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MADISON BELTLINE
PLANNING AND ENVIRONMENT LINKAGES (PEL) CORRIDOR STUDY
US 12/14/18/151
US 14–County N
Dane County

Introduction

Using the Planning and Environment Linkages (PEL) process, the problem statement developed in the corridor study is the foundation for the purpose and need statements in the National Environmental Policy Act (NEPA) process. The problem statement reflects the identified needs, whereas the goals and objectives reflect the project purpose. The problem statement, goal, and objectives are used to develop screening criteria that evaluate alternatives and monitor performance. The problem statement, goal, and objectives for the Beltline PEL were developed using a collaborative process that involved focus groups, committees, and public meetings. Elected officials, community staff, federal and state agencies, and community members all contributed. Multiple strategies will be developed and evaluated to determine the extent to which they address the screening criteria based on the project objectives. Strategies that are screened out during the PEL process will not be evaluated in the NEPA process. Strategies that are moved forward in the PEL process will be further evaluated during the NEPA process.

Problem Statement for the Beltline PEL

The Madison Beltline links southwest Wisconsin to the nation and provides an important connection among neighborhoods, businesses, communities, and regions. Initially constructed in the late 1950s, it became the main east-west highway in the Madison area. Motorists use the Beltline to travel to work, school, shopping and recreational destinations. Sections of the Beltline carry a yearly average of 123,000 vehicles per day. Without the Beltline, a far more robust system of local streets and arterials would be needed to shoulder this burden.

A 2008 Madison Beltline Needs Assessment Report documented a number of deficiencies associated with this freeway corridor. They have grown to a level that in November of 2011 Wisconsin's Transportation Projects Commission authorized the study of long-term solutions for the Madison Beltline from US 14 in Middleton to County N in Cottage Grove. Solutions are needed to address the following Beltline issues:

- Increasing travel demand and congestion.
- Roadway safety concerns.
- Limited or insufficient accommodations for alternate travel modes.

These issues lead to high crash rates, unreliable travel times, higher travel costs, and negative economic and environmental consequences for area residents, commuters, businesses, and freight movements.

Goal and Objectives

Goal

Improve multimodal travel and safety along and across the Madison Beltline corridor in a way that supports economic development, acknowledges community plans, contributes positively to the area's quality of life, and limits adverse environmental and social effects to the extent practicable.

Objectives

The study will investigate the ability of multiple strategies and corridors to satisfy the Beltline Problem Statement, Goal, and Objectives. Specific, measurable objectives for the Beltline include the following:

1. Improve safety for all travel modes.
2. Address Beltline infrastructure condition and deficiencies.
3. Address system mobility (congestion) for all travel modes.
 - a. Pedestrian
 - b. Bicycle
 - c. Transit
 - d. Local and regional passenger vehicles
 - e. Freight
4. Limit adverse social, cultural, and environmental effects to the extent practicable.
5. Increase system travel time reliability for regional and local trips.
6. Improve connections across and adjacent to the Beltline for all travel modes.
7. Enhance efficient regional multimodal access to Madison metropolitan area economic centers.
8. Decrease Beltline traffic diversion impacts to neighborhood streets.
9. Enhance transit ridership and routing opportunities.
10. Improve pedestrian and bicycle accommodations.
11. Complement other major transportation initiatives and studies in the Madison area.
12. Support infrastructure and other measures that encourage alternatives to single occupancy vehicle travel.

The previous stated objectives were condensed to the following root objectives and desired outcomes in collaboration with elected, agency, and community representatives. The root objectives and desired outcomes provide a basis for the screening criteria used in strategy evaluation.

Root Objective	Desired Outcome
1. Improve safety for all modes	
Bicycles	Reduce bicycle-motor vehicle crashes (rates/severities).
Pedestrians	Reduce pedestrian-motor vehicle crashes (rates/severities).
Motor vehicle	Decrease crashes (rates/severities - in areas of high crash frequency).
2. Address Beltline infrastructure condition and deficiencies.	Address critical pavement and geometric deficiencies.
3. Improve system mobility (congestion) for all modes	
Pedestrian	Comfortable and convenient access near, across and along the Beltline Corridor.
Bicycle	Direct and comfortable routes across and along Beltline. Provide convenient alternate mode choices/transfers.
Transit	Enhance rider access to transit facilities and vehicles. Enhance transit routing opportunities.
Motor vehicles (including passenger and freight)	Provide better travel time reliability (reduce nonrecurring congestion). Decrease/reduce recurring congestion. Provide convenient alternate route choices. Reduce motor vehicle trips during peak periods.
4. Limit adverse social, cultural, and environmental effects to extent practicable.	Consideration of alternatives that balance transportation need and protection of environmental and community resources.
5. Enhance efficient multimodal access to economic centers.	Ramp terminals and connecting roadways operate at satisfactory service levels. Convenient and comfortable access to economic centers for all travel modes.
6. Decrease Beltline diversion impacts to neighborhood streets	Diverted traffic uses roadways classified as collectors or above.
7. Complement other major transportation initiatives and studies in the Madison Area.	Concept complements, and is not in conflict with, other transportation initiatives.