City of Eagan

June 15, 2009

Mr. Kevin Roggenbuck
Transportation Coordinator
Transportation Advisory Board
390 Robert St. N.
St. Paul, MN 55101

RE: TH 149 Reconstruction Project
Surface Transportation Program Funding Submittal

Dear Mr. Roggenbuck:

The City of Eagan is submitting this application for Federal Surface Transportation Program (STP) funding for the proposed TH 149 project in the City of Eagan. The proposed project is being put forward to accommodate substantial future development in the northeast part of the city. The proposed project includes an increase in capacity with the widening of the of the existing four-lane divided roadway to a six-lane divided roadway. In addition, the city will also rebuild traffic signals and construct a multiuse trail between TH 55 and I-494.

We believe this is an excellent candidate for STP funding and look forward to its inclusion in the program.

Sincerely,

Russ Matthys

Russ Matthys, PE
City Engineer

Municipal Center
3830 Pilot Knob Road
Eagan, MN 55122-1810
651.675.5000 phone
651.675.5012 fax
651.454.8535 TDD

Maintenance Facility
3501 Coachman Point
Eagan, MN 55122
651.675.5300 phone
651.675.5360 fax
651.454.8535 TDD

www.cityofeagan.com

Federal STP Funding Application (Form 1)

INSTRUCTIONS: Complete and return completed application to Kevin Roggenbuck, Transportation Coordinator, Transportation Advisory Board, 390 North Robert St., St. Paul, Minnesota 55101. (651) 602-1728. Form 1 needs to be filled out electronically. Please go to Metropolitan Council's website for instructions. **Applications must be received by 5:00 PM or postmarked on June 15, 2009. *Be sure to complete and attach the Project Information form.** (Form 2)	Office Use Only

I. GENERAL INFORMATION

1. APPLICANT: City of Eagan			
2. JURISDICTIONAL AGENCY (IF DIFFERENT): Minnesota Department of Transportation			
3. MAILING ADDRESS: 3830 Pilot Knob Road			
CITY: Eagan	STATE: MN	ZIP CODE:55122	4. COUNTY: Dakota
5. CONTACT PERSON: Russ Matthys, P.E.	TITLE: City Engineer		PHONE NO. (651)675-5637
CONTACT E-MAIL ADDRESS: rmatthys@cityofeagan.com			

II. PROJECT INFORMATION

6. PROJECT NAME: TH 149 Reconstruction Project

7. BRIEF PROJECT DESCRIPTION (Include location, road name, type of improvement, etc... A more complete description must be submitted separately as described in Specific Requirement #3 on p. 5):

The proposed project includes expanding TH 149 from a four-lane divided roadway to a six-lane facility. Improvements extend from TH 55 to the I-494 north ramp intersection. The proposed project also constructs a multi-use trail on the west side of the corridor between TH 55 and the north I-494 ramp intersection.

8. STP PROJECT CATEGORY - Check only one project grouping in which you wish your project to be scored.

"A" Minor Arterials:

☒ Reliever	☐ Expander	☐ Non-Fwy. Principal Arterial
☐ Connector	☐ Augmenter	☐ Bikeway/Walkway

III. PROJECT FUNDING

9. Are you applying or have you applied for funds from another source(s) to implement this project? Yes ☐ No ☒

If yes, please identify the source(s):

10. FEDERAL AMOUNT: $2,480,000	13. MATCH % OF PROJECT TOTAL: 20%
11. MATCH AMOUNT: $620,000	14. SOURCE OF MATCH FUNDS: Local
12. PROJECT TOTAL: $3,100,000	15. REQUESTED PROGRAM YEAR (CIRCLE): ☒2013 ☐2014
16. SIGNATURE	17. TITLE: City Engineer

PROJECT INFORMATION (Form 2)

(To be used to assign State Aid Project Number after project is selected)

Please fill in the following information as it pertains to your proposed project. Items that do not apply to your project, please label N/A. **Do not send this form to the State Aid Office. For project solicitation package only.**

COUNTY, CITY, OR LEAD AGENCY: City of Eagan COUNTY OR CITY NO.: 195

FUNCTIONAL CLASS OF ROAD: "A" Minor Arterial Reliever

ROAD SYSTEM: TH (TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET)

ROAD NO.: 149

NAME OF ROAD: Dodd Road (Example; 1st ST., MAIN AVE)

LOCATION: From: TH 55

To: 400 feet north of the northern interchange ramp of I-494 (DO NOT INCLUDE LEGAL DESCRIPTION)

SECTION-TOWNSHIP-RANGE OF ONE END OF PROJECT: Section 2 – Township 27N – Range 23W

TYPE OF WORK: Grade, Agg Base, Bit Base, Bit Surf, Curb and Gutter, Multiuse Trail, Storm Sewer, Signals, Ped Ramps

(Examples: GRADE, AGG BASE, BIT BASE, BIT SURF, SIDEWALK, CURB AND GUTTER, STORM SEWER, SIGNALS, LIGHTING, GUARDRAIL, BIKE PATH, PED RAMPS, ETC.)

BRIDGE/CULVERT PROJECTS

OLD BRIDGE /CULVERT NO._____ NEW BRIDGE/CULVERT NO._____

STRUCTURE IS OVER _____

NAME OF TWP.: _____

"A" MINOR ARTERIAL - RELIEVER - QUALIFYING CRITERIA

The applicant must show that the project meets all the following criteria to qualify for priority evaluation. Answer each criterion in a numbered sequence. **Failure to respond to any of the qualifying criteria will result in a recommendation to disqualify your project.**

1. The project must be consistent with the policies in the Metropolitan Council's officially adopted Metropolitan Development Guide, which includes the Transportation Policy Plan (TPP) (2009) and the Regional Development Framework (2004). Consistency with the TPP includes its appendix, which contains the regional functional classification criteria. The applicant must list the documents and corresponding policy numbers or portions of text that help illustrate the project's consistency.

RESPONSE:

- The proposed project is located in a "Developing Community" **(Regional Development Framework, page 22)** and is consistent with **Policy 1, "Work Work with communities to accommodate growth in a flexible, connected and efficient manner."** There are many areas that are continuing to develop within Eagan, particularly in the northeast portion of the city. The proposed project will support substantial future development in the northeast part of the city, located east and west of the TH 149 corridor. The proposed roadway improvements will also connect to other developing communities south and east of Eagan to major transportation facilities such as I-494, TH 55, and I-35E.

- The proposed project is located in a "Developing Community" **(Regional Development Framework, page 22)** and is consistent with **Policy 2, "Plan and invest in multi-modal transportation choices…."** The reliever route is a multiuse corridor accommodating vehicular, bike and transit modes. A multiuse trail is proposed along the west side of the project to provide improved pedestrian and bicycle facilities. Additionally, the improvements to the TH 149 corridor provide improved access to transit services in the area.

- The proposed project is located in a "Developing Community" **(Regional Development Framework, page 22)** and is consistent with **Policy 3, "Encourage expanded choices in housing location and types, and improved access to jobs and opportunities."** The Cities of Eagan and Inver Grove Heights are working toward providing additional residential and commercial nodes within the TH 149 project area. Directly adjacent to the corridor, the City of Eagan has proposed developments including commercial and office uses. The City of Inver Grove Heights is proposing development in the northwestern portion of their city with various land uses, including low-, medium-, and high-density residential housing, commercial, office, and industrial uses. Improving mobility and safety along the TH 149 corridor will facilitate the connections between these employment centers within the Twin Cities (connections to I-494, TH 55 and I-35E are enhanced through this project).

- The proposed project is located in a "Developing Community" **(Regional Development Framework, page 22)** and is consistent with **Policy 4, "Work with local and regional partners to conserve, protect and enhance the region's vital natural resources."** No impacts to inventoried local or regional natural resources are anticipated with this project.

- The proposed project is consistent with **Policy 4** of the **Transportation Policy Plan Strategy 4a (page 40), "The Council will promote land use planning and development practices that maximize accessibility to jobs, housing and services."** The TH 149 corridor is surrounded by land uses that provide jobs. The proposed improvements will provide enhanced access to these employment centers.

- The proposed project is consistent with **Policy 4** of the **Transportation Policy Plan Strategy 4b (page 40), "Transportation investments and land development will be coordinated to create an environment supportive of travel by modes other than the automobile including travel by transit, walking and bicycling."** The proposed improvements to TH 149 include alternative travel modes. The proposed project will continue to support transit services along the corridor. Also, the proposed project includes the construction of a multiuse trail on the west side of the corridor.

- The proposed project is consistent with **Policy 4** of the **Transportation Policy Plan Strategy 4c (page 40), "Transportation investments and land development along major transportation corridors will be coordinated to intensify job centers, increase transportation links between job centers and medium-to-high density residential developments and improve the jobs/housing connections."** TH 149 is an arterial which connects a large number of commercial and job nodes and residential developments within the Cities of Eagan and Inver Grove Heights. Additional capacity improvements to TH 149 will allow for additional job concentrations to be developed in the northeast portion of Eagan and the northwest portion of Inver Grove Heights. The TH 149 corridor also connects to I-494 and TH 55, which connect to other surrounding developing communities and the Twin Cities. Improvements to TH 149 will strengthen the connections between these employment and residential developments.

- The proposed project is consistent with **Policy 4** of the **Transportation Policy Plan Strategy 4f (Page 41), "Local governments should plan for and implement a system of interconnected arterial and local streets, pathways and bikeways to meet local travel needs without using the regional highway system. These interconnections will reduce congestion, provide access to jobs, services and retail, and support transit."** The City of Eagan is developing areas in the northeast part of the city, which includes land adjacent to the TH 149 corridor. Eagan is working with the City of Inver Grove Heights to create roadways that have sufficient capacity and connectivity to accommodate proposed development in both cities. The proposed local and collector roadway systems in the northeast part of Eagan and northwest part of Inver Grove Heights is being planned in a manner that provides appropriate transportation options on the appropriate local and regional systems.

- The proposed project is consistent with **Policy 9** of the **Transportation Policy Plan Strategy 9b (Page 60), "The Council, Mn/DOT, local governments and transit providers will plan for and implement a multimodal roadway system…."** The proposed project continues to service existing transit that is currently on the TH 149 corridor. Additionally, the proposed project also includes a multiuse trail on the west side of the corridor.

- The proposed project is consistent with **Policy 9** of the **Transportation Policy Plan Strategy 9h (Page 62), "Corridor Studies."** The City of Eagan has completed the *Grand Oak Business Park AUAR Update,* the *Northeast Eagan Areawide Traffic Study,* and the *Lone Oak Business Campus Traffic Study* which examined proposed land use impacts to the existing roadway system. Impacts included access, capacity, level of service operations, and geometrics. The AUAR Update recommended improvements on TH 149 near the I-494/TH 149 interchange and the traffic studies recommended that this section of TH 149 be upgraded from a four to a six-lane roadway. The City of Eagan also has completed a *Transportation Infrastructure Needs Analysis* (TINA) that evaluates short- and long-term transportation needs within the city. The TINA lists this project (labeled M109 in the study) as a project that should be completed in the short-term. More recently, the Cities of Eagan and Inver Grove Heights as well as Dakota County completed the *North-South Corridor Travel Demand Study* to develop 2030 traffic forecasts and to consider a consolidated regional and county perspective broader than the local roadway system needs in the north-central portion

of Dakota County. The results of the travel demand study indicated significant needs on the regional roadway network. Most recently, the Minnesota Department of Transportation, Dakota County and the Cities of Eagan and Inver Grove Heights have partnered to complete a *Regional Roadway System Visioning Study* which will develop a vision for the area roadway system that addresses transportation issues in this area of Dakota County in a coordinated and balanced manner with area land use development plans. The visioning study is approximately 30% complete as of June 15, 2009.

- The proposed project is consistent with **Policy 11** of the **Transportation Policy Plan Strategy 11e (Page 64), "State, county and local governments will manage access to the Metropolitan Highway System to optimize the performance of existing facilities."** The proposed project maintains the existing access on an "A" minor arterial roadway, as implemented by Mn/DOT's access management guidelines. The proposed project does not add any new access points rather manages/maintains the current access on TH 149.

- The proposed project is consistent with **Policy 18** of the **Transportation Policy Plan Strategy 18d (Page 153), "The Metropolitan Council, along with local and state agencies, will coordinate planning efforts to develop efficient and continuous bikeway systems and pedestrian paths, eliminate barriers and critical gaps and ensure adequate interjurisdictional connections and signage."** The proposed project includes construction of a multiuse trail along the west side of the project. The trail will provide an interjurisdictional trail connection between the Cities of Eagan and Mendota Heights. This trail enhances the bicycle connection between the east side of Eagan and downtown St. Paul.

- The proposed project is consistent with **Policy 18** of the **Transportation Policy Plan Strategy 18e (Page 153), "Local and state agencies will implement a multimodal roadway system and design and planning for principal or minor arterial road construction and reconstruction projects will explicitly consider off-road walkway and both on- and off-road bicycle accommodation with special emphasis placed on travel barrier removal and safety for bicyclists and pedestrians."** The proposed project includes construction of a multiuse trail along the west side of the project. The trail can be used by both recreational and commuter traffic. As development occurs along the TH 149 corridor and south of TH 55, bicyclists and pedestrians can use the sidewalk to travel to these areas. The location of the trail on the west side of the corridor provides the least number of roadway crossings for users and completely avoids roadway crossings at the I-494 freeway ramp intersections.

2 The project must be included in, be part of, or relate to a problem, need or direction discussed in one of the following: 1) a local or county comprehensive plan found to be consistent with Metropolitan Council plans; 2) a locally approved capital improvement program; 3) an officially adopted corridor study reflected in the local plan; or 4) the official plan or program of the applicant agency. Because all communities in the seven-county Twin Cities region have recently completed or are currently in the process of updating their local comprehensive plans, applications in the 2009 solicitation may be for projects included in the most recent local comprehensive plan or the previous plan that was found to be consistent with Metropolitan Council plans. It also must not conflict with the goals and policies in these adopted regional plans; the 2030 Transportation Policy Plan (2009), the 2030 Regional Framework (2004), and the 2030 Regional Parks Policy Plan (2005/06). The applicant must reference the appropriate comprehensive plan, CIP, corridor study document, or other plan or program and provide copies of the applicable pages.

RESPONSE: The proposed project implements a solution to a transportation problem identified in the following documents: the City of Eagan's *Comprehensive Plan* (Updated May 2009- draft), *2010-2014 Capital Improvement Plan* (CIP), *Grand Oak Business Park AUAR* (September 1998), *Grand*

Oak Business Park AUAR Update (June 2004), *Northeast Eagan Areawide Traffic Study* (May 2005), *Transportation Infrastructure Needs Analysis* (May 2005), *Lone Oak Business Campus Traffic Study* (August 2006), and *North-South Corridor Travel Demand Study* (July 2007) (see Attachment B for all documentation).

3. The proposed project must be identified as on an "A" Minor Arterial Reliever shown on the TAB approved roadway functional classification map adopted by the TAB on or before April 15, 2009 and recorded in the Council's electronic file. The vast majority of the project must be physically located on the "A" Minor Arterial Expander roadway between logical termini. The project may include construction on small portions of non-eligible roads, as long as the construction is essential to the operation of the entire project. Examples include but are not limited to reconstruction of the approaches on intersecting collector roads and construction or reconstruction of on-ramps or off-ramps. The applicant must provide a map or sketch of the project relative to the "A" Minor Arterial Reliever system.

RESPONSE: The proposed project is identified as on an "A" Minor Arterial Reliever shown on the TAB approved roadway functional classification map adopted by the TAB in April 2009 and is recorded as such in the Council's electronic file. See Figure 3, Attachment A.

5. STP funds are available for roadway construction and reconstruction on new alignments or within existing right-of-way, including associated construction or installation of traffic signals, signs, utilities, bikeway or walkway components and public transit components. The cost of constructing a new bridge deck or reconstructing an existing bridge deck is eligible but the remainder of the superstructure and all elements of the substructure are not eligible. The applicant must describe the proposed project and state that the application includes only the eligible components.

RESPONSE: The TH 149 (Dodd Road) project area is 0.87 miles in length (4594 feet) with a southern terminus of TH 55 and a northern terminus of 400 feet north of the northern interchange ramp of I-494, City of Eagan, Dakota County. The proposed improvements are summarized as follows and in Figure 4, Attachment A:

- The road will be widened to accommodate an additional lane of motor vehicle travel in either direction. Each added lane will be 12 feet wide. Throughout the majority of the improvement, the widening can be accomplished within existing Mn/DOT Right of way. Two small areas will require acquisition of an additional amount of right of way; specifically, along the east side of TH 149 from the north side of Lone Oak Parkway to 400 feet north of the north side of Lone Oak Parkway and in the northeast quadrant of the intersection of TH 149 and O'Neill Road.
- A multi-use trail will be constructed along the entire west side of the project area. This trail will be 10 feet wide with 2 feet of clear zone on either side. The trail will have a bituminous surface. A bituminous trail surface was selected because it is more cost effective than other treatments, offers a wide variety of trail uses attracting more users, and is consistent with the proposed adjoining trail segment currently under consideration along the south side of TH 55. The proposed multi-use trail will include crossings of West Blue Gentian Road and Grand Oak Circle North.
- Medians, separating turning traffic from through traffic, will be constructed at each intersection on the east side of TH 149. These medians will not be constructed at intersections on the west side of TH 149. In addition, medians separating north from southbound traffic, in the vicinity of the I-494 interchange, will be narrowed to accommodate the additional travel lanes and the multi-use trail.
- Signals will be improved at the intersection of TH 149 (Dodd Road) with (south to north) TH 55, Lone Oak Parkway, Northwest Parkway, the south interchange ramp of I-494, and the north interchange ramp of I-494.

- Shoulders will be widened to 12 feet along most of the east and west sides of TH 149 within the project area.

This application includes only the eligible components.

6. Studies, preliminary engineering, design, construction engineering, etc. are not eligible for STP funding and should not be included in the required local match or the total project cost. Right-of-way costs are not eligible for STP funding and should not be included in the required non-federal match or the total project cost. Noise barriers, drainage projects, fences, landscaping, etc., are not eligible for STP funding as stand-alone projects, but are eligible if included as part of a larger, eligible project. The applicant must state that pre-construction work and ROW costs are not part of the total project cost in this application.

RESPONSE: Preconstruction work and right-of-way costs are not part of the total project cost stated in this application.

7. An STP construction or reconstruction project must be a permanent improvement. Traffic management projects as part of a construction project are exempt from this policy. Temporary construction is defined as work that must be essentially replaced in the immediate future (within 5 years). Staged construction is considered permanent rather than temporary so long as future stages add to, rather than replace, previous work. The applicant must state that the proposed project is a permanent improvement and does not replace any regionally funded project that was opened to traffic within five years.

RESPONSE: The proposed project is a permanent improvement and does not replace any regionally funded project that was opened to traffic within five years.

8. Applicants can request up to a cap of $7,000,000 in STP funds for a specific "A" Minor Arterial Reliever project. Other federal funds may be combined with the requested STP funds, but the source(s) must be identified in the application. The cost of preparing a project for funding authorization can be substantial. For that reason, the project's federal cost must exceed $1,000,000. The applicant must show the requested federal amount and total project cost on the cover page.

RESPONSE: The total project cost is $3,100,000. The City of Eagan is requesting $2,480,000 in Surface Transportation Program funds (80 percent of the total project cost). This amount exceeds the $1,000,000 federal cost minimum.

9. STP funds awarded in the regional solicitation must be matched with non-federal funds. The non-federal match for any STP project must be at least 20% of the total cost. The applicant must state that it is responsible for the local (nonfederal) share. If the applicant expects any other agency to provide all or part of the local match, the applicant must include a letter or resolution from the other agency agreeing to participate financially in the project's construction.

RESPONSE: The City of Eagan will provide the remaining 20 percent local match. Mn/DOT supports the project but cannot make a financial commitment at this time (see Attachment D for letters of support). In addition, Eagan's City Council has officially passed a resolution supporting the TH 149 Reconstruction project (see Attachment B). Although not providing financial support for the project, Dakota County strongly supports the proposed project (see Attachment D).

10. The applicant must include a letter from the agency with jurisdiction over the road indicating that it is aware of and understands the project being submitted, and that it commits to operate and maintain the

facility for its design life and not change the use of any right-of-way acquired without prior approval from MN/DOT and the Federal Highway Administration.

RESPONSE: The agency with jurisdiction over TH 149 is the Minnesota Department of Transportation (Mn/DOT). As part of said jurisdiction, Mn/DOT will operate and maintain the facility throughout its design life.

"A" MINOR ARTERIAL - RELIEVER - PRIORITIZING CRITERIA

Applicants must respond to each of the following prioritizing criteria. Label your responses clearly. If a criterion is not applicable to your project, explain why.

A. Relative importance of the route as an "A" Minor Arterial Reliever. 100 points

Although all Reliever routes parallel an urban principal arterial, the relative importance of each Reliever is not the same. Some Relievers play a more significant role than others do in providing an alternative route for medium distance trips and reducing demand on congested metro area principal arterials. The following criteria are intended to measure the relative importance of each Reliever route submitted for funding in this solicitation.

Definition and characteristics of the Reliever route.

0-100 points The applicant must respond to all three items below and provide a map to help answer items a) and b). The Reliever 'route' is defined as the uninterrupted length of the arterial that parallels a principal arterial. The route may be an existing or planned road on the TAB adopted system. The route may be longer than the proposed project and include more than one street name, but it must be continuous. The endpoints of the route must be a principal or other "A" minor arterial, and the route cannot be more than eight miles in length. Two projects on the same route will not be selected unless they are at least 3.5 miles apart. Points under this criterion are assigned based on the length of the Reliever route, the current and forecasted traffic volume on the Reliever route and the current transit ridership on the Reliever route.

For Items a, b and c, please reference Attachment A, Figure 4.

a) Provide the length of the Reliever route in miles.

RESPONSE: The length of the reliever route (TH 149) in approximately 3.5 miles from TH 55 (in the City of Eagan) to TH 110 (in the City of Mendota Heights).

b) Provide the current (2007) and forecasted (2030) average daily traffic volume at two or more locations on the Reliever route. MN/DOT 50-series maps should be used for current counts. Use approved city or county comprehensive plans, Met Council, accepted State Aid traffic factors by county, or a transportation study with documented acceptable forecasting methodology for forecasted volume.

RESPONSE: According to Mn/DOT's MSAS Traffic Volume maps, the current (2006) Average Annual Daily Traffic (AADT) on TH 149 between TH 55 and I-494 is 23,500 vehicles per day. North of I-494, traffic volumes are 8,100 vehicles per day.

As part of the City's draft 2009 update to the *Comprehensive Plan*, traffic forecasts were developed for 2030 (see Attachment B). The 2030 forecast volume for TH 149 from TH 55 to Northwest Parkway is 32,000 vehicles per day. The 2030 forecast volume for TH 149 from Northwest Parkway to I-494 is 42,000 vehicles per day.

c) Is public transit currently provided on this Reliever route and its corresponding section of Principal Arterial? If yes, the Metropolitan Council will provide the project scorers with current average annual ridership based on the project location map and description.

RESPONSE: Transit service utilizes TH 149 for access to service points within the Grand Oak Business Park and the Water's Corporate Complex on both sides of TH 149, but does not offer stops along the project corridor. Similarly, transit providers utilize the corresponding sections of Principal Arterial (TH 55 from TH 149 to I-494 and I-35E from TH 55 to I-494) for access to service point while not offering stops along the Principal Arterial corridor in these segments.

B. Deficiencies and Solutions on Reliever and on Principal Arterial Being Relieved 350 points

The regional solicitation process is one means of implementing regional plans. The region's Transportation Policy Plan state that the regional highway and street system will be preserved, managed, improved and expanded to support existing and planned land uses and safety and mobility needs consistent with the Regional Development Framework, the Transportation Policy Plan and approved local and county comprehensive plans. The following criteria reflect these objectives.

1. **Crash Reduction.**

0-50 points On the Principal Arterial being relieved: Provide data showing the frequency of traffic crashes expressed as crashes per million vehicle miles on the corresponding section of principal arterial. The principal arterial being relieved should be approximately the same length as the project limits on the reliever. Only one principal arterial may be relieved. The applicant must request from Mn/DOT Metro Traffic Engineering∗, the crash rate for the principal arterial being relieved. The rate received from Mn/DOT will include mainline crashes only. Crash rates will be based on TIS data for 2005-2007.

RESPONSE: Using Mn/DOT's TIS system data, the corresponding section of TH-55 between TH 149 and I-494 had a total of **38** crashes from January 1, 2005 through December 31, 2007. The crash rate for the principal arterial was **1.57** crashes per million vehicle miles per year (see Attachment E, Principal Arterial Crash Analysis).

0-50 points On the Reliever: Calculate the total number of crashes reduced due to improvements on the 'A' Minor Arterial Reliever made by the proposed project. Points will be awarded based on the total three-year number of crashes projected to be reduced by the proposed project. The applicant must base the estimate of crash reduction on the methodology found in Appendix E. The applicant must obtain data on crashes for the existing section scheduled for improvement from Mn/DOT's TIS system, and must use data from 2005 through 2007.

RESPONSE: As previously indicated, the proposed improvements to TH 149 are intended to increase safety on the corridor. According to Mn/DOT's TIS system data from January 1, 2005 to December 31, 2007, there are a total of 57 crashes

∗ Applicants should request crash data from Mn/DOT as early as possible. An agency that wishes to dispute the results of their crash data requests can contact Jolene Servatius at 651-234-7841 (or jolene.servatius@dot.state.mn.us) to reconcile those differences.

on TH 149 within the project area (see Attachment E, crash diagrams and TIS data listing). This includes 14 personal injury crashes and 43 property damage only crashes. According to the Mn/DOT factors shown in the calculations below, the proposed project would eliminate **33.3** crashes. This is a 58 percent reduction in the number of crashes on the corridor. Crash calculations are shown below.

Improvements from Mn/DOT's "% Change in Crashes" table:

Add Lanes
-0.50 reduction in fatal and injury crashes
-0.50 reduction in property damage crashes

T-Intersection Turn Lane
-0.20 reduction in fatal and injury crashes
-0.15 reduction in property damage crashes

Fatal and Personal Injury Calculations
CR = 1- (1-0.5) x (1-0.20)
CR = 1 – (0.5 x 0.80)
CR = 0.60

0.60 x 14 (Number of fatal and injury crashes) = 8.4 reduction

Property Damage Calculations
CR = 1-(1-0.5) x (1-0.15)
CR = 1-(0.5 x 0.85)
CR = 0.58

0.58 x 43 (Number of fatal and injury crashes) = 24.9 reduction

Total Crash Reduction
8.4 + 24.9 = 33.3 crashes reduced

2. **Air Quality.** The Transportation Policy Plan strongly supports environmental considerations when making transportation funding decisions. The Council supports funding priorities for transportation projects that ensure prevention of air quality violations through the reduction of mobile source emissions.

The applicant must show that the project will reduce emissions and help the region to maintain its attainment of federal carbon monoxide standards. All assumptions and calculations must be clearly documented and explained in order to receive points. The applicant must include documentation of how the VMT reduction was determined and specify the speed used for the assumptions. Speed assumptions shall be based on the methodology found in Appendix F. Points under this criterion will be awarded based on the reduction of carbon monoxide (CO), nitrogen oxide (NOx), and/or volatile organic compounds (VOC) emissions the proposed project is expected to provide.

0-100 points The applicant must demonstrate through a quantitative analysis that CO, NOx, and/or VOC emissions (in KILOGRAMS/DAY) will be reduced compared to the no-build alternative. The applicant must estimate CO, NOx, and/or VOC emissions reductions using the MOBILE6 emissions factors and vehicle emissions reduction worksheet in Appendix G.

RESPONSE: In order to determine the reduction of emissions, an analysis to determine the increase in peak hour speed on TH 149 (Northbound direction during the p.m. peak hour) due to the proposed project was conducted.

Details of the analysis are shown below:

Estimated Segment Length = 0.90 mile
Posted speed limit = 45 mph

Existing Conditions
4 signalized intersections (2 v/c <0.8 and 2 v/c >0.90)
Free-flow travel time (minutes) = (0.9 mile/45 mph) x 60 = 1.2 minutes
Intersection delay = (2 x 75) + (2 x 30) = 210 seconds = 3.5 minutes
Mid-block delay for right turn movement to eastbound I-494 ramp= 10 seconds = 0.17 minutes

Arterial Speed = (0.9 mile/(3.5 + 1.2 + 0.17 minutes)) x 60 = **11 mph**

Proposed Conditions
4 signalized intersections (3 v/c <0.8 and 1 v/c 0.8 to 0.90)
Free-flow travel time (minutes) = (0.9 miles/45 mph) x 60 = 1.2 minutes
Intersection delay = 50 + (3 x 30) = 140 seconds = 2.33 minutes
Mid-block delay = 0

Arterial Speed = (0.9 mile/(2.33 + 1.2 minutes)) x 60 = **15 mph**

Using the MOBILE6 emissions factors and vehicle emissions reduction worksheet (see Attachment E, Vehicle Emissions Reduction Worksheet), a quantitative analysis was conducted for emissions for both baseline (without project) and build (with project) conditions. The average speed along TH 149 is expected to increase by 3 mph, due to the proposed improvements. The emissions reduction due to the proposed improvements is **135 kilograms/day**.

3. **Congestion Reduction.**

0-75 points On the Principal Arterial being relieved: The applicant needs to show the hours per day the current volume exceeds the design capacity in either direction. The applicant should obtain needed data directly from Mn/DOT or a local data source if available, and provide documentation to illustrate accuracy. To calculate existing conditions, the applicant must obtain or collect the average hourly, directional traffic volumes on a weekday, the current lane configurations, and the current signal timing schemes, if applicable. Design capacity calculations must be based on the definition found in Appendix A.

RESPONSE: As identified by reports from Mn/DOT, current traffic volumes are within the design capacity guidelines of I-35E (six-lane freeway) between TH 55 and I-494.

0-75 points On the Reliever: The applicant must show that the proposed project will reduce congestion at the most congested location on the Reliever. The applicant must include the current volume to capacity (v/c) ratios in the AM and PM peak hours and the improvement in the ratios resulting from the project. Projects that have low existing v/c ratios will receive less credit for the improvement resulting from the project than projects that address a problematic existing v/c ratio. The applicant must use the methodology, worksheet and look-up tables found in

Appendix H. The applicant must conduct a corridor analysis for new alignments, comparing parallel routes that will be affected by the project.

RESPONSE: The intersection of TH 149 and the I-494 South Ramps is currently the most congested location in both the a.m. and p.m. peak hours along the project segment. Details of the volume to capacity ratio (v/c) analysis are shown below:

Existing conditions
Southbound a.m. peak hour volume = 689
Vehicle capacity = 1500 vph (one left-turn lane, two through lanes)
A.M. volume/capacity ratio = 689/1500 = 0.46

Northbound p.m. peak hour volume = 1480
Vehicle capacity = 1400 vph (two through lanes, one right-turn lane)
P.M. volume/capacity ratio = 1480/1400 = 1.06

Proposed Conditions
Southbound a.m. peak hour volume = 689
Vehicle capacity = 2100 vph (one left-turn lane, three through lanes)
A.M. volume/capacity ratio = 689/2100 = 0.33

Northbound p.m. peak hour volume = 1480
Vehicle capacity = 2000 vph (three through lanes, one right-turn lane)
P.M. volume/capacity ratio = 1480/2000 = 0.74

A.M. Improvement in Volume/Capacity Ratio = 046 – 0.33 = 0.13
P.M. Improvement in Volume/Capacity Ratio = 1.06 – 74 = 0.32
Total Improvement in Volume/Capacity Ratio = 0.45

C. Cost Effectiveness. 275 points

The Regional Development Framework and Transportation Policy Plan document the need for adequate transportation funding to implement regional transportation plans. The region must allocate transportation funds in such a way that the selected projects provide the most benefit for the amount of funding requested. Cost effectiveness is an essential component of the regional solicitation process. Cost effectiveness calculations must be based on the total cost of the project, not just the portion of the project eligible for federal funding, in order to allow consistent comparisons of all qualifying projects.

1. Crash Reduction.

0-125 points The applicant must calculate the cost per crash reduced by the proposed project. The applicant must divide the total cost of the project by the answer from the second part of criterion B.1., crash reduction on the Reliever.

The applicant must obtain data on crashes for the existing section scheduled for improvement from MN/DOT's TIS system, and must only use data from 2005 through 2007. The applicant must base the estimate of crash reduction on the methodology found in Appendix E. Points will be awarded based on the relative cost per crash reduced.

RESPONSE: The proposed improvements will be expected to eliminate **33 crashes per year**. The total project cost is $3,100,000. The cost per crash reduced by the proposed project is **$93,939**.

2. Congestion reduction.

0-75 points The applicant must calculate the cost per increase in hourly person throughput provided by the proposed improvement. The applicant must use the worksheet in Appendix I. Points will be awarded based on the lowest cost per increase in person throughput, but if there is little congestion under existing conditions fewer points will be awarded for increasing person throughput.

RESPONSE: The hourly throughput in the p.m. peak hour, in the peak direction of travel (northbound), at the most congested location (TH 149/I-494 north ramps) was calculated for current and proposed conditions. Details of the analysis are shown below:

Existing Conditions
Vehicle capacity = 1400 vph (two through lanes, one right-turn lane)
A.M. peak hour vehicle occupancy = 1.09
A.M. peak hour bus ridership = 0, assume no increase in service
Hourly person throughput = 1400 x 1.09 = 1526 pph

Proposed Conditions
Vehicle capacity = 2000 vph (three through lanes, one right-turn lane)
A.M. peak hour vehicle occupancy = 1.09
A.M. peak hour bus ridership = 0, assume no increase in service
Hourly person throughput = 2000 x 1.09 = 2180 pph

Total Increase in Hourly Person Throughput = 2180 – 1526 = 654
Cost per Increase in Hourly Person Throughput = $3,100,000/654 = $4,740

3. Air Quality

0-75 points The applicant must calculate the cost per kilogram that will be reduced by the proposed project compared to the no-build alternative. The applicant must use the estimated CO, NOx, and/or VOC emissions reductions calculated in questions B.3. and divide it into the total project cost.

RESPONSE: The proposed improvements will be expected to reduce total emissions by **135 kilograms per day**. The total project cost is $3,100,000. The cost per kilogram reduced by the proposed project is **$22,937**.

D. Development Framework Implementation. 425 points

The ***2030 Development Framework*** is the initial "chapter" and unifying theme of the Council's metropolitan development guide. Together with the Council's regional policy plans, the ***Framework*** is intended to help ensure the orderly, economical development of the seven-county area and the efficient use of four regional systems: transportation, aviation, water resources (including wastewater collection and treatment) and regional parks and open space. The ***Framework*** was adopted in January 2004, and amended in December 2006.

The Council's strategies are organized around four policies:

- Accommodating growth in a flexible, connected and efficient manner.
- Slowing the growth in traffic congestion and improving mobility.
- Encouraging expanded choices in housing locations and types.
- Conserving, protecting and enhancing the region's vital natural resources.

Under the Metropolitan Land Planning Act, local communities must prepare and submit to the Council local comprehensive plans that are consistent with the Council's regional system plans. The new or updated local comp plans were due by the end 2008. Plans submitted for Council review after that date but not yet approved by the Council may be used for the purposes of answering these criteria.

1. Development Framework Planning Area Objectives

0-75 points Higher scores will be attributed to projects that demonstrate that the project supports *Framework Planning Area* policy directions and strategies and 2000-2030 forecasts reflected in local comprehensive plans (2008 update approved by Council or a plan update that is complete for review). Higher scores will also be given for projects that support more intense, mixed-use development (residential, commercial, industrial) in centers along transportation corridors.

Applicant provides:

a) Project Area Location (The project area comprises the TAZs in which the project is located. Provide a map and identify TAZs in which the project is physically located);

RESPONSE: The project area forms the border between 2000 Met Council TAZs 258 and 259 with Zone 258 being west of TH 149 and Zone 259 east of TH 149 (see Figure 5, Attachment A).

b) Identify what the ***Framework*** Planning Designation for the Project Area and how the project supports ***Framework*** strategies for the planning area (see ***Framework*** chapter 3 "Strategies for Geographic Planning Areas – **http://www.metrocouncil.org/planning/framewor/documents.htm**.) including the relationship of the project to community development plans and objectives e.g. intensification of centers, mixed use development, development staging, and/or redevelopment/infill plans.

RESPONSE: The TH 149 corridor presently serves an important role in the regional roadway network as an "A" minor arterial route relieving traffic on I-35E and TH 55. Currently, the majority of land uses directly adjacent to and near TH 149 include mainly industrial and office developments. As mentioned in the *Grand Oak Business Park AUAR Update, Northeast Eagan Areawide Traffic Study and Lone Oak Business Campus Traffic Study*, substantial future development is expected in the northeast part of the city. These areas of development will rely on the TH 149 corridor for local and regional access. Future land use includes additional office and commercial developments.

The TH 149 corridor will also continue to play a vital role in serving north-south traffic in the City of Eagan. The proposed improvements will provide safer operations for the traffic accessing the office and retail nodes, as well as the I-494 and TH 55 regional transportation systems. North of I-494 between TH 149 and CR 63, future plans include the redevelopment of single-family residential housing units to multi-family residential in the City of Mendota heights. By improving the operations at the TH 149/I-494 interchange, the proposed project will help the corridor serve the more intense land uses planned along and near the corridor.

Land use intensification is born out of traffic analysis zones (TAZs) located adjacent to and near the project corridor. The table below shows the household and employment data for 2006/2007 and 2030 TAZs adjacent to the TH 149 corridor in Eagan. (It should be noted that the City of Eagan's employment forecasts for 2030 exceed the Met Council system statement. The City and Met Council are in the process of reconciling the Citywide employment numbers.)

TAZ #	2007 HH	2030 HH	Number Increase	2006 Employ	2030 Employ	Number Increase
258	4	4	0	3,546	4,746	1,200
259	6	7	1	4,584	13,746	9,162
Total Corridor	**10**	**11**	**1**	**8,130**	**18,492**	**10,362**

Zone 258 is adjacent to the TH 149 (west) and Zone 259 is adjacent to TH 149 (east). Planned growth along the TH 149 route results in 1 additional households. Contrastingly, employment growth increases by 10,362 by the year 2030. Zone 259 shows the greatest amount of employment growth (increase of 9,162), which corresponds to the increase in land use to fully developed with retail, office, and commercial areas.

The City's *Comprehensive Plan* shows many areas adjacent to the corridor as either being vacant or underutilized. The areas east and west of TH 149 show that some of the area is vacant and the land use maps indicate these areas will be mostly office and retail development. The proposed roadway improvements will be able to support the land use intensification as these areas fully develop.

The City of Eagan has completed three studies related to the project area: 1) *Northeast Eagan Areawide Traffic Study;* 2) *Transportation Infrastructure Needs Analysis* (TINA); and 3) *Lone Oak Business Campus Traffic Study*. The *Northeast Eagan Areawide Study* examined the traffic impacts on roadways of development directly adjacent to the corridor. According to the *Northeast Eagan Areawide Study*, which incorporates some development in the Grand Oak Business Park, the proposed developments are anticipated to generate a significant amount of traffic (about 74,000 additional daily trips) with the office/clinics and retail land uses. Because the proposed development is anticipated to generate a large amount of traffic, the study recommends that TH 149 be a six-lane facility (see Attachment B).

The City of Eagan has also completed a *Transportation Infrastructure Needs Analysis* (TINA), which looks at the City's future transportation needs. The TINA helps the City determine future transportation projects based on traffic studies, and city, county, and state transportation improvement plans. The TINA includes this project as one of the City's short-term projects to provide the increase in capacity to meet the needs of additional growth along the corridor over the next 20 years. The proposed project will support and anticipate the intensification of these developments.

Finally, the *Lone Oak Business Campus Traffic Study* examined the impact of an 85 acre office/warehouse development located approximately 0.8 miles east of TH 149. The proposed development utilizes TH 149 for access to the regional transportation network. The results of the study found that TH 149 will need to be expanded to a six-lane facility (three lanes in each direction) from TH 55 to the I-494 north ramp to accommodate additional regional traffic.

The City of Inver Grove Heights has completed an Alternative Urban Areawide Review (AUAR) that discusses land use changes in the northwest portion of the city, which is adjacent to proposed development in the northeast portion of Eagan (see Attachment B, Inver Grove Heights AUAR). Proposed land uses in Inver Grove Heights include low-density, medium-density, and high-density residential, office, industrial, and commercial developments. This development is expected to generate over 90,000 trips per day, some of which will use TH 149 between TH 55 and I-494. The proposed development in Inver Grove Heights will impact TH 149 with additional traffic along the project corridor. These developments, both in Eagan and Inver Grove Heights, will rely heavily on the TH 149 corridor for local and regional access. The proposed project will provide a stronger local link between the Cities of Eagan and Inver Grove Heights and stronger regional link to other surrounding areas and help support the intensification of the proposed developments.

c) Council staff will provide the following information to assist in the evaluation of this criterion:

TAZ Project Area demographic profile:
- Population: 2000, 2010, 2020, 2030
- Households: 2000, 2010, 2020, 2030
- Employment: 2000, 2010, 2020, 2030
- Retail Employment: 2000, 2010, 2020, 2030

TAZ Project Area land use profile:
- Acreage by existing land use category
- Planned land use (summarized from local comprehensive plans)

2. Natural Resources

0-45 points A project will score higher if sensitive natural resources are avoided and if "best management" practices are employed in project implementation beyond which is minimally required by law. Describe in a brief narrative how the project relates to identified regional natural resource areas and any local community natural resource inventory and reference attached map(s). If the project has potential for assisting restoration or has a potential adverse impact, describe the resource, impact and what implementation practices will be employed. For identified natural resource areas go to (http://gis.metc.state.mn.us/topics/nrda/index.asp).

RESPONSE: The proposed project will not impact any identified natural resource areas. When the proposed project is designed, all efforts will be taken to ensure that there are no or minimal impacts to natural resources in the project area. Best management practices with regard to construction will be employed to reduce impacts from runoff and other issues that occur during construction. Also, new construction can provide better mitigation than older roadways for runoff and other drainage issues. Therefore, when TH 149 is upgraded to a six-lane facility, drainage and roadway runoff can be minimized or even prevented, which would result in a better quality natural area.

The proposed project will increase the capacity and through mobility along the TH 149 corridor, providing better connections to civic centers in the area. Civic centers in the area include schools and parks. For example, Trinity Lutheran Church, a private school, is located near the intersection of TH 149 and TH 55, which is also a historic site.

The roadway connects to many parks and lakes north of the project corridor. The proposed project will improve the operations at the TH 149/I-494 interchange, which is an important

connection to the parks and civic areas north of the project corridor. Adjacent to TH 149 is the Mendakota Park, a 19-acre community park that has many amenities including softball fields, basketball and volleyball courts, a picnic shelter and paved walking paths within the park. Just north of the Mendakota Park is the Mendakota Golf Course. The Friendly Marsh Park, located near the project corridor, is a natural area that attracts a variety of wildlife and is adjacent to the Dodge Nature Center. The Dodge Nature Center is over 300 acres and offers a variety of activities and natural areas. Activities range from school programs to hiking to tours. Natural areas include prairies, marsh lands, ponds, orchards, and woodlands. The Dodge Nature Center also offers classroom spaces to teach children about various topics and has other buildings that house many animals.

In addition, the Saint Thomas Academy is located just west of TH 149 in Mendota Heights, along Mendota Heights Road. The Academy is a Catholic, all-male, college-preparatory military school for grades 7 through 12. East of the Saint Thomas Academy is the Visitation School, which is a Catholic School for boys and girls in Montessori preschool through sixth grade and a college preparatory school for young women in grades seven through twelve. Both schools are for students in the Twin Cities area.

3. Progress Towards Affordable Housing Goals

NOTE: Information and analysis in this section will be provided by Council staff.

0-30 points Up to 30 points can be awarded to a project, based upon a community's or group of communities' progress in addressing their affordable housing goals for 1996-2010.

For communities that participate in the Livable Communities Local Housing Incentives Program, data from their 1996-2010 negotiated housing goals will be used to determine the progress they have made toward providing opportunities to their address affordable housing goals.

For communities that do not participate in the Local Housing Incentives Program, progress will be measured against what the benchmarks were for their community in the Council's LCA goal setting methodology used in determining goals for 1996 to 2010.

Example of Analysis:

Benchmark or Ownership Goal	Progress Made to Date	Benchmark or Rental Goal	Progress Made to Date	Average Progress Made
900 units	200 units (22%)	200 units	125 units (63%)	43%

Percent of Progress Made:	Points Awarded:
85-100%	30
65-85%	25
45-65%	20
25-45%	15
10-25%	10
1-10%	5

4. Land Use and Access Management Planning

The Development Framework includes support for connected land use patterns served by an integrated street network. Access management along highways is a key component of planning for these objectives. In addition, various access management strategies can reduce crashes, improve traffic flow, and add operational capacity for the applicable roadway. Higher scores will be given to projects that are developed using a local access management plan and to projects located in communities that have a regulatory framework established to protect and improve access control in the future. Additional points will be awarded to projects that implement these plans by reducing undesired access points.

0-50 points Reference and describe the local access management plan used to develop the proposed project, and describe the corresponding county or state access management plan which supports the regional road network. Higher scores will be awarded to projects developed with an approach that is consistent with county or state access management plans.

RESPONSE: TH 149 is a state highway and is under the Minnesota Department of Transportation's jurisdiction. The plan uses access management guidelines developed by Mn/DOT (see Attachment C). According to Mn/DOT's guidelines, TH 149 is a Category 5B, which is a minor arterial in an urban/urbanizing area.

Mn/DOT's access guidelines are the focus for the corridor's access management plan. The recommended spacing for "A" minor arterials in urbanizing areas is shown in Attachment A, Figure 6. In general, full-access signalized intersections may be placed at quarter-mile (1,320 feet) spacing and secondary access or right-in/right-out access can be spaced an eighth of a mile (660 feet) apart. Private driveway access is subject to exceptions and deviations.

Existing and proposed access along TH 149 in the project area shown in Attachment A, Figure 7, is consistent with Mn/DOT access management guidelines. No additional access is anticipated in the future.

Provide and identify intersection spacing and signal spacing guidelines, and driveway allowance criteria used for the proposed project and the corresponding county or state access management guidelines.

RESPONSE: Mn/DOT's access guidelines are the focus for the corridor's access management plan. In general, full-access signalized intersections may be placed at quarter-mile (1,320 feet) spacing and secondary access or right-in/right-out access can be spaced an eighth of a mile (660 feet) apart. Private driveway access is subject to exceptions and deviations.

5. Land Use and Access Management Planning

0-50 points Having the necessary regulatory framework is essential for protecting the efficient functioning of the regional roadway network**.** Reference (adoption date) and describe the local zoning and subdivision ordinance regulations that are in place to maintain the access plan as adjacent properties are developed and/or redeveloped. Higher scores will be awarded to projects in communities with existing or proposed local support of the access management plan through existing regulations or ordinances.

RESPONSE: The City of Eagan adopted Mn/DOT's access spacing guidelines via the Transportation Section of its *Comprehensive Plan*. The City Council approved the 2008 update to the *Comprehensive Plan* on May 19, 2009.

6. Corridor Access Management Improvements

0-50 points Projects that help to implement the access management plan by removing or modifying non-conforming access points will receive points in this criterion. Identify the access locations and access management that currently exists and that will be allowed once the project is completed. Indicate by the following classifications, the existing access locations inconsistent with the proposed access management approach and any access locations that will be modified:

The existing access points are in conformance with Mn/DOT's access management guidelines. Upon completion of the project, Mn/DOT's access management guidelines will continue to be implemented along the project corridor.

a. Private Residential Driveways/Field Entrances

RESPONSE: The TH 149 project corridor does not contain any existing non-conforming private residential driveways or field entrances.

b. Low-Volume Private Driveways * (Under 500 trips per day)

RESPONSE: The TH 149 project corridor does not contain any existing low-volume private driveways.

c. High-Volume Private Driveways * (Over 500 trips per day)

RESPONSE: The TH 149 project corridor does not contain any existing high-volume private driveways.

d. Public Streets

RESPONSE: The current intersection spacing for public streets is in conformance with Mn/DOT's access guidelines.

* *Private driveways may be commercial, industrial or institutional uses such as school or hospitals.*

7. Integration of Modes

0-125 points The Transportation Policy Plan places importance on investing in multimodal transportation choices and supports the development of a transportation system that accommodates the mobility needs of users of all modes including motorists, transit vehicles and riders, pedestrians of all levels of functional ability, bicyclists and freight movers. "A" Minor Relievers are located parallel to congested principal arterials in the core, urban reserve and urban staging areas. Many of these roadways are served by transit and accommodate travel to congested activity centers and others provide important medium length routes parallel to principal arterials that may be inaccessible to non-motorized travelers. "A" Minor Relievers also play an important role in the movement of freight because they add capacity to freight origins and destinations.

Please provide the information requested below on the existing conditions and proposed changes to the roadway environment and include maps, schematics or cross-sections as appropriate. Please note that all projects that receive STP funding must meet the requirements of the Americans with Disabilities Act (ADA). If the project does not include any multimodal components or does not impact one or more modes of travel, it is only necessary to answer questions related to the existing

conditions for each mode. Evaluation of this criterion will be based on the degree to which multimodal transportation objectives are incorporated into the project. The appropriate extent and character of multimodal improvements may differ based on the role that the road serves and differing roadway conditions that can affect its design.

Transit:
Roadway projects can support transit service by improving accessibility to transit stops by pedestrians, installing bus stop amenities for passengers, placing bus stops on the far side of intersections and improving the pedestrian environment, particularly for people with disabilities. In some cases, other improvements to the roadway including curb bump-outs for bus stops or the construction of bus lanes can improve transit service reliability and speed along the segment. Projects will not be evaluated based on the existence of transit service but rather how the needs of transit vehicles and passengers are incorporated into the project if transit service exists.

Existing Conditions:

Is there transit service and/or stops along the segment of the project?

RESPONSE: Transit service utilizes TH 149 for access service points within the Grand Oak Business Campus and the Water's Corporate Complex, but does not offer stops along the project corridor.

If so, provide a map that shows the current placement of bus stops along the segment. If not, the project will be evaluated solely on the non-motorized and freight components of this criterion.

Describe transit stop compliance with current ADA Accessibility Guidelines if applicable (curb ramps, boarding and alighting areas and accessible connections to sidewalks and streets).

RESPONSE: Not applicable

Changes to Conditions from the Project:
How will the project affect transit service or the conditions for transit riders along the project segment?

RESPONSE: Not applicable

Pedestrians:
Roadway projects can be opportunities to improve the environment for pedestrian activity that occurs or may occur in the project area. Improvements to the pedestrian environment include the construction or reconstruction of walkways or multi-use paths, separating pedestrian walkways from vehicle traffic through the installation of a buffer such as a boulevard and providing lighting. Equally important to improving pedestrian movement along the project area is improving the safety and ease of pedestrian crossings of the roadway. Some examples of these kinds of improvements are installation of pedestrian countdown signals, marking crosswalks, reducing the effective crossing distance for pedestrians by installing curb extensions and pedestrian medians, and by influencing the speed of vehicles making turning movements at intersections. Different treatments are appropriate for different types of roadway conditions.

Provide information on the existing conditions for pedestrians in the project area:

Provide a map or aerial photo/schematic that shows all existing pedestrian walkways, multi-use paths and signalized and unsignalized pedestrian crossings in the project area.

See Figures 8-10, Attachment A for details on existing pedestrian facilities.

Describe or show on a map how the walkways or multi-use paths are connected to a wider pedestrian network beyond the project area. Describe destinations in the network such as schools, residential areas, transit stops, etc. within a half-mile of the project area:

RESPONSE: The existing pedestrian facilities within 0.5 miles of the project area consist of an off-roadway trail systems located in the Grand Oak business campus (west side of TH 149, between TH 55 and I-494), in The Waters Corporate Complex (east side of TH 149, between TH 55 and I-494) and along Mendota Heights Road in the City of Mendota Heights. No pedestrian facilities currently exist along the proposed project corridor.

Briefly describe the pedestrian environment along the walkways in the project area including landscaping, roadway/walkway buffers, lighting, etc.. If markedly different conditions exist along different parts of the roadway segment, describe them separately paying particular attention to existing deficiencies that will be addressed by the project. If a there are bridges along the project section, describe the pedestrian condition on and approaching the bridge.

RESPONSE: No pedestrian facilities currently exist along the proposed project corridor.

Provide information on changes to the pedestrian environment from the project and provide a plan or schematic if one has been developed:

See Figure 4, Attachment A for details on the proposed multiuse trail.

Describe methods that will be used to facilitate safer and more pleasant pedestrian movement **alongside** the roadway

RESPONSE: The proposed project includes the construction of a 10-foot wide multiuse, bituminous trail separated from the TH 149 shoulder by a grass boulevard. The trail will have 2-foot wide shoulders and will be designed to a 20-mph design speed. The trail is proposed to be constructed on the west side of TH 149 to reduce the number of roadway crossings and eliminate bicycle/vehicle interactions at the I-494 north and south ramps. The existing bridge has a concrete barrier separating vehicular traffic from bicyclists who choose to use the trail.

Describe methods that will be used to facilitate safer pedestrian **crossings** of the roadway

RESPONSE: All street crossings will occur at controlled (i.e. traffic signal) intersections with painted crosswalks. Traffic signal design will follow Mn/DOT trunk highway design standards and may include pedestrian countdown indicators if allowed

If there are any new walkways or multi-use paths to be constructed with this project, will they be connected to an existing wider pedestrian network beyond the project area? Describe or show on a map destinations in this network such as schools,

residential areas, transit stops, etc. within a half-mile of the project area. (If the project only includes reconstruction of existing pathways described above, do not answer this question.)

RESPONSE: The proposed multiuse trail will provide improved connections to the existing pedestrian facilities in The Waters and Grand Oak employment areas located immediately adjacent to the project corridor. The proposed multiuse trail will also connect to an off-street trail system in Mendota Heights. The off-street Mendota Heights trail system connects to several schools, including St. Thomas Academy, Visitation and Friendly Hills Middles School.

Bicyclists:
Roadway projects can be an opportunity to improve the conditions for bicycle travel along and crossing the corridor. Examples of ways to improve the bicycling environment include installing bike lanes or 5 foot marked shoulders, off-road paths where conditions favor them, and intersection treatments designed to reduce motor vehicle and bicycle conflict.

Provide information on the existing conditions for bicyclists in the project area:

Provide a map or aerial photo/schematic that shows all existing bicycle facilities along the roadway segment (off-road trails, multi-use paths, bike lanes, marked shoulders, unmarked shoulders, and bicycle accessible crossings of the roadway) as well as any regional trail that intersects with the project segment.

See Figures 8-10, Attachment A for details on existing bicycle facilities.

Provide information on changes to the bicycling environment from the project and provide a plan or schematic if one has been developed:

See Figure 4, Attachment A for details on the proposed multiuse trail.

Describe methods that will be used to facilitate safer and more convenient bicycle travel along the roadway segment (pathway construction, bike lane striping, shoulder improvements, improved accommodation on bridges etc.). If a project plan has been developed that shows the location of improvements, please provide it as well.

RESPONSE: The proposed project includes the construction of a 10-foot wide multiuse, bituminous trail separated from the TH 149 shoulder by a grass boulevard. The trail will have 2-foot wide shoulders and will be designed to a 20-mph design speed. The trail is proposed to be constructed on the west side of TH 149 to reduce the number of roadway crossings and eliminate bicycle/vehicle interactions at the I-494 north and south ramps. The existing bridge has a concrete barrier separating vehicular traffic from bicyclists who choose to use the trail. All street crossings will occur at controlled (i.e. traffic signal) intersections with painted crosswalks. Traffic signal design will follow Mn/DOT trunk highway design standards and may include pedestrian countdown indicators if allowed.

The proposed project will also improve the traveling conditions for bicyclists who choose to ride on the roadway shoulder. Currently, the shoulder pavement is aged and rough for use by a bicycle. The proposed

project will construct a new bituminous shoulder providing a better riding surface for bicyclists who choose to ride on the shoulder.

Does the bikeway included in this project connect to an existing official bikeway network? Describe destinations in the network that are or will be accessible by bicycle, such as schools, residential areas, employment areas, regional trails and parks etc. within one mile of the project area.

RESPONSE: No official bikeway network exists in this area. However, the proposed multiuse trail would connect to an off-street trail system in Mendota Heights. The off-street Mendota Heights trail system connects to several schools, including St. Thomas Academy, Visitation and Friendly Hills Middles School. The proposed multiuse trail will also provide improved connections to The Waters and Grand Oak employment areas located immediately adjacent to the project corridor.

The proposed multiuse trail would also connect to an on-roadway (unmarked, wide shoulder) route which continues north on TH 149 and links to numerous trails, parks and lakes in Mendota Heights. Construction of the proposed multiuse trail would provide an improved connection through the City of Eagan to the North Urban Regional Trail in Mendota Heights at TH 149 and TH 110.

Freight:

Roadway projects that are located in important freight moving areas and that aim to improve freight movement will receive higher scores in this criterion.

What is the current daily heavy commercial traffic along the project segment?

RESPONSE: According to Mn/DOT's 2006 Trunk Highway Traffic Volumes map, the current heavy commercial average daily traffic along the project segment is 720 vehicles per day.

Is the roadway used to access any of the regional intermodal freight terminals in Appendix J? If so, please list them:

RESPONSE: Adjacent land uses to the project corridor currently include industrial uses with high volumes of truck traffic.

Most of the trucking activity occurs in the northern 1/3 of the City with concentrations along TH 149 (i.e. Thomson Reuters, UPS) and along TH 13. Thomson Reuters and UPS are located on TH 149, south of TH 55. Thomson Reuters recently expanded their facilities to include more warehouse and manufacturing uses, generating additional truck traffic than what had previously existed. Many of the trucks destined for these locations, and to other locations within the city, will use the portion of TH 149 between I-494 and TH 55 as the main, direct route to these locations because it provides convenient access to the regional highway system. Also, in 1997, the City adopted the Trucking Study Report that identifies several key truck-oriented routes in Eagan. The routes include all state trunk highways, which includes TH 149. Again, much of the truck traffic within Eagan uses the project segment of TH 149 to access I-494.

Does the road connect any of the terminals to a freeway? If so, describe the route:

RESPONSE: The proposed project provides a direct connection to I-494. By improving safety and adding capacity to the TH 149 corridor and I-494 interchange, the movement of goods and freight to and from these facilities will be enhanced.

E. Maturity of Project Concept. 100 points

Projects selected through this solicitation will be programmed for construction in 2013 or 2014. That is a fairly long time but it takes several years to complete preliminary engineering, environmental studies and acquire right-of-way. The region must manage the federal funds in each year of the TIP. Projects that are not implemented in their original program year create problems. Proposed projects that have already completed some of the work is a plus. A schedule is important to know what kind of work might be needed. Large projects that need right-of-way require more work than others that do not.

0-100 points Applications involving construction must complete the project implementation schedule found in Appendix K. A detailed schedule of events is expected for all phases of the project. Applications involving non-construction projects must include a detailed discussion of the timeframes involved for initiating and completing each phase of planned activities. Points under this criterion are assigned based on how many steps have been taken toward implementation of the project. These steps reflect a federally funded project development path.

RESPONSE: In addition to the numerous studies that have been completed regarding this project, a preliminary layout and draft Project Memorandum have also been completed. Please refer to Appendix K in Attachment E for a project of the development checklist. The schedule identified in Appendix K is achievable and able to be accelerated if needed.

TOTAL: 1,250 POINTS

PA-11-05

City of Eagan

August 22, 2011

Mr. Kevin Roggenbuck
Transportation Coordinator
Transportation Advisory Board
390 Robert St. N.
St. Paul, MN 55101

RE: TH 55 Reconstruction Project
Surface Transportation Program Funding Submittal

Dear Mr. Roggenbuck:

The City of Eagan is submitting this application for Federal Surface Transportation Program (STP) funding for the proposed TH 55 project in the City of Eagan. The proposed project is being put forward to accommodate substantial future development in the northeast part of the city. The proposed project includes an increase in capacity with the widening of the of the existing four-lane divided roadway to a six-lane divided roadway. In addition, the project will also rebuild traffic signals and construct a multiuse trail between the TH 149 intersections.

We believe this is an excellent candidate for STP funding and look forward to its inclusion in the program.

Sincerely,

Russ Matthys

Russ Matthys, PE
City Engineer

Municipal Center
3830 Pilot Knob Road
Eagan, MN 55122-1810
651.675.5000 phone
651.675.5012 fax
651.454.8535 TDD

Maintenance Facility
3501 Coachman Point
Eagan, MN 55122
651.675.5300 phone
651.675.5360 fax
651.454.8535 TDD

www.cityofeagan.com

PA-11-05

Trunk Highway 55 Reconstruction Project

2011 Submittal
Surface Transportation Funding
Principal Arterial

City of Eagan

Submitted: August 22, 2011

Federal STP-UG Funding Application (Form 1)

INSTRUCTIONS: Complete and return completed application to Kevin Roggenbuck, Transportation Coordinator, Transportation Advisory Board, 390 North Robert St., St. Paul, Minnesota 55101. (651) 602-1728. Form 1 needs to be filled out electronically. Please go to Metropolitan Council's Regional Solicitation website for instructions. **Applications must be received by 5:00 PM at the Metropolitan Council FTP site or postmarked on July 18, 2011. *Be sure to complete and attach the Project Information form.**	Office Use Only

I. GENERAL INFORMATION

1. APPLICANT: City of Eagan			
2. JURISDICTIONAL AGENCY (IF DIFFERENT): Minnesota Department of Transportation			
3. MAILING ADDRESS: 3830 Pilot Knob Road			
CITY: Eagan	STATE: MN	ZIP CODE:55122	4. COUNTY: Dakota
5. CONTACT PERSON: Russ Matthys, P.E.	TITLE: City Engineer		PHONE NO. (651)675-5637
CONTACT E-MAIL ADDRESS: rmatthys@cityofeagan.com			

II. PROJECT INFORMATION

6. PROJECT NAME: TH 55 Reconstruction Project

7. BRIEF PROJECT DESCRIPTION (Include location, road name, type of improvement, etc...): The proposed project inlcudes expanding TH 55 from a four-lane divided roadway to a six-lane facility. Improvements extend from the TH 149 north intersection throught the TH 149 south intersection. The project also includes rebuilding traffic signal systems, improvements to the Lone Oak Road (CSAH 26) intersection and the construction of a multi-use trail on the west/south side through the project corridor.

8. STP PROJECT CATEGORY - Check only one project grouping in which you wish your project to be scored.

"A" Minor Arterials:

☐ Reliever	☐ Expander	☒ Non-Fwy. Principal Arterial
☐ Connector	☐ Augmenter	☐ Bikeway/Walkway

III. PROJECT FUNDING

9. Are you applying or have you applied for funds from another source(s) to implement this project? Yes ☐ No ☒

If yes, please identify the source(s):

10. FEDERAL AMOUNT: $2,400,000	13. MATCH % OF PROJECT TOTAL: 20%
11. MATCH AMOUNT: $ 600,000	14. SOURCE OF MATCH FUNDS: MnDOT/Local
12.* PROJECT TOTAL: $3,000,000	15. REQUESTED PROGRAM YEAR (CIRCLE): ☒2015 ☐2016
16. SIGNATURE Russ Matthys	17. TITLE: City Engineer

Form 2: PROJECT INFORMATION

(To be used to assign State Project Number after project is selected)

Please fill in the following information as it pertains to your proposed project. Items that do not apply to your project, please label N/A. **Do not send this form to the State Aid Office. For project solicitation package only.**

COUNTY, CITY, OR LEAD AGENCY: **City of Eagan**

FUNCTIONAL CLASS OF ROAD: **Non-Freeway, Principal Arterial**

ROAD SYSTEM: **TH**

NAME OF ROAD**: 55**

ZIP CODE WHERE MAJORITY OF WORK IS BEING PERFORMED: **55121**

APPROXIMATE BEGIN CONSTRUCTION DATE (MO/YR): **5/2015**

APPROXIMATE END CONSTRUCTION DATE (MO/YR): **12/2015**

LOCATION: From: **South intersection of TH 149**

To: **North intersection of TH 149**

TYPE OF WORK: **Grade, Agg Base, Bit Base, Bit Surf, Curb and Gutter, Multiuse Trail, Storm Sewer, Signals, Ped Ramps**

Project Elements and Estimate of Construction Costs

Fill out the scoping sheet below or attach the worksheet Appendix U and provide the cost estimate for each element. You may add additional eligible costs (construction costs) that are not accounted for in the blank spaces at the bottom of the table. Applicants may instead use the more exhaustive checklist of the Mn/DOT scoping sheet in lieu of this checklist. The total cost should match the total cost reported for the project. Please use 2011 cost estimates, the TAB may apply an inflation factor to awarded projects.

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES		
Check all that apply	**ITEM**	**COST**
X	**Mobilization (approx. 5% of total cost)**	**$125,000**
X	**Removals (approx. 5% of total cost)**	**$100,000**
X	**Roadway (grading, borrow, etc.)**	**$575,000**
X	**Roadway (aggregates and paving)**	**$795,000**
X	**Subgrade Correction (muck)**	**$50,000**
X	**Storm Sewer**	**$25,000**
X	**Ponds**	**$50,000**
X	**Concrete Items (curb & gutter, sidewalks, median barriers)**	**$50,000**
X	**Pedestrian Curb Ramps (ADA)**	**$10,000**
X	**Path/Trail Construction**	**$100,000**
X	**Traffic Control**	**$25,000**
X	**Striping**	**$20,000**
X	**Signing**	**$20,000**
	Lighting	**$0**
X	**Turf - Erosion & Landscaping**	**$20,000**
	Bridge	**$0**
	Retaining Walls	**$0**
	Noise Wall	**$0**
X	**Traffic Signals**	**$750,000**
	Wetland Mitigation	**$0**
	Other Natural and Cultural Resource Protection	**$0**
	RR Crossing	**$0**
X	**Contingencies**	**$285,000**
	TOTAL CONSTRUCTION COST	**$3,000,000**

STP Funding Application, Non-Freeway Principal Arterial
TH 55 Reconstruction Project: South intersection of TH 149 to the north intersection of TH 149

PROJECT DESCRIPTION

The City of Eagan is seeking funding under the Surface Transportation Program in the Non-Freeway Principal Arterial category, to improve Trunk Highway (TH) 55, in the City of Eagan in Dakota County (see Figure 1). The proposed project will extend approximately 3,000 feet, from the south intersection of TH 149 to the north intersection of TH 149 (see Figure 3). The proposed project is located on TH 55, a Non-Freeway Principal Arterial route which spans the entire seven-county metropolitan area from the City of Rockford to the City of Hastings (TH 55 extends well beyond the seven-county metropolitan area, but the limits of Principal Arterial classification apply only to the seven-county metropolitan area). The proposed project entails the reconstruction of TH 55 from a four-lane divided roadway to a six-lane divided facility. In addition, the proposed project will provide enhanced accommodations for pedestrians, bicyclists, and other non-motorized transportation modes, via the construction of a multi-use trail on the south/west side of the roadway. Figure 4 includes a preliminary construction layout of the proposed improvements.

The proposed project includes the reconstruction of TH 55 with capacity, geometric and access management improvements. Access reductions will improve roadway safety by reducing congestion and crashes, preserve road capacity and postpone the need for roadway widening, improve travel times for the delivery of goods and services, and ease movement between destinations. Traffic signals will be rebuilt at three intersections providing improved intersection control. Finally, the additional roadway capacity will enhance the efficiency of the corridor, improving traffic operations and eliminating congestion on this regionally significant route.

In addition to the roadway improvements, the proposed project also includes the construction of a separated (minimum of 16-feet from the roadway) 10-foot wide multi-use trail along the south/west side of the corridor. This trails will provide bicyclists and pedestrians with enhanced non-motorized access to the range of activity centers within the area; connect commuters and transit users to existing and future jobs and transit facilities; and provide safe and efficient linkages to other existing and planned segments of the Eagan and Dakota County trail systems; thereby enhancing the already popular non-motorized transportation system in the area.

These improvements are needed to maintain and enhance user safety while supporting increasing traffic volumes along TH 55. The northeast Eagan and northwest Inver Grove Heights area is one of the largest remaining undeveloped tracts on the I-494 beltway (approximately 4,300 acres). Additionally, growth is also occurring in surrounding communities, particularly to the south and east, which also impacts the TH 55 corridor. Addressing safety and mobility concerns in the project area is a priority for the City of Eagan and has been identified in the *Eagan Comprehensive Plan (2010),* as well as various traffic studies and other planning documents, such as the *Grand Oak Business Park AUAR Update (2004), Northeast Eagan Areawide Traffic Study (2005), North-South Corridor Travel Demand Study (2007), Regional Roadway System Visioning Study (2010)*, and *Transportation Infrastructure Needs Analysis (2011)*. The proposed improvements will address existing regional capacity deficiencies and support the City's vision for future development by providing the additional safety and capacity improvements necessary to accommodate existing and future users of the corridor.

NON-FREEWAY PRINCIPAL ARTERIAL - QUALIFYING CRITERIA

The applicant must show that the project meets all the following criteria to qualify for priority evaluation. Answer each criterion in a numbered sequence. **Failure to respond to any of the qualifying criteria will result in a recommendation to disqualify your project.**

1. The project must be consistent with the policies in the Metropolitan Council's officially adopted Metropolitan Development Guide, which includes the Transportation Policy Plan (TPP) (2010) and the Regional Development Framework (2004). Consistency with the TPP includes its appendix, which contains the regional functional classification criteria. Funding allocation to projects involving interchange construction and reconstruction on the Principal Arterial system (regardless of whether the project is on the Principal Arterial or and intersecting "A" Minor Arterial) are made conditional on the successful completion of the Highway Interchange Requests Procedures described in Appendix E of the Transportation Policy Plan. The applicant must list the documents and corresponding policy numbers or portions of text that help illustrate the project's consistency.

RESPONSE:

The proposed project is consistent with the policies set forth in the officially adopted Metropolitan Development Guide, which includes the Transportation Policy Plan (TPP) (2010) and the Regional Development Framework (2004).

Consistency with the 2030 Transportation Policy Plan (TPP):

- The proposed project is consistent with **TPP Policy 2 "Prioritizing Regional Transportation Investments," Strategy 2a (page 7) "System Preservation,"** and **Strategy 2b (page 8) "Highway System Investments."** Included in this project are capacity, geometric and access management improvements along Trunk Highway (TH) 55, such as the installation of additional through lanes in both the eastbound and westbound directions, construction of a center median, protected turn lanes, and separated pedestrian and bicycle accommodations. These improvements will preserve and improve overall operations and safety along the corridor, thereby optimizing the performance of the system.
- The proposed project is consistent with **TPP Policy 2 "Prioritizing Regional Transportation Investments," Strategy 2d (page 8), "Bicycle and Pedestrian Investments;" and Strategy 2e (page 8) "Multimodal Investments;" Policy 3 "Investments in Regional Mobility," Strategy 3f (page 9) "Promoting Alternatives;" and Policy 4 "Coordination of Transportation Investments and Land Use," Strategies 4b (page 9) "Alternative Modes" and 4f (page 10) "Local Transportation Planning."** In addition to providing automobile accommodations, the proposed project also includes accommodations for bicycles and pedestrians via a new multi-use trail on the west side of the roadway. In addition, the proposed median installed as part of the proposed project will also provide pedestrian refuge areas for east-west non-motorized traffic crossing the corridor. Further, the trail will be separated from the roadway via a 16-foot boulevard area, which will provide a safe and convenient route for pedestrians and bicyclists. The trail will also promote continuity in the regional system, as it will connect to the wider City of Eagan and Dakota County trail systems.

  In addition, the proposed project will create the potential to expand transit service and enhance the use of the existing transit station at Pilot Knob Road and Yankee Doodle Road, by providing an enhanced trail connection to the adjacent and surrounding communities. By separating the trails from the roadway, a safe and convenient connection will be provided for pedestrians and bicyclists who wish to access these facilities. In addition, the proposed roadway improvements will reduce congestion along TH 55, thereby improving the efficiency of transit vehicles operating within the project area.

- The proposed project supports **TPP Policy 8 "Energy and Environmental Transportation Emissions (page 12)," Strategies 8a "Reduction of Transportation Emissions" and 8e "Reduction of Green House Gas Emissions."** The proposed project has the potential to decrease vehicle and green house gas emissions by providing an alternative to motorized vehicle use, and increasing access to transit. The project includes a multi-use trail on the west side of the corridor which will provide improved access to transit services through a trail connection to an existing transit station located west of TH 55 at the Pilot Knob Road/Yankee Doodle Road intersection, as well as providing enhanced access to the transit stops located along and adjacent to the project section of TH 55.

  In addition, the proposed project the proposed project will reduce roadway congestion and improve peak hour speeds on TH 55, due to its additional capacity. As a result, transportation emissions along the corridor will be reduced.
- The proposed project is consistent with **TPP Policy 11 "Highway System Management and Improvements," Strategy 11e (pages 15), "Access Management."** The proposed project manages and reduces access to TH 55, a Principal Arterial route, through the installation of a center median and closure of existing access points along the corridor. The project includes modification of one full-access intersection to partial access (right-in/right-out only) with complete removal of two roadway access points. This access modification will improve existing traffic flow and increase overall safety along TH 55.
- The proposed project is consistent with **TPP Policy 12 "Transit System Planning," Policy 18 "Provide Pedestrian and Bicycle Travel Systems," and Strategy 18b "Connectivity to Transit (page 19)."** The proposed project includes construction of a multi-use trail on the west side of the corridor. This trail facility will connect to the wider trail network within the City of Eagan and Dakota County. The trails will in turn be used by pedestrians and bicyclists to reach bus stops and the transit station, which is just west of the project area. These improvements will create a safe and enjoyable pedestrian environment and provide the opportunity to expand the use of regional transit system by providing enhanced trail linkages.
- The proposed project is consistent with **TPP Policy 18 "Provide Pedestrian and Bicycle Travel Systems," Strategy 18c "Local Planning for Bicycling and Walking (Page 19),"** and **Strategy 18d "Interjurisdictional Coordination (page 19)."** The proposed project includes a bicycle/pedestrian trail on the west side of TH 55, which is shown in the *Eagan Transportation Plan, Bike and Trail Plan (2008)*. The proposed trail will provide an enhanced connection to other City and County trail systems and will serve both recreational and commuter purposes.
- The proposed project is consistent with **TPP Policy 18 "Provide Pedestrian and Bicycle Travel Systems," Strategy 18e "Complete Streets (page 20)."** The proposed project includes construction of a multi-use trail on the west side of the corridor, which will be separated from the roadway via a 16-foot boulevard area. Because the trail is separated from the roadway, safety for pedestrians and bicyclists will be enhanced. The proposed facility will meet state and federal design and accessibility guidelines.
- The proposed project is also consistent with the system criteria for Principal Arterials, including spacing, access spacing, and management (**Appendix D of the TPP**). The spacing guidelines for Principal Arterials in developed areas call for a two- to three-mile spacing. The nearest north-south Principal Arterial to the project segment of TH 55 is I-35E, approximately 1.5 miles to the west. The closest Principal Arterial to the west is TH 52, which is approximately three miles.

Consistency with the 2030 Regional Development Framework:

The proposed project is consistent with the Policies set forth in the 2030 Regional Development Framework and supports the strategies therein. The ***Framework*** Planning Designation for the proposed project is "**Developed Community (2030 Regional Development Framework, page 19)**." The project supports the ***Framework*** strategies for a Developed Community **(2030 Regional Development Framework, Table 2, page 20-21**), by supporting more intense, mixed-use development through investment in the regional highway system, and pedestrian and bicycle improvements. These improvements will facilitate connections between workplaces, residences, retail, services, and entertainment activities to accommodate growth and reinvestment. In addition, the proposed trail and roadway improvements will create the potential to expand the existing transit service along TH 55 and at the Eagan Transit Station (Pilot Knob Road/Yankee Doodle Road intersection), by providing enhanced trail connections within Eagan and to adjacent and surrounding communities.

2 The project must be included in, be part of, or address a transportation problem or need identified in one of the following: 1) an approved local or county comprehensive plan found to be consistent with Metropolitan Council plans; 2) a locally approved capital improvement program; 3) an officially adopted corridor study (trunk highway studies must be approved by Mn/DOT and Metropolitan Council); or 4) the official plan or program of the applicant agency. It also must not conflict with the goals and policies in these adopted regional plans; the 2030 Transportation Policy Plan (2010), the 2030 Regional Framework (2004), and the 2030 Regional Parks Policy Plan (2010). The applicant must reference the appropriate comprehensive plan, CIP, approved corridor study document, or other plan or program and provide copies of the applicable pages.

RESPONSE:

This project implements a solution to the transportation situation discussed in the approved *Eagan Transportation Plan (2008)* (see Appendix A-1). The proposed project is included in the City's *Capital Improvement Program (2011)* (see Appendix A-2). The project segment of TH 55 is also identified in the *Dakota County Transportation Plan (2009)* as over capacity and the intersection with the south junction of TH 149 is identified as a deficient intersection (see Appendix A-3). In addition, the Eagan City Council has passed a resolution endorsing the proposed TH 55 improvement project (see Appendix A-4), and the project is supported by both Mn/DOT and Dakota County, who are the agencies with jurisdictional authority over the roadway (see Appendix A-5). Furthermore, as stated in Response #1 above, the proposed project does not conflict with but rather is supportive of all adopted regional plans. These including the 2030 Transportations Policy Plan, the 2030 Regional Framework, and the 2030 Regional Parks Policy Plan.

3. The proposed project must be identified as on a Non-Freeway Principal Arterial shown on the TAB approved roadway functional classification map adopted by the TAB on or before May 18, 2011 and recorded in the Council's electronic file. The vast majority of the project must be physically located on the Non-Freeway Principal Arterial roadway between logical termini. The project may include construction on small portions of non-eligible roads, as long as the construction is essential to the operation of the entire project. Examples include but are not limited to reconstruction of the approaches on intersecting collector roads and construction or reconstruction of on-ramps or off-ramps. The applicant must provide a map or sketch of the project relative to the Non-Freeway Principal Arterial system.

RESPONSE:

As shown in Figure 3, the proposed project segment of TH 55 is identified as a Non-Freeway Principal Arterial on the TAB approved roadway functional classification map adopted May 18, 2011.

4. STP funds are available for roadway construction and reconstruction on new alignments or within existing right-of-way, including associated construction or installation of traffic signals, signs, utilities, bikeway or walkway components and public transit components. The cost of constructing a new bridge deck or reconstructing an existing bridge deck is eligible but the remainder of the superstructure and all elements of the substructure are not eligible. The applicant must describe the proposed project and state that the application includes only the eligible components.

RESPONSE:

As shown in Figure 4, the proposed project includes the reconstruction of TH 55 from a four-lane divided roadway to a six-lane divided roadway with additional turn lanes at major intersections. In addition, the proposed project includes rebuilding the three traffic signals at the intersections with the north junction of TH 149, Lone Oak Road, and the south leg of TH 149. Accommodations for bicyclists and pedestrians will also be provided, via a multi-use trail constructed on the west side of the roadway. All components of the proposed project are eligible for STP funds.

5. Studies, preliminary engineering, design, construction engineering, etc. are not eligible for STP funding and should not be included in the required local match or the total project cost. Right-of-way costs are not eligible for STP funding and should not be included in the required non-federal match or the total project cost. Noise barriers, drainage projects, fences, landscaping, etc., are not eligible for STP funding as stand-alone projects, but are eligible if included as part of a larger, eligible project. The applicant must state that pre-construction work and ROW costs are not part of the total project cost in this application.

RESPONSE:

Pre-construction work and right-of-way costs are not part of the total project cost listed in this application. Only eligible components of the proposed project are included in the total project cost.

6. An STP construction or reconstruction project must be a permanent improvement. Traffic management projects as part of a construction project are exempt from this policy. Temporary construction is defined as work that must be essentially replaced in the immediate future (within 5 years). Staged construction is considered permanent rather than temporary so long as future stages add to, rather than replace, previous work. The applicant must state that the proposed project is a permanent improvement and does not replace any regionally funded project that was opened to traffic within five years.

RESPONSE:

The proposed project is a permanent improvement and does not replace any regionally funded project that was opened to traffic within five years.

7. Applicants can request up to a cap of $7,000,000 in STP funds for a specific Non-Freeway Principal Arterial project. Other federal funds may be combined with the requested STP funds, but the source(s) must be identified in the application. The cost of preparing a project for funding authorization can be substantial. For that reason, the project's federal cost must exceed $1,000,000. The applicant must show the requested federal amount and total project cost on the cover page.

RESPONSE:

As shown on the cover page, the total estimated construction cost for the project is $3,000,000. The City of Eagan is requesting $2,600,000 in Surface Transportation Program funds (80 percent of the total project cost). The requested amount exceeds the minimum of $1,000,000 and does not exceed the $7,000,000 maximum for STP funds.

8. STP funds awarded in the regional solicitation must be matched with non-federal funds. The non-federal match for any STP project must be at least 20% of the total cost. The applicant must state that it is responsible for the local (nonfederal) share. If the applicant expects any other agency to provide all or part of the local match, the applicant must include a letter or resolution from the other agency agreeing to participate financially in the project's construction.

RESPONSE:

The City of Eagan will provide the required local match with non-federal funds. The total estimated construction cost is $3,000,000 and the local match is anticipated to be $600,000 (20 percent of total).

9. The applicant must include a letter from the agency with jurisdiction over the road indicating that it is aware of and understands the project being submitted, and that it commits to operate and maintain the facility for its design life and not change the use of any right-of-way acquired without prior approval from MN/DOT and the Federal Highway Administration.

RESPONSE:

The agency with jurisdictional authority over the proposed project segment of TH 55 is Mn/DOT. Mn/DOT is supportive of the proposed project and agrees to operate and maintain TH 55 for its design life. In addition, Dakota County has an interest in the proposed project as is has jurisdictional authority over the Loan Oak Road intersection. See Appendix A-5 for a letters of support from Mn/DOT and Dakota County.

NON-FREEWAY PRINCIPAL ARTERIAL - PRIORITIZING CRITERIA

Applicants must respond to each of the following prioritizing criteria. Label your responses clearly. If a criterion is not applicable to your project, explain why.

A. Relative importance of the route as a Principal Arterial. 100 points

Principal arterials are the most heavily traveled roads in the region, carrying 53% of the total vehicle miles of travel. Non-freeway Principal Arterial generally do not carry as much traffic as controlled-access freeways, but are important to mobility within the metro area and connect the Twin Cities to other parts of Minnesota and Wisconsin. Non-freeway Principal Arterials are located in the urban core, the developed and developing suburbs and in rural areas. Although all non-freeway Principal Arterials are part of the metropolitan highway system, the relative importance of each is not the same. Some non-freeway Principal Arterials play a more significant role than others in providing roadway capacity for autos, trucks and transit buses. In some cases, it is the only arterial roadway available to provide medium and long-range trips for many miles. The following criteria are intended to measure the relative importance of each Principal Arterial route submitted for funding in this solicitation.

1. Definition and characteristics of the Principal Arterial route.

0-100 points The applicant must respond to the two items below and provide a map to help answer items a) and b). The Principal Arterial 'route' is defined as the uninterrupted length of the arterial that provides medium to long trips in the seven-county metropolitan area. The route may be an existing or planned road on the TAB adopted system. The route may be longer than the proposed project and include freeway sections, but it must be continuous and include only the portion of the roadway designated as a Principal Arterial and be of a non-freeway design. The endpoints of the route must be a principal or other minor arterial, or the boundary of the seven-county region. Two submittals on the same route must be at least 7 miles apart. Provide a map showing the length of the Principal Arterial route and the closest parallel 'A' Minor or Principal Arterials on both sides of the Principal Arterial. Points under this criterion are assigned based on the current and forecasted traffic volume on the Principal Arterial route and the current transit ridership on the Principal Arterial route.

a) Provide the current (2009) and forecasted (2030) average daily traffic volume at two or more locations on the Principal Arterial route. MN/DOT 50-series maps should be used for current counts. Use approved city or county comprehensive plans, Met Council, accepted State Aid traffic factors by county, or a transportation study with documented acceptable forecasting methodology for forecasted volume.

RESPONSE:

The proposed project is located on TH 55, a continuous Principal Arterial route shown on the TAB adopted Functional Classification System Map (May 2011). As shown in Figure 3, TH 55 is an important Principal Arterial route which spans the entire seven-county metropolitan area. Although TH 55 continues beyond the seven-county metropolitan area, the defined Principal Arterial route length is 55 miles, extending from the Hennepin County/Wright County boundary in the City of Rockford to TH 61(Principal Arterial) in the City of Hastings. The nearest north-south Principal Arterial to the project segment of TH 55 is I-35E, approximately 1.5 miles to the west. The closest Principal Arterial to the east is TH 52, which is approximately three miles away.

According to the 2009 Mn/DOT Metro Area Index Traffic Volume Map (50-series map), current (2008) Average Daily Traffic Volumes (AADT) on TH 55 within the project area are 26,500 vehicles per day north of Lone Oak Road and 32,800 vehicles per day south of Lone Oak Road. Based on the approved *Eagan Transportation Plan (2008)*, the forecast (2030) ADT within the project area is 38,000 vehicles per day north of Lone Oak Road and 44,000 vehicles per day to the south (see Figure 3).

b) Is public transit currently provided on this Principal Arterial route? If yes, what is the average annual ridership? The applicant does not need to provide this information in its funding application. Data will be provided by the Metropolitan Council staff based on the project location map and description.

RESPONSE:

Public transit is provided on this Principal Arterial route (see Figure 5). TH 55 is a vital transit corridor served by a range of transit services. Fixed route bus service within the project area is provided by the Minnesota Valley Transit Authority (MVTA). Bus routes serving the project area include 489 and 436, providing reverse commute service between Minneapolis, St. Paul, and the City of Eagan. Reverse commute service is designed to provide residents of the central cities opportunities to use transit to travel to employment centers in suburban areas, such as the growing Northwest Eagan Development area, adjacent to the proposed project (see Figure 5). These routes typically run during peak hours, but in the opposite direction from the traditional peak hour express routes (i.e., from the downtown areas to Eagan, rather than from Eagan to downtown).

In addition, the existing bus service within the project area also provides a direct connection to the Eagan Transit Station, located at Pilot Knob Road and Yankee Doodle Road, just west of the proposed project area (see Figure 5). The Eagan Transit Station provides access to regular and express fixed route bus service, including routes 437, 445, 446, 470, 480, and 484. The Eagan Transit Station also includes a park and ride lot with 680 parking spaces for bus passengers and retail patrons.

The fixed route transit service within the project area provides transit connections to a range of activity centers within Eagan, the south metro, and both downtown Minneapolis and St. Paul. A major destination served is the Northwest Eagan Development area, which is adjacent to the proposed project (see Figure 6). Among others, the Northwest Eagan Development area is currently home to the Ecolab Corporate Campus, the US Postal Service Accounting Facility, and the Waters Business Park. The area is expected to continue to develop in the future, with over 1.25 million square feet of office, warehouse, and business park development anticipated. In addition, transit service within the project area also provides a connection to the Parkview Plaza commercial area in Mendota Heights, Signal Hills Shopping Mall in West St. Pail, the VA Medical Center in Minneapolis, and ultimately both Downtown Minneapolis and Downtown St. Paul. Bus service within the project area also provides a convenient connection to the Hiawatha LRT line (via the VA Medical Center Station), providing service to the Minneapolis/St. Paul International Airport and Mall of America.

In addition, the 2030 Transportation Policy Plan (TPP) (2030 Transit Plan, pg. 148) identifies the project segment of TH 55 as a candidate for future Express Bus service, with transit advantages. In addition, Robert Street is identified as a candidate corridor for Bus Rapid Transit (BRT). Transit service along the project corridor (TH 55) would provide a direct connection to any future transitway along Robert Street, such as BRT.

Other transit service available within the project area includes demand responsive service provided by Dakota Area Resources and Transportation for Seniors (DARTS). DARTS is a demand-responsive transit service serving Eagan and other communities in Dakota County. DARTS provides both Americans with Disabilities Act (ADA) service, as well as services to non-disabled riders aged 60 and older.

The proposed roadway improvements will improve safety and reduce congestion along TH 55, thereby improving the efficiency of transit vehicles operating within the project area. In addition, the project will create enhanced trail connections to the existing transit facilities within the City of Eagan, as well as the adjacent and surrounding communities. In this way, the proposed project will improve transit operations and enhance access to transit service along this important Principal Arterial route.

B. Deficiencies and Solutions on Principal Arterial. 275 points

The regional solicitation process is one means of implementing regional plans. The region's Transportation Policy Plan states that the regional highway and street system will be preserved, managed, improved and expanded to support existing and planned land uses and safety and mobility needs consistent with the Regional Development Framework, the Transportation Policy Plan and approved local and county comprehensive plans. The following criteria reflect these objectives.

1. **Crash Reduction.**

0-150 points Calculate the total number of crashes reduced due to improvements on the Principal Arterial made by the proposed project. Points will be awarded based on the total three-year number of crashes projected to be reduced by the proposed project. The applicant must base the estimate of crash reduction on the methodology found in Appendix E. The applicant must calculate the frequency using the Mn/DOT TIS system average for calendar years 2007 through 2009. ∗

RESPONSE:

The proposed improvements on TH 55 are intended to increase safety in the corridor between TH 149 North and TH 149 South. According to Mn/DOT's TIS system data from January 1, 2007 through December 31, 2009, there have been a total of **58** crashes on this segment of roadway (see Appendix B). The 58 crashes include 17 personal injury crashes and 41 property damage crashes. As shown in the calculation below, **the proposed project will eliminate 38 crashes.**

For the TH 55 project corridor, the proposed improvements included in the analysis are a signal rebuild at each of the three signalized intersections and an additional through lane in each direction. All crashes used in the analysis are located at one of the signalized intersections, TH 149 North, TH 149 South and Lone Oak Road. As shown below, the following crash reduction factors were used in the crash analysis:

Mn/DOT % Change in Crashes – Signal Rebuild

The individual personal injury (PI) and property damage (PD) crash reduction factors were used to obtain the highest benefit:

Rear End PI – CRF = 20
Rear End PD – CRF = 30
Sideswipe PI – CRF = 50
Sideswipe PD – CRF = 30
Left Turn PI – CRF = 25
Left Turn PD – CRF = 20
Ran Off Road PI – CRF = 35
Ran Off Road PD – CRF = 50
Right Angle PI and PD – CRF = 30
Other PD – CRF = 30

∗ Applicants should request crash data from Mn/DOT as early as possible. An agency that wishes to dispute the results of their crash data requests can contact Ryan Coddington at 651-234-7841 (or Ryan.Coddington@state.mn.us) to reconcile those differences.

Increase the Number of Lanes – Project adds a through lane in each direction
FHWA Desktop Reference for Crash Reduction Factors – Table 6, p.61/62 (see Appendix B)

Rear End – CRF = 52
Sideswipe – CRF = 44
Left Turn – CRF = 71
Ran Off Road – CRF = 40 (average of available CRF)
Right Angle – CRF = 45
Other – CRF = 31

All of the crashes were combined, since they are located at an intersection. In order to apply the CRFs correctly, the crash reduction calculation was completed for each of the crash type:

Rear End Crashes (4 PI and 19 PD)
PI Crashes: CR = 1 – [(1-0.20)(1-0.52)] = 0.62 x 4 crashes = **2.48 crashes reduced**
PD Crashes: CR = 1 – [(1-0.30)(1-0.52)] = 0.66 x 19 crashes = **12.54 crashes reduced**

Sideswipe Crashes (1 PI and 5 PD)
PI Crashes: CR = 1 – [(1-0.50)(1-0.44)] = 0.72 x 1 crash = **0.72 crashes reduced**
PD Crashes: CR = 1 – [(1-0.30)(1-0.44)] = 0.61 x 5 crashes = **3.05 crashes reduced**

Left Turn Crashes (3 PI and 6 PD)
PI Crashes: CR = 1 – [(1-0.25)(1-0.71)] = 0.78 x 3 crashes = **2.34 crashes reduced**
PD Crashes: CR = 1 – [(1-0.20)(1-0.71)] = 0.77 x 6 crashes = **4.62 crashes reduced**

Ran Off Road Crashes (1 PI and 6 PD)
PI Crashes: CR = 1 – [(1-0.35)(1-0.40)] = 0.61 x 1 crash = **0.61 crashes reduced**
PD Crashes: CR = 1 – [(1-0.50)(1-0.40)] = 0.70 x 6 crashes = **4.20 crashes reduced**

Right Angle Crashes (7 PI and 4 PD)
PI and PD Crashes: CR = 1 – [(1-0.30)(1-0.45)] = 0.62 x 11 crashes = **6.82 crashes reduced**

Other Crashes (2 PD)
PD Crashes: CR = 1 – [(1-0.30)(1-0.31)] = 0.52 x 2 crashes = **1.04 crashes reduced**

Total Crash Reduction for the TH 55 Corridor = 38 crashes reduced

2. **Air Quality.** The Transportation Policy Plan strongly supports environmental considerations when making transportation funding decisions. The Council supports funding priorities for transportation projects that ensure prevention of air quality violations through the reduction of mobile source emissions.

The applicant must show that the project will reduce emissions and help the region to maintain its attainment of federal carbon monoxide standards. All assumptions and calculations must be clearly documented and explained in order to receive points. The applicant must include documentation of how the VMT reduction was determined and specify the speed used for the assumptions. Speed assumptions shall be based on the methodology found in Appendix F. Points under this criterion will be awarded based on the reduction of carbon monoxide (CO), nitrogen oxides (NOx), and/or volatile organic compounds (VOC) emissions the proposed project is expected to provide and if the project is near an air quality monitoring site.

0-50 points The applicant must demonstrate through a quantitative analysis that CO, NOx, and/or VOC emissions (in KILOGRAMS/DAY) will be reduced compared to the no-build alternative. The applicant must estimate CO, NOx, and/or VOC emissions reductions using the MOBILE6 emissions factors and vehicle emissions reduction worksheet in Appendix G.

RESPONSE:

It is important to note that due to the industrial/warehouse uses in the immediate project area, truck traffic volumes are higher than normal. Based on Mn/DOT HCADT (2006) maps, heavy commercial truck volumes on the TH 55 corridor are approximately eight percent of the daily volume. Using the Highway Capacity Manual, the passenger-car equivalent (PCE) of 1.5 was applied to eight percent of the peak hour traffic volume to account for heavier truck volumes and their impact on the TH 55 intersection capacities (see Appendix C).

To determine the reduction of emissions, an analysis to determine the increase in peak hour speed on TH 55 (westbound direction) during the a.m. peak hour due to the proposed project was conducted. Details of the analysis are shown below:

Segment Length = 0.53 mile
Posted Speed Limit = 55 mph
3 signalized intersections

Existing Conditions

Free-flow travel time (min.) = (0.53 mile /55 mph) x 60 = 0.58 minute

Signalized intersection delay (2 locations v/c > 0.9) = 150 seconds = 2.5 minutes
Signalized intersection delay (1 location v/c < 0.8) = 30 seconds = 0.5 minutes

Arterial Speed = (0.53 mile/(0.58 + 3.0 minutes)) x 60 = 9 mph

Proposed Conditions

Free-flow travel time (min.) = (0.53 mile /55 mph) x 60 = 0.58 minute

Signalized intersection delay (1 locations v/c > 0.9) = 75 seconds = 1.25 minutes
Signalized intersection delay (2 locations v/c < 0.8) = 60 seconds = 1 minute

Arterial Speed = (0.53 mile/(0.58 + 2.25 minutes)) x 60 = 11mph

Based on the analysis, the peak hour average speed will increase by **2 mph** on this segment after proposed project improvements. Using the MOBILE5B emission factors and vehicle emissions reduction worksheet (see Appendix D), a quantitative analysis was conducted for total emissions for both baseline (without project) and build (with project) conditions. The total emissions reduction due to the proposed improvements is **135 kilograms/day.**

3. **Congestion Reduction.**

0-75 points The applicant must show that the proposed project will reduce congestion at the most congested location on the Principal Arterial. The applicant must include the current volume to capacity (v/c) ratios in the AM and PM peak hours and the improvement in the ratios resulting from the project. Projects that have low existing v/c ratios will receive less credit for the improvement resulting from the project than projects that address a problematic existing v/c ratio. The applicant must use the methodology, worksheet and look-up tables found in Appendix H. The applicant must conduct a corridor analysis for new alignments, comparing parallel routes that will be affected by the project.

RESPONSE:

It is important to note that due to the industrial/warehouse uses in the immediate project area, truck traffic volumes are higher than normal. Based on Mn/DOT HCADT (2006) maps, heavy commercial truck volumes on the TH 55 corridor are approximately eight percent of the daily volume. Using the Highway Capacity Manual, the passenger-car equivalent (PCE) of 1.5 was applied to eight percent of the peak hour traffic volume to account for heavier truck volumes and their impact on the TH 55 intersection capacities (see Appendix C). The v/c capacity analysis for the TH 55 corridor takes this into account.

The volume to capacity (v/c) ratio analysis was conducted at the intersection of TH 55 and Lone Oak Road in the a.m. and p.m. peak hours. Details are shown below:

Existing Conditions
Westbound a.m. peak hour volume = 2013 vph
Vehicle capacity = 2000 vph (two left-turn lanes, two through lanes, right-turn lane)
A.M. volume/capacity ratio = 2013/2000 = 1.01

Eastbound p.m. peak hour volume = 1478 vph
Vehicle capacity = 1700 vph (left-turn lane, two through lanes, right-turn lane)
P.M. volume/capacity ratio = 1478/1700 = 0.87

Proposed Conditions
Westbound a.m. peak hour volume = 2013 vph
Vehicle capacity = 2600 vph (two left-turn lanes, three through lanes, right-turn lane)
A.M. volume/capacity ratio = 2013/2600 = 0.77

Eastbound p.m. peak hour volume = 1478 vph
Vehicle capacity = 2600 vph (two left-turn lanes, three through lanes, right-turn lane)
P.M. volume/capacity ratio = 1478/2600 = 0.57

A.M. Improvement in Volume/Capacity Ratio = 1.01 – 0.77 = 0.24
P.M. Improvement in Volume/Capacity Ratio = 0.87 – 0.57 = 0.30
Total Improvement for Phase II in Volume/Capacity Ratio = 0.24 + 0.30 = 0.54

C. Cost Effectiveness. 300 points

The Regional Development Framework and Transportation Policy Plan document the need for adequate transportation funding to implement regional transportation plans. The region must allocate transportation funds in such a way that the selected projects provide the most benefit for the amount of funding requested. Cost effectiveness is an essential component of the regional solicitation process. Cost effectiveness calculations must be based on the total cost of the project, not just the portion of the project eligible for federal funding.

1. Crash Reduction.

0-125 points The applicant must calculate the cost per crash reduced by the proposed project. The applicant must divide the total cost of the project by the answer from criterion B.1. Points will be awarded based on the relative cost per crash reduced.

RESPONSE:

The proposed improvements will be expected to eliminate a total of 38 crashes. The total project cost is $3,000,000. The cost per crash reduced by the proposed project is **$78,947**.

2. Air Quality

0-75 points The applicant must calculate the cost per kilogram per day that will be reduced by the proposed project compared to the no-build alternative. The applicant must divide the total project cost by the estimated reduction in CO, NOx, and/or VOC emissions per day calculated in question B.2.

RESPONSE:

The proposed improvements will be expected to reduce total emissions by **134.5 kilograms per day**. The total project cost is $3,000,000. The cost per kilogram reduced by the proposed project is **$22,305.**

3. Congestion reduction.

0-100 points The applicant must calculate the cost per increase in hourly person throughput provided by the proposed improvement. The applicant must use the worksheet in Appendix I. Points will be awarded based on the lowest cost per increase in person throughput, but if there is little congestion under existing conditions fewer points will be awarded for increasing person throughput.

RESPONSE:

The hourly throughput in the a.m. peak hour, in the peak direction of travel (westbound), at the most congested location (Lone Oak Road) was calculated for existing and proposed conditions. Details of the analysis are shown below:

Existing Conditions

Vehicle capacity = 2000 vph (two left-turn lanes, two through lanes, right-turn lane)
A.M. peak hour vehicle occupancy = 1.08
A.M. peak hour ridership = 0, assume no increase in service
Hourly person throughput = 2000 x 1.08 = 2,160 persons per hour

Proposed Conditions

Vehicle capacity = 2600 vph (two left-turn lanes, three through lanes, right-turn lane)
A.M. peak hour vehicle occupancy = 1.08
A.M. peak hour ridership = 0, assume no increase in ridership with this project
Hourly person through put = 2600 x 1.08 = 2808 persons per hour

Total increase in hourly person throughput = **648 persons per hour**

Cost per increase in hourly person throughput **=** $3,000,000/648 = **$4,630**

D. Development Framework Implementation. 425 points

The Metropolitan Development Guide is comprised of the ***2030 Regional Development Framework*** and system plans for transportation, including highways, transit and aviation; water resources management; and regional parks and trails. Together, the Development Framework and system plans create a vision for the region and are intended to help ensure the orderly, economical development of the seven-county area. The ***Framework*** is organized around four overall goals:

- Efficient Growth. Work with local communities to accommodate growth in a flexible, connected and efficient manner.
- Multi-modal Transportation. Plan and invest in multi-modal transportation choices, based on full range of costs and benefits, to slow the growth of congestion and serve the region's economic needs.
- Housing Choices. Encourage expanded choices in housing locations and types, and improved access to jobs and opportunities
- Natural Resource protection. Work with local and regional partners to conserve, protect and enhance the region's natural resources.

Under the Metropolitan Land Planning Act, local communities must prepare and submit to the Council local comprehensive plans that are consistent with the Council's regional systems plans. Local communities have submitted plans for 2030 and these have been reviewed by the Council.

1. Development Framework Planning Area Objectives **0-100 points**

Strategies for regional development relate directly to growth patterns within the region. The ***Framework*** communities are identified according to their regional planning area designation which is based on its geographic location, existing development patterns, forecast growth, planned land uses, and the availability of infrastructure. The project's relationship to **Framework** and **TPP** are addressed in the qualifying criteria.

The objective of this section is to address the land use and transportation linkages and how the project supports development and the accommodation of growth for the communities affected.

What are the 2030 land uses proposed in the community(ies) adopted plan for the project area/corridor affected? Identify the TAZs that lie partially or wholly within the project limits.

RESPONSE:

The City of Eagan's 2030 Land Use Plan was adopted in April 2010, as part of its Comprehensive Plan, and identifies special planning areas that provide unique planning opportunities and warrant more detailed planning guidance (see Figure 7). The proposed TH55 segment improvements intersect two such special planning areas that would be served by the proposed TH 55 improvements and dependent on efficient and improved traffic flow. These two areas are envisioned to be an attractive gateway and employment area for the community and are projected to continue to grow, expand and continue to act as a major employment center for the community.

The "Northeast Area" Special Area is generally bounded by TH 55 on the south, TH 149 on the west, I-494 on the north, and the City limits on the east (see Figure 7). This special area is the predominate future major office area for the city. It is intended to provide additional employment opportunities in the form of continued growth in business parks, office, and service businesses in this part of Eagan.

The "North Lexington Commons" Special Area is generally bounded by TH 55 on the north/east, CSAH 26 (Lone Oak Road) on the south, and I-35E on the west. This special area examines a possible transit node around a future passenger rail corridor and envisions a mixture of land uses such as office and

commercial and residential land uses, with industrial land use as the main land use in the area. While future rail transportation is only visionary in this case, TH 55 serves as its main regional access and identifies a need for enhanced transportation planning within this corridor. Also, an active redevelopment TIF district is in place along the adjacent southern parcels along TH 55 that anticipates redevelopment intensity of an older warehouse area of the City.

The project area forms the border between 2000 Met Council TAZs 248, 249, 250, 257, 258 and 259 (see Figure 8). The City of Eagan Comprehensive Plan 2030 identifies the following employment forecasts for these areas:

TAZ	2007 Employment	2030 Employment	Increase
248	1890	2388	498
249	87	991	904
250	6152	6518	366
257	2430	2925	495
258	3546	4071	525
259	4734	9581	4847
Total	**18839**	**26474**	**7635**

How does the project support this 2030 land use plan in the project area? Refer to the land use map and provide the land use categories and their description from the adopted local comprehensive plan.

RESPONSE:
The proposed TH 55 project improvement area serves a major industrial and office area in the northeast section of the City. The City of Eagan experienced a 20% job growth between 2000 and 2008, adding 8,600 jobs within that period. A significant portion of these jobs were created in the surrounding businesses parks served by the TH 55 corridor. Current land use adjacent to the TH 55 includes mainly industrial and corporate office developments with two smaller retail areas at TH 149 and at Lone Oak Road. The subject TH 55 segment specifically serves as a vital connection between the large employment areas of Grand Oaks Business Park, the Waters Business Park, and the Eagandale Center Industrial Park which comprise one of the largest employment centers in the Metropolitan region. These business parks include some of Eagan's largest employers such as Ecolab, United State Postal Service, Wells Fargo, Dart Transit, and White House Custom Colour.

Specific land surrounding this corridor and uses identified in the Eagan 2030 Comprehensive Plan (see Figure 7) include:

- MO= Major Office (mix of corporate office buildings, research and development facilities, educational/vocational institutions, and hotels);
- BP= Business Park (mix of corporate office buildings, office-warehouse, office-showroom, research and development facilities, restaurants and hotels.);
- I= Industrial (mix of industrial, manufacturing, trucking/logistics, warehouse, and similar uses); and,
- RC= Retail Commercial (shopping centers, supermarkets, drugstores, department stores, convenience center/gas stations, restaurants, and hotels) nodes at each end of the project segment.

Due to its locational advantages within the regional transportation system, including proximity to the MSP International Airport, Eagan is home to over 140 separate businesses and nearly 6,000 employees involved in transportation and warehouse activities. Over 100 of these businesses are directly involved in truck transportation and support activities. They Hwy 55/149 corridor is essential to

many of these businesses for the efficient movement of goods through the region. Dart Transit, the UPS Regional Distribution Center, Citi-Cargo, Uline, and ABF Trucking depend on this corridor as well as and many others in the surrounding area that are involved in the logistics, distribution and warehousing of materials.

The Project segment serves northeast Eagan, an area within the city that will show the highest concentration of forecast employment growth to 2030. The northeast Eagan and northwest portion of Inver Grove Heights is one of only a few remaining underutilized corporate development areas along the I-494 corridor in Dakota County. The TH 55 segment upgrade will provide an important connection to more efficiently move people to and from this transportation corridor to existing and future jobs.

How does the project support 2030 forecasts for the project area? [Council staff will evaluate this criterion and will provide the following information to assist in the evaluation of this criterion: TAZ Project Area demographic profile population, household, employment and retail employment. The applicant does not need to provide a response.]

2. Progress Towards Affordable Housing Goals **0-50 points**

NOTE: Information and analysis in this section will be provided by Council staff

Methodology for Evaluating Progress Made Towards Affordable Housing Goals

Up to 50 points can be awarded to a project, based upon a community's or group of communities' progress in addressing their affordable housing goals for 1996-2010.

For communities that participate in the Livable communities Local Housing Incentives Program, data from their 1996-2010 negotiated housing goals was used to determine the progress they have made toward providing opportunities to address their affordable housing goals.

For communities that do not participate in the Local Housing Incentives Program, progress will be measured against what the benchmarks were for their community in the Council's LCA goal setting methodology used in determining goals for 1996 to 2010.

Communities negotiated goals for both ownership and rental housing. Analysis consisted of comparing the goal, progress made to date and determining the percentage of the goal achieved for both ownership and rental combined.
Example of Analysis:

	Negotiated Goal	Progress to Date	Overall Progress Made - %
Rental Units	900	200	
Ownership Units	200	125	
Total Housing Units	**1,100**	**325**	**30%**

Scoring:

Percent of Progress Made:	Points Awarded:
90-100%	50
71-89%	40
51-70%	30
31-50%	20
11-30%	10
1-10%	5

For projects with 2 or more communities, scores are averaged and then applied to the project. Communities that do not have negotiated goals are given the same average score of the other communities within their group.

3. Land Use and Access Management Planning

0-100 points

The Development Framework includes support for connected land use patterns served by an integrated street network. Access management along highways is a key component of planning for these objectives. In addition, various access management strategies can reduce crashes, improve traffic flow, and add operational capacity for the applicable roadway. Higher scores will be given to projects that are developed using a local access management plan and to projects located in communities that have a regulatory framework established to protect and improve access control in the future. Additional points will be awarded to projects that implement these plans by reducing undesired access points.

Reference and describe the local access management plan used to develop the proposed project, and describe the corresponding county or state access management plan which supports the regional road network. Higher scores will be awarded to projects developed with an approach that is consistent with county or state access management plans.

RESPONSE:
In 1999, the City of Eagan and MnDOT entered into a partnership to develop an access management plan for TH 55 to ensure that traffic operations and safety are maintained on this important regional facility. A formal plan, titled "Trunk Highway 55 (TH 55) Access Management Plan" was ultimately developed. MnDOT and the City of Eagan effected a Memorandum of Understanding, dated May 26, 1999, agreeing "to utilize the recommended access and frontage road improvements identified in the TH 55 Access Management Plan to improve safety and mobility, while maintaining adequate access to current and future adjacent properties along TH 55." The Eagan City Council officially adopted the plan via resolution on June 1, 1999. The resolution states "that the City of Eagan hereby adopts the results and recommendations of the Access Management Study for TH 55 from Mendota Heights to Inver Grove Heights and commits to work with MnDOT to implement them with development or related public improvements." (see Appendix A-7)

The plan was developed in anticipation of continued development and/or redevelopment of properties along TH 55 as well as increased traffic volumes. The plan recognized the need to minimize access points along the corridor to maintain safety and mobility while coordinating adjacent land use development. The TH 55 access management plan identifies the following corridor-access elements:

- Location of existing access (1999)
- 1999 and 2020 traffic operations at key intersections
- Future development and background growth
- Location of future full-access intersections
- Location of future signalized intersections
- Location of future partial-access intersections
- Location of future frontage or backage roads
- Required future geometrics at key intersections
- Location of access closures or modifications

The development of this access management plan relied heavily on public participation. Public meetings were initially held to allow adjacent property owners to identify their issues related to access management on TH 55. Final public meetings were held to present the final results of the access management plan. All comments received during the public meetings were reviewed and incorporated in the final report.

Additionally, MnDOT has established guidelines for managing access to the state highway system. TH 55 is a principal arterial state highway under the Minnesota Department of Transportation's jurisdiction. The City of Eagan has adopted MnDOT's access spacing guidelines for Principal Arterial routes via the Transportation Section of the City's *Comprehensive Plan* (see Appendix A-1). The City Council approved the 2010 update to the *Comprehensive Plan* on April 6, 2010.

Provide and identify intersection spacing and signal spacing guidelines, and driveway allowance criteria used for the proposed project and the corresponding county or state access management guidelines.

RESPONSE:
This segment of TH 55 is subject to both MnDOT's Access Management Guidelines and the joint City/MnDOT Access Management Plan.

According to MnDOT's guidelines, access management on TH 55 is Category 3B, which is a principal arterial in an urban/urbanizing area (see Appendix A-6). MnDOT's access guidelines for Category 3B roadways (see Figure 9) establish minimum spacing for:

- Primary, full-movement intersections at ½ mile;
- Secondary intersections at ¼ mile;
- Signal spacing at ½ mile; and
- Adjacent properties to TH 55 retain access rights, so allowance of driveways is determined by availability of reasonably convenient and suitable alternative access.

Existing access spacing is shown in Figure 10 while proposed access modifications are shown in Figure 11. No new access points are being added to TH 55 as part of this project. The proposed project complies with the MnDOT Category 3B access guidelines.

The ultimate roadway layout for TH 55 according to the *TH 55 Access Management Plan* is shown in Appendix A-7. Additional development of adjacent properties is required to achieve the ultimate layout indicated in the figure. Specifically, construction of the planned backage road in the northeast quadrant of Lone Oak Road (CSAH 26) and TH 55 requires the development of properties adjacent to its alignment. The current owners of these properties have not indicated any plans to develop their properties to date. Nonetheless, the proposed project complies with the TH 55 Access Management Plan to the extent that can be accomplished with the proposed roadway improvements.

Having the necessary regulatory framework is essential for protecting the efficient functioning of the regional roadway network**.** Reference (adoption date) and describe the local zoning and subdivision ordinance regulations that are in place to maintain the access plan as adjacent properties are developed and/or redeveloped. Higher scores will be awarded to projects in communities with existing or proposed local support of the access management plan through existing regulations or ordinances.

RESPONSE:

The City of Eagan adopts and defines access management policies as part of the Transportation Section of its *Comprehensive Plan* (see Appendix A-1) in lieu of ordinances or codes. The City Council approved the 2010 update to the *Comprehensive Plan* on April 6, 2010. The City of Eagan has adopted MnDOT's access spacing guidelines for Principal Arterial routes via the Transportation Section of the City's *Comprehensive Plan* (see Appendix A-1).

Additionally, the City of Eagan and MnDOT entered into a partnership to develop an access management plan for TH 55 to ensure that traffic operations and safety are maintained on this important regional facility. A formal plan, titled "Trunk Highway 55 (TH 55) Access Management Plan" was ultimately developed. MnDOT and the City of Eagan effected a Memorandum of Understanding, dated May 26, 1999, agreeing "to utilize the recommended access and frontage road improvements identified in the TH 55 Access Management Plan to improve safety and mobility, while maintaining adequate access to current and future adjacent properties along TH 55." The Eagan City Council officially adopted the plan via resolution on June 1, 1999. The resolution states "that the City of Eagan hereby adopts the results and recommendations of the Access Management Study for TH 55 from Mendota Heights to Inver Grove Heights and commits to work with MnDOT to implement them with development or related public improvements." (see Appendix A-7)

4. Corridor Access Management Improvements

0-100 points

Projects that help to implement the access management plan by removing or modifying non-conforming access points will receive points in this criterion. Identify the access locations and access management that currently exists and that will be allowed once the project is completed. Indicate by the following classifications, the existing access locations inconsistent with the proposed access management approach and any access locations that will be modified:

a. Private Residential Driveways/Field Entrances

RESPONSE:

Currently, two (2) private residential driveways exist along the project corridor. Both driveways are allowed restricted access (right-in/right-out movements only). One (1) private residential driveway is proposed to be eliminated as part of the project. The property served by the remaining private residential driveway does not have reasonably convenient and suitable alternative access at this time and will be allowed continued restricted access to TH 55. Per the ultimate roadway layout for TH 55 from the *TH 55 Access Management Plan* (see Appendix A-7), reasonably convenient and suitable alternative access for this parcel is planned via a backage road which will be constructed as adjacent parcels are developed.

b. Low-Volume Private Driveways * (Under 500 trips per day)

RESPONSE:

There are no low-volume private driveways along the project corridor.

c. High-Volume Private Driveways * (Over 500 trips per day)

RESPONSE:

Currently, three (3) high-volume private driveways exist along the project corridor. The first high-volume private driveway is located on the west side of TH 55 between Lone Oak Road (CSAH 26) and the south intersection of TH 149. This driveway serves the corporate headquarters for Dart Transit Company and is restricted to right-in/right-out only movements. Per the ultimate roadway layout for TH 55 from the *TH 55 Access Management Plan* (see Appendix A-7), this right-in/right-out only access is planned to remain in the future. However, a frontage road is available from TH 149 which provides some level of access. It is proposed that modification or elimination of this access be evaluated as part of the project.

The second high-volume private driveway in the project corridor is located on the east side of TH 55 between Lone Oak Road (CSAH 26) and the north intersection of TH 149. This driveway serves Trinity Lone Oak Lutheran Church and School as a full movement access. Per the ultimate roadway layout for TH 55 from the *TH 55 Access Management Plan* (see Appendix A-7), this full movement access is

planned to be modified to a right-in/right-out only access and a backage road constructed to provide additional directional access. The median at this high-volume private driveway will be closed as part of the project to effect the right-in/right-only movements and the backage road will be constructed in the future as adjacent parcels develop.

The third high-volume private driveway in the project corridor is located on the west side of TH 55 north of the north intersection of TH 149. This driveway serves multiple parcels including TP Universal Exports LLC/TPAero and the Metropolitan Council. Per the ultimate roadway layout for TH 55 from the *TH 55 Access Management Plan* (see Appendix A-7), this right-in/right-out only access is planned to be eliminated by construction of a frontage road with adjacent development. To date, no development proposals have been received for the segment of frontage road that would serve these parcels. However, it is proposed that the frontage road be extended to accommodate access to these parcels as part of this project providing reasonably convenient and suitable alternative access for these parcels and allowing the elimination of this high-volume private driveway.

d. Public Streets

RESPONSE:

The project corridor is anchored on each end by a signalized intersection with TH 149. The intersections of TH 149 comply with MnDOT public street and signal spacing guidelines for Category 3B roadways as they are located with ½ mile spacing.

Additionally, a signalized, public street intersection with Lone Oak Road (CSAH 26) is located approximately 1000 feet north of the south TH 149 intersection. This signalized, public street intersection does not comply with MnDOT public street and signal spacing guidelines for Category 3B roadways as they are located at less than ½ mile spacing. Grade-separation of this intersection has been discussed in several regional roadway studies but determined to the cost-prohibitive.

5. Integration of Modes

0-75 points The *Transportation Policy Plan* requires that explicit consideration of all users of the transportation system be considered in the planning and scoping phase of roadway projects. The integration of modes criteria evaluate the value of the proposed project in providing better accommodations for pedestrians, bicyclists, transit and freight vehicles. Such accommodation should be provided within the existing right-of-way and provide the same level of access as motor vehicles unless it is shown to be impractical. In such cases, the project may include facilitation of such travel outside of the roadway right-of-way along a close parallel route. Principal Arterials are the highest capacity highways that make up the metropolitan highway system and carry single occupant vehicles, freight vehicles, and express buses. With some exceptions, non-motorized travel is not well-suited to travel alongside non-freeway principal arterials but without careful planning and development, this roadway type can be a barrier to such travel because it has high speeds, and provides few and difficult crossing opportunities.

Pedestrians: Examples of pedestrian improvements include construction or reconstruction of walkways or multi-use paths, separating pedestrian walkways from vehicle traffic through the installation of a buffer such as a boulevard, and providing pedestrian lighting. Equally important to improving pedestrian movement along the project area is improving the safety and ease of pedestrian crossings of the roadways. Some examples of these kinds of improvements are installation of pedestrian countdown signals with crosswalks, reducing the effective crossing distance by installing curb extensions and pedestrian medians, and reducing the speed of vehicles making turning movements at intersections. Different treatments are appropriate for different types of roadway conditions.

Include a map that shows all new or reconstructed walkways or multi-use paths that will be constructed as part of this project as well as all pathways that these walkways will connect to and

any potential pedestrian destinations such as schools, residences, transit stops, parks, and businesses within ¼ mile of the project area that will be accessible to pedestrians. In the response field, indicate the characteristics of these pedestrian facilities (i.e. multi-use trail, sidewalk, or crosswalk etc.) and whether they are brand new facilities or a replacement of an existing facility. All pedestrian facilities must be designed to be ADA-compliant at a minimum.

RESPONSE:

The proposed project will facilitate integration of modes by providing dedicated facilities for pedestrians, bicyclists, and other non-motorized transportation modes along a Principal Arterial route. In addition, the project will fill a gap in the local trail network work, creating enhanced non-motorized connections to a range of pedestrian destinations such as schools, residences, transit stops, parks, and businesses.

There are currently a lack of adequate pedestrian facilities along the proposed project segment of TH 55, leading to an unsafe pedestrian environment. As shown in Figure 12, there are currently no trails or sidewalks along the roadway within the project area. There are currently crosswalks in place at the existing signalized intersections (TH 149 north junction, Lone Oak Road, and TH 149 south junction); however, they do not generally connect to any corresponding trails or sidewalks. As an example, there are north-south and east-west crosswalks at the TH 149 north intersection, but there are no sidewalks on TH 149 or TH 55 to connect to the crosswalks. This contributes to a lack of adequate pedestrian crossing facilities and makes crossing TH 55 within the project area unsafe for pedestrians.

The proposed project will create a safer and more efficient pedestrian environment through the provision of a new multi-use trail and safe pedestrian crossing locations along this high volume Principal Arterial route. As shown in Figure 4, the proposed project includes the reconstruction of TH 55 from a four-lane divided roadway to a six-lane divided roadway, including a new multi-use trail on the west side of the roadway. The proposed trails will be 10 feet wide and will be separated from the roadway travel lanes by a minimum of 16 feet, via a boulevard. The proposed project will enhance the pedestrian environment by providing a multi-use trail along TH 55 where none currently exists. In addition, the proposed separation between the trail and vehicle travel lanes will ensure a safe and efficient pedestrian environment, by minimizing pedestrian/vehicle conflicts.

Moreover, as part of the roadway reconstruction to a six-lane undivided roadway, a new concrete raised median will be installed in the center of the roadway at each of the three signalized intersections along the corridor (TH 149 north junction, Lone Oak Road, and TH 149 south junction). This newly constructed median will provide safe pedestrian refuge areas for non-motorized traffic crossing the corridor, thereby reducing the effective crossing distance for pedestrians and improving safety for pedestrians and motorists alike. Further, the proposed project will include crosswalk markings and curb ramps at each of the signalized intersections within the project area, which will connect to the proposed trails. The crosswalk markings will direct pedestrians to a safe crossing location, while alerting motorists as to the presence of pedestrians. The curb ramps will provide enhanced access to the trail system for those who would otherwise be excluded due to the barrier created by the curb (i.e., those who use wheelchairs, walkers, children on bicycles, etc.).

The enhanced trail facilities included as part of the proposed project will provide improved pedestrian connectivity within the area, creating safe and enjoyable linkages between the range of pedestrian destinations surrounding the project corridor. These include the already popular park and trail system in the area, schools, retail, entertainment, and transit facilities. Further, the proposed trails will connect to a wider pedestrian network which includes both the City of Eagan and Dakota County trail system. In addition, these trails provide a connection to the Eagan Transit Station and park-and-ride lot at Pilot Knob Road and Yankee Doodle Road. As shown in Figure 12 there are several parks, schools, and playgrounds within a 1/4-mile radius of the proposed project, all of which will realize enhanced pedestrian linkages as a result of the proposed improvements. These include the Musikgarden of Trinity Lone Oak music school on the east side of TH 55 within the project area, Lexington Park (1/4-mile west of project area), North Park (1/4-mile south of project area), and Bur Oaks Park (1/4-mile east of project area).

In addition, the proposed project will facilitate enhanced trail linkages between the multitude of residences surrounding the project area and jobs within the growing Northwest Eagan Development area. This development is adjacent to the proposed project, on the east side of TH 55 (see Figure 6). Among others, the Northwest Eagan Development area is currently home to the Ecolab Corporate Campus, the US Postal Service Accounting Facility, and the Waters Business Park. The area is expected to continue to grow in the future, with over 1.25 million square feet of office, warehouse, and business park development anticipated, thereby increasing the importance of the proposed trail facility.

As shown in Figure 12**,** the proposed project will also fill a gap in the local trail network, providing a safe, convenient, and enjoyable connection to the existing and planned local and regional trail systems within Eagan, as well as those in adjacent communities. The City of Eagan generally has a well developed trail system consisting of a network of north-south and east-west trails along most major roadways; however, there are currently very few continuous trails serving the northwest portion of the city (see Figure 12). This gap in the trail system limits pedestrian mobility within the area, deterring pedestrian travel. The proposed project will provide a continuous north-south trail extending through the Northwest Eagan area, thereby addressing this critical trail system gap. This continuous north-south trail connection will provide enhanced linkages to the local trail systems, creating a safe, efficient, and enjoyable trail route to regional pedestrian destinations such as Fort Snelling State Park (approximately three miles west of the project area) and Lebanon Hills Regional Park (less than two miles south of the project area).

Finally, the proposed project will improve pedestrian access to transit. By creating an enhanced trail linkage between residences and jobs within the area, and the existing transit facilities, the proposed project will provide enhanced trail access to transit services. In addition, these improvements will create the potential to expand transit service and enhance the use of the existing transit station at Pilot Knob Road and Yankee Doodle Road (just west of the proposed project).

As previously described, the proposed project will promote integration of modes through enhanced pedestrian safety, improved pedestrian mobility, and by providing better linkages to a wide range of pedestrian destinations. All pedestrian facilities will be ADA compliant.

Bicyclists: Examples of bicycle improvements include striping a bike lane or a marked shoulder that is 5 feet wide or greater, installing an off-road pathway where conditions favor one, and intersection treatments designed to reduce motor vehicle and bicycle conflict. Different treatments are appropriate for different types of roadway conditions.

Include a map that shows all new or reconstructed bikeways that will be constructed (or striped) with this project, and show how they connect to an existing or planned bikeway network. Also show potential destinations along the roadway segment and within a ¼ mile of the project area that will be accessible with this bikeway network such as schools, parks residences, transit stops, and businesses. In the response field, indicate the characteristics of these bicycle facilities (i.e. bike lane, striped shoulder, cycle track, multi-use trail etc.) and whether they are brand new facilities or a replacement of an existing facility..

RESPONSE:

The proposed project will facilitate integration of modes by providing dedicated facilities for pedestrians, bicyclists, and other non-motorized transportation modes along a Principal Arterial route. In addition, the project will fill a gap in the local trail network work, creating enhanced non-motorized transportation system connections to a range of bicycle-oriented destinations such as schools, residences, transit stops, parks, and businesses.

There are currently a lack of adequate bicycle facilities along the proposed project segment of TH 55, leading to an unsafe bicycle environment. As shown in Figure 12, there are currently no trails or sidewalks along the roadway within the project area. There are currently crosswalks in place at the existing signalized intersections (TH 149 north junction, Lone Oak Road, and TH 149 south junction);

however, they do not generally connect to any corresponding trails or sidewalks. As an example, there are north-south and east-west crosswalks at the TH 149 north intersection, but there are no sidewalks on TH 149 or TH 55 to connect to the crosswalks. This contributes to a lack of adequate bicycle crossing facilities and makes crossing TH 55 within the project area unsafe for bicycles.

The proposed project will create a safer and more efficient bicycle environment through the provision of a new multi-use trail and safe bicycle crossing locations along this high volume Principal Arterial route. As shown in Figure 4, the proposed project includes the reconstruction of TH 55 from a four-lane divided roadway to a six-lane divided roadway, including a new multi-use trail on the west side of the roadway. The proposed trails will be 10 feet wide and will be separated from the roadway travel lanes by a minimum of 16 feet, via a boulevard. The proposed project will enhance the bicycle environment by providing a multi-use trail along TH 55 where none currently exists. In addition, the proposed separation between the trail and vehicle travel lanes will ensure a safe and efficient bicycle environment, by minimizing bicycle/vehicle conflicts.

Moreover, as part of the roadway reconstruction to a six-lane undivided roadway, a new concrete raised median will be installed in the center of the roadway at each of the three signalized intersections along the corridor (TH 149 north junction, Lone Oak Road, and TH 149 south junction). This newly constructed median will provide safe refuge areas for non-motorized traffic crossing the corridor, thereby reducing the effective crossing distance for and improving safety for bicycles and motorists alike. Further, the proposed project will include crosswalk markings and curb ramps at each of the signalized intersections within the project area. The crosswalk markings will direct bicycles to a safe crossing location, while alerting motorists as to the presence of bicycles crossing. The curb ramps will provide enhanced access to the trail system for those who would otherwise be excluded due to the barrier created by the curb (i.e., those who use wheelchairs, walkers, children on bicycles, etc.).

The enhanced trail facilities included as part of the proposed project will provide improved bicycle connectivity within the area, creating safe and enjoyable linkages between the range of bicycle destinations surrounding the project corridor. These include the already popular park and trail system in the area, schools, retail, entertainment, and transit facilities. Further, the proposed trails will connect to a wider bicycle network which includes both the City of Eagan and Dakota County trail system. In addition, these trails provide a connection to the Eagan Transit Station and park-and-ride lot at Pilot Knob Road and Yankee Doodle Road. As shown in Figure 12 there are several parks, schools, and playgrounds within a 1/4-mile radius of the proposed project, all of which will realize enhanced bicycle linkages as a result of the proposed improvements. These include the Musikgarden of Trinity Lone Oak music school on the east side of TH 55 within the project area, Lexington Park (1/4-mile west of project area), North Park (1/4-mile south of project area), and Bur Oaks Park (1/4-mile east of project area).

In addition, the proposed project will facilitate enhanced trail linkages between the multitude of residences surrounding the project area and jobs within the growing Northwest Eagan Development area. This development is adjacent to the proposed project, on the east side of TH 55 (see Figure 6). Among others, the Northwest Eagan Development area is currently home to the Ecolab Corporate Campus, the US Postal Service Accounting Facility, and the Waters Business Park. The area is expected to continue to grow in the future, with over 1.25 million square feet of office, warehouse, and business park development anticipated, thereby increasing the importance of the proposed trail facility.

As shown in Figure 12**,** the proposed project will also fill a gap in the local trail network, providing a safe, convenient, and enjoyable connection to the existing and planned local and regional trail systems within Eagan, as well as those in adjacent communities. The City of Eagan generally has a well developed trail system consisting of a network of north-south and east-west trails along most major roadways; however, there are currently very few continuous trails serving the northwest portion of the city (see Figure 12). This gap in the trail system limits bicycle mobility within the area, deterring non-motorized travel. The proposed project will provide a continuous north-south trail extending through the Northwest Eagan area, thereby addressing this critical trail system gap. This continuous north-south trail connection will provide an enhanced linkage to the local trail systems, creating a safe, efficient, and enjoyable trail route to regional bicycle-oriented destinations such as Fort Snelling State Park

(approximately three miles west of the project area) and Lebanon Hills Regional Park (less than two miles south of the project area).

Finally, the proposed project will improve bicycle access to transit. By creating an enhanced trail linkage between residences and jobs within the area, and the existing transit facilities, the proposed project will provide enhanced trail access to transit services. In addition, these improvements will create the potential to expand transit service and enhance the use of the existing transit station at Pilot Knob Road and Yankee Doodle Road (just west of the proposed project).

As previously described, the proposed project will promote integration of modes through enhanced bicycle safety, improved bicycle mobility, and by providing better linkages to a wide range of bicycle destinations. All bicycle facilities will be ADA compliant.

Transit: Examples of transit improvements include improving accessibility to transit stops by pedestrians, installing bus stop amenities for passengers, and placing bus stops on the far side of intersections. In some cases, other improvements to the roadway, including curb bump-outs for bus stops or the construction of bus lanes can improve transit service reliability and speed along the roadway.

Is there transit service on the roadway? If so, what elements of this project will enhance the mobility of transit vehicles, if any? What elements of this project will improve passenger access to transit stops?

RESPONSE:

Public transit is provided on this Principal Arterial route (see Figure 5). TH 55 is a vital transit corridor served by a range of transit services. Fixed route bus service within the project area is provided by the Minnesota Valley Transit Authority (MVTA). Bus routes serving the project area include 489 and 436, providing reverse commute service between Minneapolis, St. Paul, and the City of Eagan. Reverse commute service is designed to provide residents of the central cities opportunities to use transit to travel to employment centers in suburban areas, such as the growing Northwest Eagan Development area, adjacent to the proposed project (see Figure 6). These routes typically run during peak hours, but in the opposite direction from the traditional peak hour express routes (i.e., from the downtown areas to Eagan, rather than from Eagan to downtown).

In addition, the existing bus service within the project area also provides a direction connection to the Eagan Transit Station, located at Pilot Knob Road and Yankee Doodle Road, just west of the proposed project area (see Figure 5). The Eagan Transit Station provides access to regular and express fixed route bus service, including routes 437, 445, 446, 470, 480, and 484. The Eagan Transit Station also includes a park and ride lot with 680 parking spaces for bus passengers and retail patrons.

The fixed route transit service within the project area provides transit connections to a range of activity centers within Eagan, the south metro, and both downtown Minneapolis and St. Paul. A major destinations served is the Northwest Eagan Development area, which is adjacent to the proposed project (see Figure 6). Among others, the Northwest Eagan Development area is currently home to the Ecolab Corporate Campus, the US Postal Service Accounting Facility, and the Waters Business Park. The area is expected to continue to develop in the future, with over 1.25 million square feet of office, warehouse, and business park development anticipated. In addition, transit service within the project area also provides a connection to the Parkview Plaza commercial area in Mendota Heights, Signal Hills Shopping Mall in West St. Pail, the VA Medical Center in Minneapolis, and ultimately both Downtown Minneapolis and Downtown St. Paul. Bus service within the project area also provides a convenient connection to the Hiawatha LRT line (via the VA Medical Center Station), providing service to the Minneapolis/St. Paul International Airport and Mall of America.

In addition, the 2030 Transportation Policy Plan (TPP) (2030 Transit Plan, pg. 148) identifies the project segment of TH 55 as a candidate for future Express Bus service, with transit advantages. In addition,

Robert Street is identified as a candidate corridor for Bus Rapid Transit (BRT). Transit service along the project corridor (TH 55) would provide a direct connection to any future transitway along Robert Street, such as BRT.

Other transit service available within the project area includes demand responsive service provided by Dakota Area Resources and Transportation for Seniors (DARTS). DARTS is a demand-responsive transit service serving Eagan and other communities in Dakota County. DARTS provides both Americans with Disabilities Act (ADA) service as well as services to non-disabled riders aged 60 and older.

The proposed project will enhance mobility and efficiency for transit vehicles traveling within the project area, and will also improve passenger access to transit stops. As shown in Figure 4, the proposed project includes the reconstruction of TH 55 from a four-lane divided roadway to a six-lane divided roadway with additional turn lanes at major intersections. In addition, the proposed project includes rebuilding three traffic signals at the intersections with the north junction of TH 149, Lone Oak Road, and the south junction of TH 149. Accommodations for bicyclists and pedestrians will also be provided, via a multi-use trail constructed on the west side of the roadway.

The proposed roadway capacity and intersection improvements will improve safety and reduce congestion for motorists traveling along TH 55, including transit vehicles and passengers who drive to the Eagan Transit Station park-and-ride lot. This will result in a reduction of delays and an increase in traffic operations efficiency, thereby enhancing the mobility of transit vehicles operating within the project area.

In addition, the proposed project will increase pedestrian and bicycle access to transit facilities by providing a safe, convenient, and continuous multi-use trail route along TH 55. This will improve transit access by creating a trail connection between residences, jobs, and commercial uses and the existing transit facilities within the area. Moreover, the proposed project will provide safe and convenient locations for pedestrian and bicycles to cross TH 55 to access bus stops and the Eagan Transit Center (just west of the proposed project). As part of the roadway reconstruction, a new concrete raised median will be installed in the center of the roadway at each of the three signalized intersections along the corridor (TH 149 north junction, Lone Oak Road, and TH 149 south junction). This newly constructed median will provide refuge areas for non-motorized traffic crossing the corridor, thereby reducing the effective crossing distance for and improving safety for pedestrians and bicycles. Further, the proposed project will include crosswalk markings and curb ramps at each of the signalized intersections within the project area, which will connect to the proposed trail. The crosswalk markings will direct pedestrians and bicycles to a safe crossing location, while alerting motorists as to the presence of pedestrians crossing. The curb ramps will provide enhanced trail access for those who would otherwise be excluded due to the barrier created by the curb (i.e., those who use wheelchairs, walkers, children on bicycles, etc.). These improvements will provide a safe and convenient pedestrian and bicycle environment, thereby improving pedestrian access to transit.

By improving roadway safety and efficiency, and by providing enhanced trail connections to transit facilities within the area, the proposed project will improve transit operations and enhance access to transit service along this important Principal Arterial route.

Freight: Freight improvements will be evaluated on the role of the roadway in providing freight mobility.

What is the current daily heavy commercial traffic along the project segment? Is the roadway used to access any of the regional intermodal freight terminals in Appendix J and does the road connect any of these terminals to a freeway?

RESPONSE:

The proposed project is located in an important freight moving area and will help to improve freight mobility by providing enhanced access to a regional intermodal freight terminal and by providing a safe and efficient route for regional freight traffic.

Heavy Commercial Traffic

According to Mn/DOT Traffic Flow maps, the current (2006) daily heavy commercial traffic volume on TH 55 within the project segment is 1,480 north of Lone Oak Road and 1,300 vehicles per day south of Lone Oak Road, making TH 55 a regionally important freight route. There is a high amount of freight traffic on the project segment of TH 55, due to the many warehouse and industrial uses within the area.

Eagan is home to over 140 separate businesses and nearly 6,000 employees involved in transportation and warehouse activities. Over 100 of these businesses are directly involved in truck transportation and support activities. The project segment of the Hwy 55/149 corridor is essential to many of these businesses for the efficient movement of goods through the region. Dart Transit, the UPS Regional Distribution Center, Citi-Cargo, Uline, and ABF Trucking depend on this corridor, as well as and many others in the surrounding area that are involved in the logistics, distribution and warehousing of materials.

Regional Intermodal Freight Terminals

The proposed project will improve access to a major regional intermodal freight terminal. The proposed project lies approximately 3.5 miles southeast of the Minneapolis - St. Paul International Airport, which is an intermodal freight terminal of regional, state, and national significance. From the airport, air cargo and passengers are disseminated throughout the region, primarily on Principal Arterial routes such as TH 55. TH 55 is adjacent to the airport, just north of the project area, and is the primary Principal Arterial route connecting this critical intermodal freight terminal to freight destinations/generators to the south and east. The proposed project will reduce congestion on TH 55, thereby enhancing mobility, efficiency, and safety for freight haulers traveling along TH 55 to access this important regional intermodal freight terminal.

Terminal Freeway Connections

The proposed project will provide an enhanced freeway connection to a major regional intermodal freight terminal. TH 149 connects to I-494 just north of the proposed project area (less than one mile). By improving safety, efficiency, and operations at the intersection of TH 55 and TH 149, the proposed project will enhance access to I-494, which will provide an improved freeway connection to the Minneapolis - St. Paul International Airport. In addition, the proposed project will also improve access to I-494 for major freight generators and to the regional highway system for truck traffic. Numerous truck terminals and jobs centers are located along TH 55, TH 149, and the I-494 corridor. As TH 55 and TH 149 connect to I-494, the proposed project will improve access to these major truck terminals and employment centers. Finally, the project will also improve access to the many freight generating warehouse areas along TH 55, within the project area.

E. Maturity of Project Concept. 100 points

Projects selected through this solicitation will be programmed for construction in 2015 or 2016. That is a fairly long time but it takes several years to complete preliminary engineering, environmental studies and acquire right-of-way. The region must manage the federal funds in each year of the TIP. Projects that are not implemented in their original program year are carried over to the next program year, or the funding sunset date. This requires other projects to shift program years to maintain fiscal balance in the TIP and STIP. Proposed projects that have already completed some of the work are more likely to be ready for funding authorization in their program year. A schedule is important to know what kind of work might be needed. Large projects that need right-of-way require more work than those that do not.

0-100 points Applications involving construction must complete the project implementation schedule found in Appendix K. A detailed schedule of events is expected for all phases of the project. Applications involving non-construction projects must include a detailed discussion of the timeframes involved for initiating and completing each phase of planned activities. Points under this criterion are assigned based on how many steps have been taken toward implementation of the project. These steps reflect a federally funded project development path.

RESPONSE: Please complete the project implementation schedule found in Appendix K.

TOTAL: 1,200 POINTS

Appendix K
Project Implementation Schedule

Please check those that apply and fill in anticipated completion dates

1) Project Scope
__√__Stake Holders have been identified
__√__Meetings or contacts with Stake Holders have occurred

2) Layout or Preliminary Plan
_____ Identified Alternatives
_____ Selected Alternatives
_____ Layout or Preliminary Plan started
__√__Layout or Preliminary Plan completed
Anticipated date or date of completion

3) Environmental Documentation
_____EIS _____EA ___√__PM
Document Status
__√__Document not started
_____Document in progress; environmental impacts identified
_____Document submitted to State Aid for review (date submitted _____)
_____Document approved (need copy of signed cover sheet)
Anticipated date or date of completion/approval December 2013

4) R/W
_____No R/W required
_____R/W required, parcels not identified
__√__R/W required, parcels identified
_____R/W has been acquired
Anticipated date or date of acquisition September 2014

5) Railroad Involvement
__√__No railroad involvement on project
_____Railroad R/W Agreement required; negotiations not begun
_____Railroad R/W Agreement required; negotiations have begun
_____Railroad R/W Agreement is complete
Anticipated date or date of acquisition _____

6) Construction Documents/Plan
__√__Construction plans have not been started
_____Construction plans in progress
Anticipated date or date of completion September 2014
_____Construction plans completed/approved

7) Letting
Anticipated Letting Date March 2015