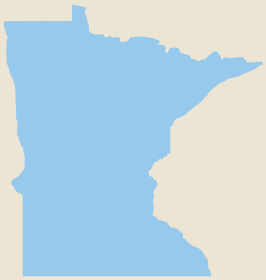

# Livability & Sustainability

## Through the Integration of Complete Streets Practices in Minnesota

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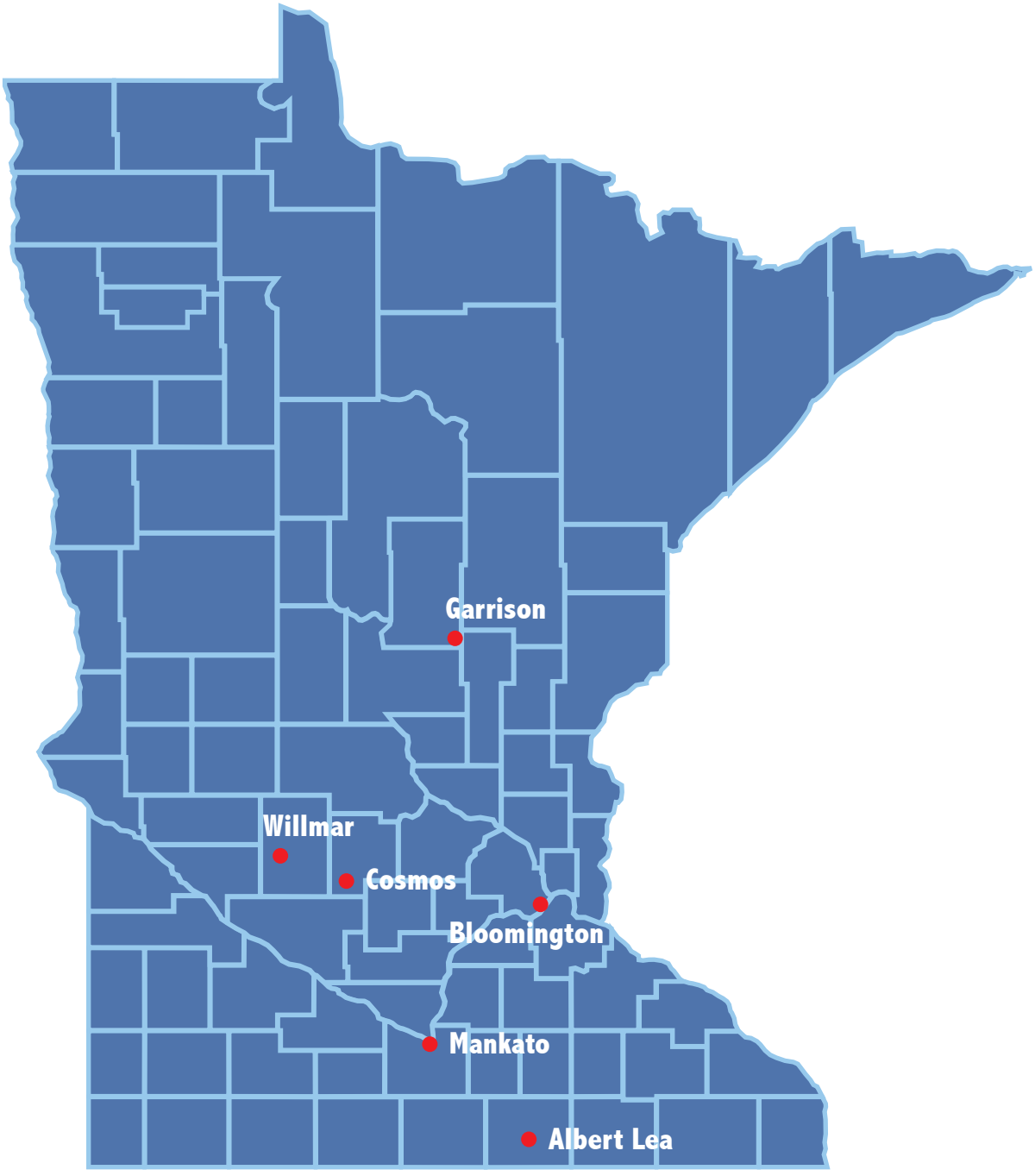
Links in this document appear in blue.

# Project Site Map



# Minnesota's Statewide Initiative:

**Livability and Sustainability through the Integration of Complete Streets Practices in Minnesota**

The Minnesota Department of Transportation and its local partners are pleased to present this TIGER II application to the US DOT. Our agencies are proposing to construct six Complete Streets projects in communities throughout Minnesota that promote livability and sustainability. Minnesota has been a leader on transportation initiatives, such as Context Sensitive Solutions, and we look forward to this opportunity to work in a leadership role with the US DOT on this initiative and the proposed development of performance measures for Complete Streets projects.

Minnesota, like the nation, went through an era where transportation investments emphasized the development of a uniform, car-centric highway system. The vision of the era was to connect every corner of the state via a system of roads, and through this connection, communities would prosper. It was in pursuit of this vision that the landscape of Minnesota changed; communities were bypassed, or blown through by main streets that resembled broad airport runways. Neighborhoods were bisected by freeways and expressways, or simply obliterated by their construction. Communities redeveloped to serve the highway. Investments in transit and the infrastructure to support other modes diminished as the private vehicle became the dominate mode for getting around. As Minnesotans became more dependent upon their vehicles, traffic congestion and environmental and health concerns have increased.

In the last few years, Minnesota and the nation have taken great strides in how we view our transportation investments. There is a greater awareness of the interconnectivity between transportation, the economic vitality of a community, and the health of its residents. Enhancing this interconnectivity and providing more transportation choices have become key themes in discussions relating to livability and sustainability.

Under the initiative described in this grant application, Minnesota will continue to move toward institutionalizing the interconnectivity between transportation, economic vitality and environmental health by demonstrating how a statewide livability and sustainability vision can translate into six projects of broad geographic, economic and social diversity. These projects will become the framework for future projects in every corner of Minnesota and possibly a model for projects across the nation.

**Background:** Over the past several decades, Minnesota has invested billions of dollars in developing this car-centric highway vision where communities were built or rebuilt to serve the highway. In 2004, Minnesota marked a turning point with the opening of the state's first light rail transit line to overwhelming success in ridership. The progression to a sustainable transportation system with livable communities will take time, but we are making strides by expanding the LRT system and building Bus Rapid Transit and commuter rail. Additionally, in the past few years, Minnesota has taken major steps on policy and planning.

**2006 – Mn/DOT's Technical Memorandum**
Mn/DOT Technical Memorandum Design Policy – "Design Excellence through Context Sensitive Design and Solutions," Oct. 17, 2006

**2008 – Mn/DOT Strategic Vision**
"To become a global leader in transportation, committed to upholding public needs and collaboration with internal and external partners to create a safe, efficient, and sustainable transportation system for the future."

**2009 – Complete Streets Report**
This report was prepared in response to the legislative directive to the Commissioner of Transportation to study the costs, benefits and feasibility of implementing a Complete Streets policy for the state of Minnesota.

**2009 – Minnesota Statewide Transportation Policy Plan:** 2009-2028

A collaborative approach to implementing the vision for "A Safe, Efficient and Sustainable Transportation System" identified in the Minnesota Statewide Transportation Plan: 2009-2028.

**2010 – Chapter 351 of the 2010 Regular Legislative Session**

Minnesota Statutes 174.75 COMPLETE STREETS

**Subdivision 1. Definition** "Complete streets" is the planning, scoping, design, implementation, operation, and maintenance of roads in order to reasonably address the safety and accessibility needs of users of all ages and abilities. Complete streets considers the needs of the motorists, pedestrians, transit users and vehicles, bicyclists, and commercial and emergency vehicles moving along and across roads, intersections, and crossings in an manner that is sensitive to the local context and recognizes that the needs vary in urban, suburban, and rural settings.

**Challenges to be Addressed:** The challenges faced by Minnesota as it moves from the broad vision and policies cited above to implementing them throughout the state are not unique–many states face the same situation. This initiative identified the following challenges to implementing a statewide vision and its policies:

1. **Geographic and Economic Diversity**
   Minnesota is a diverse state: about half of its people live within the Twin Cities metropolitan area and half live in Greater Minnesota. While overall the population of Minnesota continues to grow faster than neighboring states, the growth is not uniform across the state (2000-2009 Population Growth in Midwest Report). The Twin Cities and other urban centers see the majority of the growth, increasing demand on communities and the transportation network, while rural areas are experiencing diminishing populations to the point where the survival of small towns is in question. In many areas, agriculture is the primary economic driver; in other areas, natural resources and recreation are the driving force. At the same time, throughout the state, high-tech/biotech and green industries are being looked at to revitalize the economy. Even within its urban centers, the population is diverse, dispersed between moderate-density cities and sprawling suburbs.

   To successfully implement a statewide approach to a sustainable transportation system and livable communities, this geographic and economic diversity must be recognized and the approach must provide the flexibility to address regional needs.

2. **Unique Needs and Fiscal Constraints**
   As with geographic and economic diversity, communities across Minnesota are also socially and fiscally unique. Many communities are struggling to meet basic services, therefore "livability" and "sustainability" investments fall outside of their budgets. For many communities, multi-modal options are limited and transit options may not exist. In some communities the highway is the community's Main Street, attempting to accommodate both long distance highway traffic and local multi-modal trips, and in other communities the highway has bypassed the town and drawn away most of the commercial businesses from the traditional downtown.

   To successfully implement a statewide approach to a sustainable transportation system and livable communities, a toolbox of solutions is needed to address different and unique transportation needs. This toolbox needs to include realistic funding options to support local visions of sustainability and livability.

3. **Traditional Silos** Within the car-centric highway vision, the Department of Transportation has traditionally been the lead agency overseeing the construction of state highway system. Under a sustainability and livability approach, new opportunities have emerged for greater collaboration between traditional and non-traditional partnerships. It is unrealistic for a Department of Transportation to attempt to address all the interconnected elements of livability and sustainability alone. Other state agencies, the federal government,

local governments, community coalitions, health and environmental groups all have a stake in the process.

To successfully implement a statewide approach to a sustainable transportation system and livable communities, the traditional silos that limit broader input into transportation investments need to be removed and a collaborative approach to assessing success is needed.

**4. No National Model or Approach**

Across the country, the federal government, states and communities are discussing what "livability and sustainability" means to them. Within these discussions, many good ideas and concepts have been identified. These ideas and concepts then become broad visions, but these visions often do not take into account the needs and constraints real communities face as they work to incorporate this broader vision. While it is recognized that a one-size fits all approach will not work, guidance for implementation and how to measure success for vastly diverse communities does not exist.

To successfully implement a statewide approach to a sustainable transportation system and livable communities, a clear definition of the vision and goals for sustainability and livability is needed with the flexibility to be used across the vastly diverse communities of the nation.

## How This Initiative Will Address the Challenges:

The "Livability and Sustainability through the Integration of Complete Streets Practices in Minnesota" initiative will begin to address the challenges listed above by funding six Complete Streets projects across the state. These projects will provide a framework for how future transportation investments can incorporate a statewide vision for sustainability and livability across a diverse geographic, social and economic landscape. These Complete Streets elements of the projects will vary in scope, partnerships, and anticipated results based on the uniqueness of the communities, but all of the projects will contribute to addressing the challenges described above through the following objectives:

**1. Recognize Geographic and Economic Diversity**

Having a clear understanding of the stakeholders' needs is critical to developing a sustainable transportation system and livable community. Key considerations include: understanding the geography and economy of the region; knowing the livelihood of its residents; identifying what attracts people to the area; and understanding the region's connection to the rest of the state and to the country. The six projects represent the geographic and economic diversity of Minnesota, and each of these projects provide an opportunity for a better understanding of how a Complete Streets project would work in their particular region. The geographic features of each of these projects are (July 2009 populations):

- Garrison (pop 220): Rural, Small Town, Native American Tribal Lands, Recreational Area, Historical Area, Economically Distressed Area
- Bloomington (pop 82,960): Major Metropolitan/ Suburban Trade Center, Redeveloping Brownfields, Super-regional Retail Center
- Cosmos (pop 553): Rural, Small Town, Agricultural Area
- Albert Lea (pop 17,402): Rural Trade Center, Historical District, Agricultural Area
- Mankato (pop 36,500): Rural Trade and Educational Center, Agricultural Area, Suburban Corridor
- Willmar (pop 17,907): Rural Trade Center, Traditional Downtown, Agricultural and Recreational Area

**2. Demonstrate a Sliding Scale for Implementation** Having a clear understanding of a community's population, its ability to provide local funding, and its access to various transportation modes is critical to developing a sustainable transportation system and livable community. The scale of improvements should take all these factors into account. Examples of this include:

- The Lindau Corridor project in Bloomington is located in a major urban center and has

connections with bus transit, light rail transit, bike paths and a vast network of freeways and streets. These links provide accessibility to the entire Twin Cities Metro area. It is a mix of commercial, flex-tech, retail and residential areas with walkable connections. Because of the size of Bloomington and opportunities for private development, this project is able to leverage private and local funds and improve the connectivity between several different transportation modes. These investments also go beyond the transportation network and support the local community's housing needs. Funding is available, assigned and in-place for these improvements.

- The Cosmos Main Street Project is located in a community of about 500 people in western Minnesota. The city currently has limited multi-modal options, primarily consisting of a countywide dial-a-ride transit service. The community struggles to meet the basic needs of its residents and also currently lacks the economic vitality to leverage private funds. This project demonstrates how the city, working with Mn/DOT, can improve the livability of their community while at the same time helping Mn/DOT replace a wide highway section with something more sustainable.

Each of the six Complete Streets projects demonstrates how a statewide vision can be scaled to a community's specific needs, constraints and fiscal limitations to improve livability and support a sustainable system.

**3. Emphasize Multi-Jurisdictional Collaboration** Recognizing that these projects are more than simply road improvement projects is critical to developing a sustainable transportation system and livable communities. Each of these six projects will be developed under a collaborative three "M's" (Multi-jurisdictional, Multi-modal and Multi-beneficial) approach. The projects will be refined through a process led by Mn/DOT staff. The process, currently underway, brings in non-traditional partners to review and comment on the project selection process and innovative approaches to measuring livability and sustainability elements in the Benefit Cost Analysis. In addition, the projects in this initiative include other non-traditional partnerships (e.g., Albert Lea efforts becoming America's First Certified Blue Zones City, Willmar's close relationship with the Willmar Design Center, and Bloomington's public/private partnership with the Mall of America).

**4. Develop a National Model** Having clear objectives is critical to developing a sustainable transportation system and livable communities. Through the processes introduced above, Mn/DOT will identify baseline data for each of these projects and commonalities between projects, and develop a tracking process to gauge their success. This data will provide an initial framework for linking various Complete Streets practices to a quantitative livability measure for long-range planning/outcomes.

**Long-Term Outcomes:** It is the goal of this initiative to show how a statewide livability and sustainability vision can be used to develop and construct Complete Streets projects in widely diverse communities. These six projects represent the diversity of Minnesota and will align with the criterion of the USDOT's long-term outcomes in different ways (see the individual project descriptions for details). For the overall initiative, the long-term outcomes of livability and environmental sustainability are emphasized through the "How This Initiative Will Address the Challenges" section above. By addressing these challenges, Minnesota continues to take steps away from a car-centric highway system towards a more multi-modal approach for sustainable transportation and livable communities.

## Project Partners

**State Agencies:**
Minnesota Department of Transportation
Minnesota Department of Health
Minnesota Housing
Minnesota Department of Natural Resources
Minnesota Pollution Control Agency

**Local Agencies:**
City of Bloomington
City of Willmar
City of Mankato
City of North Mankato
City of Albert Lea
City of Cosmos
City of Garrison

**Private Partners:**
Blue Cross and Blue Shield of Minnesota
Mall of America
HealthPartners

**Other Partners:**
Transit for Livable Communities
Willmar Design Center
Metro Transit
Minnesota Valley Transit Authority
Bloomington Central Station
Metropolitan Airport Commission
US Fish and Wildlife

## Grant Funds and Sources/ Uses of Project Funds

All local match funds listed below are committed for the year of the project.

Garrison: Total Project Costs $7,665,000
$6,132,000 TIGER II (80%)
$1,533,000 Mn/DOT State Fund Match (20%)

Bloomington: Total Project Costs $49,000,000
$15,450,000 TIGER II (32%)
$33,550,000 City of Bloomington and Private Funds (68%)

Cosmos: Total Project Costs $4,000,000
$3,200,000 TIGER II (80%)
$800,000 Mn/DOT State Funds Match (20%)

Albert Lea Total Project Costs $13,400,000
$10,720,000 TIGER II (80%)
$2,680,000 City of Albert Lea Match (20%)

Mankato: Total Project Costs $18,550,000
$15,350,000 TIGER II (83%)
$3,200,000 Mn/DOT State Funds and City of Mankato Match (17%)

Willmar: Total Project Costs $1,855,000
$1,830,000 TIGER II (99%)
$25,000 City of Willmar Match (1%)

Evaluation: Total Project Costs $10,000
$8,000 TIGER II (80%)
$2,000 Mn/DOT Soft Match (20%)

**Total Initiative:**
**Project Total Project Costs $94,480,000**

**$52,690,000 TIGER II (56%)**
**$41,790,000 Local (44%)**

# City of Garrison **Complete Streets Project**

**Project Description:** The Garrison Complete Streets Project includes improvements to the key transportation features in the rural town, as well as along Highway 169 south to Kathio Township and the Mille Lacs Indian Reservation (see Project Map). The project includes: the restoration of Garrison's massive, nationally significant, historic Civilian Conservation Corps concourse and pedestrian underpass bridge; creation of a more alternative-transportation-friendly downtown Garrison by landscaping vacant land into a city park and improving multi-modal facilities; restoration of the Kathio Township historic CCC bridge (including rail safety improvements); Lake Mille Lacs shoreline water quality improvements through the reestablishment of native plantings and erosion control measures; reduction of greenhouse gas emissions by converting existing roadway lighting to LED; installation of a clean energy alternative system (i.e., a solar collection system at the Mn/DOT Garrison truck station); and the development of a cell phone, web-based interactive interpretive tool of key CCC properties (concourse, bridges and associated CCC archaeological campsite). The project builds off Mn/DOT's nationally recognized leadership in the area of historic preservation for both wayside facility and historic bridges.

**Selection Criteria**

**State of Good Repair:** Highway 169 is a regional highway providing connections between the metropolitan Twin Cities and the rural and recreational areas in the central part of the state. Locally, the highway serves residents and businesses of the Mille Lacs Band of Ojibwe reservation, Kathio Township, Garrison and larger regional centers, including the county seat of Brainerd. Bringing the highway bridges and the concourse (primary wayside facility) to a state of good repair is vital for the state's efforts to maintain transportation facilities along this key roadway and provide for the effective movement of goods and people. The three stone structures are more than 70 years old and in critical need of repair and restoration. Mn/DOT is spending $1.2 million on critical structures wall repair on the concourse in 2011, but additional funds are needed to properly restore the historic structure. Repair of all three structures will ensure continued safe operation of this key local and regional roadway, lower maintenance costs, and extend the useful life of the structures by 75 years. Mn/DOT has committed to and is capable of funding the future maintenance of the structures through a Section 106 Programmatic Agreement with FHWA and MN SHPO.

**Economic Competitiveness:** The project is located in an Economically Distressed Area: In 2007, 17.7% of Garrison residents and 24.7% of Kathio Township residents had income below the poverty level (compared to 9.5% statewide). The restoration of the bridges and improvements to the road (e.g., lighting) will improve the long-term efficiency of transporting goods and people in this economically distressed area.

**Livability:** The project meets livability standards by reducing GHG emissions through the use of LED lights and installation of a solar energy station; providing more transportation choices to local residents and regional travelers by developing multi-modal facilities that will reduce vehicle trips by approximately 1,200 per year (including widening and improving sidewalks to accommodate pedestrians, bicycles and golf carts; installing a tree line alee to separate pedestrians from traffic; replacing deficient ADA elements; and exploring the re-opening of the pedestrian underpass under Highway 169), and supporting the existing community of Garrison by land recycling (converting existing vacant land to a city park). The project also enhances the unique character of Garrison and the area through the restoration of the important historic resources that will continue to connect the community to its history as a source of pride and identity. FHWA's Office of Planning, Environment and Realty's Surface Transportation Environmental and Planning Program commissioned a series of white papers from the U.S. Department of Transportation's John A. Volpe National Transportation

Systems Center (Volpe Center). Based on input from the Transportation Research Board committee, the white papers outlined future research needs organized by the four cross-cutting topic areas. In the area of livability, committee members recognized Mn/DOT's historic bridge streamlining process, in which premier state-owned bridges were selected for long-term preservation. The report noted that research was needed to identify "best practices for prioritizing the rehabilitation of historic bridges and understanding the most effective means of preservation for different types of bridges as they relate to livable communities."

**Environmental Sustainability:** The project will reduce the number of vehicle trips by as much as 1,200 vehicles per year through improved multi-modal facilities, improve energy efficiency by 80 percent by replacing existing roadway lighting with LED fixtures, and reduce GHG emissions by more than 65,000 tons through installation of a solar energy collection system for the Garrison Mn/DOT Truck Station. If the system produces power exceeding the annual electric usage for truck station and excess renewable energy credits, it will be sold into the utility power grid. The project also enhances the environment by improving water quality through shoreline restoration and revegetation and by planting 130 new trees. Finally, rehabilitation of the historic wayside and bridges, as compared to demolition and new construction, has less impact on landfills and requires less new manufactured materials. The rehabilitated wayside also functions to draw motorists off the highway during traffic backups or delays, thereby reducing GHG emissions caused by motorists idling in traffic.

**Safety:** Pedestrian and vehicle conflicts are a prime concern along this stretch of roadway. One pedestrian fatality combined with conflicts of pedestrians trying to cross from downtown Garrison to the historic concourse and views of Lake Mille Lacs make safety a key concern for local residents, tourists and Mn/DOT. The project includes elements to address pedestrian safety, including widening the existing sidewalk into a multi-modal trail, planting trees between the roadway and multi-modal trail, installing other key visual landscape reminders that vehicles are traveling through a residential area, and reestablishing the historic entrance and exit to the concourse. Currently, traffic coming into and out of the concourse is funneled into one point, creating traffic delays and movement conflicts from all directions, including with pedestrians. By reestablishing the original circulation patterns, such conflicts will be reduced. Repair/stabilization of the historic bridges and upgrading the railings to modern safety standards while maintaining the historic appearance will ensure continued safe operation of the roadway.

**Job Creation & Economic Stimulus:** As stated under Economic Competiveness, the project is located in an Economically Distressed Area. This project will require a variety of professionals and craftsman, including engineers, architects, historians, landscape architects, stone masons, roadway construction workers, and landscapers to complete the work on site. Indirect impact of the initial expenditures for employee lodging, meals, gas and project materials will result in additional spending in the local economy.

**Innovation:** The use of LED roadway lighting and the installation of the solar energy collection systems will reduce non-renewable energy consumption, reduce dependency on traditional fuels, and reduce CO2 emissions. Development of a Cell Phone Historic Site Tours is a cutting-edge approach to providing in-depth, flexible and inexpensive historic interpretation.

**Partnership:** Mn/DOT is actively partnering with the city of Garrison to promote current and proposed future stages of restoration for the concourse and historic bridges. **Jurisdictional and Stakeholder Collaboration:** the State of Minnesota will match 10-15% of the project costs. **Disciplinary Integration:** the projects are supported by the State Historic Preservation Office, the Minnesota Historical Society, and the Preservation Alliance of Minnesota. Local groups, the Garrison City Council, the Mille Lacs Band of Ojibwe and local businesses support the Garrison rehabilitation projects (link to Letters of Support). The project is located in Minnesota's 8th Congressional District, represented by Congressman James Oberstar.

# City of Bloomington
# Lindau Corridor Complete Streets Project

**Description:** The Lindau Corridor Complete Streets project is located in the South Loop District in the city of Bloomington, Minn. (Link to Location Map). This project consists of five components that create an east-west, Complete Streets spine in the regionally significant South Loop District. Each project provides independent utility within the District. The five project components are described below and shown on the Project Map:

- Lindau Lane safety improvement at the northbound to eastbound access ramp from Trunk Highway 77 to Lindau Lane
- Lindau Lane grade separation between Ikea Way and 24th Avenue
- Lindau Lane Complete Streets construction from 24th Avenue to 30th Avenue
- 30th Avenue Complete Streets construction from American Boulevard to East Old Shakopee Road
- Lindau Lane bicycle and pedestrian connection between 30th Avenue and 31st Avenue

**Connections to the existing transportation system:** The city of Bloomington is in the process of developing a framework for its South Loop District. This district has a number of distinct transportation connections that make it a prime area for additional development. South Loop has four light rail transit stations on the Hiawatha LRT Line, is the planned nexus of four BRT lines, and is adjacent to the expansive Minnesota Valley National Wildlife Refuge and Minneapolis-Saint Paul International Airport. South Loop also has a number of sites ready for new development and already includes existing marquee developments such as the international tourist destination, Mall of America, and a signature mixed-use, transit-oriented development in Bloomington Central Station. This Complete Streets proposal will more efficiently connect the existing multi-modal aspects of the District.

**Challenges to be addressed and how this project will address the challenges:** The challenges facing the District are: 1) the lack of internal connectivity; 2) the existing "mega-block" configuration; 3) an intersection with the highest crash rate in the city; and 4) the need to provide incentives to spur development. This project will connect the Mall of America to Bloomington Central Station with a Complete Streets corridor, which will have facilities for bicycles, pedestrians, buses and automobiles. Constructing this corridor will also begin to break up the mega-block configuration, as shown on the attached South Loop street layout concept plan. The Lindau Lane safety enhancement will reconfigure the intersection with the highest crash rate of 3.40 per Million Entering Vehicles by removing vehicle turning restrictions. Constructing the Lindau Lane grade separation will facilitate the Mall of America's next phase of development and increase pedestrian safety at the Mall. Constructing the rest of the corridor will provide the infrastructure needed to initiate new transit and Complete Streets-oriented development.

**Selection Criteria**

**Quantify impacts on the nation, metro area or region:** The Lindau Corridor project will introduce a Complete Streets corridor in the South Loop District, providing connectivity within the District. This district is home to the internationally significant Mall of America, which draws approximately 40 million visitors each year. Completing the Lindau Corridor project will enhance livability, sustainability and safety within the District, while bringing a variety of new office, retail and hospitality jobs to the area.

**Projections for both build and no build scenarios for 20 years:** Constructing the Lindau Corridor will be the first step in dividing the existing large mega-blocks to create an east-west spine of the District, while connecting the District's two major developments, the Mall of America and Bloomington Central Station, as well as the Minnesota Valley National Wildlife Refuge. The South Loop District today is not pedestrian or bicycle friendly and building a complete street through the District that

connects residential and retail will allow for a truly multi-modal connection between the two anchor development sites.

**Long-Term Outcomes:**

**State of Good Repair:** Building an interconnected grid of complete streets, pedestrian connections and transit access will be a key component to making the most efficient use of existing and future infrastructure. The improvements to Lindau Lane are projected to alleviate other needed traffic capacity improvements in South Loop. Lindau Lane is intended to serve as a prototype for a new development pattern for the District that relies on connectivity, increased walking/biking and transit use and urban densities.

**Economic Competitiveness:** The city of Bloomington is nearing the completion of the South Loop District Plan, which projects that 65% of the city's 40-year growth potential is within the District. Bloomington's strategy to accelerate development in the District includes advancing the key infrastructure improvements that have the largest impact on private development potential. Projects included in this application are instrumental in South Loop development plans. Taken as a whole, the market value of new development in the District is estimated to be $4 billion.

The expansion of the Mall of America represents approximately 35% of the South Loop District's development potential. The Mall is an international destination for shopping and entertainment. The Mall of America plans to expand to the north with an at-grade connection over Lindau Lane. The expanded development will include a mix of land uses, such as medical office, hotel and retail using shared parking. The integrated connection between Mall of America Phase I and II requires the Lindau Lane grade separation. Upon completion of Phase II, the Mall of America will be the largest integrated entertainment/retail/mixed-use facility in the country.

**Livability:** Complete Streets and compact development increase the use and livability of the area. The Complete Streets aspects of the South Loop District will provide increased light rail, bus, bicycle and pedestrian usage. One feature of the District plan is a new residential neighborhood for approximately 2,900 new high density dwellings concentrated around LRT stations that will bring around-the-clock activity to the area.

**Environmental Sustainability:** Innovative stormwater infiltration methods will be used. More dense, sustainable development will be promoted with a new street pattern. Incorporating multiple modes of transportation into the District will reduce single-occupant automobile VMT by 1,500,000 annually within South Loop, as well as to all destinations along the Hiawatha Light Rail line.

**Safety:** An interconnected grid of smaller streets serving all modes of transportation will be safer than the mega-block alternative that exists today in South Loop. The safety improvement at Highway 77 and Lindau Lane will significantly reduce accidents at the city's intersection with the highest accident rate. It is anticipated that these improvements will reduce crash costs by $1.1 million annually.

**Job Creation and Economic Stimulus:** The South Loop District has unparalleled connectivity, great potential as a regional center for commerce and is adjacent to the Minnesota Valley National Wildlife Refuge. With one of the Twin Cities' major transit hubs providing bus, light rail, and bus rapid transit connections and its proximity to the airport and freeways, South Loop is better connected than any place in the region. Within an area the size of downtown Minneapolis, corporate headquarters, high-tech manufacturing, a flourishing hospitality industry rivaling downtown Minneapolis and St. Paul, and the nation's largest retail and entertainment center are the foundation for a bustling urban center. Located along the bluff of the Minnesota River Valley, South Loop's situation in the landscape provides excellent environmental conditions for green practices in construction and stormwater recharge, efficient energy generation, as well as unbeatable views of one of the nation's largest urban wildlife refuges.

| Projected Development and Employment Increases in South Loop | | | |
|---|---|---|---|
| | **2020 Total** | **2030 Total (cumulative)** | **2050 Total (cumulative)** |
| **Office Development** | 1.3 million sq. ft. | 2.3 million sq. ft. | 5.4 million sq. ft. |
| **Retail Developmnet** | 1.8 million sq. ft. | 1.8 million sq. ft. | 3.5 million sq. ft. |
| **Hotel Rooms** | 1,415 rooms | 1,985 rooms | 3,330 rooms |
| **Residential Units** | 990 units | 1,790 units | 2,900 units |
| **New Jobs** | 9,780 jobs | 13,480 jobs | 28,900 jobs |

**Innovation:** The Lindau Corridor will incorporate Complete Streets design aspects throughout the project. The project will maximize accessibility and convenience for all users of the various components of the transportation network. The Complete Streets project will also provide transit access to the successful Hiawatha Light Rail line connecting the Minneapolis downtown area, MSP Airport and South Loop.

**Partnership:** Partnerships are well-established with the Mall of America, Bloomington Central Station, MSP Airport, adjacent cities (Richfield, Edina, Eagan and Burnsville), adjacent counties (Hennepin, Dakota and Ramsey), metro area agencies (Met Council, Minnesota Valley Transit Authority and Met Transit), state agencies (Minnesota Department of Transportation, Department of Economic Development, Department of Natural Resources), as well as many other public and private entities. These partnerships will serve Bloomington well as the South Loop area continues to develop (link to Letters of Support). The project is located in Minnesota's 3rd Congressional District represented by Congressman Erik Paulsen.

# City of Cosmos **Complete Streets Project**

**Project Description:** The city of Cosmos, with a 2009 population estimate of 553, is situated approximately 80 miles west of the Minneapolis-St. Paul metropolitan area in the southwestern corner of Meeker County, Minn. Two principal transportation corridors serve Cosmos: Minnesota Highway 4 and Highway 7. Besides serving as a regional connector for western Minnesota, Highway 4 also serves as the city's Main Street. Cosmos is also fortunate to be served by the Luce Line Regional Bike/Pedestrian Trail, which parallels Highway 7 from Cosmos into the western suburbs of the Minneapolis-St. Paul area.

Cosmos is a typical rural community that is undergoing transition: three decades of population decline combined with car-centric municipal infrastructure that is over 50 years old, makes adapting to a 21st century city difficult. Highway 4 was constructed through Cosmos in 1949 at an average width of about 80 feet. During its construction, Cosmos placed city water lines under Highway 4 to help provide municipal water to all the residents and businesses within the city. This "wide highway" design (see location map) was appropriate for a bustling mid-20th century community that needed parking areas for cars and agricultural equipment along a very active main street. Fast-forward 61 years to modern day Cosmos, and the magnitude of the problems this community faces is clear. Highway 4 remains the same "wide highway" design it was in 1949, making conversion of the city's downtown to a more multi-modal, pedestrian friendly center difficult. The water lines under Highway 4 are now past their useful lifespan and are beginning to break several times throughout the year. A significantly depleted business community and residential population loss since the 1970s has left Cosmos with a much smaller tax base, making reconstruction of the existing infrastructure beyond the city's abilities. Combined, these impacts have left the city of Cosmos with some large economic challenges in its future.

The project being proposed jointly by Mn/DOT and the city of Cosmos will help the community address its challenges and move forward to become a 21st century city. This project will reconstruct Highway 4 to an average 44-foot corridor width through the city, instead of the current 80-foot roadway. The area once occupied by Highway 4 on the west will be turned into both green space and into an ADA accessible pedestrian and bike path from the downtown north to Taurus Street. On the east side of Highway 4, a green space and sidewalk will also support a more Complete Streets concept. Under the green space areas, the city will install new water lines that will eliminate the community's current water line issues under existing Highway 4 and will benefit the community by making new water lines economically affordable for the remaining businesses and residents. Combined, the livability and sustainability benefits of this project support the state of Minnesota's vision for a Complete Streets approach to the transportation network.

**Selection Criteria**

**Nation/Regional Impact and Impact of No Build:** Although Cosmos is a small community in the rural portion of the state of Minnesota, this project has regional and national impacts. Cosmos is but one of hundreds of small rural communities across the United States that has aging municipal infrastructure under a "big highway" design. If this type of Complete Streets project is successful here, it could become the model for rural cities all across the country. Without project funding, Mn/DOT will be unable to afford the cost to do a full reconstruction through this community and instead will do a pavement repair project, leaving the existing street width as is. Furthermore, the cost of replacing the aging water lines under the Highway 4 main roadway bed, without Mn/DOT paying for the removal and surfacing of a new Highway 4, is cost prohibitive and would result in water rate charges that would only further put the city of Cosmos at a competitive disadvantage.

**State of Good Repair:** At present, Highway 4 has a Pavement Sufficiency Rating of 2.3 (on a 0 to 4 scale) that will become a 4.0 when the project is complete. The life cycle cost of Highway 4 will be far less with this project then without it, because the long-term expense of

the wider pavement area will be gone. The existing water distribution system is in very poor condition and this more than 15 breaks occurred in the system in spring 2010. After this project, Cosmos will have new water lines that are no longer under Highway 4.

**Economic Competitiveness:** This project will allow Cosmos to stay competitive as a 21st century city by holding the cost of water service rates to a level that is comparable with other cities in the region. Also, the project will provide Cosmos with several aspects of a Complete Streets network in order to attract both residents and businesses interested in locating to a modern city that offers modal choice options.

**Livability:** With the completion of this project, residents within Cosmos will be able to have mode choice options. In addition, Highway 4 will become a component that defines Cosmos as a community, instead of a wide barrier that divides the city. The project will improve the city's quality of health by replacing the antiquated water system.

**Environmental Sustainability:** Reducing Highway 4 to an average width of 44' from 80' will result in far fewer impervious surfaces and in minimizing the amount of future materials needed to preserve the roadway. The added green space will provide some opportunity to slow storm run-off before it reaches the South Fork Little Crow River on the south side of Cosmos.

**Safety:** By reducing the width of Highway 4 and adding an ADA compliant pedestrian/bike path, pedestrian/bike safety will be improved and result in more residents feeling the corridor is both safe to cross and travel by walking and/or biking as compared to the existing wide roadway.

**Job Creation, Innovation & Partnership:** This project provides the state of Minnesota the ability to help one of its communities on the verge of economic recovery stay competitive and attract potential residents/businesses; Meeker County was an Economically Distressed Area until May 2010. It also retains existing residents and businesses by keeping water rates at a level that can be maintained with the tax base of the city. The project represents a unique partnership between the economic and social needs of the city of Cosmos, and the long-term roadway needs of Mn/DOT. Furthermore, the project demonstrates a departure from the normal "highway widening" approach and instead narrows or streamlines the corridor into the style of a complete street. The project is located in Minnesota's 7th Congressional District represented by Congressman Collin Peterson.

# City of Albert Lea **Broadway Avenue Complete Streets Project**

**Project Description:** Broadway Avenue, which runs through historic downtown Albert Lea, will be rebuilt using Complete Streets approaches (see proposed project map). Broadway Avenue serves as both the heart of Albert Lea's historic downtown commercial district, and as a major trunk highway within Mn/DOT's transportation system. This dichotomy is a reality in many Minnesota communities, where trunk highways severed the historic downtown and made them less pedestrian friendly, but also brought in customers and goods. The project will result in a more multi-modal friendly downtown, while maintaining the historic characteristics of the business district and rehabilitating key existing surface transportation assets. The project will also build on the successes of the Albert Lea AARP/Blue Zones City Vitality Project, the goal of which is to add 10,000 years to the lives of Albert Leans by encouraging them to make small changes in their daily lives, including walking more. Project elements include: widening the existing sidewalk, installing pedestrian bump outs, striping bicycle lanes, landscaping, constructing a parking ramp to reduce on-street parking and minimize the number of cars on Broadway Avenue, closing an adjacent street to provide a pedestrian plaza and access to the parking ramp, replacing outdated utilities, and constructing a roundabout to improve traffic directional flow and pedestrian crossing safety into the park near Fountain Lake.

**Selection Criteria**

**State of Good Repair:** While Broadway Avenue is the heart of downtown Albert Lea's historic district, it is also a key highway corridor. The existing stretch of infrastructure is in poor condition, with narrow and uneven sidewalks, crumbling roadway pavement, and failing below-grade infrastructure (water/sewer). The city has an on-schedule maintenance program and is capable of keeping a rehabilitated system in a state of good repair.

**Economic Competitiveness:** The previous Vitality Project resulted in the city establishing a Vitality Center on Broadway Avenue. The presence of the center, combined with the proposed Complete Streets improvements, will increase downtown Albert Lea's economic productivity. For example, the city is currently working with a business to bring 250 additional jobs to Broadway Avenue. The business is interested in locating to the area because if feels it would be a healthy area for its employees due to the accessibility to the Vitality Center and the proposed improvements under this current project proposal that will make the area more pedestrian friendly. In addition, Front Street on the south end connects with the western terminus of the Minnesota State Blazing Star Trail and will have the effect of bringing trail users into downtown Albert Lea and to Fountain Lake and the city trail system.

**Livability:** The city of Albert Lea is America's first certified Blue Zones City, having received the designation after successfully completing the nine-month intensive Vitality Project, designed to make environmental and policy changes to improve the health and vitality of the community. Early in the Vitality Project, a nationally recognized expert in the area of walkability did a "walkability audit" with city officials and pointed out ways to make Albert Lea more walkable. Since then, the city has added sidewalks that connect several portions of a well-traveled path around Fountain Lake. Many states and nations, including Israel and Korea, are tracking the project and hoping to replicate its success by enacting policies and improvements that encourage personal movement. The TIGER II Complete Streets project will build on the successes of the Vitality Project by expanding opportunities for walking in the downtown area and connecting to the established trails along Fountain Lake. Overall, the project will improve the existing trunk highway infrastructure by enhancing the downtown with modal connectivity, and will increase the number of modes accommodated within the downtown historic district.

**Environmental Sustainability:** Albert Lea's focus on creating a walkable city is key to its future environmental sustainability. The proposed project will result in a more pedestrian friendly downtown that will initially reduce ve-


hicle trips by about 150 trips per year and by more than 1,300 trips per year in 20 years.

**Safety:** The result of the Complete Streets reconstruction will be to calm traffic by installing visual elements (e.g., landscaping, narrower lanes, pedestrian bump-outs, bicycle lanes) that remind drivers they are in an area with many pedestrians.

**Job Creation & Economic Stimulus:** This project will create jobs for construction workers, historians, architects, landscape architects, landscape contractors, and the trades and will be a stimulus within a community that has experienced significant job loss.

**Innovation:** As the nation's first Blue Zone Community, Albert Lea is a leader in seeking and implementing innovative approaches to improving community health and transportation opportunities.

**Partnerships:** The city of Albert Lea has been working closely with Mn/DOT, which owns part of the roadway, and the downtown businesses to determine their needs. The community has embraced this project and the city has received resolutions of support from the city of Albert Lea, Albert Lea Medical Center and Destination Albert Lea and the Albert Lea Downtown Association (link to additional Letters of Support). The streetscape design is being developed through consultation with the business community, Heritage Preservation Commission, the Minnesota State Historic Preservation Office, Planning Commission, and the Albert Lea Medical Center. The project is located in Minnesota's 1st Congressional District represented by Congressman Tim Walz.

# City of Mankato **Madision Avenue Complete Streets Project and New Transit Facility**

**Project Description:** The proposed two-faceted project is located in Mankato, Minn., 85 miles southwest of the Twin Cities, and includes Complete Streets improvements to Madison Avenue and the construction of a new transit center. The proposed Madison Avenue project extends for three miles on Madison Avenue and is located within the city limits extending from the existing urban area to the non-developed infill area to the east. In order to use every square foot of pavement more effectively, the project aims to enhance the multi-modal corridor with increased transit and non-motorized usage. This project links directly to the extension of County State Aid Highway 12 and new interchange with US Highway 14 at the east edge of Mankato (see location map). Project elements include: shared bus/right turn lanes between Victory Drive and future CSAH 12; continuous pedestrian facilities (sidewalk) through the entire length of the project and multi-use trail along south side between Victory Drive and CSAH 12; high-efficiency lighting improvements; pavement rehabilitation and reconstruction; transit access points at two major destinations (Apache Mall and Wal-Mart); improved roadway crossings, connecting residential areas with commercial areas; and roundabout at intersection of Madison Avenue and Minnesota Highway 22, both principal arterials.

The new bus facility (see Transit Site Plan) will be a re-use of the old Mn/DOT headquarters on Victory Drive. Its strategic location near bike paths, major thoroughfares and complementary development combined with the improved public transit routing will be the keystone for improved efficiency. New construction of tilt-up panel poured concrete and steel will be constructed to LEED standards where practical. The 20,000 square foot transit facility will be capable of housing 26 Class 700 buses and include automatic bus locator and real-time dispatching technology. Its design and size will meet the increasing demands for transportation options through the year 2050.

**State of Good Repair**

The section of Madison Avenue from 7th Street to a future County State Aid Highway 12 will restore and improve an already vibrant but aging major thoroughfare. Madison Avenue runs through the heart of Mankato's commercial district with 20,000 vehicles per day using the existing four-lane roadway. Madison Avenue provides direct and indirect access to a wide variety of businesses including nurseries, florists, convenience stores, banks, pharmacies, restaurants, car dealerships, auto repair, furniture and grocery stores, big box retail and River Hills Mall, the primary shopping center for south-central Minnesota.

The existing public transit facility was constructed in the 1930s as a county shop and no longer meets the diverse needs of the Greater Mankato Transit System. The existing facility is inefficient, undersized and land-locked, and is remote to complementary development and accessibility to the maintenance facility.

**Economic Competitiveness:** The city of Mankato, county seat for Blue Earth County, is a growing regional center with a population of approximately 50,000 and has recently been certified a Metropolitan Statistical Area. The trade area population is more than 300,000 and there are 1.6 million people who live within 60 miles of the community.

**Livability:** Along with an increasingly high number of 20-24 year old adults, the trend of a skyrocketing elderly population necessitates proactive transportation solutions to serve all citizens' needs. As in other regional centers, Mankato is attracting people who are moving closer to services that allow them to stay out of nursing homes. Effective transportation is a key factor in containing the costs to society of caring for these individuals. A well-planned and efficient transportation system that offers a diverse range of integrated options is critical for success in mitigating the overwhelming effects we are

facing. The existing facility's location is not readily accessible to the large population of disabled and elderly. The proposed transit facility for the Greater Mankato Area is the linchpin in the effective redesign of how Mankato will offer an array of integrated and efficient transportation options to our growing disabled, student, economically disadvantaged and aging populations. The strategic location of the new transit facility allows us to provide fixed route bus service to the work site for physically and mentally disabled residents. This project will result in integration with regional bike trail system and pedestrian walkways that provide easy access to both primary and secondary education institutions. In addition, the new facility will be within walking distance of major subsidized housing units and will allow for improved fixed route bus service to this demographic.

**Environmental Sustainability:** This project will improve the efficiency of operations of all transportation modes, thus improving accessibility to businesses and places of employment. Impacts to the region include improving the mobility and safety of Madison Avenue and providing access to future infill development. It supports plans by the Mankato transit system to implement BRT along key corridors to major destinations. Net effects will be a significant increase in access to transit/bike/pedestrian modes of transportation, a reduction in automobile use, decreased delay and traffic congestion, improved safety, improved air quality, and a longer projected life of the existing corridor. The new bus facility (see Transit Site Plan) will be a re-use of the old Minnesota Department of Transportation headquarters on Victory Drive. New construction of tilt-up panel poured concrete and steel will be constructed to LEED standards where practical. Its strategic location near bike paths, major thoroughfares and complementary development combined with the improved public transit routing will be the keystone for improved efficiency. The 20,000 square foot transit facility will be capable of housing 26 Class 700 buses and include automatic bus locator and real-time dispatching technology. Its design and size will meet the increasing demands for transportation options through the year 2050.

**Safety:** The proposed Madison Avenue improvements provide separation between pedestrians, bicycles and vehicular traffic for the entire length of the corridor. It also constructs a roundabout at a major intersection.

**Partnership:** The proposed transit facility and Madison Avenue improvements stem from the Mankato Area Transportation and Planning Study and other city of Mankato plans. MATAPS is the result of an ongoing successful partnership among different units of government and agencies in the Mankato/North Mankato Area – each having influence over the region's transportation system. MATAPS 2035 is being completed and takes a multi-modal and inter-modal approach to achieving transportation solutions. The intent is to create conditions that over time allow transit to become more efficient and effective, thereby becoming a more viable option for a larger and diverse demographic. MATAPS supports a version of a Bus Rapid Transit system that incorporates many of the principles of BRT, but excludes the large capital expense that a full-fledged BRT system would require. The Mankato area BRT system will emphasize frequent and direct bus service with limited stops between key destinations hubs. The BRT Concept Plan will integrate with the Long Range Major Roadway Projects and Proposed Non-Motorized System Plan. The project is located in Minnesota's 1st Congressional District represented by Congressman Tim Walz.

# City of Willmar **Becker Avenue Complete Streets Project**

**Project Description:** The Becker Avenue Complete Streets Project is located in Willmar, Minn., a city in the west central region of the state with a population of approximately 18,000. The project (see project plan map) consists of the reconstruction of four blocks of Becker Avenue from 1st Street South to 5th Street South using Complete Streets principles, including a convertible section for markets and festivals, a multi-use trail corridor that will connect to and perhaps become part of the Glacial Lakes State Trail, stormwater planters, curb bump-outs, street trees, and an improved pedestrian environment.

Becker Avenue is a downtown city street that runs parallel to and one block from the main commercial street in town. The project ends at 1st Street, which is a major thoroughfare and a business spur of US Highway 71. At the intersection of Becker Avenue and 4th Street is Kandiyohi Area Transit's downtown bus station.

**Challenges:** While many cities have parks or squares that serve as a downtown commons, or gathering place, Willmar has no such venue. This has a significant impact on livability, making downtown residential units less desirable, causing people to live farther away from jobs, retail businesses and entertainment. In addition, Willmar has a generally poor urban forest, which also impacts livability, increases the urban heat island effect, and increases stormwater runoff. The downtown storm sewer system is overburdened and flooding occurs in the downtown area after many rainstorms.

**Addressing Challenges:** This project re-envisions the Becker Avenue right of way as Willmar's downtown commons. It would be street as open space. With the addition of a multi-use block that can be easily closed for events, Willmar will gain needed event, market and plaza space without significant additional investment in land, infrastructure or maintenance. With the addition of a three-block green corridor with a major trail and stormwater management facilities in the right of way, Willmar will improve its urban forest, stormwater infrastructure, and non-motorized transportation connections. This new linear open space corridor will improve livability in Willmar and will increase commercial and residential property values.

**Selection Criteria**

**Impacts:** The Becker Avenue project will have a great impact on the west central Minnesota region. Willmar is the regional center and a county seat. Many people come from across the region to use downtown services, including the weekly market, at which regional producers sell produce and crafts to regional consumers. An improved street as open space in Willmar will encourage more visits to downtown Willmar. In addition, the idea of a street as open space is an innovative one – an idea that could serve as a model for other rural communities across the nation. Since these smaller cities have dwindling populations and budgets, it is important that they do more with less, so asking a street to do double duty as both vehicular corridor and open space is a model of efficiency. It will also be a model for how smaller rural cities can retain population by providing amenities (both spaces and events) in the downtown area.

**Projections:** Without the Becker Avenue project, Willmar's livability over the next 20 years will either remain as is or will decline. This is an issue that faces many small rural towns nationwide, as their population ages and the next generation leaves for cities. Without this project, in 20 years Willmar will likely have fewer businesses, a smaller population and no downtown open space to serve as a catalyst for population retention and business attraction. With the Becker Avenue project, in 20 years Willmar will be viewed as an attractive, viable regional center, thereby attracting residents, encouraging younger people to stay in town and potentially bringing new businesses to the city.

**Long-Term Outcomes**

**State of Good Repair:** While the proposal calls for converting Becker Avenue into a pedestrian area for markets and events, at other times it must serve as a traditional transportation facility. The road is in need of repaving, and through this project, Becker Avenue will continue to serve as an efficient transportation corridor.

**Economic Competitiveness:** The Willmar Complete Streets project will increase the efficiency and effectiveness of the existing transportation system through integration of the existing transportation infrastructure into a new use – a downtown commons. This project will provide several specific economic benefits to Willmar and the region: an improved market will better link rural and in-town producers with their customers and bring more shoppers to downtown Willmar; the provision of a corridor for the Glacial Lakes State Trail will provide tourism infrastructure; and the presence of a linear open space will increase commercial and residential property values and desirability.

**Livability:** Willmar currently does not have a downtown commons, a serious lack in a city of this size. The Becker Avenue corridor will provide this critical open space in a unique way, with trails, wide sidewalks and pocket plazas. The project will result in expanded mode choices, connecting the commercial downtown to residential areas through pedestrian facilities, and constructing new bicycle paths that connect to existing trail systems. These elements will thereby increase the number of mode choices on the existing infrastructure. The upgrading of the new transit stop at the corner of Becker Avenue and 4th Street will encourage expanded transit use in the Willmar area.

**Environmental Sustainability:** The expanded facilities at the transit stop, construction of new bicycle trails that will connect to larger, regional trail systems, and the expansion of pedestrian facilities are expected to result in an eventual reduction in automobile VMT of 16,000. Willmar currently experiences some flooding in the downtown area during storms. The inclusion of stormwater management planters in the corridor will help ameliorate this problem, as well as improve water quality in Foot Lake and Lake Willmar, to which stormwater currently drains without any treatment. Additionally, the inclusion of street trees in deep planters will help to cool the street and adjacent buildings. Lastly, a new transit stop (KAT) at the corner of Becker and 4th Street will be further upgraded, encouraging transit use in the Willmar area.

Willmar's downtown storm sewer system is regularly overwhelmed in even small storm events, causing flooding downtown. Eventually, the city will need to overhaul its system, which could run into the millions of dollars. This project will remove water from the system, thereby saving costs on system upgrades. All water in the corridor runs untreated to Foot Lake, a recreational water body just north of town. Road runoff contributes to algal blooms in the lake and reduces water quality. Relative to the Baseline annual figure of 1.6 million gallons of water running through the sewer system, new stormwater management areas included in the Complete Streets installation would remove 90% (1.4 million gallons per year) of the current sewer volume, recharging the groundwater and allowing heavy metals, oils and nutrients to filter through the soil before being taken up by plants.

**Safety:** Pedestrian/bicycle and vehicular conflict are of concern in downtown areas across the nation. The existing Becker Avenue conditions are no exception: the system favors vehicles and often makes it difficult for pedestrians and bicyclists to feel safe. This project will improve pedestrian/bike safety in the downtown area through the inclusion of traffic calming measures such as bump-outs, colored intersections and plantings; designated bicycle trails; and opportunities for closing off the street to vehicular traffic during key events.

**Job Creation and Economic Stimulus:** This project would provide a wide variety of construction-related work, including grading and paving, specialized stormwater elements, utilities and artworks. Long-term, the improved market will provide retail-based jobs for farmers in the region and small foodstuff producers in town. Willmar is now home to a community commercial kitchen

in which small producers can prepare foodstuffs for commercial sale.

**Innovation:** This project is innovative in several ways. The stormwater management system would use trees and plants to infiltrate and evapotranspire rainfall. The deliberate inclusion of a market in the corridor on a section of convertible street allows the street to serve a direct economic development purpose. The inclusion of the future Glacial Lakes State Trail corridor in the right of way creates both a multi-modal corridor as well as turns the street into an element of tourism infrastructure.

**Partnership:** Minnesota Department of Natural Resources has approved, in principle, the extension of the Glacial Lakes State Trail into downtown Willmar. In the near future Willmar will likely enter into a cooperative development agreement to construct this trail extension, at which time the DNR will assist with, at the very least, signage and promotion. The non-profit Willmar Design Center raised money for the schematic design and will continue to seek funding for other downtown projects. The Design Center has a good volunteer base of support for downtown initiatives. Willmar Municipal Utilities was involved in the Becker Avenue Complete Streets Project and may consider performing needed utility work while the corridor is under construction. Rice Hospital/Kandiyohi County Public Health, through their involvement in this project and the STEPS to a Healthier MN - Willmar program, will use the corridor and other planned trails and walking routes for patient and resident health benefits. This summer, the Willmar Design Center, in partnership with these organizations, will implement Willmar Walks, a series of health and tourism walking routes throughout the downtown area, which will originate on Becker Avenue. The city of Willmar is also a recent recipient of a Minnesota Department Employment and Economic Development grant funding additional work within downtown Willmar (link to Letters of Support for this project). The project is located in Minnesota's 7th Congressional District, represented by Congressman Collin Peterson.

# Benefit Cost Analysis

Following the guidance of Appendix A of the TIGER II Notice as well as best practices presented in the Workshop hosted by USDOT in May, an effort has been made to comprehensively evaluate the benefits and costs for Baseline and Complete Streets scenarios over a 20-year study horizon. Given the size and modeling capabilities of the smaller communities included in this application, inputs such as demand forecasts and anticipated mode-shifting behavior could not be developed with the precision possible with—and required of—multi-region or interstate projects. However, the scope of benefit components identified in the attached worksheets spans the significant categories specified in Appendix A relevant at the level of local analysis, from the fundamental measure of transportation activity by mode, continuing with environmental, health, recreation benefits and beyond, to net effects specific to each location. At the same time, no consideration has been given here to changes belonging to the domain of economic impact assessment—including job creation and spurring of private investment (these areas are covered in the application narrative where applicable). The table below summarizes the combined benefit-cost results across all the study locations under the 3% and 7% discount scenarios.

| | Discount Rate Assumption | |
|---|---|---|
| Benefit-Cost Measure (rounded) | **3%** | **7%** |
| **Present Value of Benefits** | $103,000,000 | $56,000,000 |
| **Present Value of Costs** | $36,500,000 | $52,000,000 |
| **Net Present Value** | $66,500,000 | $4,000,000 |
| **Benefit-Cost Ratio** | 2.8 | 2.8 |

Volumes and cost factors were supplied where available by individuals based in each of the project areas. In the absence of location-specific parameters, certain shared monetization assumptions were drawn from the consensus/average values obtained by and applied within the Transportation Economic Development Impact System modeling framework, a widely used third-party software package designed by Economic Development Resource Group, Inc. that includes a benefit-cost estimation module. Examples of TREDIS-sourced default factors include transportation environmental costs expressed on a per-mile basis and personal/commuter/crew valuations of travel time.

While details of the benefit calculations are contained in the linked files, evaluations of the major classes of benefits followed the general methods listed here:

- **Livability:** Estimated by mode and trip purpose based on counts of general population access and likelihood to use under Baseline conditions and Complete Streets operations. Pedestrian and bicycle modes provide health and recreation benefits accrued to new non-motorized users and offset by a travel time penalty for pedestrian trips.
- **Economic Competitiveness:** Estimated single-occupant vehicle-hour/mile changes between Baseline and Complete Streets scenarios and monetized with direct vehicle operating costs and passenger value of time. Where applicable, displaced trips were re-accommodated through mode-switching assignment on the local Complete Streets corridor only. This approach results in a conservative forecast for most Complete Streets studies in two respects: first, the efficiency swing created by the shift from single-occupant auto to carpool/transit/bicycle/pedestrian travel is only credited on the analyzed segment, rather than the entire trip duration, and secondly the non-economic impact effects of increased personal/recreational trips is not quantified, due to difficulty in measuring the consequent improvement in consumer welfare under such sketch proposals.

- **Sustainability:** Estimated costs from emission of carbon dioxide and criteria pollutants using proxy of vehicle-miles traveled were obtained within Economic Competitiveness (above). Additionally evaluated project-specific alternative energy, water supply and sewer benefits were derived from the anticipated Complete Streets transportation investment.
- **Safety:** Measured or estimated the frequency of fatal, injury and property damage accidents for Baseline and Complete Streets scenarios, then applied the costs per crash type anchored to the Value of a Statistical Life last revised by USDOT in 2009 ($6 million).
- **State of Good Repair:** Measured or estimated the life-cycle costs of Baseline and Complete Streets construction, design, land acquisition (if any), operation and maintenance, then assigned a salvage/residual factor in the final year of analysis to reflect remaining functional value beyond the 20-year benefit-cost time frame.

**Links to Project-Specific Benefit Cost Analyses:**

- Garrison BCA
- Bloomington BCA
- Cosmos BCA
- Albert Lea BCA
- Mankato BCA
- Willmar BCA

# Project Readiness and NEPA

**Project Readiness and NEPA:**

**Garrison –** CATEX will be completed by spring 2011. The NEPA review has been initiated for this project. Mn/DOT's Office of Environmental Services does not anticipate any permitting issues. Mn/DOT's Cultural Resources Unit, which reviews all federal funded projects for Section 106 on behalf of FHWA, has initiated the Section 106 process. Consultation has been initiated with the 25 tribal groups with an interest in reviewing projects in this portion of the state. CRU has also issued its determination of "No Adverse Effect" from the project to the Minnesota State Historic Preservation Office regarding the project, explaining that the three historic stone structures will be rehabilitated according to the SOI Standards. Mn/DOT CRU and the SHPO will help develop and review the plans to ensure compliance with the Standards. (Link to Mn/DOT Early Notification Memo)

**Bloomington –** In 2002, an Alternative Urban Areawide Review (link below) was completed for the South Loop District (formerly Airport South District), and in 2009 the AUAR was updated (link below). As part of the AUAR update, a request was sent to the Minnesota Department of Natural Resources regarding Natural Heritage information within a one mile radius of the South Loop District (link below).

Upon deciding to apply for the TIGER II grant, the city began the NEPA process by starting to write five categorical exclusions, one for each component of the Lindau Corridor project. As of Aug. 2, 2010, the CATEX documents are still in draft form and have not yet been submitted for formal review. A Historic/Archaeological Review Request was sent to G. Joseph Hudak, Mn/DOT Office of Environmental Services, via email on July 12, 2010. A follow-up voicemail was left for G. Joseph Hudak on July 27, 2010. As of Aug. 2, 2010, a response has not been received regarding the Historic/Archaeological Review Request. A Threatened and Endangered Species Review Request was sent to Jason Alcott via email on July 8, 2010. On July 28, 2010, Jason Alcott, Mn/DOT Office of Environmental Services, responded via email that for each of the five projects, a determination of no effect was made. It is anticipated that the five CATEX documents will be completed in the summer of 2011.

Link to Environmentally Related Federal, State and Local Actions (e.g., permits)

**Cosmos –** CATEX will be completed in December 2010. Preliminary review indicates no environmental permitting issues anticipated. A cultural resources survey is underway and it is anticipated that it will be complete by December 2010. If any historic resources (including districts) are present, proposed work will be done in accordance with the SOI Standards.

**Albert Lea –** The CATEX will be completed by spring 2011. Preliminary review indicates no environmental permitting issues anticipated. Because the project is located in a National Register Historic District, the Section 106 review has been initiated (a historical/archaeological review request). All proposed work will conform to the Secretary of Interior's Standards for the Treatment of Historic Properties (SOI Standards); therefore, a No Adverse Effect determination under Section 106 is anticipated. The city has hired an architect specializing in historic projects, and ongoing involvement by Mn/DOT's Cultural Resources Unit (on behalf of FHWA) and the Minnesota State Historic Preservation Office will ensure project compliance with the Standards.

**Mankato –** CATEX to be completed by summer 2011. Preliminary review indicates no historic resources or environmental permitting issues anticipated.

Link to Environmentally Related Federal, State and Local Actions (e.g., permits)

**Willmar –** CATEX to be completed by summer 2011. Preliminary review indicates no environmental permitting issues anticipated. A Threatened and Endangered Species Review Request and a Historical/Archaeological Review Request were submitted to the proper agencies on Aug. 10, 2010. If any historic resources (including districts) are present, proposed work will be done in accordance with the SOI Standards.

## Federal Wage Rate Certification

Minnesota Department of Transportation Federal Wage Rate Certification
http://www.dot.state.mn.us/planning/program/tigerii/index.html

City of Bloomington Federal Wage Rate Certification
http://www.dot.state.mn.us/planning/program/tigerii/Bloomington/bloomington.html

City of Mankato Federal Wage Rate Certification
http://www.dot.state.mn.us/planning/program/tigerii/mankato/mankato.html

City of Albert Lea Federal Wage Rate Certification
http://www.dot.state.mn.us/planning/program/tigerii/albertlea/albertlea.html

City of Willmar Federal Wage Rate Certification
http://www.dot.state.mn.us/planning/program/tigerii/willmar/willmar.html