreement.

Aesthetic improvements implemented through special funding programs or other agreement types, such as Landscape Partnerships, may have different maintenance responsibilities.

Consistent with [MnDOT Policy OE007 Art on Trunk Highway Right of Way](#), the applicant for an art installation will be responsible for all maintenance associated with the art.

MnDOT reserves the right to remove art from the right-of-way for any reason, including but not limited to safety concerns, failure of the applicant to maintain the artwork properly, deterioration of the artwork or surrounding area, or future highway construction and maintenance activities. Regardless of the reason, the applicant is responsible for all associated costs for removal or disposal.

14. Utilities Owned by Local Units of Government

In conjunction with a trunk highway construction project, the most frequently encountered utilities owned by local units of government include, but are not limited to:

- Sanitary sewer systems
- Water mains and associated hydrants, gate valves and manholes
- Locally owned street lighting

These utility items may be included in a cooperative construction agreement rather than a utility agreement. [Minnesota Statutes § 161.45 "Utility on Highway Right-of-Way; Relocation,"](#) [Minnesota Statutes § 161.46 "Reimbursement of Utility,"](#) and [Minnesota Administrative Rules 8810.3100 – 8810.3600 "Utilities and Equipment"](#) determine which agency is responsible for the cost of the adjustment or relocation of utilities owned by a local unit of government. Relocations will be performed pursuant to the [MnDOT Policy OE002 Utility Accommodation on Highway Right of Way](#) and the [Utility Accommodation and Coordination Manual](#).

15. Procedures

See [Appendix E](#) for a flowchart of the Design and Construction Process for locally administered MnDOT Cooperative Agreement Projects. For MnDOT administered projects, see documentation at [Pre-letting Services Project Coordination for MnDOT Administered Projects](#) (internal MnDOT link). Early coordination and communication as to the scope of the construction project and the potential cost sharing elements is essential.

MnDOT considers the MnDOT-funded portion of a locally- administered cooperative construction project to be a trunk highway project and must review and approve the construction plan and right-of-way acquisition procedures. This approval must be provided before the cooperative construction agreement can be completed.

15.A. District Responsibilities

The district will assign a project manager to facilitate development of locally administered project. The district project manager will guide the preparation of plans and special provisions and will arrange for MnDOT programming of locally- administered projects. The district will furnish the local unit of government's engineer and/or their consultant with a copy of these procedures early in the project development stage.

The district functional areas will review and provide comments on the plan, specifications and estimate at 30%-60% complete. As needed, the project manager may request the following offices to provide review and comments: Central Office Environmental Stewardship for environmental due diligence, Traffic, Bridge, Freight and Rail, Geometric Design, Transit, Pre-Letting Services and ADA.

At a 90% complete plan, the district project manager will review the plan to ensure that all comments have been addressed. See Section 15.C Project Turn-in to MnDOT Central Office for district responsibilities related to project turn-in to MnDOT Central Office.

15.B. Cost Estimates During Project Development

Responsibility for project cost should be determined by MnDOT's project manager, in coordination with MnDOT's Cooperative Agreements Engineer and in cooperation with local unit of government representatives, early in the project development process. Consider developing pre-agreement letters that outline potential cost share elements. Responsibilities for local cost participation must be kept current during project development. Local responsibility and associated costs for cooperative projects will be provided to each local unit of government by MnDOT's project manager each time project cost estimates are updated, in accordance with MnDOT's "[Cost Estimating Procedures during Project Development](#)." A document outlining items and their associated costs for each local unit of government will also be included with the information provided when municipal approval is requested by MnDOT. Copies of cost estimate information provided to the local unit of government will also be provided to the Cooperative Agreements Engineer.

Care must be taken to clearly establish that cost estimates during project development, including the share identified as local responsibility, are preliminary and are subject to change until actual contract prices are established in the successful bid and award of contract.

15.B.1. Pro-Rata Items

The cost of the following pay items will be pro-rated among participating agencies in the same ratio as their share of the project to the total project cost.

Table 6: Pro-Rata Items

Pay Item	Name	Payment
2221.501	Mobilization	Lump Sum
2031.502	Field Office	Each
2031.502	Field Laboratory	Each
2031.502	Combination Field Laboratory – Office	Each
2563.601	Traffic Control	Lump Sum

The pro-rata value assigned to each cost split (including bridge costs, if applicable) shown in the plans is determined by dividing the dollar value of work associated with that split by the total dollar value of the contract (including bridge costs), less the pro-rata items. The pro-rata percentage assigned to each cost split is established using estimated quantities and estimated prices, and does not change following bid opening, contract approval, or throughout the life of the contract. The actual dollar amount paid by each split is adjusted by applying the split percentage to the actual contract bid price for the pro-rata items.

15.B.2. Construction Engineering

15.B.2.1. Design-Bid-Build Construction Engineering

Construction engineering for design bid-build projects consists of inspection, materials testing, surveying and staking, and contract administration of a construction project. The cost share for this work will be 8% of the construction cost share amount and the following items will have the following values:

- Contract Administration 3%
- Construction Inspection 2%
- Surveys and Staking 2%
- Materials Inspection 1%

If any of these construction engineering tasks are not completed by the local agency, the construction engineering costs paid by MnDOT will be reduced by the indicated amount.

15.B.2.2. Design-Build Construction & Engineering

Engineering for design-build projects consists of design, project management, bonds and insurance as well as contract administration. The cost share for this work will be 23% of the Design-Build cost share amount and the following items will have the following values:

- Design Engineering 8%
- Project Management, Bonds & Insurance 10%
- Contract Construction Engineering 5%

In general, the Design Engineering will be the responsibility of the party administering the design-build project. The following are three options for determining the construction and engineering costs that will be charged to the non-administering party:

Option 1 (Preferred Option): Payments Based on percent of Design-Build Bid Cost

Payment Percent = Cost Share / Total Project Cost

(Costs from engineering construction cost estimate)

Payment =

Design-Build Bid (A+B+C) x Payment Percent minus

Total Project Cost x Payment Percent x 8% (8% for Design Engineering Deduction) plus

Design-Build Bid x Payment Percent x 5% (5% for State Contract Construction Engineering)

Where A+B+C is contract management + design + construction

Option 2: Payments Based on Engineering Construction Cost Estimates

Payment =

Cost Share (Determined from an engineering construction cost estimate) plus

10% x Cost Share (10% for Project Management, Bonds and Insurance) plus

5% x Cost Share (5% for State Contract Construction Engineering)

Option 3: Payments Based on Design-Build Line Item Bid Costs

Payment =

Line Item Cost (From design-build bid) plus

10% x Line Item Cost (10% for Project Management, Bonds and Insurance) plus

5% x Line Item Cost (5% for State Contract Construction Engineering)

15.B.3. Methods for Computing Cost Shares

Agreements may be written using one or a combination of any of the methods below. In some instances, it may be difficult to identify or keep track of a portion of an agency's participation based on pay items. For that portion, a lump sum amount or a percentage of construction costs may work, for the other portion, a schedule I might fit the situation.

15.B.3.1. Composite Percentage

Each agency's participation in the cooperative construction project is determined in accordance with [Section 4 Application of Policy to Projects](#). Under a separate worksheet, the estimated quantities and the estimated unit prices are used to compute the preliminary cost of each agency's participation. Each agency's cost participation is then converted from a dollar amount to a preliminary percentage of the total project cost.

After bids are received, each agency's percentage will be revised using the estimated quantities, and the contract unit prices of the successful bidder and any addenda. These revised final percentages will not change throughout the life of the project. All supplemental agreements and change orders that are written to the project must identify the appropriate cost participation, as determined in Section 4 Application of Policy to Projects, for the work contained therein.

After completion of the project, each agency's final cost participation amount will be determined using the final percentage applied to the final project costs, plus any applicable supplemental agreements and change orders. The difference between the advanced amount and the final amount will be computed and paid to the appropriate agency.

This method greatly reduces the amount of record keeping which is required of construction personnel to document the "schedule I" method.

15.B.3.2. As-built Quantities (Schedule I)

Each agency's participation in the cooperative construction project is determined in accordance with Section 4 Application of Policy to Projects. Each agency's costs are identified as a group or column in the construction plan. Estimated quantities and the estimated unit prices are used to compute the preliminary cost of each agency's participation. These preliminary costs are used to prepare the cooperative construction agreement. After bids are received, each agency's cost will be revised using the estimated quantities and the contract unit prices of the successful bidder including any addenda. All supplemental agreements and change orders that are

written to the project must identify the appropriate cost participation, as determined in Section 4 Application of Policy to Projects, for the work contained therein.

After completion of the project, each agency's final cost participation amount will be determined using the actual final as-built quantities and the contract unit prices, plus any applicable supplemental agreements, work orders, change orders, "back sheet" adjustments and construction engineering charges. The difference between the advanced amount and the final amount will be computed and paid to the appropriate agency.

15.B.3.3. Lump Sum

Each agency's participation in the cooperative construction project is determined in accordance with Section 4 Application of Policy to Projects. Lump sum agreements are written for a specific dollar amount that is based on the estimated cost of their construction and construction engineering. This type of agreement is most appropriate when the division of quantities or costs by another method is not practical or where the scope of the work is well defined and the chance of significant changes in quantities or the need for supplemental agreements is minimal. It should also be considered when an agreement is being prepared for a small dollar amount.

15.B.3.4. Bid-priced Lump Sum

Each agency's participation in the cooperative construction project is determined in accordance with Section 4 Application of Policy to Projects. Under a separate worksheet, the estimated quantities and the estimated unit prices are used to compute the preliminary cost of each agency's participation and is then revised based upon unit item bid prices. No adjustment in the cost participation is made to reflect contract final quantities. If the scope of the contract work changes significantly, a lump sum agreement may be supplemented or another agreement written to reflect the revised scope of work.

15.B.4. Cost Share Information in Construction Plans

Cooperative construction cost participation must be identified in the construction plan. Quantities on the estimated quantities sheets must be split into as many columns as there are separate funding groups; the factors that determine funding groups are funding source, project number, and percentage of participation. Specific funding information should be included at the top of each group column in the following manner:

- Federal aid participation should be indicated by showing the percentage of federal aid participation for each group. When there is more than one Federal Project Number, each separate federal aid funding source is shown as a separate group and the appropriate Federal Project Number should be indicated.
- MnDOT participation should be indicated by showing the percentage of MnDOT participation for each group. When there is more than one State Project Number, each separate state funding source is a separate group, and the appropriate State Project Number should be indicated.
- Local participation should be indicated by showing the percentage of local participation, and if applicable, the State Aid Project Number. Lump sum agreements should be identified with a note at the

top of the column for the items applied. The notes on the SEQ sheet should state “See Lump Sum Agreement # with local governmental agency.”

- The funding percentages must total 100% for each column.
- When space is limited at the top of the column, footnotes may be used.
- The tabulation sheets need to support the quantities for each funding group shown on the estimated quantities sheets.
- The Federal Project Number, State Project Number, State Aid Project Number, and Cooperative Agreement Number must be shown on the construction plan title sheet.

For further information regarding cost participation information required in the construction plan, see the “Metro Sample Plan,” MnDOT Design Scene, or contact MnDOT’s Design Service Engineer, the Funding Program Coordinator in the MnDOT Office of Transportation System Management, or MnDOT’s Cooperative Agreements Engineer.

15.C. MnDOT Administered Project Agreement Request

The following documents must be submitted for an agreement request for a MnDOT administered project a minimum of 11 weeks before project letting to begin preparation of the cooperative construction agreement and allow sufficient time for execution of the agreement:

1. A completed Agreement Submittal Checklist.
2. A PDF of the plan with a title sheet signed by the district and the bridge plan if applicable.
3. A colored layout which shows MnDOT and local cost participation if applicable.
4. A schedule of quantities and an estimate of construction costs. If the agreement is a lump sum, include justification for the lump sum amount.
5. A copy of correspondence indicating the local agency understands and agrees with the cost share splits.
6. A copy of the Limited Use Permit(s), if applicable.
7. Maintenance exhibits if applicable.

Project turn-in for MnDOT administered projects will be in accordance with present procedures for project turn-in and pre-letting activities.

15.D. Locally Administered Project Turn-in to MnDOT Central Office

The project manager must schedule a pre-submittal plan review meeting with the Cooperative Agreements Engineer and the Project Design Services Engineer prior to project turn-in.

The following documents must be submitted for a locally administered project a minimum of 11 weeks before project letting to begin preparation of the cooperative construction agreement and allow sufficient time for execution of the agreement:

1. A completed Agreement Submittal Checklist.
2. A PDF of the plan with a title sheet signed by the District and the bridge plan, if applicable.
3. A PDF of the proposal.
4. A spreadsheet showing funding or participation distribution for Delegated Contract Process (DCP) projects.
5. A colored layout which shows MnDOT and local cost participation, if applicable.
6. A schedule of quantities and an estimate of construction costs. If the agreement is a lump sum, include justification for the lump sum amount.
7. Environmental Due Diligence documents, if not previously submitted to the Office of Environmental Stewardship.
8. Right of Way documentation.
9. A Utility Certification.
10. A Quality Management Process Checklist.
11. Maintenance exhibits, if applicable.
12. A copy of the Limited Use Permit(s), if any.
13. The scheduled bid opening or letting date.

15.E. Agreement Writing, Reviews, and Signatures

The cooperative construction agreement is written by the Cooperative Agreements Unit in MnDOT's Office of Project Management and Technical Support and forwarded to the project manager for review, who then sends it to the local unit of government for their review. The agreement is signed by each agency. The local unit of government will provide a copy of the resolution or delegation of authority authorizing the signature of the agreement. The construction contract will not be awarded and the Contractor will not be allowed to commence construction activities prior to complete execution of the cooperative construction agreement and concurrence by all parties in that award.

15.F. Payment

15.F.1. By a Local Unit of Government to MnDOT

After award of the construction contract, MnDOT will revise the Schedule “I” cost estimates, if applicable, based on actual bid prices per the applicable method of computing cost shares. MnDOT will forward the fully executed agreement to the local unit of government with a notice that an invoice from MnDOT will be forthcoming. MnDOT’s Office of Financial Management will invoice the local unit of government per the terms of the agreement.

15.F.2. By MnDOT to a Local Unit of Government

Payment by MnDOT to a local unit of government is made after the award of the construction contract, per the terms of the agreement, and upon receipt of an invoice from the local unit of government.

Final payment is made, per the terms of the agreement, after completion of all the work in the contract, final payment to the contractor, and acceptance of the work by the District Engineer.

15.G. Other Types of Agreements

15.G.1. Maintenance

A maintenance agreement is written with a local unit of government to transfer maintenance responsibilities of elements that are constructed as part of the road construction project. Maintenance agreements can also provide payment to a local unit of government for performing maintenance responsibilities that MnDOT operations would normally perform, such as winter maintenance, patching and sweeping of the trunk highway. These agreements may be referred to as technical assistance, routine maintenance, or biennial maintenance agreements. Each district writes maintenance agreements. If payment for routine or biennial maintenance is required, funds are encumbered and paid by each district.

15.G.2. Detour

Detour agreements are between MnDOT and local road authority for a local roadway that the district has decided to use as an official detour route, in accordance with [Minnesota Statutes §161.25 “Temporary Trunk Highway Detour; Haul Road.”](#) The districts involve all appropriate road authorities in the selection of an official detour route. Once established, the detour will become a temporary trunk highway for the duration of the detour.

The detour payments are based on an estimate of the state motor fuel excise tax (gas tax) revenue generate by the detour as follows:

Gas Tax Income Generated by the Detour = ADT of traffic diverted x Length of detour (miles) x Duration (days) x 0.00781⁵

The district will write simple detour agreements. The Cooperative Agreements Unit in MnDOT's Office of Project Management and Technical Support will write complex detour agreements. The Cooperative Agreements Unit will encumber the funds and make the payment for all detour agreements. The district will inform the local unit of government of the removal of detour signing and the duration of the detour. No detour agreement is written for less than \$500.

15.G.3. Unofficial Detour

When official detours are selected and established for MnDOT construction projects, there are occasional times when a percentage of trunk highway or local traffic may elect to use adjacent local roads that are not the established detour. These are known as unofficial detours. There may be extra, beyond-the-ordinary maintenance work required on unofficial detours due to the increased traffic.

If the local unit of government anticipates or experiences additional maintenance costs during construction, the MnDOT Resident Engineer or designee, at the request of the local unit of government, can either have MnDOT maintain the roadway through its contractor or reimburse the local unit of government for doing so. Performance of the work or reimbursement for the work is in MnDOT's sole discretion and must not include improvements beyond restoring the condition of the road. FHWA will not participate in payment for unofficial detour work.

There are three options for performing the work:

1. When the impacted roadways can be identified before construction with a high degree of likelihood that there will be impacts, MnDOT may perform the maintenance work itself, through its contractor, using various bid items (i.e. calcium chloride for dust control, motor grader hours, gravel); or
2. After letting, MnDOT may perform the maintenance work itself, through its contractor, by executing a Change Order for Extra Work in accordance with MnDOT 1402.5; or
3. Unofficial Detour Agreement. Unofficial detour agreements are between MnDOT and a local road authority. When the local road authority performs the additional maintenance work on the unofficial detour route, they may seek reimbursement from MnDOT, in which case MnDOT must enter into an unofficial detour agreement with the local road authority. Unofficial detour agreements are written by either the District or the Cooperative Agreements Unit in MnDOT's Office of Project Management and Technical Support.
 - Reimbursable expenses are those over and above the average expenditures for maintenance and cannot include improvement costs. Examples include activities and materials such as dust control,

⁵ The multiplier 0.00781 should be used in State Fiscal Years 2027 through 2030. After FY2030, please contact the Office of Transportation System Management for an updated multiplier.

blading, and providing and spreading additional gravel, if required to adequately maintain roadway conditions.

- After performing the additional maintenance work, the local road authority must submit documentation of the equipment, labor hours, and materials to the MnDOT District for payment consideration. Documentation submitted by the local road authority should also include at least three years of prior maintenance cost records (or enough information to develop an average annual or cost per mile) and applicable invoices for work performed on the unofficial detour route. If these documents are not available, compensation will be determined on a case-by-case basis. If the District determines that the costs are reasonable, an unofficial detour agreement is written, and payment is made.
- If MnDOT and the local road authority cannot agree upon the amount of additional maintenance costs that should be paid, the "Gas Tax Method" that is used for determining payment for a detour placed on paved roadways may be used. The average daily traffic volume is used in the Gas Tax Method calculation and is limited to 25% of the traffic volumes diverted from the detoured trunk highway. An agreement or payment will not be written for less than \$500. Depending on the number and amount of payments to a local road authority for unofficial detours, the official detour agreement may be amended to reflect the decreased traffic that has used the official detour route.

Appendix A: Glossary

Aesthetics

Visual enhancement of structural or functional elements that are part of the project scope and goals, such as pavement, sidewalk, railings, walls, barriers, or pilasters. Aesthetics focuses on the form, scale, color, and texture of these elements to create a cohesive, context sensitive, and visually appealing environment.

Auxiliary Lane

An auxiliary lane is the portion of a roadway that is adjacent to a through-lane and is used for passing, weaving, truck climbing, or other purposes that promote the safe and efficient movement of through-traffic. A parking lane is not an auxiliary lane.

Bikeway

Facilities that designate separate space for the use of bicycles and similar micro-mobility devices like scooters distinct from pedestrians, cars and trucks. Examples include shared use paths, bicycles lanes, buffered bicycle lanes, protected bicycle lanes, and sidewalk-level separated bicycle lanes.

Cities of the First Class

Cities of the first class are those cities having more than 100,000 inhabitants.

Commissioner

The Commission of Transportation or the duly appointed Deputy Commissioner, or other designee of the Commissioner.

Contributing Flow (CA)

A simple calculation based on the Rational Method intended to represent the anticipated runoff contribution from a drainage area. Any other flows from larger offsite areas, including agricultural drain tile, should be included when calculating contributing flow.

Cooperative Construction Agreement

A cooperative construction agreement is an agreement between MnDOT and a local unit of government pursuant to Minnesota Statutes § 161.20 “General Powers of the Commissioner,” Minnesota Statutes § 161.38 “Special Agreements for Highways in Municipalities,” and Minnesota Statutes § 161.45 “Utility of Highway Right-of-Way; Relocation,” concerning construction and/or maintenance in which both parties have an interest.

Cooperative Construction Project

A cooperative construction project is a construction project that includes trunk highway and local road improvements in which costs and/or maintenance responsibilities are shared between MnDOT and local units of government.

Cooperative Construction Items

Cooperative Construction items are items in a cooperative construction project that have cost-sharing responsibilities, as identified in accordance with this Manual.

Coordinated Traffic Control Signal Systems

Coordinated traffic control signal systems consist of interconnected signal systems timed to maximize the efficiency of the whole system.

Design

Design includes, but is not limited to, the preparation of detailed construction plans, construction specifications and an engineer's cost estimate.

District

A district is one of the eight organizational subdivisions of the Minnesota Department of Transportation.

Drainage (“Conveyance”)

Structures that convey stormwater runoff from developed areas to discharge points, typically receiving waterbodies. Drainage may also be referred to as collection of surface runoff to achieve spread requirements into a conveyance system. The drainage system refers to collection, conveyance, and discharge of stormwater from and through development. Movement of water (“runoff”) from one location to another. Existing Drainage refers to the conveyance system that is in place when a project is being designed. Modifications to an existing system as part of a project is the Proposed Drainage.

Drainage or Stormwater Improvement

Accommodating flow beyond the existing drainage system or enhancing the stormwater quantity management or quality treatment.

Drainage System

A system of ditches, tiles, and/or storm sewer pipe networks to drain property. A drainage system may also include the improvement of a natural waterway used in the construction of a drainage system and any part of a flood control plan proposed by the United States or its agencies in the drainage system

Enforcement Light

An enforcement light is a light placed on a signal system to allow law enforcement officers to verify a red indication from a vantage point that is safe to pursue a vehicle that runs a red light.

Expressway

An expressway is a trunk highway of four or more through-lanes with a divided median, at-grade intersections, or a combination of interchanges and at grade intersections, with partial or full access control.

Fatal and Serious Injury Crash Rate Index (FAR)

A metric used by MnDOT to evaluate and prioritize safety improvements on roadways. It compares the fatal and serious injury crash rate at an intersection to the critical rate for similar intersections.

Federal Funds

Federal appropriations for transportation purposes received on a reimbursable basis through the Federal Highway Administration.

FHWA – Federal Highway Administration

“The Federal Highway Administration (FHWA) provides leadership, guidance, and direction to State Departments of Transportation in the planning, construction and maintenance of transportation projects. Working collaboratively with State partners, FHWA Division Offices ensure that the nation's roads, bridges and tunnels are safe and continue to support economic growth and environmental sustainability. Additionally, to ensure accountability, the FHWA Division Offices work with the State to develop, track and analyze activities and recommend innovative techniques and strategies to improve the performance of the transportation system. FHWA and its Division Offices are responsible for working with State Departments of Transportation to ensure that the nation's strategic investments preserve and modernize the U.S. highway system - and ultimately to save lives.” Federal Highway Administration Minnesota Division website.

Freeway

A divided arterial highway with full control of access ([23 CFR § 645.207](#))

Frontage Road

A frontage road is a roadway that provides for local traffic circulation while controlling access to the trunk highway. In accordance with [Minnesota Statutes §161.38 “Special Agreements for Highways in Municipalities,” subdivision 3 “Frontage road,”](#) a frontage road may be directly adjacent to the main traveled lanes of the trunk highway or may be constructed a reasonable distance from the limits of the trunk highway right-of-way if, in the judgment of the commissioner, such location is necessary to eliminate unreasonable circuitry of travel or to provide access to properties otherwise denied access to public highways by construction of the trunk highway. Such frontage roads will connect at least at one end with the trunk highway or with another public highway.

Grade Separation

A grade separation is any bridge or structure that vertically separates modes of travel, such as bridges carrying a roadway over/under another roadway, or bridges carrying a trail over/under a roadway.

Green Infrastructure

Green Infrastructure is the use of vegetation and soils in combination with built structures to support transportation functions.

Highway

A general term denoting a public way for the transportation of people, materials, goods, and services but primarily for vehicular travel, including the entire area within the right of way.

Indian Country

The simplified definition of “Indian Country” includes reservations, allotments, and “dependent Indian communities.” A longer and more nuanced definition of Indian Country may be found in [18 U.S.C. § 1151](#).

Interchange

An interchange connects two roadways that are grade-separated. A system of ramps and/or loops provides for turning movements between the roadways. An interchange may include frontage roads, auxiliary lanes, signals, signs, lights and other items.

Intersection

An intersection connects two roadways that are not grade-separated. An intersection may include turn lanes, auxiliary lanes, signals, signing, lighting and other items.

Intelligent Transportation System (ITS)

ITS is the application of advanced technologies, information systems and management techniques to improve the safety and operation of transportation systems.

Legs of an Intersection

Legs of an intersection are the physical roadways of the intersection, including interchange ramp legs which require a signal. A leg may carry two-way traffic, one-way traffic going either direction or may be exclusively pedestrian traffic (e.g., mid-block pedestrian crossing).

Local Roadway

A local roadway is a roadway under the jurisdiction of a local unit of government.

Local Unit of Government

A road authority other than MnDOT, including but not limited to a municipality including cities, counties or townships in accordance with [Minnesota Statutes §161.38 “Special Agreements for Highways in Municipalities,” subdivision 5 “Definition of municipalities”](#) or other governing authorities, such as park boards, other state agencies or other states.

Locally administered Project

A locally administered transportation project is a project in which a local unit of government performs the construction contract administration.

Locally initiated Project

A locally initiated project is a transportation project in which the need, scope, or means to accomplish the project is predominantly a determination of, and priority for, the local unit of government, regardless of who is administering the project.

MnDOT administered Project

A MnDOT-administered project is a transportation project in which MnDOT performs the construction contract administration.

MnDOT initiated Project

A MnDOT initiated project is a transportation project in which the need, scope, or means to accomplish the project is predominantly a determination of and priority for MnDOT.

Municipal Consent

Municipal consent is a statutory or home rule charter city's approval of MnDOT's final layout for a project on a trunk highway when state statute requires that approval. The approval is by a resolution passed by the elected council of the municipality. Municipal consent is required for projects that alter access, increase or reduce traffic capacity (increasing or decreasing the number of through lanes), or require acquisition of permanent right of way. High Occupancy Vehicle lanes and projects that implement certain traffic safety measures are exempt.

Parking Lane

A parking lane is the portion of a roadway adjacent to a through lane, not including the gutter pan, and is used for on street parking.

Pedestrian Bridge

Bridge structure that carries a sidewalk, shared use path or bikeway.

Pedestrian Hybrid Beacon

A pedestrian hybrid beacon is a special type of hybrid beacon (a beacon that is intentionally placed in a dark mode, with no indication displayed, between periods of operation and, when operated, displays both steady and flashing traffic control signal indications) used to warn and control traffic at an unsignalized location to assist pedestrians in crossing a street or highway at a marked crosswalk.

Rectangular Rapid Flashing Beacon

A pedestrian-activated traffic device with bright yellow lights that flash in an irregular pattern, similar to police lights, to alert drivers to someone crossing at a crosswalk, especially at mid-block or uncontrolled intersections where there are no traffic signals.

Right of Way

Real property or interests therein, acquired, dedicated or reserved for the construction, operation, and maintenance of a highway.

Road

See highway.

Roadway

Roadway is that portion of a highway improved, designed, or ordinarily used for vehicular travel, exclusive of the sidewalk or shoulder. During periods when the commissioner allows the use of dynamic shoulder lanes as defined in [Minnesota Statutes § 169.011 “Definitions,” subdivision 25 “Dynamic shoulder lanes,”](#) roadway includes that shoulder.

Shoulder

Shoulder is that part of a highway which is contiguous to the regularly traveled portion of the highway and is on the same level as the highway. The shoulder may be pavement, gravel, or earth.

State Road Construction

State road construction is the actual construction, reconstruction, and improvement of trunk highways, including right-of-way.

State Road Construction Account

The State Road Construction (SRC) account is the biennial appropriation of funds by the legislature which may only be expended for trunk highway purposes. This appropriation is comprised of federal aid funds made available to MnDOT and state funds dedicated to the trunk highway fund. All funds allocated to the State Road Construction account are subject to requirements and restrictions of the account, specifically that funds may only be expended for trunk highway purposes, regardless of the original source of the funds.

State Transportation Improvement Program (STIP)

The STIP is a federally required document that provides a list of transportation projects that are expected to be funded with federal transportation dollars within a four-year window. This list of projects includes state and local transportation projects funded with federal highway or federal transit funds. Minnesota also includes most projects on the state trunk highway system regardless of funding source (federal or state). Rail, port, and aeronautic projects are included for information purposes. Refer to the website for details, [State Transportation Improvement Program](#).

Stormwater Asset

Infrastructure owned and maintained by an agency or LGU used to convey and/or treat stormwater runoff.

Stormwater Study

An engineering study that examines the hydrologic and hydraulic features of an area, usually to identify drainage problems and solutions including, but not limited to, drainage capacity and water quality treatment needs.

Street

See highway.

Studies and Preliminary Engineering

A process of research and fact-finding that includes, but is not limited to, traffic analysis, needs analysis, alternative development and evaluation, geometric design layouts and environmental documents, and

associated mapping, visualization, surveys, traffic counts, public and agency involvement, soil boring and other necessary data gathering prior to commencing a roadway design.

Surfacing

Surfacing consists of roadway pavement, including aggregate, bituminous, and concrete base courses, but does not include curb and gutter.

Sustained Crash Location

Sustained crash locations are areas where, statistically, there are a higher number of crashes associated with a particular location when compared to other similar locations throughout the state. Sustained crash locations greatly exceed statewide rates and can be determined by using a critical crash rate to establish if a location has a sustained crash problem.

Through-lane

A through-lane is that portion of a roadway available for the movement of vehicles, excluding shoulders, turn lanes, auxiliary lanes and parking lanes.

Touchdown Point

A touchdown point is the limit of construction necessary to match trunk highway improvements with the existing alignment, grade, and geometric design of the intersecting street.

Traffic Control Signal System

A type of highway traffic control signal by which traffic is alternately directed to stop and permitted to proceed. Integral components of the traffic control signal include the control equipment, interconnect hardwire, fiber, or wireless equipment, camera systems, electrical wiring, signal hardware, Accessible Pedestrian Signal (APS) equipment, intersection roadway lighting, intersection roadway signs, and emergency vehicle preemption, and other minor construction, such as curb, sidewalk, pedestrian curb ramps and minor surfacing considered to be a necessary element of the traffic control signal system. Also included within this definition are pedestrian signals, pedestrian hybrid beacons, and flashing beacons at intersections.

Traffic Control Signal System Operation

Traffic Control Signal System Operations consists of all aspects of timing, timing studies and optimization, monitoring, responding to inquiries, field review, and functional checks of a traffic control signal system.

Trailblazing Sign

A type of sign used to provide directional guidance to a specific destination such as a cultural site, recreational area, college, university or specific business.

Trunk Highway Fund

This fund is the principal operating fund for MnDOT, and to some extent for the Department of Public Safety. It is a governmental fund that accounts for public monies used to construct, maintain, and operate Minnesota's

trunk highway transportation infrastructure. Annual transfers of funds to the Minnesota Management & Budget (MMB) debt service account in the state debt service fund are also made from this fund.

Trunk Highway System

All roads established or to be established under the provisions of [Article XIV](#), Section 2 of the Constitution of the State of Minnesota. This system includes highways that are constructed, improved, and maintained as public highways under the jurisdiction of the Commissioner of Transportation, including highways on the Interstate system.

Visual Impact Assessment (VIA)

A tool and methodology to inform visual resource inventory, analysis, and design, for the purposes of mitigating negative impacts, and enhancing the affected visual resources associated with transportation projects.

Appendix B: Guidance on Bridge Ownership

This appendix provides guidance to help inform discussions of bridge ownership and ownership responsibilities for new and replacement bridges carrying local facilities over a trunk highway and bridges carrying trunk highways over local facilities.

Background

Past practice led to MnDOT owning most trunk highway overpass or underpass bridges. MnDOT ownership was appropriate in times when most grade separations resulted from the construction of the interstates, other freeways, or trunk highway-to-trunk highway grade separations. In those situations that would still be the practice today.

In more recent times, population growth, changes in traffic patterns and volumes, and changes in funding availability has resulted in a growing number of new grade separations involving local infrastructure crossing trunk highways. These new crossings are frequently driven by local needs. MnDOT may not be in a financial position to construct and take ownership of bridges that do not address trunk highway performance issues and so they are increasingly being funded by local agencies.

The number of factors in these case-by-case ownership decisions has led to potentially inconsistent decisions being made.

The purpose of this document is to establish a uniform process for determining ownership and assigning ownership responsibilities of bridges at grade separations involving trunk highways.

This guidance is intended to be applied to new and replacement bridges that are engineered and/or constructed after the effective date of this guidance. It is not intended to be applied retroactively to bridges that have prior agreements or arrangements in place for maintenance, unless all parties desire such a change.

Bridge Ownership Philosophy

The Minnesota Department of Transportation should own and bear responsibility for all bridges that carry trunk highways over local facilities and bridges that carry local facilities over trunk highways except for those bridges where responsibilities are shared as identified by this process.

Taking ownership of a bridge has implications for decades and should not be based on transient factors. Instead, it should be based on what best serves the public over the life of the bridge. For most bridges over trunk highways, MnDOT is the owner of the bridge and accepts all the bridge ownership responsibilities therefor. In circumstances the bridge exists primarily to serve local needs, either a local agency or MnDOT may be named the owner, but the local agency should share in the ownership responsibilities for the bridge and may be the designated owner as well.

Definition of Bridge Owner

For the purposes of this guidance, “bridge owner” means the following:

- The owner possesses the overall obligation to ensure that the structure does not present a safety risk to the public.
- As outlined in the Specifications for the National Bridge Inventory (SNBI), ownership and maintenance entries in the National Bridge Inventory (NBI) include:
- Owner (SNBI Item ID B.CL.01): identifies the agency type that has ownership of the bridge.
- Maintenance (SNBI Item ID C.CL.02): identifies the agency that has primary maintenance responsibility.

Bridge Ownership Responsibilities

Ownership of a bridge includes many responsibilities. Those responsibilities may be shared or delegated based upon an agreement between MnDOT and other agencies, not unlike a traffic signal agreement. These are some of the common ownership responsibilities in addition to those listed in the definition:

- Bridge inspections** are required by state and federal law. MnDOT inspects all of the bridges it owns and many of the bridges over trunk highways that are owned by local agencies. Costs may be reimbursed if in an agreement. The code for the agency performing the inspection is stored in MnDOT’s Structure Information Management System (SIMS).
- Minor maintenance** includes non-structural maintenance activities on the bridge, including but not limited to, keeping the roadway, bridge deck, shoulders, medians, gutters, sidewalks, and shared use paths usable in winter, clear of litter and debris, appropriate disposal of such material, pavement markings, guardrail, and non-structurally supported signing.
- Major maintenance** includes all structure-related maintenance, including painting, re-decking and rehabilitation of the bridge, including the deck, rails, sidewalk and supporting structural elements, concrete bridge approach panels, and structurally supported signing on the bridge. The code for the agency responsible for the majority share of major maintenance costs is stored in the National Bridge Inventory.
- Emergency response** is provided by MnDOT in response to bridges hit by vehicles for any bridge over a trunk highway as part of its responsibilities to assure the safety for the traveling public on the local route and the trunk highway below.
- Restitution** from insurance companies or private parties who have damaged a bridge is the responsibility of the party with major maintenance cost responsibilities.
- Permits** related to bridges fall include these main types:

- a. **Utility permits** are issued by MnDOT anytime a utility crosses the trunk highway right-of-way at any location. MnDOT will coordinate with the local agencies when permits are issued for crossings on bridges with local ownership responsibility.
- b. **Oversize permits** are issued by the local agency with jurisdiction of the route carried on the bridge over a trunk highway. The agency issuing the permit is responsible for checking clearances as well as determining if a pre-trip route survey is necessary. See the overweight permit guidance below for permit applications that also include overweight vehicles.
- c. **Overweight permits** are issued in accordance with processes described on the MnDOT State Aid Bridge Overweight Permit website at: <http://www.dot.state.mn.us/stateaid/bridge/overweight-permits.html>. Bridges that are owned by MnDOT and carry a local agency route follow the “MnDOT Owned Bridges on Local Roadway Overweight Permitting Process Flowchart.” Bridges that are owned by a local agency follow the “Local Bridge Overweight Permit Process Flowchart.”
- d. **Special use permits** are issued by the local agency with jurisdiction of the route carried on the bridge; however, the applicant must also obtain a Parade/Special Event/Banner permit from MnDOT prior to performing the event.
- e. **Flags** may only be installed by MnDOT at any location within MnDOT right-of-way including bridges over the trunk highways regardless of the ownership of the bridge.

G. **Future reconstruction or replacement costs** may be divided in any manner, but MnDOT’s share cannot be more than is allowed Section 5, Bridges, Interchanges and Grade Separations.

For additional details on responsibilities of the bridge owner, refer to chapter A of the [Bridge and Structure Inspection Program Manual](#).

In some cases where MnDOT is the owner, MnDOT may not have any cost responsibility whatsoever. Responsibility for construction, maintenance, inspection, and replacement costs could be up to 100% with other agencies by agreement. Any costs incurred by MnDOT as the owner could be reimbursed as MnDOT may require and as documented in the agreement. SNBI Item ID B.CL.02 “Maintenance Responsibility” would refer to the agency with fiscal responsibility for the maintenance and inspection, or the agency with the majority share of the fiscal responsibility.

Procedures to Determine Bridge Ownership and Bridge Ownership Responsibilities

Using the definition and list of ownership responsibilities in this procedure, the following case scenarios describe how ownership should be determined and how ownership responsibilities are divided where the bridge is shared infrastructure. Assignment of responsibilities must always be made in a written agreement.

For the NBI records, one owner needs to be identified for each bridge, but ownership responsibility need not be all or nothing. Shared ownership responsibility documented in an agreement is acceptable and encouraged

where full ownership responsibility by one party is not reasonable. The following are the four most common cases for bridge ownership.

1. MnDOT Identified as Bridge Owner

In most cases, MnDOT owns the new bridge and is responsible for most or all the bridge ownership responsibilities. Share of construction cost is a good guide. Where MnDOT pays 100% of the initial cost, MnDOT is likely to also be the sole owner with all bridge ownership responsibilities, except for minor maintenance by the local agency if the bridge carries local traffic. MnDOT will be listed as the owner in the National Bridge Inventory.

MnDOT will own and assume ownership responsibility for bridges at grade separations in these situations.

- A. Bridges carrying a trunk highway over another trunk highway.
- B. Bridges for new grade separations with local facilities caused by conversion of a trunk highway to a freeway or construction of a new freeway.
- C. New bridges in a new trunk highway interchange or a grade separation that addresses a trunk highway safety or capacity issue with no important local system benefits, or other bridges constructed at MnDOT's discretion.
- D. Bridges that replace currently owned MnDOT bridges in-kind. In-kind includes modernization to current standards and may include elements such as pedestrian/bicycle connections, new turn lanes, or wider shoulders that are consistent with current design standards, including modernizations to existing overpasses and interchanges.

An example of not in-kind is converting a rural two-lane bridge to an urban four-lane bridge due to local growth. Modernizations would not include replacing an existing interchange type, such as a standard or compressed diamond interchange, with a diverging diamond (DDI) or single point urban interchange (SPUI), for example, that has considerably more deck area. These latter cases would fall under #2 below with MnDOT Identified as Owner with Shared Responsibilities.

The bridge ownership agreement should identify cost shares for future bridge rehabilitation or replacement.

- E. A prior agreement prescribes MnDOT ownership of the bridge.

2. MnDOT Identified as Bridge Owner with Shared Ownership Responsibilities

For bridges that have been determined to have shared local and trunk highway benefit or responsibility, **MnDOT will be listed as the owner in the National Bridge Inventory**. Potential cost sharing will be negotiable for bridge ownership responsibilities and must be documented in an agreement. Examples that would fall under this category include:

- New locally initiated interchange or overpass that addresses both trunk highway safety/capacity issues and provides additional local road connectivity or more convenient access to developable land.

- Converting an existing rural two-lane bridge, currently owned by MnDOT, to an urban four-lane bridge due to local growth
- Replacing an existing diamond interchange bridge with a DDI or SPI that has considerably more deck area
- Replacing an existing interchange or overpass bridge with a new bridge that includes elements that are not considered modernizations. In this case, ownership responsibility of the elements that are not considered modernizations would normally be borne by the requesting party, but this could be influenced by which entity or entities have such elements identified in one or more planning documents. Examples of elements that are not considered modernizations may include but are not limited to: new general purpose lanes, dedicated lanes for bus rapid transit, shoulders and shared use paths wider than guidance, and wider lanes than standards require to accommodate on-street parking.

3. Railroad, Transit, or Private Party Identified as Bridge Owner

In some unique cases, MnDOT, counties, and cities are not owners at all. These include railroads, bus rapid transit, light rail, private bridges, or bridges owned by state or federal agencies. **These types of bridges would be listed as owned by other agencies in the National Bridge Inventory** with ownership responsibilities by such party. Bridges such as these will typically be allowed by MnDOT via permit.

4. MnDOT Identified as Bridge Owner with Local Financial Responsibility

When the new bridge over the trunk highway is driven mainly by local interests such as providing additional local road or non-motorized connectivity or more convenient access to developable land, with no important trunk highway benefits, **MnDOT will be listed as the owner in National Bridge Inventory**. MnDOT would have only the responsibilities in the Definition of a Bridge Owner section above. Bridge ownership responsibilities and cost sharing must be identified in an agreement. MnDOT likely would have no financial responsibility. MnDOT would work in partnership with the local agency on the scope and schedule of technical bridge management, repair, or replacement recommendations.

The local agency may be identified as the owner in the National Bridge Inventory if mutually agreed to. The ownership agreement would define the local agency's bridge ownership responsibilities and cost sharing.

Districts may give consideration to townships and non-state aid cities that have low net tax capacity, small budgets, and limited ability to participate in cost sharing for inspections and major maintenance.

"Consideration" means lower cost sharing than otherwise would be assigned to a local agency with higher net taxing capacity and larger budgets. Note that in these cases, if the roadway carrying traffic on the new or replacement bridge is jurisdictionally transferred to an agency with a higher net tax capacity, larger budgets, and/or more ability to participate in costs associated with inspection, major maintenance, rehabilitation, and replacement (jurisdictional transfer from township to county, for example), the responsibilities identified in the maintenance agreement may be renegotiated.

This process is not binding upon MnDOT or another agency until the agencies have signed an agreement.

MnDOT will assert operational control of a bridge if, in their sole opinion, an unreasonable risk to the trunk highway exists. MnDOT will always respond to a bridge hit to determine the immediate safety for the travelling public.

Early in the development of the project, the MnDOT project manager will negotiate both initial capital cost participation and ownership responsibilities for any bridges carrying local routes, transitways, or other non-trunk highway traffic over trunk highways. Ownership responsibilities may be divided among agencies or may be shared jointly through cost-sharing. Responsibilities can be divided in any agreed upon manner. Results of the negotiation must be captured in an agreement.

Authority and Process

This process constitutes guidance to MnDOT districts on determining ownership. The District Engineer has the authority to negotiate on the elements of bridge ownership within the bounds of this guidance. As discussions and negotiations begin, district staff should inform the District State Aid Engineers of this discussion. In the Metro Area, Area Managers should also be made aware of these discussions/negotiations.

If the District Engineer, local agencies, and/or District State Aid Engineers/Area Managers are not able to reach agreement on bridge ownership and/or bridge ownership responsibilities, a committee comprised of one member from each of the MnDOT Divisions below can be consulted and will provide recommendations. The membership of the committee will be determined by each Division Director.

- Engineering Services
- State Aid and Statewide Radio Communications
- Operations
- Sustainability, Planning, and Program Management

Bridge ownership and bridge ownership responsibilities will typically be documented in an agreement. Just as cost splits are reviewed by the Agreements Unit, so will the ownership determination be reviewed. Significant departures from the standard practice will result in the Agreements Unit verifying the decision with the District Engineer and the State Bridge Engineer.

If the decision does not conform to this guidance, then the decision must be approved by the committee identified above. The following factors should be considered.

1. The bridge must meet the constitutional and statutory requirements for being an eligible use of trunk highway funds. All typical trunk highway crossings meet this requirement.
2. If the proposed ownership causes a MnDOT cost share beyond the amount allowed by the Cost Participation Policy, an exception may be required.
3. The requestor should provide clear justification for why the guidance should not be followed.

Applicability

This guidance is not intended to supersede existing agreements or prior ownership decisions, nor is it intended to shift existing ownership and/or ownership responsibilities from MnDOT to local agencies, or vice versa on existing, rehabilitated, or replacement bridges.

Effective Date

This guidance applies to all new or replacement bridges over trunk highways beginning on August 24, 2020.

Table B-1: Bridge Ownership Guidance Revision History

Revision #	Date	Summary of Changes
Original	August 2020	N/A
1	July 2023	• Technical changes • Add language about modernizations and which agency should have ownership responsibilities • Require notification of ownership responsibility negotiations to District State Aid Engineers and, in Metro, Area Managers • Add MnDOT committee if agreement cannot be reached
2	December 2023	• Add language about local agencies that have small budgets and limited ability to participate in cost sharing for inspection, major maintenance, rehabilitation, and replacement
3	March 2026	• Incorporated into the cost participation policy as an appendix. Separated guidance on pedestrian bridges.

Table B-2 Summary of Bridge Ownership Responsibilities

Ownership Scenario	Bridge Inspection Costs ²	Major Maintenance	Minor Maintenance	Emergency Response	Permits	Restitution Recovery	Rehab or Replace
1. MnDOT owned, MnDOT led bridge rehab or replacement with modern standards (shoulders, sidewalk or trail, turn lanes, etc.)	MnDOT	MnDOT	Local Agency	MnDOT	Both	MnDOT	See Section 6 Bridges, Interchanges and Grade Separations
2. MnDOT owned, locally led bridge rehab or replacement with modern standards (shoulders, sidewalk or trail, turn lanes, etc.) <i>Example: I-35E & County Road J</i>	MnDOT	MnDOT	Local Agency	MnDOT	Both	MnDOT	See Section 6 Bridges, Interchanges and Grade Separations
3. MnDOT owned, MnDOT led bridge replacement, widening with additional thru lanes on the bridge, or different interchange type than current	Cost shared by agencies	Cost shared by agencies	Local Agency	MnDOT	Both	MnDOT	Cost shared by agencies
4. MnDOT owned, locally led bridge replacement, widening with additional thru lanes on the bridge, or different interchange type than MnDOT recommended <i>Example: 4th Street over I-694</i>	Cost shared by agencies	Cost shared by agencies	Local Agency	MnDOT	Both	MnDOT	Cost shared by agencies
5. New interchange or overpass over a new freeway or expressway <i>Example: Dodge County Road CSAH 3 over Hwy 14 between Owatonna and Dodge Center</i>	MnDOT	MnDOT	Local Agency	MnDOT	Both	MnDOT	See Section 6 Bridges, Interchanges and Grade Separations
6. MnDOT led new interchange or overpass on an existing freeway or expressway	MnDOT	MnDOT	Local Agency	MnDOT	Both	MnDOT	See Section 6 Bridges, Interchanges and Grade Separations
7. Locally led new interchange or overpass, primarily addressing TH safety/capacity issues	MnDOT	MnDOT	Local Agency	MnDOT	Both	MnDOT	See Section 6 Bridges, Interchanges and Grade Separations
8. Locally led new interchange or overpass, primarily for local access <i>Example: Helmo Ave/Bielenberg Dr</i>	Local Agency	Local Agency	Local Agency	MnDOT	Both	Local Agency	100% Local Agencies

Ownership Scenario	Bridge Inspection Costs ²	Major Maintenance	Minor Maintenance	Emergency Response	Permits	Restitution Recovery	Rehab or Replace
9. Locally led new interchange or overpass, addressing TH safety/capacity issues and providing improved local access. <i>Examples: Hwy 12/CSAH 92, Hwy 36/Manning Ave, Hwy 36/Hadley Ave, Hwy 610 ramp over Hwy 610 near I-94</i>	Cost shared by agencies	Cost shared by agencies	Local Agency	MnDOT	Both	MnDOT	See Section 6 Bridges, Interchanges and Grade Separations
10. Locally initiated new pedestrian bridges	Local Agency	Local Agency	Local Agency	MnDOT	Both	MnDOT	See Section 10.D Pedestrian Bridges and Underpasses
11. All other pedestrian bridges	Cost shared by agencies	Cost shared by agencies	Local Agency	MnDOT	Both	MnDOT	See Section 10.D Pedestrian Bridges and Underpasses

1 Locally led funding package may or may not include MnDOT funds.

2 With local cost responsibility, it is expected that typically the local agency would contract with MnDOT to perform the inspection, but it is not required.

3 Local share for inspection, major maintenance and rehab/replace for township and non-state aid cities with low net tax capacity and/or small budgets may be lower than otherwise would be assigned

Appendix C: Summary of Lighting Responsibilities

Table C-1: Summary of Trunk Highway Lighting Cost Participation Responsibilities

Circumstance	Construction	Ownership	Power	Luminaire Repair & Replacement	All Other Maintenance
Freeways and interchange ramps and loops	100% MnDOT	MnDOT	MnDOT	MnDOT	MnDOT
Intersections of two trunk highways.	100% MnDOT	MnDOT	MnDOT	MnDOT	MnDOT
Isolated intersection of local road and trunk highway	Up to 100% MnDOT	Local unless authorized by MnDOT District Engineer	Local unless authorized by MnDOT District Engineer	Local unless authorized by MnDOT District Engineer	Local unless authorized by MnDOT District Engineer
Roundabouts (one feedpoint)	Same as costs for overall roundabout	MnDOT	Local	Local	MnDOT
Roundabouts (multiple feedpoints)	Same as costs for overall roundabout	Circle and TH legs – MnDOT Local legs – Local	Circle and TH legs – MnDOT Local Legs – Local	Circle and TH legs – MnDOT Local Legs – Local	Circle and TH legs – MnDOT Local Legs – Local
J-turns	MnDOT	MnDOT	Local unless authorized by MnDOT District Engineer	Median and at U-turns - MnDOT Local legs – Local unless authorized by MnDOT District Engineer	MnDOT

Circumstance	Construction	Ownership	Power	Luminaire Repair & Replacement	All Other Maintenance
Lighting MnDOT deems justified for the trunk highway system within communities and requested/supported by the local community including for: traveled roadways, adjacency sidewalks, shared use paths and shared use path crossings.	Up to 100% MnDOT using standard equipment	Local	Local	Local	Local
Any use of non-standard, decorative, or aesthetic lighting	Incremental cost above standard equipment – either MnDOT through the aesthetics budget or Local	Local	Local	Local	Local
Bridges carrying the trunk highway over a local roadway	On bridge – MnDOT Under bridge (<50 feet) – Local Under bridge (>50 feet) – up to 100% MnDOT Under bridge pedestrian for security and safety – up to 100% MnDOT	On bridge – MnDOT Under bridge (all) - Local	On bridge – MnDOT Under bridge (all) - Local	On bridge – MnDOT Under bridge (all) - Local	On bridge – MnDOT Under bridge (all) - Local
Bridges carrying a local roadway over a trunk highway	On bridge – Local Under bridge – MnDOT	On bridge – Local Under bridge – MnDOT	On bridge – Local Under bridge – MnDOT	On bridge – Local Under bridge – MnDOT	On bridge – Local Under bridge – MnDOT

Appendix D: Aesthetics Example

The following is an example of how to determine MnDOT and local aesthetic participation on a fictitious project.

This project consists of a three-mile corridor improvement. The existing roadway is a rural two-lane trunk highway. The first mile of work includes widening to add right turn lanes, shoulder repair, and a mill and overlay. The second mile of work includes widening to add right turn lanes, shoulder repair, ADA improvements, and a mill and overlay. The third mile of the project is major construction expansion from two lanes to four lanes, including replacing a small bridge and constructing a short retaining wall. All three segments do not contain unique or highly sensitive features, and design decisions are primarily driven by functional needs. There are also no unique environmental or historic elements or properties along these segments.

The estimated costs of the project prior to inclusion of costs associated with aesthetic elements are:

Bridge cost	\$1,100,000
Retaining wall cost	\$150,000
Other MnDOT Project Costs (Mile 1)	\$900,000
Other MnDOT Project Costs (Mile 2)	\$1,000,000
Other MnDOT Project Costs (Mile 3)	\$3,250,000
Local project costs	\$600,000
Total project costs	\$7,000,000

The aesthetic participation factors were determined to be:

Bridge: Considered as Participation Level B	7%*
Retaining Walls: Considered as Participation Level B	12%

Other MnDOT project costs:

Mile 1; Participation Level B, Category 2; Preservation, Safety & Maintenance	0%
Mile 2; Participation Level B, Category 1; Major Construction/Reconstruction	3%
Mile 3; Participation Level B, Category 1; Major Construction/Reconstruction	3%

** Not to exceed \$500,000 per bridge.*

The limits of MnDOT aesthetic participation were determined as follows:

Portion of the Project	Cost	MnDOT Participation Factor	MnDOT Aesthetics Limit (\$)
Bridge	\$1,100,000	7%	\$77,000
Retaining Wall	\$150,000	12%	\$18,000
Other MnDOT Project Costs (Mile 1)	\$900,000	0%	\$0
Other MnDOT Project Costs (Mile 2)	\$1,000,000	3%	\$30,000
Other MnDOT Project Cost (Mile 3)	\$3,250,000	3%	\$97,500
Total MnDOT Aesthetic Participation Limit			\$222,500

Mile 1 – Category 2 – Preservation, Safety & Maintenance:

The visual assessment process and corridor design guide for the project identified the following aesthetic elements and associated estimated costs for mile 1 of the project:

Bridge aesthetic treatments	N/A
Retaining wall aesthetic treatments	N/A
Sidewalk and Median Surface Treatments	N/A
Decorative roadway lighting	\$20,000
Total Cost of Aesthetic Elements	\$20,000

Mile 2 – Category 1 – Major Construction/Reconstruction:

The visual assessment process and corridor design guide for the project identified the following aesthetic elements and associated estimated costs for mile 2 of the project:

Bridge aesthetic treatments	N/A
Retaining wall aesthetic treatments	N/A
Sidewalk and Median Surface Treatments	\$30,000
Decorative roadway lighting	\$30,000
Total Cost of Aesthetic Elements	\$60,000

Mile 3 – Category 1 – Major Construction/Reconstruction:

The visual assessment process and corridor design guide for the project identified the following aesthetic elements and associated estimated costs for mile 3 of the project:

Bridge aesthetic treatments	\$90,000
Retaining wall aesthetic treatments	\$40,000
Sidewalk and Median Surface Treatments	\$50,000
Decorative roadway lighting	\$50,000
Total Cost of Aesthetic Elements	\$230,000

Final Cost Responsibilities

For this project, the costs for the desired aesthetic elements were distributed as follows:

Aesthetic Element	MnDOT Specific Item Participation	Other MnDOT Project Cost Participation	Local Participation
Bridge	\$77,000	\$0	\$13,000
Retaining Wall	\$18,000	\$0	\$22,000
Sidewalk and Median	\$0	\$63,750	\$16,250
Decorative Lighting	\$0	\$63,750	\$36,250
Total	\$95,000	\$127,500	\$87,500

Total Aesthetic Costs = \$310,000

MnDOT Aesthetic Participation = \$222,500

Local Aesthetic Participation = \$87,500

Appendix E: Design and Construction Process for Cooperative Agreement Projects

Cooperative Agreement Process for Work on Trunk Highways

Table E-1: Process Based on Funding

T.H. Funds	T.H. Federal Funds	Local Funds	State Aid Funds	State Aid Federal Funds	* Who is Letting?	Plan/Proposal is submitted to "?" Refer to the process listed under (Note 2) for details	Federal Authorization responsibility	Comments	(Note 2) The Process is:
Yes	No	Yes	Yes	Yes	MnDOT	Central Office – Pre-Letting	Pre-Letting	State Aid - signature required; Send a copy of plan to Cooperative Agreements	Defined on TPDP web site
Yes	Yes	Yes	Yes	No	MnDOT	Central Office – Pre-Letting	Pre-Letting	DSAE signs (Note 1) Send a copy of plan to Cooperative Agreements, copy to State Aid	Defined on TPDP web site
Yes	No	Yes	Yes	No	MnDOT	Central Office – Pre-Letting	none	DSAE signs (Note 1) Send a copy of plan to Cooperative Agreements, copy to State Aid	Defined on TPDP web site

T.H. Funds	T.H. Federal Funds	Local Funds	State Aid Funds	State Aid Federal Funds	* Who is Letting?	Plan/Proposal is submitted to "?" Refer to the process listed under (Note 2) for details	Federal Authorization responsibility	Comments	(Note 2) The Process is:
Yes	Yes	No	Yes	Yes	MnDOT	Central Office – Pre-Letting	Pre-Letting	State Aid - signature Required; Send a copy of plan to Cooperative Agreements	Defined on TPDP web site
Yes	Yes	No	Yes	No	MnDOT	Central Office – Pre-Letting	Pre-Letting	DSAE signs (Note 1), Send a copy of plan to Cooperative Agreements	Defined on TPDP web site
Yes	No	Yes	No	No	MnDOT	Central Office – Pre-Letting	none	Send a copy of plan to Cooperative Agreements (Note 1)	Defined on TPDP web site
Yes	No	Yes	Yes	No	Local Let	Central Office - Cooperative Agreements Office	none	Full MnDOT approval required. District State Aid Engineer Signs plan - for funding and approval (Note 1)	See below
Yes	No	Yes	Yes	Yes	Local Let	Central Office – State Aid	State Aid	State Aid - CO signature required; Send a copy of plan to Cooperative Agreements for Full MnDOT approval	See below

T.H. Funds	T.H. Federal Funds	Local Funds	State Aid Funds	State Aid Federal Funds	* Who is Letting?	Plan/Proposal is submitted to "?" Refer to the process listed under (Note 2) for details	Federal Authorization responsibility	Comments	(Note 2) The Process is:
Yes	Yes	Yes	No	No	Local Let	Central Office - Cooperative Agreements Office	Case by Case	Full MnDOT approval required. DSAE does not sign.	See below
Yes	Yes	Yes	Yes	No	Local Let	Central Office - Cooperative Agreements Office	Case by Case	Full MnDOT approval required. DSAE signs the plan (Note 1)	See below
Yes	No	No	Yes	No	Local Let	Central Office – Cooperative Agreements Office	none	Full MnDOT approval required. District State Aid Eng. Signs plan - for funding and approval (Note 1)	See below
Yes	Yes	No	Yes	Yes	Local Let	Central Office – State Aid	State Aid	State Aid - CO signature Required; Send a copy of plan to Cooperative Agreements for Full MnDOT approval	See below

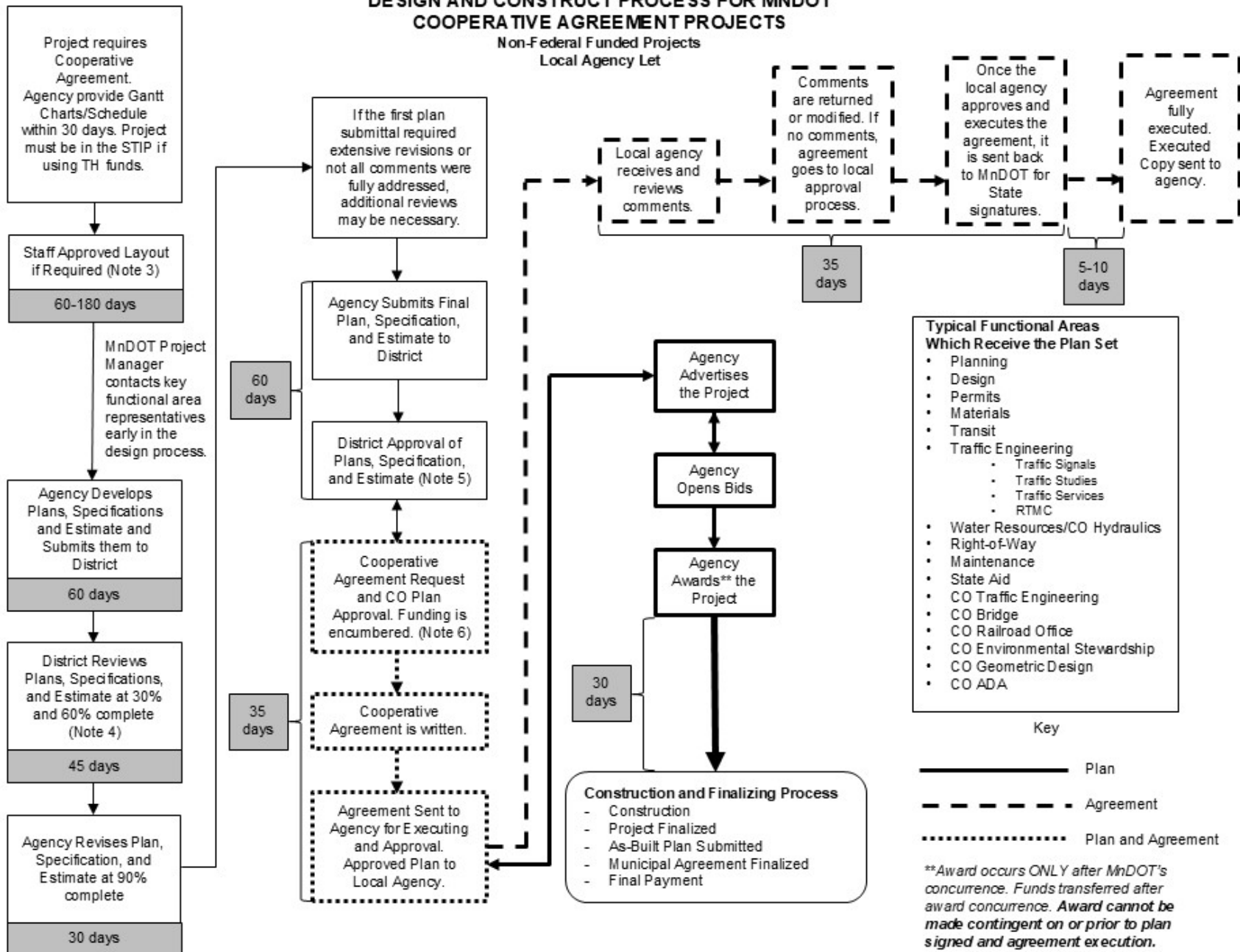
T.H. Funds	T.H. Federal Funds	Local Funds	State Aid Funds	State Aid Federal Funds	* Who is Letting?	Plan/Proposal is submitted to "?" Refer to the process listed under (Note 2) for details	Federal Authorization responsibility	Comments	(Note 2) The Process is:
Yes	No	No	No	No	Local Let	Central Office-Cooperative Agreements Office	none	Full MnDOT approval required for all plans involving Level 1 or 2 Geometric Layout and all bridges or tunnels to the TH. DSAE does not sign	See below
No	No	Yes	Maybe	No	Local Let	Central Office – Cooperative Agreements Office	none	Full MnDOT approval required for all plans involving Level 1 Geometric Layout and all Bridges or tunnels to the TH only	See below

* Delegated Contract Process (DCP) allowed only with Local Agencies that have approved DCP Agreement.

(Note 1) if a local bridge will be funded with bond dollars, the plan must be approved by CO State Aid.

DESIGN AND CONSTRUCT PROCESS FOR MNDOT COOPERATIVE AGREEMENT PROJECTS

Non-Federal Funded Projects
Local Agency Let



(Note 3)

Review of Layouts is first done by the District. It varies by District who reviews the Layout. In the Metro District, there is a Layout Advisory Committee (LAC). For Simpler projects, the district usually does the initial review on their own. For more complex project it is advisable to get the CO Geometric Design Support Group (GDSU) involved.

Once the layout is approved by the District, it is sent to the CO GDSU for final approval.

The District's Project Manager acts as the contact with the Local Agency.

<https://www.dot.state.mn.us/design/geometric/index.html>

(Note 4)

The District Project Manager has responsibility over routing the plans for review, coordinating the comments (and responding back to the Local Agency to act on the comments), and resolving disagreements with Functional Areas. The plan is signed with active electronic signature by the Design Engineer and District Engineer, Materials Engineer, Water Resources Engineer and Traffic Engineer, if applicable. The plan is approved and signed by the Director of Land Management and the State Design Engineer.

District Plan Review (Note 5)

Transportation Engineer (signature)

District State Aid Engineer* (signature) – for rules

Traffic Engineer

Materials Engineer

Water Resources Engineer

*Only necessary if project uses State Aid Funding

Central Office Plan Review (Note 6)

State Pre-Letting Engineer

CO State Aid (signature) – if using State Aid Funds

State Design Engineer (signature)

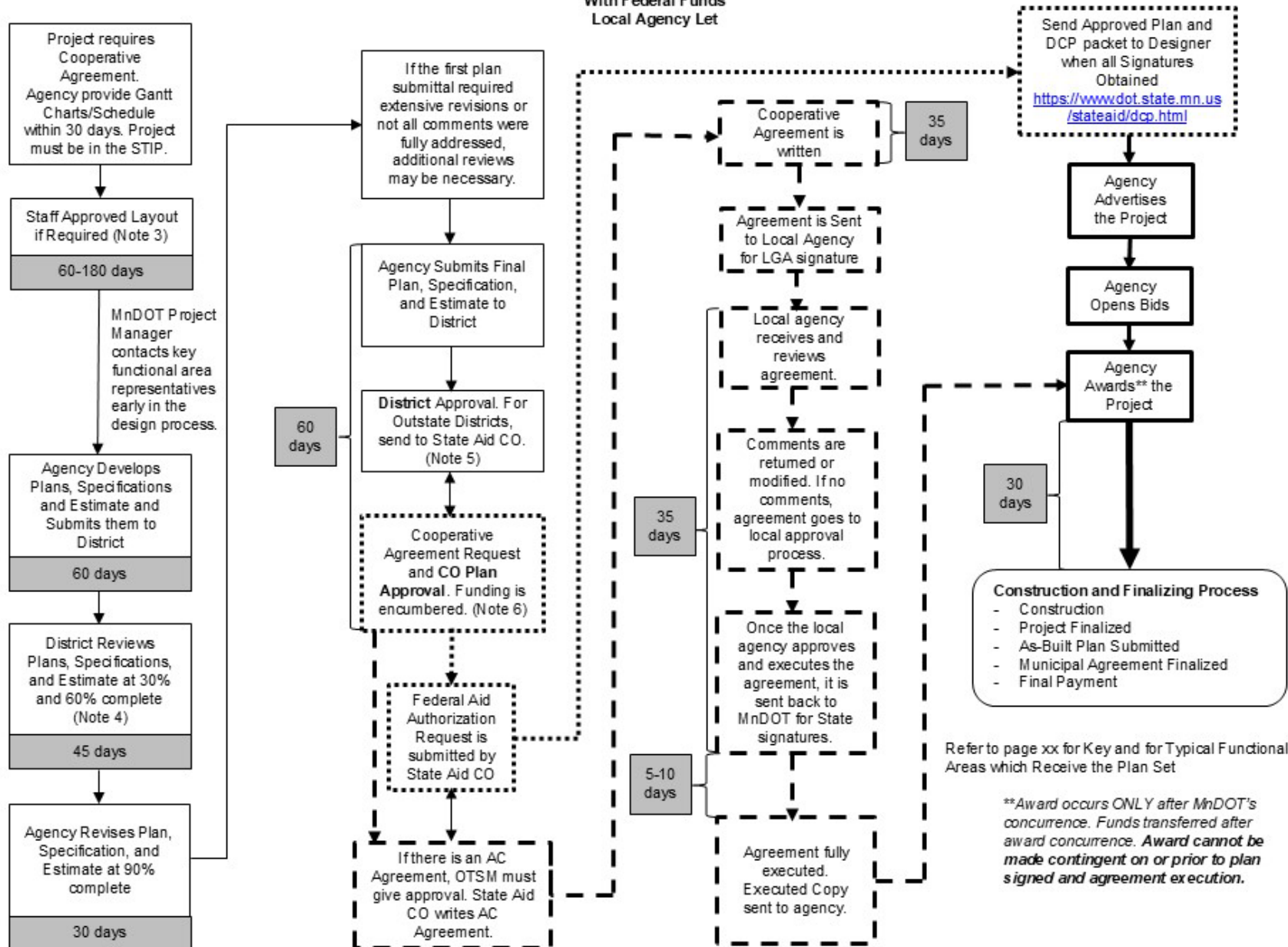
Director, Land Management (signature)

State Bridge Engineer (signature)**

**If a bridge is part of a project

DESIGN AND CONSTRUCT PROCESS FOR MNDOT COOPERATIVE AGREEMENT PROJECTS

With Federal Funds
Local Agency Let



(Note 3)

Review of Layouts is first done by the District. It varies by District who does the Layout. In the Metro District, there is a Layout Advisory Committee (LAC). For Simpler projects, the district usually does the initial review on their own. For more complex project it is advisable to get the CO Geometric Design Support Group (GDSU) involved.

Once the layout is approved by the District, it is sent to the CO GDSU for final approval.

The District's Project Manager acts as the contact with the Local Agency.

<https://www.dot.state.mn.us/design/geometric/index.html>

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District Plan Review (Note 5)

Transportation Engineer (signature)

District State Aid Engineer* (signature) – for rules

Traffic Engineer

Materials Engineer

Water Resources Engineer

**Only necessary if project uses State Aid Funding*

Central Office Plan Review (Note 6)

State Pre-Letting Engineer

CO State Aid (signature) – on federally funded projects

Director, Land Management (signature)

State Design Engineer (signature)

State Bridge Engineer (signature)

***If a bridge is part of a project*

Appendix F: Individual Project Maximum Determination Examples

This section is still under development