TWIN CITIES
FREIGHT AND COMMUTER BOTTLENECK REMOVAL PROJECT

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GRANTS FOR TRANSPORTATION INVESTMENT GENERATING ECONOMIC RECOVERY
"TIGER DISCRETIONARY GRANTS"

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AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

PROJECT SUMMARY

Fast Facts

Project Name: Twin Cities Freight and Commuter Bottleneck Removal Project
What: Replacing obsolete signalized bottleneck interchanges and intersections with state-of-the art interchanges at US 169/I-494 and TH 101/TH 13
Where: Southwest Minneapolis/St. Paul metropolitan area, Minnesota
Cost: $201.3 Million
TIGER Request: $135 Million
Construction Timeframe: 2010 - 2012
Jobs: 707 direct jobs

Why Is This Project The Best Choice For TIGER?

1. Project of National and Regional Significance

The US 169/I-494 interchange is currently the only signalized interchange remaining on an inter-regional corridor in the twin cities metropolitan area. The congestion and safety issues on this interchange not only impact vehicles but also freight operators, transit providers and private bus companies who operate numerous routes through the interchanges.

The project is necessary to improve the flow of grain traffic through the southwest Minnesota region so it can be effectively distributed to the rest of the country. The project improves the flow of goods to the Ports of Savage (Ports), an important transfer point on the Minnesota River for grain heading around the country. In addition, the project will improve traffic flow for those who commute by car and bus into this growing employment center. The existing configurations of the US 169/I-494 Interchange and TH 101/TH 13 Intersection present numerous safety and mobility issues as well as inhibits economic growth in the region.

Significant Long-Term Benefits

- Reduction in the number of crashes occurring on both interchanges, thereby improving the overall road safety of the region
- Improved mobility and quality of life in the region due to lower congestion and travel time savings
- Free-flowing traffic to the Ports – a key grain distributor in the U.S.
- Improved access for employees and visitors to the tribal casinos in Scott County.

2. It's A Solid Public Investment

- B/C Ratio > 1.19

3. Tremendous Partnership

- Numerous Local and State funding commitments, along with Mn/DOT's proven ability to delivery large capital projects on-time and on-budget
- Strong Support from the Port operators as well as the owners and employees of the Tribal Casinos in the region.

Why Now?

The time is now: The project cannot be completed at this time without a TIGER grant. Despite Mn/DOT's efforts to identify full funding for this project since the beginning of the decade, state and local commitments are not sufficient to fund the entire project. Further federal and state funding will only be determined after 2010, while congestion, safety and economic competitiveness will continue to decline.

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1 Project Description

The Twin Cities Freight and Commuter Bottleneck Removal Project

The Twin Cities Freight and Commuter Bottleneck Removal Project , herein referred to as "the Project", is to improve traffic flow in key intermodal connectors to reduce congestion, improve safety and strengthen the region's ability to develop its economy. The investments run through four cities and two counties and include the reconstruction of a series of interchanges/intersections on a key Minnesota freight corridor southwest of Minneapolis: the interchange of Trunk Highway 169 (US 169) at Interstate 494 (I-494) (US 169/I-494) in Bloomington, Eden Prairie and Edina, Minnesota and reconstruct the TH 13 and TH 101 intersection (TH 101/TH 13) near Savage, Minnesota (here-on referred to as "the Project" or "the Interchange Project"). The interchange and intersection lie on an important route for truck traffic from the Ports to the region. The following are some of the problems in this important intermodal connector:

US 169/I-494 is the last remaining interchange on an inter-regional corridor with stop lights in the twin cities metropolitan area.

TH 13 is the primary access route to the Ports, which has been designated an FHWA intermodal connector facility based on the annual throughput. It is a major connector to TH 101, US 169, I-494 and I-35W.

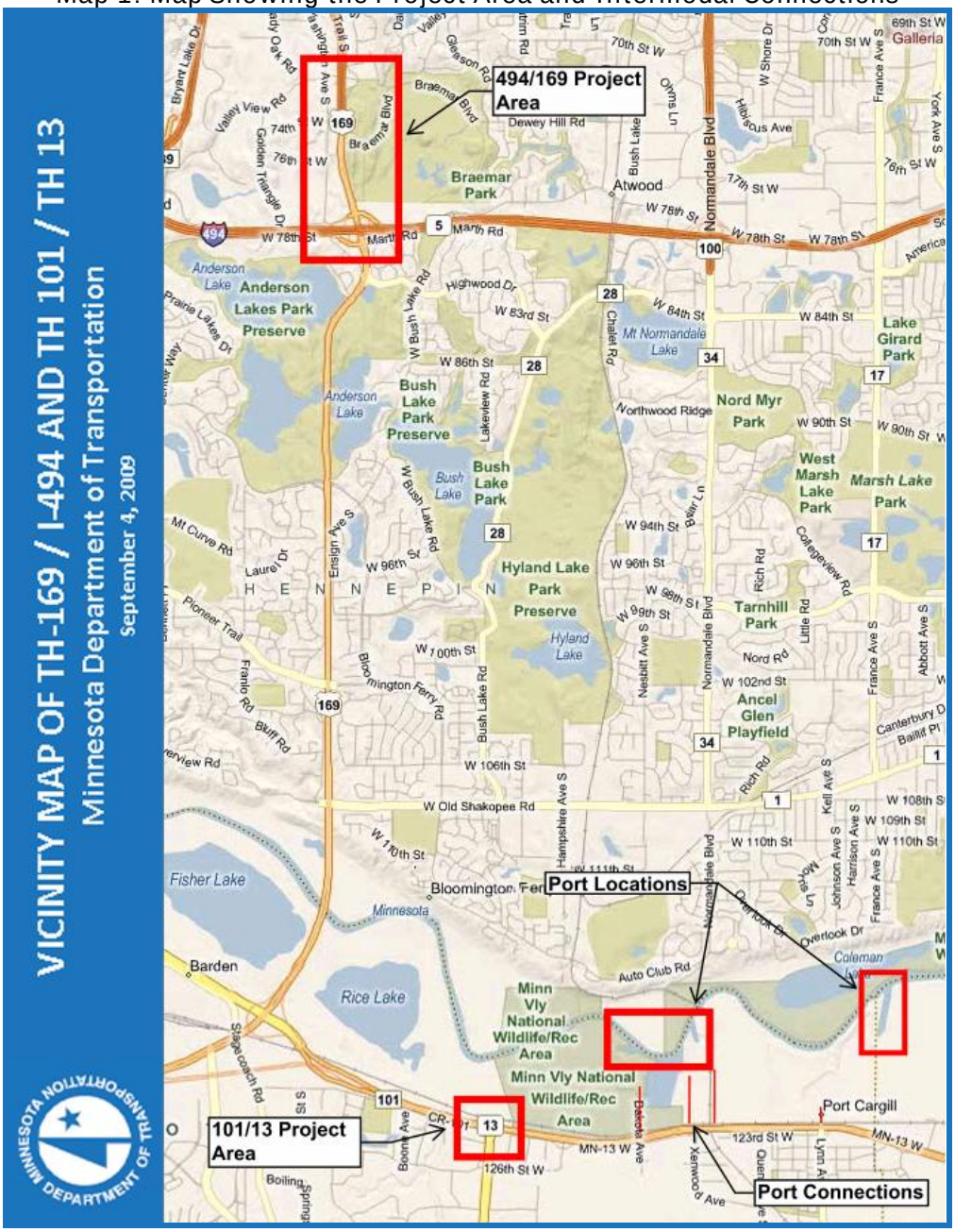
- Significant congestion with numerous delays
- Safety issues since there are a high number of crashes related to congestion and the unsafe conditions for entering and exiting certain ramps.
- Intermodal connection issues:
  - These interchanges are important connectors from the Ports, five key freight terminals on the Minnesota River, to US 169 and eventually I-494. TH 13 is the primary access route to and from the Ports, which has been designated an FHWA intermodal connector facility based on the annual throughput.
  - Transit is also another key component as a part of the project since it completes the bus shoulders on portion of US 169 at the interchange. Furthermore, numerous buses (both public transit and privately operated) use the interchanges to take people to and from work. Mystic Lake Casino is located outside the City of Savage and is the region's largest employer with over 4,000 employees.

The key investments made under the project to alleviate these problems are:

- A reconstruction of the US 169/I-494 interchange from a "cloverleaf" type of interchange to a directional interchange with opposing loops – this will provide a more consistent flow of traffic and will reduce the number of crashes.
- The conversion of US 169 to a four lane freeway with regional routes separated from local traffic – this will add capacity and alleviate congestion, particularly for trucks, such as those coming from the Ports.
- The reconstruction of three-legged, at grade intersections currently operated by traffic lights into an interchange to allow for a better flow of traffic, thereby reducing congestion and the number of crashes.

The map below shows the two proposed interchange locations included in the project and the intermodal connections.

Map 1: Map Showing the Project Area and Intermodal Connections



US 169/I-494

I-494 is an east/west principal arterial that makes up the southern and western portions of the "beltway" around the Twin Cities metropolitan area. The existing interchange is a "cloverleaf" type configuration with three traffic signals on US 169 with local roadway connections integrated within and around the interchange. This configuration and the use of three traffic signals constrains the traffic flow through the interchange area leading to increased congestion, travel times and crashes on US 169 and I-494. This is the only signalized system interchange on an inter-regional corridor in the metropolitan area.

Analysis conducted in April 2009 indicates that the US 169/I-494 interchange is over capacity in both the morning and evening peak hours. The analysis on the levels of service on the roads indicates that several freeway and ramp intersections are currently operating at unacceptable levels of E and F during peak periods. As a result, there is significant traffic diversion to the local supporting road system as well as to other adjacent freeway segments that are not designed to handle high volumes of traffic.

The following table shows existing and forecasted average daily traffic volumes:

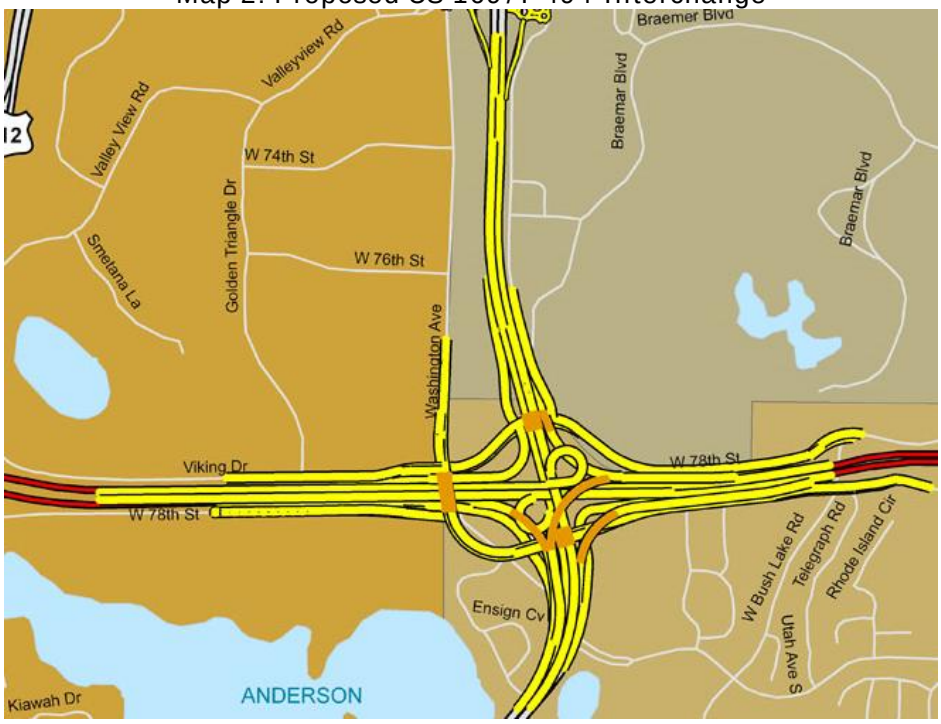
Exhibit 1: Existing and forecasted average daily traffic volumes

Segment	Existing ADT	2030 ADT
I-494		
West of US 169	115,000	148,000
East of US 169	132,000	172,000
US 169		
North of I-494	56,000	71,000
South of I-494	80,000	116,000

The interchange reconstruction phase of the project includes a reconfiguration of the existing "cloverleaf" type interchange to a directional interchange with loops in the northeast and southwest quadrants. The project also includes the improvements to the local road system and the reconstruction of US 169 as a four lane freeway with regional movements separated from local movements. Furthermore, several traditional intersections on the local road system (not trunk highway system) with traffic signals and stop-sign controls will be converted to roundabouts to facilitate a better flow of traffic. All of these adjustments will improve the flow of traffic, reduce congestion and congestion related crashes, and minimize delays, particularly in the peak periods. Regional roadway capacity will be improved with local short to medium length trips using the new and improved local roadways.

The project employs a performance-based design, which uses available data and modeling to optimize Mn/DOT's use of resources. Since two of the system-to-system connections on US 169/I-494 interchange are utilized by low volumes of traffic and are also served by additional connections, the design is based on the needs of the traffic flow and only includes the necessary connections at this time. The design allows the remaining connections to be added when the performance measures indicate that they are needed, as discussed below in the Innovation section.

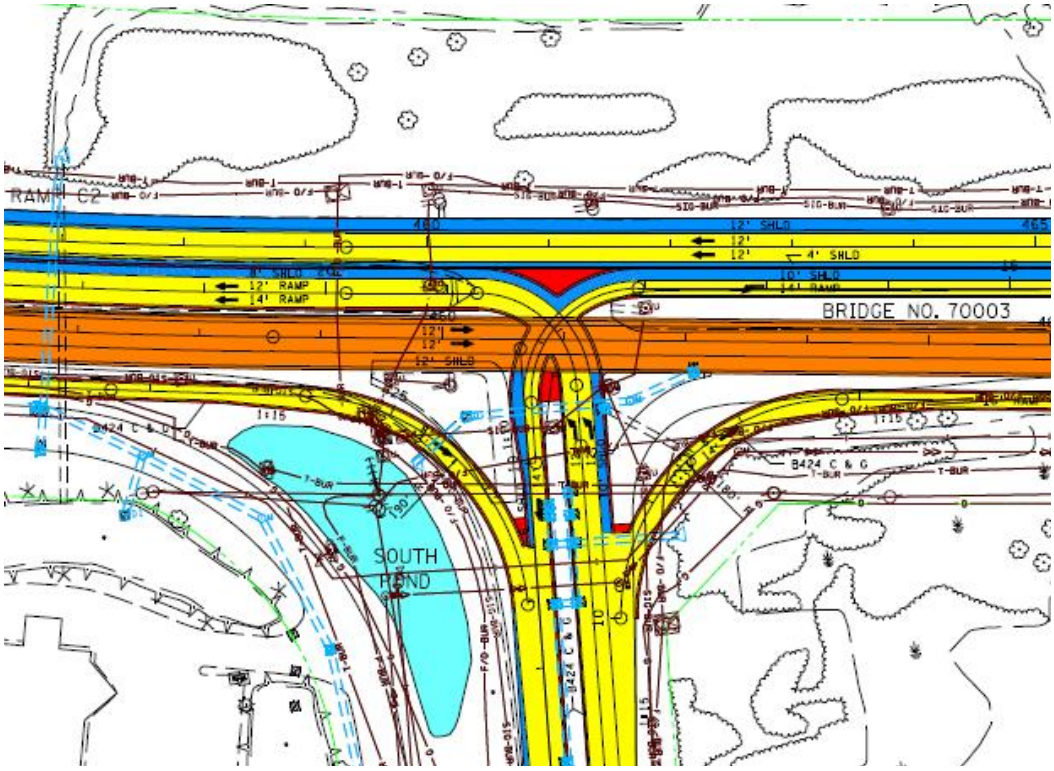
Map 2: Proposed US 169/I-494 Interchange



TH 101/TH 13

The TH 101/TH 13 intersection serves as an important interregional and east-west connection between US 169 and I-35. It provides a key intermodal connection to and from the Ports of Savage, a designated FHWA intermodal connector facility based on the annual throughput, which handles a significant portion of US grain traffic. The intersection is currently an at-grade signalized "T" intersection, which is not suitable for higher than average use of heavy commercial vehicles and often leads to congestion, accidents and delays. The heavy commercial traffic is only expected to increase in the future, due to the increase in demand by over the next year of the corn, soybean and wheat production across the U.S. This is likely to translate into growth in demand at the Ports due to their regional significance.

Map 3: Proposed TH 101/TH 13 Interchange



The 2007 Average Daily Traffic volume for the east-west portion of the interchange was 53,000. The forecasted volumes for 2030 approach 60,000. The current ADT for the northbound segment approaching the signal at TH 101 is 23,000, projected to grow to 31,000 by 2030.

The Project addresses the increase in traffic by more than doubling the capacity of the intersection, which is currently at 4,400 vehicles per hour. The Project includes construction of an interchange and other improvements including lighting and access modifications. Currently, all of the movements at the three-legged, at grade intersection are operated by a traffic signal. The project will bridge the eastbound traffic over vehicles moving in the westbound direction, so that the mainline traffic in both directions is free-flowing. The westbound vehicles exiting and entering the mainline will do so via a signal. It is anticipated that these modifications to the flow of traffic is expected to reduce crashes at the intersection by approximately 80% and more than double the capacity of the intersection thereby reducing congestion and travel time.

2 Project Parties

Minnesota Department of Transportation

Minnesota Department of Transportation (Mn/DOT), the project sponsor, has a long history of receiving competitive grants from U.S. Department of Transportation and has proven track record of delivering federally-funded projects in a timely and responsible manner, assuring the success of the project.

- Through the Urban Partnership Agreement program, the department was awarded $133.3 million in federal funds and contributed $50.2 million in matching state funds to deliver an innovative partnership that will pioneer new ways to move people and goods efficiently.
- In 2008, Minnesota was selected by USDOT as one of one of eight pioneer sites in the country for the Integrated Corridor Management initiative. The ICM initiative seeks to combine freeway, arterial street and transit systems using existing technologies and strategies to ultimately develop a fully integrated and optimized corridor.

Mn/DOT has worked hard to deliver successful projects for USDOT in the past and is encouraged by the opportunity to do so again with this project and the TIGER grant program.

Scott County, Minnesota

Scott County is located southwest of the Minneapolis/St. Paul Metropolitan Area and is the county which encompasses the City of Savage and the TH 101/TH 13 intersection. Scott County is a local financial partner and will contribute approximately $2.4 million in local funds to support the project, which includes funds from the TAB Surface Transportation Program (STP) fund, the Mn/DOT Safety fund, and the county wheelage tax fund.

City of Savage

While the City of Savage is not a funding partner for the project, it is a cooperating entity. In addition to granting the necessary municipal approval, it submitted an application to Mn/DOT requesting funding for this TH 101/TH 13 section of this project.

City of Edina, City of Bloomington, City of Eden Prairie

The three cities of Edina, Bloomington and Eden Prairie are located in Hennepin County and are close to the US 169/I-494 interchange and are expected to bear the local cost share of the project. In 2006, the Project Management Team presented the project design and alternative to representatives from these three cities in order to gather municipal feedback. All three cities have provided their municipal approval as required by state law.

3 Grant Funds

The following table shows the current breakdown and assumptions of funding sources for the total project cost (performance-based design) of $201.3 million.

Exhibit 2: Sources of Funds for the Project, $2009 Millions

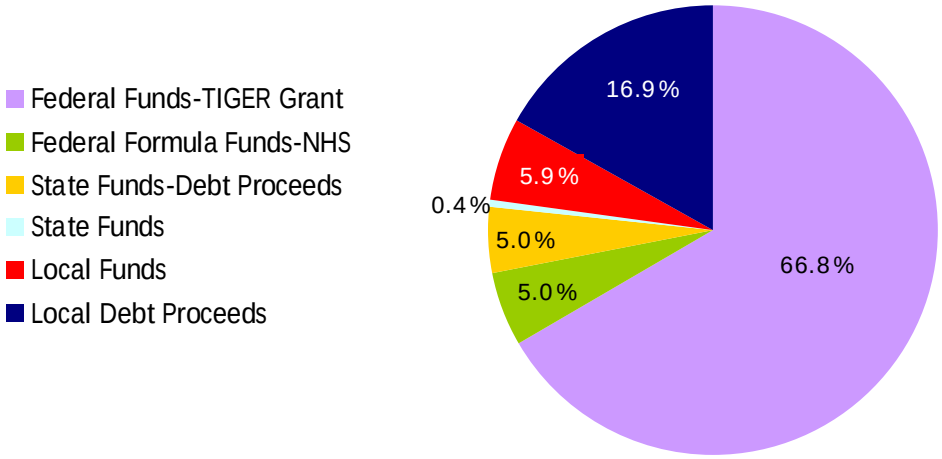
Sources of Funds	Millions (2009 $)
Federal Funds – TIGER Grant	$134.5
Federal Formula Funds - NHS	$10.1
State Funds	$0.8
State Funds – Debt Proceeds	$10.0
Local Funds	$12.0
Local Funds – Debt Proceeds	$34.0
Total Project Funds	$201.3

Note: Figures do not add up to total due to rounding.

The financing table above represents the total project cost for performance-based design. Mn/DOT is willing to build the full interchange for 494/169, which would cost an additional $30 million. Mn/DOT has stated its preference for performance-based design to the FHWA, due to its cost-effectiveness. However if FHWA requires full interchange construction, Mn/DOT will comply and increase its request for TIGER grant funding by $30 million.

The figure below shows the breakdown of the funding sources broken out by federal, state and local sources. Approximately 28.2%of total funding is expected to come from state and local sources.

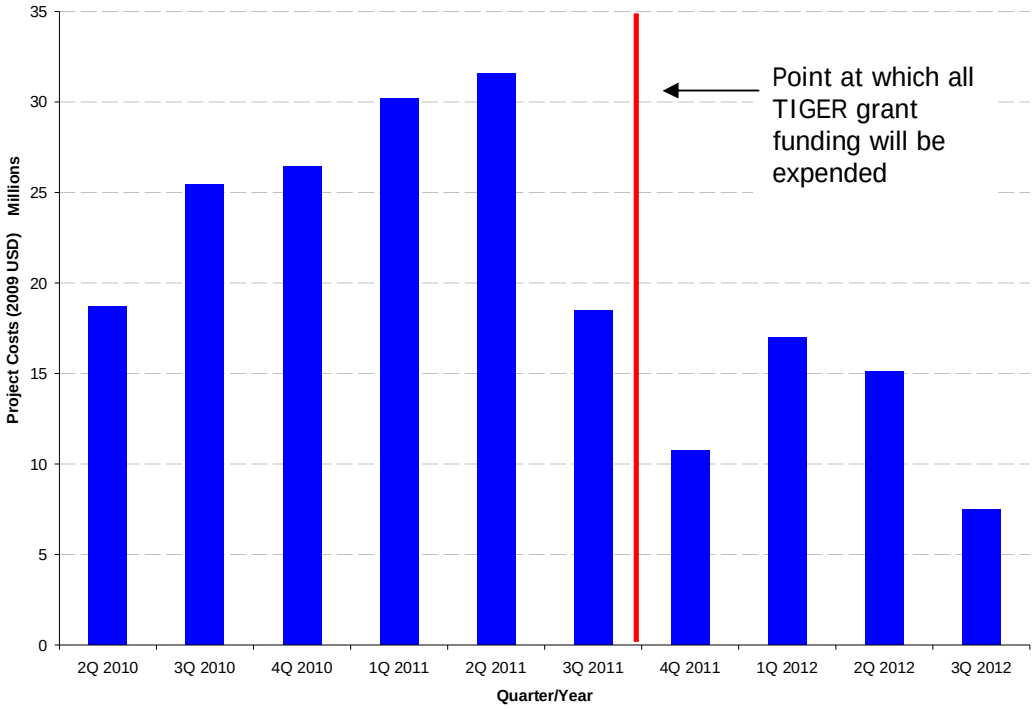
Exhibit 3: Breakdown of Funding Sources as a Percentage of Total Funds



While a large portion of the project funds are anticipated to come from discretionary federal funds, the remainder of the project is expected to involve numerous entities, reflecting broad support for the project. Since the funding sources do not have specific timing associated, it is assumed that the TIGER grants will be utilized as soon as they are received; thereby, allowing for the flexibility in timing of the committed local funds.

The graph below shows the project costs on a quarterly basis. The red line shows the point at which all of the TIGER grant funding would be expended assuming that other funding sources would only be used once the TIGER funds dedicated to the project were depleted.

Exhibit 4: Project Cost Schedule, $ 2009 Millions, 2Q 2010 – 4Q 2012



Mn/DOT has already invested significant resources in this project and related corridor improvements. Approximately $4 million has been spent on the planning and environmental analysis and close to $6 million of federal High Priority Project (HPP) funds have been used for right-of-way acquisition. The US 169 corridor has long been identified as a critical area for the regional network. Over $25 million of state bond funds with local match dollars were used to remove at grade intersections on US 169 at Pioneer Trail (2004) the Anderson Lakes Parkway/Bloomington Ferry Road (2005).

4 Selection Criteria

4.1 Selection Criteria: Primary

4.1.1 Long Term Outcomes

(i) State of Good Repair

Economic Growth

Since the condition of the intersections and ramps currently meet sufficiency standards, state of good repair is not a critical issue for this project. However, the project does address the need to upgrade existing facilities in order to accommodate more traffic (90% of the grain entering the Ports is via trucks). Since the project is critical to facilitating truck traffic to and from the Savage grain Ports, which has been designated as an FHWA Intermodal Connector Facility, it is imperative to the local economy to alleviate congestion on TH 101/TH 13 and US 169/I-494. The inability of TH 13 to adequately serve the Ports efficiently, limits the productivity of the Ports and the delivery of key commodities to the region creating back-logs and inefficiencies farther down the production chain.

Furthermore, major parcels of the land surrounding the intersections are presently vacant and well suited for major corporate headquarter facilities. Existing land use designations of these parcels would support and promote the development of corporate office, technology, research and manufacturing sectors.

Project Capitalization
The Project includes costs associated with building infrastructure features that minimize lifecycle costs and the need for replacement. The use of the roundabouts is a key feature of the Project since they not only reduce congestion, but also reduce operating costs due to the elimination of traffic signals.

Ongoing Operating and Maintenance Costs
Mn/DOT will operate and maintain the interchanges as it does the 1,100 miles of highway throughout the State. Ongoing operating and maintenance (O&M) costs are primarily handled through Mn/DOT using various state transportation funds generated from the following sources:

- Motor fuel tax
- Motor vehicle registration fees
- Federal highway funds
    - Highway user tax distributions
    - Flexible highway account
    - County State Aid Highway Fund (CSAH)
    - Municipal State Aid Streets Fund (MSAS)

(ii) Economic Competitiveness

This project aims to improve congestion on a significant route for grain traffic. Just past the TH 101/TH 13 interchange lie five ports/freight terminals, known as the Ports of Savage, where grain is transferred from truck and rail to barges and are sent down the Minnesota River. These are The Port Bunge Slip, Port Cargill, Port Richards, Savage Elevator Wharf and Port Marilyn Dock. Over 3 million tons of grain and other products travel through these facilities every year, making this one of the most important freight transport corridors in the upper midwest region. Reducing congestion to the Ports and other employment centers in the area is critical to improving the economic competitiveness of the region.

As of the early 1990's, 8% of the nation's grain traveled through these ports. While this figure has decreased slightly due to economic conditions and the diversion of grain to ethanol production, it is a central corridor for the nation's grain traffic.

In addition to being a key grain corridor, US 169 is a principal arterial highway that serves as an important component of the state and regional transportation system, supporting local and regional economic development and servicing commuters in the Metropolitan Area. In the Metropolitan Area, US 169 is one of the few corridors that afford north-south continuity, crossing both the Mississippi and Minnesota Rivers.

Since the route contains significant truck traffic as well as commuter traffic, it is critical that traffic flow as smoothly as possible through the corridor. The congestion resulting from the current signalized intersections adds considerable costs to the grain transport and limits the economic viability of the area. The project would alleviate this congestion and reduce the number of crashes, thereby reducing freight and user costs in the long term.

The project runs through Scott and Hennepin counties. While neither qualifies as economically depressed, 10.2% of Hennepin County lives below the poverty line. Scott County has experienced significant job growth in the last decade and is actively promoting further economic development. Surrounding the project interchanges are a number of large tracts of land that are ideally suited for major corporate headquarters facilities. The counties and cities have designated these parcels for use by technology, research and manufacturing sectors. This growth would build on recent additions to the County, such as Cargill, ADC Telecommunications, Continental Machines and Seagate Technology.

(iii) Livability

Congestion Mitigation
Reduction in peak-hour congestion from the project is expected to reduce total delays occurring in both project sites from 6.5 hours a day to less than one hour.

Congestion Mitigation: US 169/I-494

Mn/DOT has identified US 169 as a high priority interregional corridor. The State's Inter Regional Corridor study states that high priority interregional corridors should "function at a free-flow level of operation, with a minimum of 60 mph speeds and minimal conflicts and interruptions to traffic flow". The IRC Study identifies US 169 as below this target for existing and future mobility performance. The study also identifies this segment of US 169 as at risk for signal proliferation, which can significantly impair a corridor's ability to meet mobility targets.

The project sits on a major intermodal corridor, where trucks and rail bring grain into ports to be loaded onto river barges. Since 90% of the grain arrives by truck, the interchange improvements are important to facilitating the flow of freight through the corridor.

This project will significantly reduce congestion along this key corridor. Currently, the interchanges experience congestion problems during the a.m. and p.m. peak hours. The heavy traffic volumes and signalized intersections along the corridor contribute to the congestion problems; the existing signals create stop and start conditions for US 169 mainline users and negatively impact mobility. The congestion caused by vehicles stopped on the I-494 exits to US 169 causes significant backups onto I-494 for up to three hours in the p.m. peak period.

Traffic operations analysis results indicate that the signalized intersections on US 169 at I-494 operate at unacceptable levels of service (Level of Service E or F) during the peak hours. This is due to high traffic demand on the mainline, which exceeds capacity and causes significant queuing and delay. These conditions are expected to worsen if no improvements are made and as traffic volumes continue to increase.

Existing traffic volumes exceed the typical capacity of a four-lane expressway. Forecast 2030 volumes indicate a continuing increase in traffic volumes. The forecast traffic growth on US 169 indicates that congestion, delays and safety problems along the corridor will continue to increase if no improvements are made.

The existing interchange cannot support existing traffic volumes during the peak periods. The signalized intersections on US 169 are a major bottleneck in the regional transportation system. The existing US 169/I-494 interchange includes three traffic signals on US 169, which are the only controlled intersections along the 30-mile segment of US 169 through the core of the metro area. The traffic signals along US 169 at I-494 constrain the traffic flow through the interchange leading to increased congestion and queuing, thereby increasing travel times and accidents.

Reconstruction of this interchange is necessary to accommodate future traffic volumes and provide an acceptable level of operations and safety. I-494 is a principal arterial roadway that makes up the southern and western portions of the "beltway" around the Twin Cities metropolitan area. The function of the US 169/I-494 interchange is critical from a regional perspective.

Congestion Mitigation: TH 101/TH 13

TH 13 carries the highest volume of truck traffic on a non-freeway in the twin cities metropolitan area. The three-legged at-grade intersection with TH 101 is operated by a traffic signal, causing significant congestion at the intersection. The current intersection capacity of 4,400 vehicles per hour is not sufficient to meet the demand. The Scott County Association for Leadership and Efficiency (SCALE) has called the TH 13 corridor and the Ports of Savage one of its highest funding priorities. The Scott County 2030 Comprehensive Plan Update considers this corridor a high priority since it is a multi-modal corridor serving regional and global markets.

The congestion caused by this signalized interchange prevents TH 13 from effectively serving the ports, thereby limiting their productivity. This major multi-modal and intermodal corridor serves rail, barge and truck traffic suffers from this congestion. On a typical day, TH 13 serves 13,000 heavy commercial vehicles. Therefore, any congestion on TH 13 and at the TH 101/TH 13 intersection will likely create back-ups through US 169 and at the US 169/I-494 interchange.

Under the current circumstances, the traffic signal causes congestion on a daily basis affecting both directions. . The table below compares the current a.m. and p.m. peak volume with the proposed project capacity.

Exhibit 5: Current morning and evening peak volumes (2007) and current/proposed capacity

	Eastbound TH 101 approach	Westbound TH 13 approach	Northbound TH 13 approach	Overall intersection
Peak volume – a.m.	2198	1846	1512	5556
Peak volume – p.m.	2816	2263	790	5869
Current capacity	1600	2000	800	4400
Proposed capacity	3700	4700	1400	9800

The intersection is well above capacity, as seen in the table above. This congestion has significant regional economic and safety impacts.

Access to Jobs

According to the 2000 Census, only 35% of Scott County's workforce is employed inside the county. By improving highway access to attract businesses, along with the county's recent job growth, planners can expect more residents of Scott and Hennepin counties to work near their homes. The project also supports access to existing jobs, such as the 150 employees at the Ports, and the over 4,000 at the Mystic Lake Hotel and Casino, one of Scott County's largest employers.

Transit Benefits

The project interchanges host a large number of transit riders each day. The project improvements will reduce the travel time for local bus routes and make the bus option more attractive to drivers and non-drivers alike. In addition, the project expands the current system of bus-only shoulders on TH 13 and US 169. Some of the key transit routes include:

- Blue Express route 490 runs 10 buses on the corridor each morning and evening commute
- Blue Express route 498A runs two buses in the morning, two in the evening and two reverse commute routes
- Southwest Transit route 680 runs two buses for the morning commute and three on the evening return.
- Shakopee Mdewakanton Sioux Community, Scott County's biggest employer, runs a transit system for employees of the Mystic Lake Casino Hotel. The team member shuttle takes casino employees to and from Minneapolis/St. Paul that includes both US 169 and TH 13. The casino runs eight roundtrips at all hours of the day and night.
- The Mystic Lake Casino Hotel runs nine bus routes to bring people to the casino from around the region.
- Scott County and Carver County offer paratransit services that often take passengers through TH13 to the Minnesota Valley Transit Authority's Burnsville Park and Ride lot

Bicycle/Pedestrian Improvements

Mn/DOT's bicycle and pedestrian unit has been involved in developing the plans for this project so they can improve accessibility for non-drivers. This project will construct new sidewalks and curbs that can affect accessibility by people with certain disabilities. In addition, Mn/DOT's project plan includes a number of trails which connect all three cities' bicycle master plans.

Community Involvement

Community participation in this process is essential especially since the project involves closing some local access to US 169 and replacing traffic signals with roundabouts. Twenty five open house, public meetings or municipal hearings were held on the project from 2002 to 2007. These are listed at the following web link - http://www.dot.state.mn.us/metro/projects/169/meeting.html.

An open house was held in Savage in August 2008 to introduce the TH 101/TH 13 portion of the project. In December 2008 the project sponsor conducted a presentation to Savage City Council that highlighted the safety and congestion benefits. Furthermore Savage City council held numerous committee meetings in conjunction with local planning and economic development groups.

(iv) Sustainability

The project is using a performance based flexible design which has a number of benefits. Theses include an increased ability to accommodate multimodal transportation when needed, a greater sensitivity to the design needs of the local community and surrounding environment, the ability to increase safety system-wide by considering return on investment and engineering projects to the point of diminishing return, and the opportunity to improve more miles of highway with limited transportation funding.

The project also promotes sustainability in the following ways:

- Noise – the project does comply with local noise ordinances which restrict the timing and extent of construction related noise levels and includes noise mitigation techniques. The US 169/I-494 section of the project has two noise barriers in place as well as a visual barrier that will mitigate noise as part of the project.
- Use of Materials – The project design and construction plan includes use of environmentally safe materials that would not contaminate the nearby open body of water.
- Wetland Mitigation – The methodologies and procedures from the *1987 Corp of Engineers Wetlands Delineation Manual* were used to mitigate any adverse impacts during construction on the surrounding wetlands.

(v) Safety

Due to their configuration, both locations are highly congested and are operating at full capacity in the peak periods. The increased traffic on the roads and the conditions for entering and exiting certain ramps has led to a higher number of road accidents in recent years, which could not only lead to more congestion (beyond normal levels) but also to higher operating costs due to the possible removal of crash debris and repair of road assets.

Reconfiguring the intersections from traditional traffic signal and stop-sign operated facilities to roundabouts will likely create a more efficient flow of traffic, thereby reducing congestion, resulting in fewer accidents. It is estimated that the number of crashes could be reduced by 50% at both interchanges.

TH 101/TH 13

Under the existing configuration of the interchange, the traffic signal causes congestion on a daily basis affecting both directions resulting in a high level of crashes. The TH 101/TH 13 intersection is ranked as number 48 in the Minneapolis/St. Paul metropolitan area's top 200 crash list[1]. In the period 2005 to 2007, the east-west portion of the project recorded approximately 105 crashes (comprised of right angle, rear end and all other crashes). With the proposed project, the number of crashes could be reduced by up to 80%.

US 169/I-494

It is estimated that the improvements to the US 169/I-494 interchange could result in safety related benefits of approximately $47 million (2008$) of which approximately $13.8 million in savings comes from the US 169/I-494 interchange alone. In the period of 2005 – 2007, the interchange reported 319 crashes. An additional 200 crashes were reported related to congestion in the vicinity of the interchange. This is a total of 519 crashes in the three year period. With the proposed project, the number of crashes could be significantly reduced.

4.1.2 Evaluation of Expected Project Costs and Benefits

The benefit-cost analysis included herein was conducted in 2002 and has been updated and revised to reflect the guidelines set forth for TIGER grant applications. The analysis compared the full-build alternative (interchanges along US 169 at the I-494 ramps and grade-separated improvements to the TH101/TH13 interchange) to the no-build alternative. The full-build alternative also included the construction of an additional lane on TH169 from I-494 to the Bloomington Ferry Bridge, modifications to the frontage road systems, and other improvements required to connect to local area roadway network.

[1] Transportation Chapter of the City of Savage's Comprehensive Plan

This analysis quantifies three main benefit components: 1) Travel time delay, measured in Vehicle Hours Travelled (VHT); 2) Operating costs, measured in Vehicle Miles Travelled (VMT); and 3) Safety, measured in accident reduction benefits.

The base year assumed for the analysis is 2009. The project is scheduled to begin construction in the second quarter of 2010 and will be complete in the third quarter of 2012. Therefore, 2013 is considered the first year benefits will be realized. The benefits accumulated over a 20-year period are considered in this analysis. All benefits are discounted at a 7% real rate back to 2009 dollar terms. All figures are presented in 2009 dollar terms unless otherwise noted.

Benefit-Cost Ratio

The benefit-cost ratio for the project is 1.19. This ratio demonstrates that the project will generate $1.19 in benefits for every dollar spent. It is important to remember that benefits from the improvements for the TH101/TH13 interchange were not included in an effort to eliminate a double-counting of benefits.

Exhibit 6: Benefit Cost Ratios, 2009 $Millions

(2009 $M)	7% Discount Rate	3% Discount Rate
Project Benefits	$198.1	$314.9
Project Costs	$166.3	$117.3
Benefit-Cost Ratio	1.19	2.68

As required by the Federal Register guidelines for TIGER grant applications, a 7 percent discount rate has been applied uniformly to all project costs and benefits to arrive at the discounted benefit cost ratio and net present value. As an alternative, and again in keeping with the Federal Register guidelines, benefits and costs have also been valued using a 3 percent discount rate. Sources for these rates are OMB circulars A-4 and A-94, where 7 percent is represented as the average expected return on private capital and 3 percent represents the social rate of time preference. The higher rate is intended to provide a private sector investment benchmark for assessing government projects, while the lower rate is an estimate of the social rate of time preference for households and individuals. The former might be more appropriately applied to benefit streams that accrue to private firms, while the latter might be more appropriately applied to long term benefits that accrue strictly to current households and subsequent generations, and even more particularly where these benefits accrue to lower income households for whom long term wealth accumulation or future social benefits will be more highly valued. As projects will typically benefit a mixture of private and public stakeholders, as well as different income or social groups, the BC ratios would undoubtedly fall somewhere between those computed at 7 percent and 3 percent.

Travel Time Delay

To estimate savings associated with reductions in Vehicle Hours Traveled, standard wage rates for vehicle drivers were applied. Current Minnesota wage data from the Bureau of Labor Statistics (BLS)[2] was used to approximate the value of time for truck drivers, as well as drivers of personal automobiles. Drivers of personal vehicles were split into personal or work trip purpose categories in order to provide a more accurate value of time estimate for each class.

According to current State of Minnesota BLS data, the median wage for heavy truck drivers is $18.31 per hour. This figure is used to approximate hourly operating costs for commercial vehicles, or heavy trucks. For personal trips, the average wage for the State across all occupations is used in order to approximate an hourly value of time for an individual. The median hourly wage for all occupations in Minnesota is $16.87. Assuming that 35% of trips are work trips, and 65% are personal trips, the weighted hourly wage for individual automobile travel is calculated at $13.58 per hour. This hourly figure was calculated by assuming that 70% of the average Minnesota wage figure for personal trips, and 100% of the average wage for work trips. Combining the network assumptions, and commercial and personal trip values, the composite cost per vehicle hour is calculated at $19.73.
Using the above assumptions, the present value of vehicle operating savings over the analysis period is calculated at approximately $181.6 million, with an average annual savings of approximately $9.0 million.

[2] *http://www.bls.gov/oes/2008/may/oes_mn.htm#b00-0000*

Operating Costs

Further reductions in vehicle operating costs accrue as a result of reductions in Vehicle Miles Traveled. These savings arise in terms of the marginal operating cost reductions for vehicles, which can be reduced with more efficient road networks and shorter trips. In order to calculate vehicle operating cost savings from reduced VMT, standard variable cost metrics were used in order to convert reductions in VMT to monetary benefits. Traffic volumes assumed are consistent with a technical memorandum written for the project area[3], the composition of traffic is 94% automobile and 6% truck for both the no-build and full-build alternatives now and in the future. A weighted average of the marginal operating cost for each class of vehicle is used to form a composite cost per vehicle mile traveled.

Using recent data from the Automobile Association of America (AAA)[4] on automobile and light truck operating costs, the variable cost (fuel, maintenance, tires) of an average automobile is $0.18 cents per mile. This cost does not include any overhead such as financing or initial vehicle cost. For heavy trucks, an FHWA Truck Size & Weight study[5] on truck costs was used to approximate per-mile operating expenses. Using this FHWA report, it is estimated that the variable operating cost of a heavy truck is approximately $1.17 per mile. Using these figures, a composite vehicle operating cost of $0.24 per mile is calculated. This composite cost is applied in order to convert VMT reductions to monetary benefits.

Operating costs actually increase over the analysis timeframe due to increased use. The operating costs yield a net loss of $2.9 million over the analysis period. The annual average loss is approximately $145,000.

Safety

Safety benefits for the improved roadway have been quantified using the most recent Value of a Statistical Life (VSL) as defined in the TIGER guidelines. A conservative application of the new VSL has been used to quantify the safety benefits of the project. Exhibit 7 shows the crash rates expected for both alternatives and the expected reduction in crashes by type.

Exhibit 7: Crash Rates per Million VMT

Crash Categories	No-Build	The Project	Reduction in Crash Rates
Fatal	0.00	0.00	0.00
A	0.05	0.00	0.05
B	0.29	0.05	0.24
C	0.54	0.10	0.44
PDO	1.61	0.59	1.02

Using the above assumptions, the present value of vehicle operating savings over the analysis period is calculated at approximately $31.2 million, with an average annual savings of approximately $1.6 million.

Net Project Cost

The remaining capital value, value of improvement beyond the analysis period, was considered as a reduction in cost and was subtracted from total cost to obtain a net cost. The total cost to construct the project in 2009 dollar terms is shown in Exhibit 8 below.

[3] *Performed by SRF Consulting Group, Inc. dated February 2002*
[4] *http://www.aaaexchange.com/Assets/Files/200948913570.DrivingCosts2009.pdf*
[5] *5http://www.fhwa.dot.gov/reports/tswstudy/TSWwp7.pdf*

Exhibit 8: Project Cost in $2009 Millions, by Quarter, 2Q 2010 – 3Q 2012

2010			2011				2012			
Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Total
18.73	25.47	26.45	30.20	31.60	18.48	10.77	17.00	15.12	7.49	201.3

The remaining capital value of the project at the end of the analysis period was derived using factors for the remaining useful life of each component. At the end of the 20-year analysis period, it is assumed that right-of-way assets would retain 98% of their value, major structures (bridge, retaining walls) would retain 89% of their value, and the roadways would retain 71% of their value. These retention values are based on standard Mn/DOT depreciation procedures. The remaining value of the assets in constant dollars is $165.8 million. The present value of all assets in 2009 dollars is approximately $35 million.

Exhibit 9: Net Cost of Project Calculation, $2009 Millions

Present Value of Initial Capital Costs	$201.3
Present Value of Remaining Capital	$35.0
Net Project Cost	$166.3

4.1.3 Evaluation of Project Performance

Mn/DOT is dedicated to clarity and transparency in its expenditure of ARRA funds. Three certifications were filed in advance of receiving ARRA stimulus funds: Form 1511 signed by Commissioner Sorel, and Forms 1607 and 1201 filed by Governor Pawlenty. In addition, Mn/DOT is filing monthly reports with FHWA on project status (Form 1585), project plan (Form 1586), employment report (Form 1587), and expenditures (Form 1201). In all cases, Mn/DOT is following both the letter and spirit of the law in regard to the expenditure of stimulus funds. A compilation of documents related to ARRA transparency and accountability is maintained at http://www.dot.state.mn.us/federalrecovery/reports.html.

Mn/DOT will apply a similar amount of rigor in the receipt of any TIGER grant. Mn/DOT will track employment activity related to any TIGER grant construction project, including the type of job, and resident location of workers, to determine the geographic diversity of employment opportunities and the number of jobs created in economically distressed areas. In addition, Mn/DOT will monitor the project for their secondary and induced impact on employment, such as business expansions due to the TIGER grant project.

4.1.4 Job Creation & Economic Stimulus

Job Creation and Economic Stimulus Overview

The project is expected to create significant near-term economic benefits for the Hennepin County and Scott County areas, the State of Minnesota, in addition to other regions of the United States. Minnesota's near-term economic benefits from the project would be driven by an increase in construction spending in the region. These project expenditures would generate a short term increase in demand for engineering and technical services, as well as construction-related labor and materials.

To quantify the near-term economic benefits of this project an analysis was conducted utilizing Bureau of Economic Analysis (BEA) RIMS II multipliers. RIMS II multipliers classify each capital cost category according to industrial sectors (using NAICS industry codes) and can vary widely depending on the geographic region being analyzed. This particular analysis utilizes RIMS II data for the State of Minnesota, Hennepin County, and Scott County. The multipliers were used to determine the quantity and industry composition of benefits generated by the project resulting in estimations of short-term job creation, earnings, and economic output as a result of the project. The multipliers estimate two types of impacts:

- Direct Impacts: Direct impacts represent new spending, hiring, and production by civil engineering and construction companies to accommodate the demand for resources in order to complete the project.

- Indirect/Induced Impacts: Indirect impacts result from the quantity of inter-industry purchases necessary to support the increase in production from the construction industry experiencing new demand for its goods and services. All industries that produce goods and services consumed by the construction industry will also increase production and, if necessary, hire new workers to meet the additional demand. The level of inter-industry trade within the area will determine the size of the indirect impact. Induced impacts stem from the re-spending of wages earned by workers benefitting from the direct and indirect activity within area. For example, if an increase in demand leads to new employment and earnings in a set of industries, workers in these industries will spend some proportion of their increased earnings at local retail shops, restaurants, and other places of commerce, further stimulating economic activity.

In addition to measuring the effects of the project on the regional economies, the economic impacts that will accrue to the rest of the state due to the project were also quantified. These impacts, referred to as "spillover" benefits, reflect the inter-county trade that occurs to supply industries in Hennepin and Scott Counties with the goods and services it needs to increase production.

The degree of these out-of-county "spillover" benefits depend on the size and composition of the local economy for a given county. Counties that have large, diverse workforces and a broad industry base often rely less on inter-county trade to support local production than smaller, less diverse county economies.

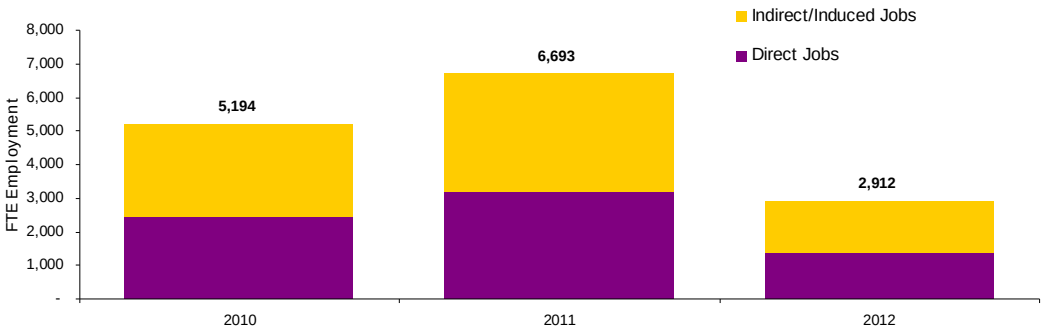
The results of the short term economic impacts are shown below in Exhibit 10:

Exhibit 10: Summary of Near-Term Economic Impacts Resulting From the US 169/I-494 and TH 101/TH 13 Interchange Project

Direct Impacts	
Employment (Average Annual FTE Employment)	707
Earnings (2009 $)	$75,205,680
Output (2009 $)	$202,749,360
Indirect/Induced Impacts	
Employment (Average Annual FTE Employment)	773
Earnings (2009 $)	$72,166,050
Output (2009 $)	$410,611,740
Total Impacts	
Employment (Average Annual FTE Employment)	1,480
Earnings (2009 $)	$147,371,730
Output (2009 $)	$613,361,100

Beginning in 2010, the project is expected to generate significant economic benefits for the region. An estimated average of 1,480 jobs will be created annually by the project, including an average of 707 direct jobs per year. Exhibit 8 shows the profile of full-time equivalent (FTE) employment generate by the project's expenditures. At the peak of spending, in the second quarter of 2011, approximately 2,323 FTE persons are employed as a result of the project, including 1,110 direct jobs.

Exhibit 8: Breakdown of Job Creation by Year, FTE Employment, 2010 - 2012



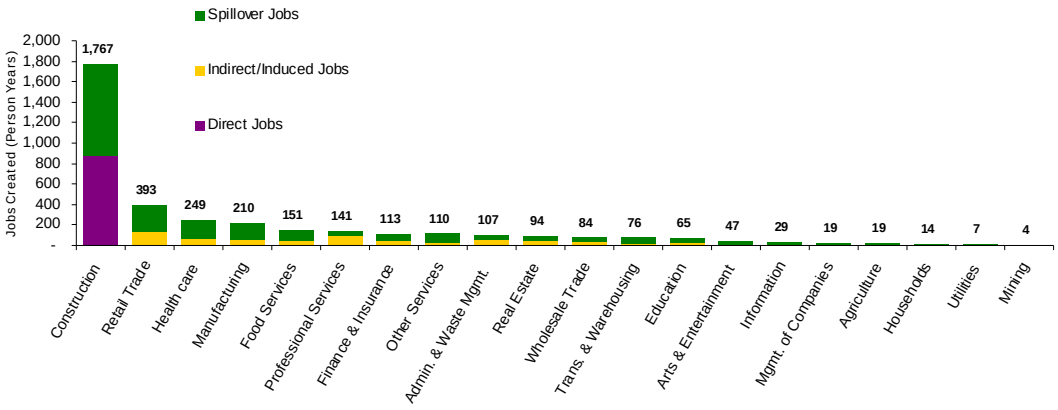
In total, the project is projected to create 3,700 person years of employment, including 1,767 direct job person years. Exhibit 11, below, shows the number of persons employed on the project per quarter.

Exhibit 11: Direct (On-Project) Jobs by Quarter, FTE Employment, Q2 2010 – Q4 2012

2010			2011				2012		
Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
658	895	929	1,060	1,110	649	378	597	531	263

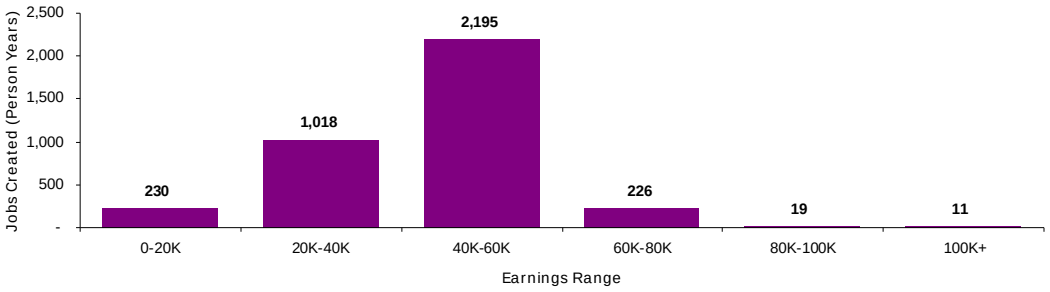
Exhibit 12 shows the breakdown of jobs created by industry and type of impact. As expected, the civil engineering construction industry is estimated to receive the largest increase in jobs from the project (1,767 person years), almost all of which are direct jobs created. The industries that will see the largest number of indirect jobs created include retail trade (393 person years), health care (249 person years), manufacturing (210 person years), food services (151 person years), professional services (141 person years), finance and insurance (113 person years), other services (110 person years), and administration and waste management (107 person years).

Exhibit 12: Breakdown of Job Creation by Industry and Type of Impact



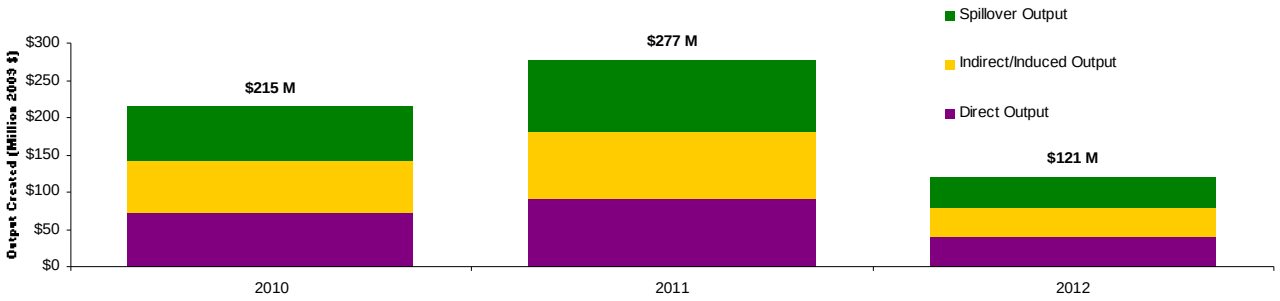
It is also important to consider the quality of the jobs that would be created by the project, which can be most easily measured by the number of jobs created at various levels of compensation. Exhibit 13 shows that the majority of jobs generated by the project would receive compensation above $40,000/year, indicating that the project would generate above average paying jobs that would help stimulate the regional economy.

Exhibit 13: Breakdown of Job Creation by Earnings Range



The amount of short-term economic activity generated by the project is shown in Exhibit 14. In total, the project would generate $613 million in real economic output (measured in 2009 dollars), with over $216 million dollars of economic output generated in 2010. Consistent with job creation, the majority of economic activity would be generated in 2011.

Exhibit 14: Breakdown of Statewide Economic Output Generated by Contract



Economic Opportunities

Disadvantaged Business Enterprises

Mn/DOT seeks to ensure the maximum practicable opportunities for small business and Disadvantaged Business Enterprises (DBE) is possible on the Project.

Mn/DOT formed a DBE and Workforce Inclusion Group in December of 2008, in an effort to explore innovative ways to encourage higher minority participation on economic stimulus projects as well as on regular projects. This outreach effort has encouraged dialogue with representatives of the contracting industry and the DBE community to increase the understanding of specific issues and barriers to inclusion of DBEs. This collaborative working group provides an opportunity for a Mn/DOT and its industry partners to explore new ways of doing business in an effort to increase DBE and workforce inclusion. Specific initiatives to increase DBE participation include:

- The Mentor Protégé Program[6]
- DBE/prime meet and greet events
- Outreach and Support Hub (OSH) Program
- DBE Orientation, Business Assessment and Training Program
- Bid Express, Small Business Network (SBN)
- DBE Program Information Meetings
- DBE Financing Project
- Advertising in Minority and Women's press recruiting new DBE's

[6] http://www.dot.state.mn.us/civilrights/documents/Mentor-Protege.pdf

Scott County and Hennepin County have the largest portion of DBE firms in the twin cities metropolitan area who have the necessary expertise in interchange and intersection modifications.

In addition, Mn/DOT has taken a number of actions to increase transparency and to ensure contractors clearly understand that Mn/DOT is serious about inclusion of women and minorities on its ARRA and non-stimulus projects. Mn/DOT expects contractors to make aggressive efforts to meet the DBE goal of 15.3% and to take part in the initiatives mentioned above.

Mn/DOT has a number of employment programs and initiatives underway that work with community based organizations to connect disadvantaged workers and businesses with contracting and employment opportunities.

- Mn/DOT ROADS program: Merrick Community Services (a community partner) graduated a pool of 32 work-ready minorities and women in March 2009. These individuals are ready to be hired by contractors to work on Mn/DOT projects and be sponsored into the unions. A grant request has been submitted to FHWA for funding to expand the ROADS Program to the Native American Tribal Reservations in central and northern Minnesota.

- STEP Program: The STEP program reimburses community training programs for recruiting, training and placing trainees with prime contractors and tracking their employment. Contracts have been approved to work with three community organizations.

- Summer Transportation Institute Program: All four eligible Tribal and Community Colleges in MN have been approved to hold Summer Transportation Institute Programs in 2009 for Native American youth. Contracts were executed in June 2009

- Community Training Orgs Curriculum: Basic OIC training curriculum was shared with several unions and found to provide exactly the skills that unions are looking for in terms of entry-level skills for employee's entering the unions. (Workforce and DBE Inclusion Workgroup initiative)

- Commercial Drivers License Training: Applied for and received funding to provide commercial drivers license training to women and minorities. Four programs will be offered state-wide beginning in the fall of 2009.

- Hispanic Outreach: Mn/DOT is working on a new initiative, in collaboration with the Department of Employment and Economic Development, aimed at assisting migrant and seasonal farm workers in greater Minnesota transition from agricultural work to highway heavy construction. This program is aimed at the Hispanic community since they comprise the majority of migrant farm workers, but will benefit other ethnic groups as well. (Workforce and DBE Inclusion Workgroup initiative)

In addition, Mn/DOT has enlisted the assistance of the Mn/DOT Department of Human Rights Contract Compliance Division to monitor projects this summer and to assist in the compliance efforts for both stimulus and non stimulus projects. A large number of contractors are located in the metro area.

Safety, Labor and Equal Opportunity Laws

Equal Employment Opportunity (EEO) provisions will be incorporated into all jobs that are created for the project. Mn/DOT follows state and federal OSHA requirements and holds contractors to the highest labor and safety compliance standards. The underlying safety components in Mn/DOT's business practices do not allow contractors with a poor safety and labor practices track record to be competitive on projects. Mn/DOT Follows all state and federal wage, employment and labor laws applied.

In construction and procurement of the Project, Mn/DOT will abide by Federal, State and Regional civil rights and equal opportunity laws to ensure that all individuals will benefit from all projects, particularly those that stem from the Recovery Act.

(i) Project Schedule

The project is set to go out as a design-build procurement. This will allow Mn/DOT to obligate the funds prior to issuing the RFP. The project schedule is as follows:

- December 2009 – Issue RFQ
- January 2010 – Develop draft RFP
- March 2010 – Issue RFP and obligate funds
- June/July 2010 – Award to the successful design-bid firm

(ii) Environmental Approvals

Mn/DOT submitted an Environmental Assessment for the US 169/I-494 component of the project and received a finding of "No Significant Impact" in October 2003. In May 2007, the supplemental project memo – 4(F) 6(F), was approved which includes park and property acquired through council funding respectively.

In June 2007, Mn/DOT and FHWA confirmed that the TH 101/TH 13 interchange project met the parameters for a categorical exclusion, so neither an Environmental Assessment nor an Environmental Assessment Worksheet was required. In June 2008, Mn/DOT distributed an early notification memo requesting environmental review from the appropriate agencies for input into the categorical exclusion determination. To date, complete input has been received from all agencies except the Department of Natural Resources (DNR). Mn/DOT has received some initial comments and is awaiting the final comment memo for inclusion into the categorical exclusion determination. It is anticipated that the categorical exclusion determination will be complete by December 2009.

(iii) Legislative Approvals

No legislative approvals are necessary.

(iv) State and Local Planning

Trunk Highway 169's importance in the statewide transportation system has been identified in three regional transportation studies/plans:

1. The Mn/DOT *Statewide Interregional Corridor (IRC) Study* (November 1999)
2. The Mn/DOT *Metro Division Transportation System Plan (TSP)* (January 2001)
3. The Mn/DOT *State Highway 169 Corridor Management Plan* (January 2002).

- Bloomington's draft update to the *Comprehensive Plan* (2008) states that the city supports improvements to the US 169/I-494 interchange; this is consistent with its future land use map, which designates areas around the interchange as right of way for these improvements. This project is compatible with existing and future land uses adjacent to the interchange (current and future designated land uses are office and residential).

- Eden Prairie's draft *2008 Comprehensive Plan* identifies improvements to the interchange, states that the city has provided Municipal Consent, and supports any efforts to expedite construction. This project is compatible with existing and future land uses near the interchange (current and future designated land use near the interchange is office).

- Edina's draft *Comprehensive Plan Update 2008* recognizes the proposed improvements to the interchange and of its list of "other interchange projects," identifies the US 169/I-494 interchange as its highest priority. This project is compatible with existing and future land uses near the interchange (current and future designated land uses near the interchange are office and industrial).

This request is also consistent with existing comprehensive plans in these cities. The Bloomington *Comprehensive Plan* (2000) recommends interchange improvements at the US 169/I-494 interchange and Eden Prairie's *Transportation Plan* (1997) includes the interchange improvements. The Edina *Comprehensive Plan* (1999) does

not comment on the need for the specific improvements, but does include a policy for "upgrade of existing roadways when warranted by demonstrated volume, safety or functional needs, taking into consideration environmental limitations."

The cities of Bloomington and Eden Prairie, as well as the Metropolitan Council and Hennepin County, are also partners in the *State Highway 169 Corridor Management Plan* (2002) from I-494 through the City of Mankato. This plan includes the proposed improvements to the US 169/I-494 interchange. In addition, the proposed project is also identified in the Metropolitan Council's *2030 Transportation Policy Plan* and the *2009-2012 Transportation Improvement Program*.

The City of Savage has submitted an application to Mn/DOT as part of the Mn/DOT's interchange solicitation program requesting that the 101-13 interchange be improved. The project is identified as being congested and in need of improvement in the following plans and studies at the state and local level:

- Scott County's Comprehensive Plan
- The Comprehensive Plan for the City of Savage
- TH13 Corridor Study, Mn/DOT (2001)
- TH13/169/CH21 Phase 1 Study

(v) Technically Feasible

The project has been proven to be technically feasible through the completion of substantial preliminary engineering. Any issues raised in the engineering of project have been adequately addressed and the geometric layout has been approved. The project costs include adequate contingency allocations for any unknown technical issues resulting from construction.

The project is a long way through the Mn/DOT project development process and can start the procurement process for design-build delivery immediately upon grant award notification. The project has met design criteria by Mn/DOT.

(vi) Financially Feasible

The project adopts a funding timeline to correlate with construction spending. The funding package has been developed with numerous agencies and jurisdictions, which is expected to provide a greater level of flexibility and stability in funding as compared to a single-sourced funding plan. So far the project has $26.3 million committed in funds as compared to $201.3 million in project costs. Therefore the proposed TIGER grant of $134.5 million will help fill the funding gap.

The project has financial commitments from multiple entities at the local level in addition to the state. This demonstrates a sound financial plan since it demonstrates broad support and provides some flexibility in the timing of committed funds. Supporting letters from the financially committed parties are attached with this application.

Local Support - The local funds are committed and local cooperating entities have approved the project. The three cities of Edina, Bloomington and Eden Prairie have passed resolutions committing to the project. The City of Savage is the main applicant on an application to Mn/DOT to fund the interchange. State law requires municipal approval for highway projects going through the jurisdiction of cities. Mn/DOT has secured the approval of all four cities.

State Level Support - The US 169/I-494 Interchange portion of the project (which is the more significant portion in terms of costs) is included in the State's Highway Improvement Plan showing a commitment to the project at the state level. The Mn/DOT is financially well positioned to fulfill its financial commitments to this project. It has forecast Fiscal Year (FY) 2010 revenue of $1,316 million, growing to $1,513 million by FY2013 for the state's Trunk Highway System. The Agency's FY2010 Trunk Highway Fund (THF) balance is forecast to be $28 million, growing to $75 million by FY2013. Assuming Federal revenues stay at current levels, the Mn/DOT's THF cash balance is estimated to be between $100 million and $350 million each fiscal year. The Agency completed a $400 million bonding program in FY 2007 and began a $1.8 billion bond program in FY 2009. It forecasts FY 2010 debt service at $87 million, growing to $171 million in FY2013, with a very aggressive construction schedule. The Agency's

FY2009 construction program exceeded $800M and in FY2010 the construction program will exceed $1.2B. It has sufficient flexibility within the current Minnesota Highway Funds programs and the large bonding program that will help to ensure delivery of a successful Tiger grant application even if unforeseen revenue or project risks materialize.

The contingency level is currently at 10%, which is adequate to address any unknown issues given the extensive preliminary engineering completed for this project. Mn/DOT conducted considerable utility engineering and a thorough analysis of right-of-way impacts through its pre-design process which will minimize any unknowns that may require contingency funding.

4.2 Selection Criteria: Secondary

4.2.1 Innovation

Performance Based Design

The project is innovative in a number of ways. First, as mentioned above, the project employs a performance-based design, which uses available data and modeling to optimize Mn/DOT's use of resources. Since two of the system-to-system connection on US 169/I-494 interchange are utilized by low volumes of traffic and are also served by additional connections, the design is based on the needs of the traffic flow. This innovative approach ensures that no unnecessary resources are expended and that available funds are used to enhance the critical freight and commuter traffic flows.

Performance based design is an important initiative to Mn/DOT since it fits into Mn/DOT's goal to construct, operate, and maintain excellent transportation facilities, that satisfy stakeholders and leave a positive and lasting impact on communities. Performance based design incorporates design standards and flexibility, safety, aesthetics, environmental sustainability and community sensitivity. The project as defined in this application utilized this method in its design. After the project is constructed, performance measures will be used to determine when the final two movements of the broader project design are necessary (these will cost an additional $30 million). Since these are two movements with very little anticipated volume in the near term, Mn/DOT will use the following performance measures to determine the need for the remaining two movements:

> Reserve Capacity of Shared Regional/Local Ramp Intersections – Conduct a volume to capacity (V/C) analysis of the "US 169 southbound off ramp/Viking Drive/I-494 westbound on ramp" intersection. If the V/C analysis is considered unacceptable (>0.9) and the ramp-to-ramp movement represents at least ten percent of the critical movement, the construction of the final two movements will be considered.
>
> Travel Time Analysis – Conduct a travel time survey from Prairie Center Drive along TH 212 to Bren Road along US 169 utilizing the TH 212 corridor (this is an alternate route to traveling through the US 169/I-494 intersection). Estimate the travel for the same origin and destination using the I-494 and US 169 corridors. If the estimated travel time for the I-494 and US 169 is corridors is less than the observed travel time on TH 212 and the US 169 is operating at free-flow speeds north of TH 62, the construction of the two movements will be considered.
>
> Benefit-Cost Analysis – Conduct a benefit-cost analysis (BCA) to determine if the benefits of constructing the final two movements are greater than the cost. If the B/C is greater than 1.0, the construction of the two movements will be considered.

This method of design allows for a flexible and responsible design since it only spends limited funds on the portion of the project that is necessary and only allocates additional funding if and when it is necessary. However, should the U.S. Department of Transportation and the Federal Highway Administration not agree with this method of delivery and will require the broader project to be delivered, Mn/DOT will work to deliver the project with additional funding to support the extra project costs.

Project Delivery
The chosen delivery method for the project is design build. As a part of this method, Mn/DOT allows for the contractor to provide an Alternative Technical Concept (ATC) which could prove to be very advantageous for the maintenance of traffic (MOT) component of the project. ATC is a best practices effort very unique to Mn/DOT that allows for maximum project innovation since it gives contractors the flexibility to present new design ideas to Mn/DOT in a confidential environment. Design build also accelerates the delivery of the project which allows for economic benefits mentioned earlier in this report.

Transit component
The Project includes the widening of bus shoulders in the north and southbound directions of US 169 and through the Interchange as well as along TH 13. Providing bus shoulders on a major arterial and through a major interchange is not something that is typically included in large highway projects. Mn/DOT is a national leader in the use of bus only shoulders.

Roundabouts
The use of roundabouts as a key component in the project design is an innovative aspect of the design for local connections. The advantages of using roundabouts are:

1. Constructing a roundabout allows use of the existing 169 bridge at Valley View Road and does not force reconstruction as a traffic signal would.
2. The Project requires the use or modification of less land (particularly 4f and 6f property which includes park and property acquired through council funding respectively).
3. Roundabouts are also more cost effective since they reduce lifecycle costs. This is because they create more efficient flow of traffic and minimize the need for a future interchange modification project.

4.2.2 Partnership

Jurisdictional and Stakeholder Collaboration
Project funding is assumed to come from a variety of local and state funding sources, indicating broad support for the project. The local funds amount to approximately 23% of total project costs. The funding sources for each of these contributions are further defined in Section 3.

The Project will also involve collaboration with Transit and Private Bus operators who operate through the interchange since it includes an expansion of the current system of bus only shoulders on US 169 and I-494.

Disciplinary Integration
While the project is primarily supported by the local and state jurisdictions involved, it has also received support from operators at the Ports and the owners and employees at Mystic Lake Hotel and Casino since it addresses mobility issues for travelers to and from these locations.

The TH 101/TH 13 portion of the Project is recognized by the Scott County Association for Leadership and Efficiency (SCALE) which was formed to encourage communication and collaboration of services and sharing of resources. This recognition brings widespread support to the project from other regions, counties and groups including:

- School districts within Scott County
- Townships within Scott County
- The Shakopee Mdewakanton Sioux Community

The US 169/I-494 portion of the Project has received financial commitment from the three neighboring cities and has received municipal approval. The project is included in the long term economic development plans discussed above.

5 NEPA Requirement

In December 2002, an Environmental Assessment was issued for construction along US 169 from Valley View Road to Pioneer Trail. In November 2003, there was a negative declaration on the need for an EIS for that project, and FHWA made a finding of no significant impact (FONSI). After the negative declaration was made, Mn/DOT updated the conceptual design and issued a Project Memorandum in 2007. The FONSI is available upon request.

6 Environmentally Related Federal, State, and Local Actions

All of the related federal, state, and local environmental actions related to this project have been completed.

Appendix A: Federal Wage Rate Requirement

The Minnesota Department of Transportation (Mn/DOT) will comply with the requirements of subchapter IV of chapter 31 of title 40, United States Code (Federal wage rate requirements),as required by the Recovery Act for all projects funded in whole or in part with Federal Tiger Grants. Within Mn/DOT, the Labor Compliance Unit (LCU) will provide investigative and enforcement assistance, along with resources to Mn/DOT, local governmental agency and consulting firm personnel in administering federal-aid construction contracts in accordance with the federal prevailing wage laws. The LCU website is accessible to all interested parties working on projects funded by the Federal Tiger Grants: www.dot.state.mn.us/const/labor

All contractors that perform work under contracts that are funded in whole or in part with federal funds will be required to furnish copies of weekly payroll reports to the contracting agency. Contractors shall certify each payroll report by completing a Statement of Compliance Form (required Mn/DOT 21658 form) which is an enhanced version of the WH347 Copeland certification form. In addition, the prime contractor is will be responsible for assuring that its payroll records and those of its subcontractors accurately reflect the hours worked, rate of pay and classification of work performed. The contracting agency will administer the contract in accordance with the plans, specifications and provisions.

In addition, the contracting agency will maintain a poster board on the project listing all required posters and wage decisions in a location that easily accessible to all worker on the project. The contracting agency will utilize a Labor Compliance Field Review Form monthly to conduct employee interviews; the information collected will be compared to the information on the certified payroll to assist the contracting agency in ensuring that all contractors are demonstrating compliance. At any time, the prime contractor will be required to permit representatives from Mn/DOT, the U.S. DOL, the Federal Highway Administration, or the contracting agency to perform worker interviews on the project.

The following table displays links to all contract/provisions related to state and/or federal-aid projects for prevailing wage requirements. The contract labor provisions/specifications will be incorporated into all state-aid and federal-aid contracts and shall be applicable to the prime contractor and all subcontractors contracting to do all or part of the work under a contract. The prime contractor, along with all subcontractors will be required to provide to each lower tier subcontractor, performing work under a contract, copies of all required contract provisions.

Proposal/Contract Labor Provisions and Specification Documents	Contract Applicability Federal, State or Both
State Funded Contracts Special Provisions Division A	State
Federally Funded Contracts Special Provisions Division A	Federal
FHWA Federal Special Provisions - Form 1273	Federal
Debarment Notice	Both
Traffic Control Notice	Federal
Federal Wage Decision - The contracting agency shall incorporate the applicable federal wage decision(s) into a contract proposal pursuant to the following requirements.	Federal
State Highway & Heavy Wage Decision - The contracting agency shall incorporate the applicable highway and heavy wage decision(s) into a contract for the construction or maintenance of highways, or other public works and includes roads, highways, streets, airport runways, bridges, power plants, dams and utilities. Furthermore, the contracting authority shall incorporate pursuant to the following requirements.	Both
State Truck Rental Rate Decision - The contracting agency shall incorporate the applicable truck rental rate decision(s) into a contract for the construction or maintenance of highways, or other public works and includes roads, highways, streets, airport runways, bridges, power plants, dams and utilities. Furthermore, the contracting agency shall incorporate pursuant to the following requirements.	Both
State Commercial Wage Decision - The contracting agency shall incorporate the commercial wage decision(s) into a contract for all building construction projects exclusive of residential construction.	Both

Jon Chiglo, P.E.
Minnesota Department of Transportation
Chapter 152/Economic Recovery Program Manager

Charles Groshens
Minnesota Department of Transportation
Labor Compliance Unit Supervisor

Appendix B: Letters of Support

SCOTT COUNTY PUBLIC WORKS DIVISION

HIGHWAY DEPARTMENT · 600 COUNTRY TRAIL EAST · JORDAN, MN 55352-9339
(952) 496-8346 · Fax: (952) 496-8365 · www.co.scott.mn.us

LEZLIE A. VERMILLION
PUBLIC WORKS DIRECTOR

MITCHELL J. RASMUSSEN, P.E.
COUNTY ENGINEER

September 11, 2009

Mr. Ray LaHood
Secretary
U.S. Department of Transportation
1200 New Jersey Ave., SE
Washington, DC 20590

Dear Secretary LaHood:

I am writing in support of the TIGER Discretionary grant application for the TH 169/I-494 and TH 101/TH 13 Interchanges Project in Hennepin and Scott Counties, Minnesota. The project is a vital part of infrastructure in the regional transportation system, and will generate jobs and spur economic development upon its completion.

As you are aware, transportation and economic development are intrinsically linked. State and local officials in Minnesota have worked diligently to develop the TH 169/I-494 and TH 101/TH 13 Interchanges Project, but funding remains an issue. In real dollar terms, transportation investment is declining due to construction inflation and declining fuel tax revenue. With infrastructure investment stifled, our region is missing out on development opportunities that could spur our economy. A TIGER grant for the TH 169/I-494 and TH 101/TH 13 Interchanges Project would help put people to work, and attract long term private investment to the region.

The Tiger grant program is a very wise federal action in this time of economic recession. I assure you that a grant to the TH 169/I-494 and TH 101/TH 13 Interchanges Project would perfectly meet the goals of the program and help nurse our regional economy back to health. I urge your favorable review of this application for TIGER grant funds.

Sincerely,

Lezlie Vermillion
Public Works Director

An Equal Opportunity/Safety Aware Employer

US Hwy 169 Corridor Coalition

Working together to enhance safety, reduce congestion and maximize economic development along the US Highway169 inter-regional corridor.

Members

Cities
Belle Plaine
Bloomington
Edina
Jordan
Le Sueur
North Mankato
Mankato
Prior Lake
Savage
Shakopee
St. Peter

Counties
Blue Earth
Le Sueur
Scott

Region 9 Development Commission

July 24, 2009

Honorable Governor Timothy Pawlenty
130 State Capitol
75 Rev. Dr. Martin Luther King Blvd
St Paul MN 55155

Dear Governor Pawlenty:

On behalf of a large and growing coalition of elected officials and communities in both the southwest metropolitan area as well as portions of southwest Minnesota, we are writing to communicate our great concern over the completion of the reconstruction of the vital U.S. Highway 169/I-494 interchange project in a timely manner. This critical economic link to the entire southwest portion of the great State of Minnesota, and to and through a significant part of the Twin Cities, remains undone, with no definite timeline for future action. Meanwhile, due to ever increasing congestion, the interchange itself continues to become a greater threat to the safety of the traveling public and the health of the state's economy.

Since being designated as a "highest priority need" in the Trunk Highway 169 Interregional corridor Study in 2001, this project has quietly slipped from Mn/DOT's ten year plan, the state and regional STIP process, and was again ignored in the round of transportation stimulus fund spending in the state in 2009. At this point, the U.S. Highway 169/I-494 interchange project is where it was over ten years ago: in need of state commitment and the funding necessary for its completion with no present prospect of any near-term reconstruction.

The technical data clearly supports the need for timely investment in this interchange as witnessed by over 500 crashes during a three-year span and congestion delays that are in excess of six hours per day. Within the last year, two fatalities directly related to this congestion have occurred, one just within the last month.

Our group enthusiastically backed Mn/DOT's efforts to propose a performance-based phased improvement project at 169/494, which is the approach Mn/DOT desired to take with the Federal Highway Administration (FHWA). With strong assurances from Mn/DOT leadership that this was a sound and cost-effective approach, we actively advocated for this effort. We also offered to contribute our own communities' local ARRA dollars for this project and expressed willingness to bond locally for additional monies for the project. We aggressively courted support at the TAB to move this project forward with the use of ARRA funds. In the end, however, FHWA rejected a reduced scope project and advised a full build of the interchange, with turning movements in all directions, was necessary. The full build cost was approximately $180 million, now $213 million due to further ROW analysis. Mn/DOT had committed to the reduced scope cost of approximately $145 million. When FHWA rejected the reduced scope, Mn/DOT withdrew its support for the interchange reconstruction. With almost $100 million of the cost coming from ARRA money and local communities willing to commit to the investment, the inability of Mn/DOT to commit to this project, with that much "found" capital was very frustrating, especially since, in our belief, 169/494 met the requirements of the ARAA money more appropriately than any other project being funded. As a result, this is the last remaining freeway-to-freeway interchange on the Interstate beltway with stop control regulating over 170,000 cars daily and no committed plan for moving forward.

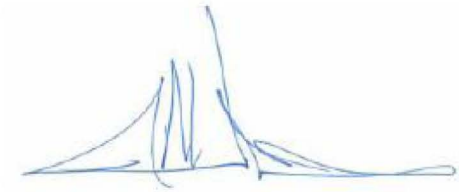
During the recent Transportation Advisory Board (TAB) ARRA project selection process; we built a coalition to support moving forward with this project. We believe we effectively demonstrated the need for reconstruction of the 169/494 interchange through a far-reaching coalition that transcends both political parties and geographical boundaries; one composed of both rural and urban communities, stretching from Mankato to Minneapolis. This diverse group of communities and counties stands committed to a systemic, regional and inter-regional approach to developing and maintaining safe and viable transportation networks.

Regarding funding possibilities, we are aware Mn/DOT will be applying for Transportation Investment Generating Economic Recovery (TIGER) funds as part of the ARRA funding for this interchange improvement project. This is sincerely appreciated. We understand that Mn/DOT will offer the partial interchange as a part of the application for TIGER funds and we encourage you to support and direct Mn/DOT to make certain the reconstruction of 169/494 is in Mn/DOT's application for TIGER funds.

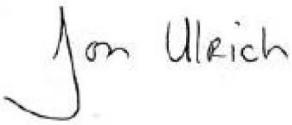
While we are encouraged by the idea the U.S. Secretary of Transportation has a significant discretionary fund available for use to stimulate the economy, we do believe the success of any TIGER application will be extraordinarily difficult. We would therefore like to meet with you in the near future to discuss other strategies that might be employed to assure the successful and prompt reconstruction of this interchange. We therefore look forward to hearing from your office regarding a potential meeting between you and community and county representatives.

Thank you for your consideration of these requests.

Sincerely,



Mayor James Hovland
City of Edina
Chair



Commissioner Jon Ulrich
Scott County
Vice Chair

Commissioner Tom McLaughlin
Blue Earth County
Secretary

Councilman Rod Axtell
City of Bloomington
Treasurer

CC: Tom Sorel
State Senators
State Legislators
Mayors
Board Chairs
US Hwy 169 Corridor Coalition Members

OFFICE OF PUBLIC WORKS | September 11, 2009

EDEN PRAIRIE
LIVE • WORK • PLAY

O: 952 949 8300
FAX 952 949 8390
TDD 952 949 8399

8080 Mitchell Rd
Eden Prairie, MN
55344-4485

edenprairie.org

Mr. Ray LaHood
Secretary
U.S. Department of Transportation
1200 New Jersey Ave., SE
Washington, DC 20590

Dear Secretary LaHood:

I am writing in support of the TIGER Discretionary grant application for the TH 169/I-494 and TH 101/TH 13 Interchanges Project in Hennepin and Scott Counties, Minnesota. The project is a vital part of infrastructure in the regional transportation system, and will generate jobs and spur economic development upon its completion.

As you are aware, transportation and economic development are intrinsically linked. State and local officials in Minnesota have worked diligently to develop the TH 169/I-494 and TH 101/TH 13 Interchanges Project, but funding remains an issue. In real dollar terms, transportation investment is declining due to construction inflation and declining fuel tax revenue. With infrastructure investment stifled, our region is missing out on development opportunities that could spur our economy. A TIGER grant for the TH 169/I-494 and TH 101/TH 13 Interchanges Project would help put people to work, and attract long term private investment to the region.

The Tiger grant program is a very wise federal action in this time of economic recession. I assure you that a grant to the TH 169/I-494 and TH 101/TH 13 Interchanges Project would perfectly meet the goals of the program and help nurse our regional economy back to health. I urge your favorable review of this application for TIGER grant funds.

Sincerely,

Eugene A. Dietz, P.E.
Director of Public Works

City Offices
6000 McColl Drive, Savage, MN 55378-1800 Telephone: 952-882-2660 Fax: 952-882-2656

September 14, 2009

Mr. Ray LaHood
Secretary
U.S. Department of Transportation
1200 New Jersey Ave., SE
Washington, D.C. 20590

Re: Highway 13/Highway 101 TIGER Discretionary Grant
City Project 08-21
City of Savage, Scott County

Dear Mr. LaHood:

I am writing in support of the TIGER Discretionary grant application for the TH 169/I-494 and TH 101/TH 13 Interchanges Project in Hennepin and Scott Counties, Minnesota. The project is a vital part of infrastructure in the regional transportation system and will generate jobs and spur economic development upon its completion.

The level of traffic along and adjacent to Highway 13 has increased substantially in recent years with continued residential, commercial, and industrial development south of the Minnesota River and with the opening of the Highway 169/Bloomington Ferry Bridge in the mid-1990s. Some of the many effects related to increased traffic volumes include increased accidents and other traffic safety issues. Highway 13 carries the highest volume of truck traffic in Minnesota, and farmers and truckers find it difficult to negotiate the traffic to reach the Ports of Savage in a timely manner. Highway 13 is unique in its combination of commuter traffic with truck access to a major national port.

Highway 13 moves traffic in the east/west direction until it intersects Highway 101, where it then moves traffic in the north/south direction. Today all movements of the three-legged at-grade intersection are operated by a signal. The project will bridge the eastbound traffic over vehicles exiting and entering the westbound direction, so that mainline traffic in both directions is free-flow. The westbound vehicles exiting and entering mainline will do so on the left side and will be controlled by a two-phase signal. The project also implements access management strategies.

It is anticipated that the project improvements will reduce the number of crashes at the intersection by approximately 50% and will more than double the capacity of the intersection.

Please strongly consider this application for TIGER grant funds to help fund this critical interchange project within the Twin Cities Metropolitan Area.

If you have questions or comments, feel free to contact me at 952-882-2672 or jpowell@ci.savage.mn.us.

Sincerely,

City of Savage

John M. Powell, P.E.
Public Works Director/City Engineer

JMP/ljj

G:\2008\08-21 (TH 13-TH 101)\TH 13 TH 101 TIGER App.doc

E-mail: comments@ci.savage.mn.us Website: www.cityofsavage.com

City of Edina

September 15, 2009

Mr. Ray LaHood
Secretary
U.S. Department of Transportation
1200 New Jersey Ave., SE
Washington, DC 20590

RE: U.S. Highway 169 and I 494 Interchange Project

Dear Secretary LaHood,

The City of Edina is writing to express our support for the TIGER Discretionary grant application for the U.S. 169/I-494 Interchange Project in Hennepin County, Minnesota.

This interchange serves as a vital link for the transfer of goods and services throughout our community and the region. The critical improvements are necessary to provide the essential regional transportation network required to grow our economy and will help to employ our state work force.

This project will help eliminate the regional bottleneck and increase safety thereby improving the quality of life of all users. We strongly urge your favorable review of the Minnesota Department of Transportation TIGER grant application for the U.S. 169/I-494 Interchange Project.

Sincerely,

Gordon Hughes
City Manager

c: Edina City Council
Wayne Houle – Director of Public Works/City Engineer

City Hall
4801 WEST 50TH STREET
EDINA, MINNESOTA, 55424-1394

www.cityofedina.com

952-927-8861
FAX 952-826-0390
TTY 952-826-0379

September 14, 2009

Mr. Ray LaHood
Secretary
U.S. Department of Transportation
1200 New Jersey Ave., SE
Washington, DC 20590

Dear Secretary LaHood:

I am writing in support of the TIGER Discretionary grant application for the TH 169/I-494 and TH 101/TH 13 Interchanges Project in Scott County and Hennepin County, Minnesota. The project is a vital part of infrastructure in the regional transportation system, and will generate jobs and spur economic development upon its completion.

As you are aware, transportation and economic development are intrinsically linked. State and local officials in Minnesota have worked diligently to develop the TH 169/I-494 and TH 101/TH 13 Interchanges Project, but funding remains an issue. In real dollar terms, transportation investment is declining due to construction inflation and declining fuel tax revenue. With infrastructure investment stifled, our region is missing out on development opportunities that could spur our economy. A TIGER grant for the TH 169/I-494 and TH 101/TH 13 Interchanges Project would help put people to work, and attract long term private investment to the region.

The TIGER grant program is a very wise federal action in this time of economic recession. I assure you that a grant for the TH 169/I-494 and TH 101/TH 13 Interchanges Project would perfectly meet the goals of the program and help nurse our regional economy back to health. I urge your favorable review of this application for TIGER grant funds.

Sincerely,

Peter Bell

Peter Bell, Chair

cc: Tom Weaver, MC Regional Administrator
Arlene McCarthy, Director MTS
Robert McFarlin, Councilmember
Tom Sorel, Minnesota Commissioner of Transportation
Scott McBride, MnDOT Metro District Engineer

www.metrocouncil.org

390 Robert Street North • St. Paul, MN 55101-1805 • (651) 602-1000 • Fax (651) 602-1550 • TTY (651) 291-0904

CITY OF
BLOOMINGTON
MINNESOTA

September 14, 2009

Ray LaHood
Transportation Secretary
U.S. Department of Transportation
1200 New Jersey Ave SE
Washington, DC 20590

RE: I-494 and U.S. Highway 169 Interchange Project

Dear Mr. LaHood:

We understand that the Minnesota Department of Transportation will be submitting projects that have a regional impact that will improve the movement of people and goods in the Twin Cities metro area. The City of Bloomington strongly supports the US169/I-494 interchange as such a project.

The I-494 and U.S. Highway 169 interchange is a critical link within the metropolitan regional and interregional system. This project clearly meets the objectives of the 2009 Transportation Investment Generating Economic Recovery (TIGER) funds that will employ a highly skilled workforce in a diverse range of engineering and construction jobs over the next three years from the greater metro area. Furthermore, this project will result in sustained economic benefits for the region and state well into the future because it will greatly improve the flow of freight and people.

MnDOT defined the U.S. Highway 169 from I-494 to Mankato as a High Priority Interregional Corridor. In the 2003 Corridor Management Plan, this interchange was the highest priority project identified by the study partners along the entire corridor from Mankato to I-494. While a few smaller projects that have been done in the corridor, this important project remains undone. The City of Bloomington is in strong support of this project as the City's highest regional project priority since the interchange has a negative impact on the Bloomington roadway network since many people use local roadways in their efforts to avoid this regional bottleneck.

MAYOR AND CITY MANAGER
1800 W. OLD SHAKOPEE ROAD, BLOOMINGTON MN 55431-3027
PH 952-563-8780 FAX 952-563-8754 TTY 952-563-8740

Ray LaHood
Transportation Secretary
U.S. Department of Transportation
1200 New Jersey Ave SE
Washington, DC 20590

We strongly endorse MnDOT to encourage the federal government allocating these funds to recognize this project as true economic stimulus. It is shovel ready as a design-build project that will enhance the safety and mobility of a very critical link in the existing state system, immediately provide a diversity of job types that exceeds the other candidate projects, and have a lasting impact on the state's economy. Please select it to move forward. Thank you for your consideration.

Sincerely,

Gene Winstead
Mayor

CC: Bloomington City Council
City Manager
Public Works Director