



DATE: May 11, 2017
TO: TAC Funding and Programming Committee
FROM: Tony Fischer, Planning Analyst
SUBJECT: Proposed Changes to Appendix F of the 2040 Transportation Policy Plan

Appendix F of the 2040 Transportation Policy Plan (TPP) describes the planning considerations for where on the principal arterial system an interchange may be a beneficial highway enhancement.

As you are aware MnDOT and the Council recently completed a study of interchange needs on the non-freeway principal arterial system, the Principal Arterial Intersection Conversion Study. For the first time this study provided a region wide prioritization of these types of investments. With this study, it was anticipated that an update to Appendix F would be needed and attached is the resulting proposed update.

In addition, interest in this approval process was heightened as it is the intent of several competitive funding programs (i.e., the Regional Solicitation, MnDOT's Transportation Economic Development Program (TED), and federal funds programmed through MnDOT's Freight Investment Plan) to use this interchange approval as a qualifying criterion.

Due to the significant reordering of text and the number of changes proposed, a red lined Microsoft Word document would be difficult to follow. Therefore, the changes are summarized here:

- Incorporate results of the Principal Arterial Intersection Conversion Study,
- Define coverage area as the MPO boundary, seven counties plus the urbanized portion of Wright and Sherburne Counties,
- Define which types of interchange improvements should seek approval (changes to access with mainline grade separation),
- Clearly define which types of interchange improvements should NOT seek approval (interchange or cross street safety and mobility investments that

do not affect access where mainlines are grade separated, and local connections to interchanges),

- Connect the process to approved regional policy, including Thrive MSP 2040 Outcomes and the TPP Goals,
- Move List of Successfully Completed Proposals from Increased Revenue Scenario to Appendix F,
- Remove engineering and operations language to focus on planning questions, and
- Clarify and consolidate text where possible (including consolidated criteria for existing and developing freeways).

In the months to come, input from a variety of stakeholders will be sought to further refine the document as part of the 2040 Transportation Policy Plan update.

For any questions related to this work please contact Tony Fischer (tony.fischer@metc.state.mn.us, 651-602-1703) or Steve Peterson (steven.peterson@metc.state.mn.us, 651-602-1819).

Appendix F: Preliminary Interchange Approval Process

Background

The Preliminary Interchange Approval process is the first of several required approvals that may be needed as part of the project development process. The process is intended to be a planning-level assessment completed several years prior to construction. Its purpose is to demonstrate that the proposed project is consistent with the region's long range plans and that its location is generally suitable for an interchange based on general transportation planning principles. Years later once the final designs and environmental process are complete, projects must demonstrate that they continue to show consistency with regional policy by completing a [Controlled Access Request](#) to the Metropolitan Council.

Preliminary Interchange Approval is needed before applying for several competitive funding programs including the Regional Solicitation for Transportation Projects, MnDOT's Transportation Economic Development Program (TED), and federal funds programmed through MnDOT's Freight Investment Plan.

This approval process is based on work originally done in 1979 by a joint committee of the Transportation Advisory Board and the Metropolitan Council. It has been revised and simplified over time to reflect policy changes, revised state and federal laws and regulations, and experience with applying the criteria. The rationale for requiring this approval comes from strategy 10 within the Access to Destinations Goal:

“Regional transportation partners will manage access to principal and A-minor arterials to preserve and enhance their safety and capacity.”

For this approval process, an interchange is defined as a location with grade-separated roadways and one or more adjacent access connections between the two roadways. However, it is important to note that some types of interchange improvement projects must go through this approval process and other types do not.

Types of interchange projects needing approval through this process:

- Addition (or removal) of an interchange on a Principal Arterial
- Addition (or removal) of an interchange access to a Principal Arterial

Types of interchanges projects not needing approval through this process:

- Preservation, safety, or mobility investments not described above (e.g., new turn lanes)
- Modifications to the existing ramp(s), interchange design, or configuration not described above
- New local roadway connections to an interchange ramp or ramp terminal

Evaluation Criteria

A proposer begins the review by submitting materials addressing each of the evaluation criteria described below to the Interchange Planning Review Committee. The Committee is comprised of staff from the Metropolitan Council and MnDOT. In cases of the Interstate System, Federal Highway Administration staff will also participate. The relevant boundary is federally recognized, designated planning boundary for the Metropolitan Planning Organization which includes the counties of Anoka, Hennepin, Ramsey, Carver, Scott, Dakota and Washington, and the urbanized portion of Wright and Sherburne counties.

The Committee will review the proposal for consistency with these criteria. In many cases a conversation between the proposer and the committee will be needed to reach a common understanding of how the proposal is or is not consistent with the region's long term plans. The review process is completed when the committee provides a letter of findings to the proposer. The approval process is intended to be a planning-level assessment and detailed traffic modeling is not required.

1. Consistency with Local and Regional Planning – Interchange access should be considered only when it supports local comprehensive plans approved by the Metropolitan Council, as well as [Minnesota GO](#), [Thrive MSP 2040](#) and the [2040 Transportation Policy Plan](#).

Thrive MSP 2040 is the long-term development guide for the Twin Cities region. Its desired outcomes include:

- **Stewardship** advances the Council's longstanding mission of orderly and economical development by responsibly managing the region's natural and financial resources, and making strategic investments in our region's future.
- **Prosperity** is fostered by investments in infrastructure and amenities that create regional economic competitiveness, thereby attracting and retaining successful businesses, a talented workforce, and, consequently, wealth.
- **Equity** connects all residents to opportunity and creates viable housing, transportation, and recreation options for people of all races, ethnicities, incomes and abilities so that all communities share the opportunities and challenges of growth and change.
- **Livability** focuses on the quality of our resident's lives and experiences in our region, and how places and infrastructure create and enhance the quality of life that makes our region a great place to live.
- **Sustainability** means protecting our regional vitality for generations to come by preserving our capacity to maintain and support our region's well-being and productivity over the long term.

The region's 2040 Transportation Policy Plan guides the development of the region's transportation system. Its goals are:

- **Transportation Stewardship** – Sustainable investments in the transportation system are protected by strategically preserving, maintaining, and operating system assets.
- **Safety and Security** – The regional transportation system is safe and secure for all users.

- **Access to Destinations** – People and businesses prosper by using a reliable, affordable, and efficient multimodal transportation system that connects them to destinations throughout the region and beyond.
- **Competitive Economy** – The regional transportation system supports the economic competitiveness, vitality, and prosperity of the region and state.
- **Healthy Environment** – The regional transportation system advances equity and contributes to communities’ livability and sustainability while protecting the natural, cultural, and developed environments.
- **Leveraging Transportation Investments to Guide Land Use** – The region leverages transportation investments to guide land use and development patterns that advance the regional vision of stewardship, prosperity, equity, livability, and sustainability.

Questions:

- a. How does this proposal optimize the pursuit of the Thrive MSP 2040 outcomes and 2040 Transportation Policy Plan goals?
- b. How are negative impacts to any of these outcomes or goals balanced against the others?
- c. What opportunities for public input on the project have occurred at this early stage?
- d. Is this proposal identified in any local plans or studies?
- e. Is the land use in local comprehensive plans consistent with this proposal (comprehensive plans are required to coordinate local land uses and regional systems such as transportation) or are any amendments to local comprehensive plans anticipated?

2. Project Need – The need for an additional interchange or access at an existing location must be demonstrated and documented before consistency with the long-range plans can be found. The [Principal Arterial Intersection Conversion Study](#) was completed in 2017 and prioritized future grade-separation projects into three tiers (High Priority, Medium Priority, and Low Priority) by the magnitude of the problem at each at-grade intersection. The results of this regional study can help build a case for the project. Projects classified as High Priority have larger documented problems and a larger investment such as an interchange may be needed.

In most cases, new interchanges should be built in a logical sequence when they are a part of a conversion of an arterial to a freeway. If the long-term goal is not a freeway, then non-traditional designs should be considered to match the scale of the solution to the scale of the problem and to be consistent with plans for the corridor. With few exceptions, a new interchange should be within the Metropolitan Urban Service Area.

Questions:

- a. Is the need for this project documented in any past plans or studies?
- b. If the location was studied as part of the [Principal Arterial Intersection Conversion Study](#), how is this proposal consistent with the general level of priority and investment need described in the study?

- c. Please attach a figure showing the existing and future (2040) traffic volumes for the interchange area, along with any congestion, safety, or other data that demonstrates the basic need for the project.
- d. Is the project a logical extension of an existing freeway (for arterial projects only)? If not, please explain how the proposal fits in the context of the corridor.
- e. Is the project located within the Metropolitan Urban Service Area? If not, please explain any anticipated timeline for this or extenuating circumstances that support this level of interchange access.

3. Functional Classification – Interchanges should only connect principal arterials or a principal arterial to an A-minor arterial. The purpose of the principal arterial system is to serve regional trips, not to substitute for inadequate local access and circulation capacity. Principal arterials emphasize mobility. A-minor arterials provide a high level of mobility but can also provide a land access function. Collectors and local roads provide more of the land access function.

Questions:

- a. Is the cross-street of the proposed project a principal arterial or A-minor arterial? If not, are there plans to change the cross streets functional class to a principal arterial or an A-minor arterial?

4. Local Roadway Network and Access Management – Interchange access is not to be provided if the need is justified only as a convenience for short trips; to compensate for lack of a planned adequate complementary minor arterial or collector system; to compensate for deficient minor arterial or frontage road capacity; or to correct collector or minor arterial capacity deficiencies caused by poor design or excessive access to adjacent parcels. Regional travel demand for the principal arterial system will take precedence over local or land parcel development and related access needs.

When an interchange is proposed on an arterial, the project should at a minimum include the removal of all access within one-half a mile of the center of the proposed interchange and any at-grade full-access intersections within one mile. It is recommended that access needs should be evaluated as part of an overall corridor plan or sub area plan

Questions:

- a. Please describe the existing and planned local road network?
- b. Could improvements be made to this local system to better serve local trips instead of the constructing the proposed project?
- c. Will the project remove all access within one-half mile of the center of the proposed interchange and any median openings within one mile of the center of the proposed interchange?
- d. Describe any frontage road or other access changes that will be needed along with the project?

5. Interchange Spacing – Interchanges should be spaced at a minimum of one mile apart (center to center). Interchanges spaced less than one mile apart will require justification and may require special design features such as auxiliary lanes to maintain safety and efficiency. If it is determined that it is appropriate to locate an interchange at less than one mile spacing or to modify an existing interchange, the safe operation of the main roadway must be maintained. Outside of the Metropolitan Urban Service Area, interchanges are typically not needed within two miles of each other due to the lack of intense development.

Questions:

- a. Is the project at least one mile from an existing interchange within the Metropolitan Urban Service Area or two miles from an existing interchange in rural areas?
- b. How is the proposed project consistent with the future vision for the corridor?
- c. From a planning-level perspective, what are the upstream and downstream impacts of the project?

Programmed and Planned Projects that have successfully completed this process:

Location	County	Proposed Changes	Status
US169 at TH 41/Scott CSAH 78	Scott	New grade separated interchange and corresponding access closures and local road network	Programmed in FY 2018
I-394 at Plymouth Rd	Hennepin	Local connection at ramp terminal intersection	Programmed in FY 2018
US 169 at Scott CSAH 14	Scott	Replace intersection with interchange	Programmed in FY 2018
TH 36 at Hadley Ave	Washington	Replace intersections with interchange	Programmed in FY 2019
I-94 at Brockton Ln	Hennepin	Provide full access to I-94 where existing overpass exists	Programmed in FY 2020
US 169 at 101 st Ave	Hennepin	Replace intersection with interchange	Programmed in FY 2021
TH 252 at 66th St	Hennepin	Replace intersection with interchange	Programmed in FY 2021
TH 36 at Manning Ave	Washington	Replace intersection with interchange	Programmed in FY 2021
TH 212 at Carver CR 140	Carver	Access to and from the north at existing overpass	Planned
I-694 at White Bear Ave	Ramsey	Expand capacity on cross street	Planned
I-494 at Argenta Trail	Dakota	Provide full access to I-494 in proximity to existing overpass	Planned
TH 36 at TH 120	Ramsey/Washington	Replace intersections with interchange	Planned
I-35W at Ramsey County Road J	Anoka/Ramsey	Add access to and from the north where to and from the south exists	Planned
TH 610 and W Broadway Ave	Hennepin	Local connection at ramp terminal intersection	Planned
US 169 at Scott CR15	Scott	Local connection at ramp terminal intersection	Planned



TPP Update: Appendix F

TAC Funding and Programming Committee

May 18, 2017

What is Appendix F?

- Highway Interchange Request Criteria and Review Procedure
 - First Developed in 1979
- Early Review of Interchange Proposals by Council, MnDOT, FHWA (in cases of Interstate Highways) to ensure:
 - Consistency with regional plans
 - Location is suitable for type of improvement
- Anticipated to be Qualifying Criteria for Competitive Funding
 - Freight Solicitation 2017
 - Transportation Economic Development (TED) 2017
 - Regional Solicitation in 2018

Clarify When Appendix F Applies

- Define Boundary as MPO (7 Counties + Urbanized Wright & Sherburne)
- Define “Interchange”
 - Grade separated highways with adjacent access connection(s)
- Applies to:
 - Addition or removal of an interchange on a PA
 - Addition or removal of interchange access to a PA
- Does not apply to:
 - Preservation, safety, or mobility investments not described above (e.g., new turn lanes or thru lanes)
 - Modifications to the existing ramp(s) or interchange design
 - New local roadway connections to an interchange ramp or ramp terminal

Other Proposed Changes

- Incorporate Thrive MSP 2040 and 2040 TPP Language
- Incorporate Results of Principal Arterial Intersection Conversion Study
- Remove Engineering/Operations Language to Focus on Planning Questions
- Clarify & Consolidate Text
- Move List of Successfully Completed Proposals from Increased Revenue Scenario to Appendix F

Increased Revenue, Current TPP

- U.S. 169 at 101st
- ~~U.S. 52 at Dakota CR 42~~
- ~~I-494 at E Bush Lake Rd~~
- I-94/MN 610 at Hennepin CR 610
- I-494 at Argenta Trail
- I-94 at Brockton Avenue
- U.S. 212 at Carver CR 140

Increase Revenue...Appendix F

- “Some of these efforts are high priorities and are not included in the Current Revenue Scenario due to anticipated funding limits. Other proposals have been brought forward by local partners to support the economic development they hope to achieve in their communities.” – Current TPP
- “consistent with the qualifying criteria found in Appendix F of the Transportation Policy Plan, although funding has not yet been identified. This list is not intended to be exhaustive nor does it indicate the region’s priorities for investment.” – Current TPP
- No “b” or “c” Evaluated, often Just a Dot on a Map

Draft Evaluation Criteria

1. Consistency with Local and Regional Planning
2. Need for Interchange
3. Functional Classification of Cross Street
4. Supporting Local Roadway Network and Access Management
5. Interchange Spacing

New Website

- Contact Information
- Table of Past Proposals
- THRIVE Examples
- Point Proposers Toward Next Steps

Schedule for Soliciting Feedback

- 5/1 Council TPP Work Group
- 5/11 TAC Planning
- 5/12 Capital Improvements Committee
- *5/18 TAC Funding & Programming*
- 6/7 TAC
- 6/21 TAB

Questions

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