Coulee Region Transportation Study

Planning and Environment Linkages (PEL)

LAPC

September 16, 2015

Schedule

- PIM 3: September 2015
  - Focus: present strategy findings and eliminated options

2015

WINTER	SPRING	SUMMER	FALL	WINTER
Work Plan	**Data collection Strategy Development**	**Evaluation**	**Refine**	**Final Report**

STUDY PROCESS

- *Existing Conditions*
- *Future Conditions*
- *Develop Broad Strategies*

Evaluate Strategies

Refined Strategies

Recommend Refined Strategies

PLANNING & ENVIRONMENT LINKAGES

Timeline

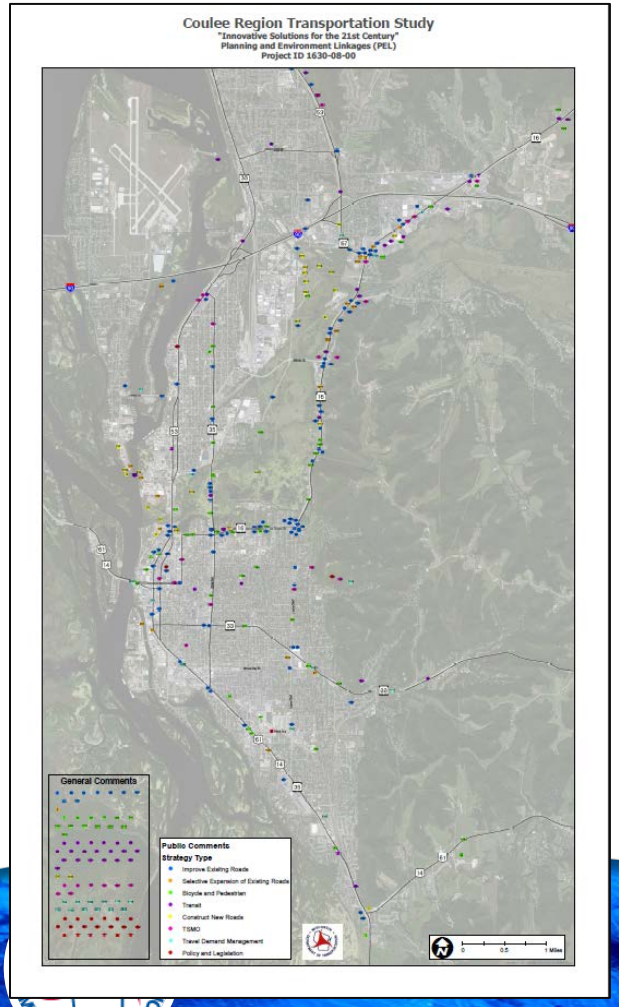
Planning and Environment Process **(We are Here)**

Project Development Process

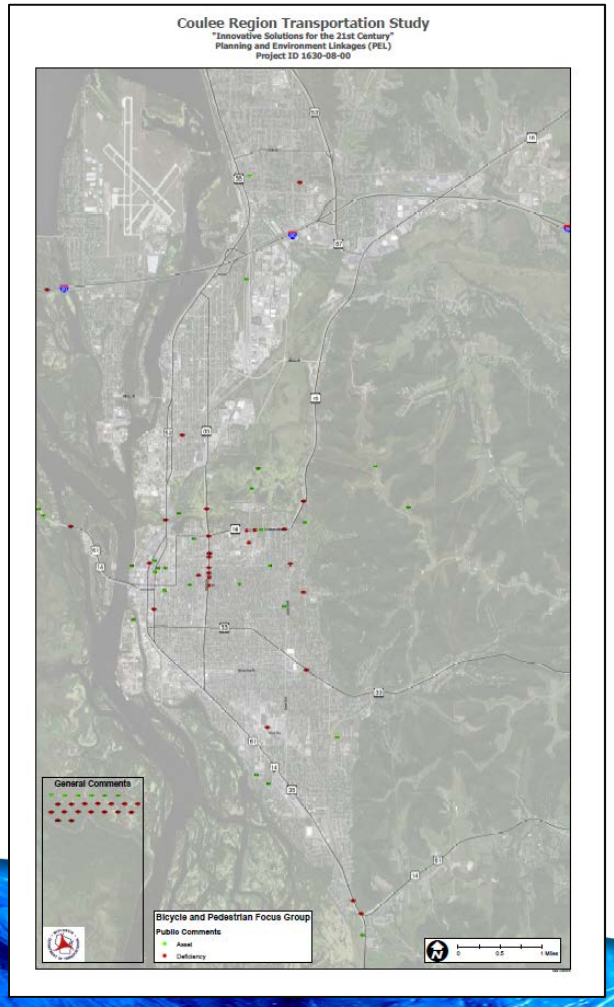
2016 → 2017 → 2020 → 2023 → 2025

Study Comments

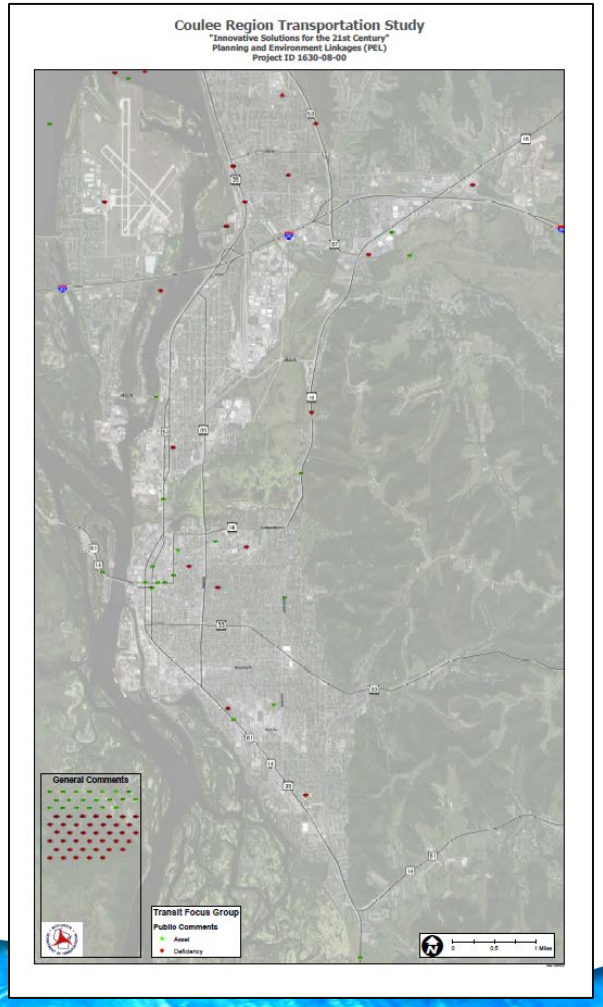
350 public comments



81 Bike/Ped Focus Group comments



102 Transit Focus Group comments



Goal

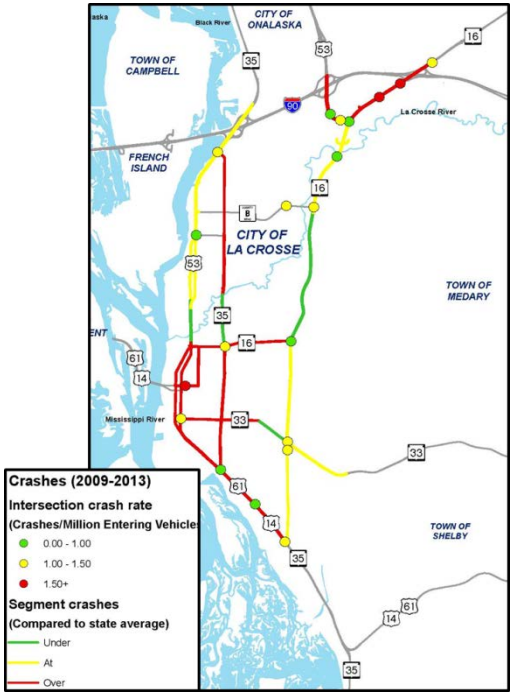
- **Goal**:
  - Improve the long-term movement of people and goods, safely and efficiently, in a manner that accommodates economic development, incorporates community plans, and limits adverse environmental impacts and social effects, in ways that support the regions natural beauty and livability and contribute positively to the region's quality of life.

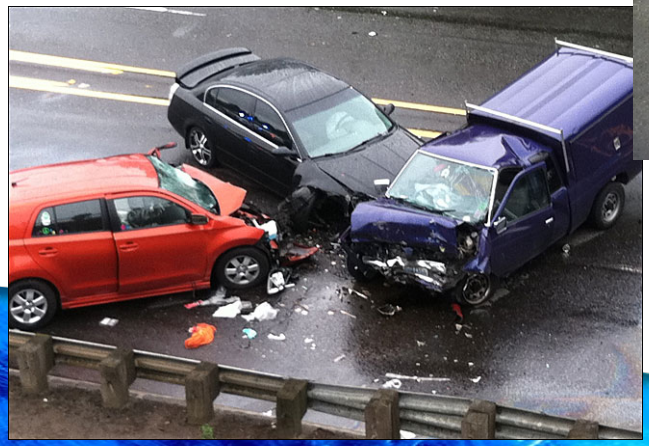
Objectives

- 1 – Safety
- 2 – Infrastructure
- 3 – Congestion and Reliability
- 4 – Plan for Future Transportation
- 5 – Limit Impacts

Safety

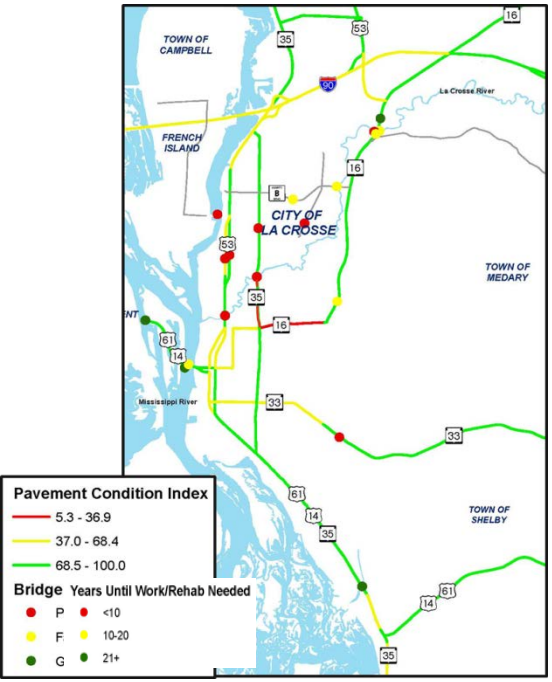
- Reduce rate and severity of pedestrian, bicycle and vehicular crashes





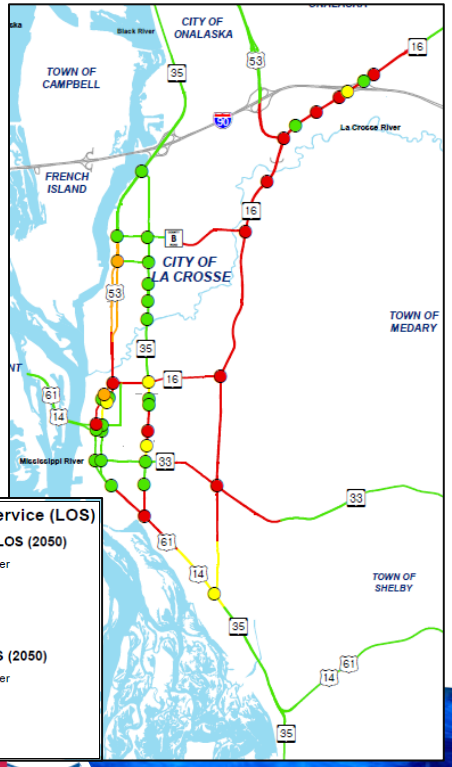
Infrastructure

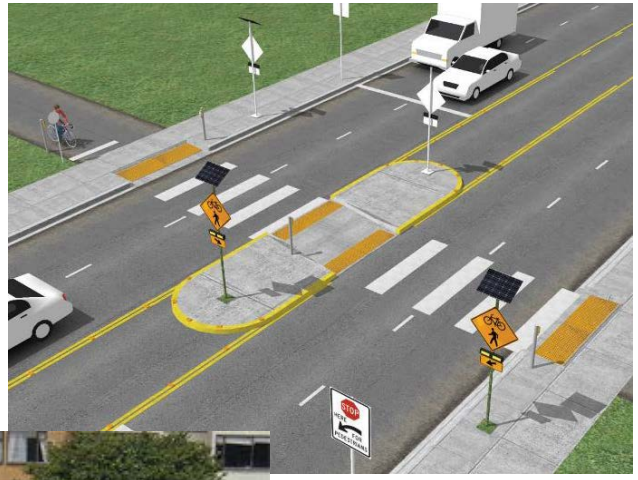
- Address pavement, structural, geometric deficiencies and utilities



Congestion and Reliability

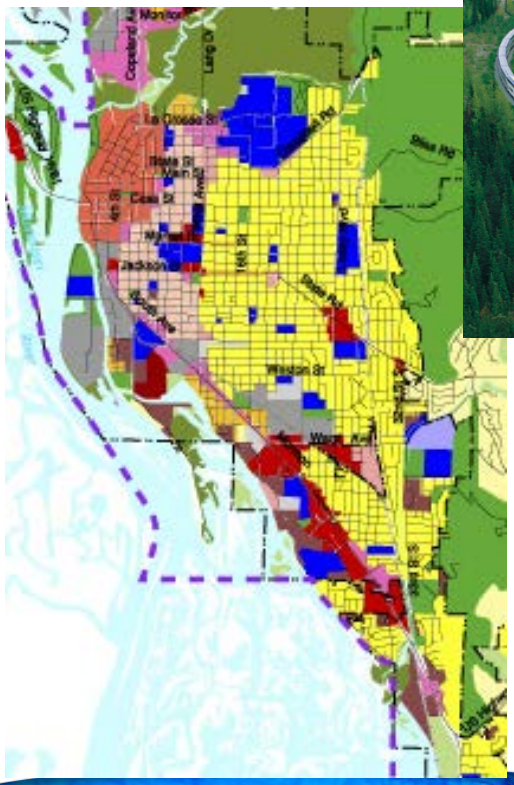
- Provide comfortable, direct, reliable and convenient access for all modes of transportation.
- Promote/encourage the use of alternate modes of travel.
- Provide reliable travel times for both reoccurring and nonrecurring congestion.
- Reduce motor vehicle use during peak periods





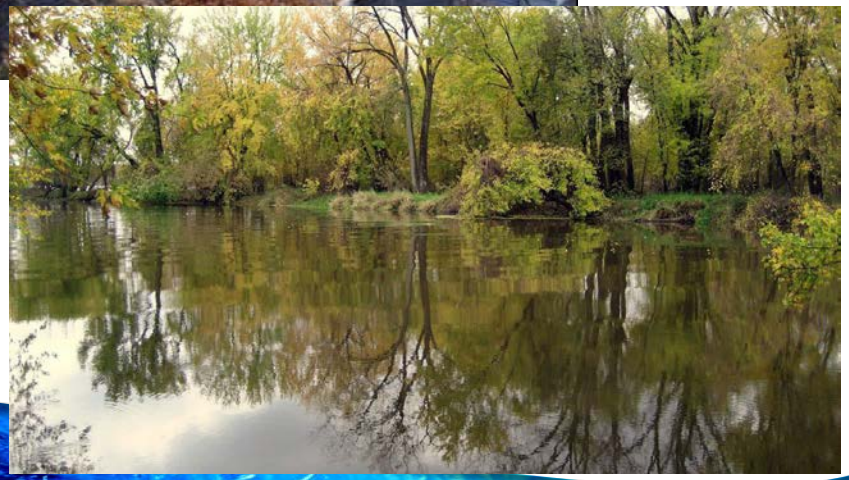
Plan for Future Transportation

- Promote smart growth that considers all transportation modes along with changes to land use



Limit Impacts

- Consider strategies that balance transportation needs with protection of the environment and community resources.



Objectives

- Objectives:

Root Objective	Desired Outcome	Screening Considerations
1. Safety	Reduce rate and severity of pedestrian, bicycle and vehicular crashes.	
2. Infrastructure	Address pavement, structural, geometric deficiencies and utilities	
3. Improve Congestion and Travel Reliability		
Multimodal (Pedestrian/Bicycle/Transit)	Provide Comfortable, direct, reliable and convenient access for all modes of transportation Promote/encourage the use of alternate modes of travel	
Motor Vehicles	Provide reliable travel times for both reoccurring and nonrecurring congestion Reduce motor vehicle use during peak periods.	
4. Plan for future transportation needs	Promote smart growth that considers all transportation modes along with changes to land use.	
5. Limit impacts to community's resources	Consider strategies that balance transportation needs with protection of the environmental and communities resources	

Strategies

- Strategies are solutions or concepts
- All strategies, at this point, are being evaluated/screened separately
- Any strategy that helps meet an objective will be moved into a strategy package
- Many individual strategies will be grouped together to create Strategy Packages

Broad Strategies

- **TDM**
- Policy and Legislation
- Bike and Pedestrian
- Transit
- TSMO
- Roadways
  - Improve Existing Roads
  - Selective Expansion
  - New Roads

Travel Demand Management (TDM)

Public Comments Overview

- 25 comments
- Repeated themes:
  - Increase amount of park and rides (Onalaska)
  - Encourage car pooling
  - Flex work hours
  - Employee & employer incentives
  - Carpool/vanpool
  - Park and ride facilities
  - Parking management
  - Rideshare

Travel Demand Management (TDM)

Objective Screening Process

Does Not Satisfy Objective
Partially Satisfies Objective
Strongly Satisfies Objective

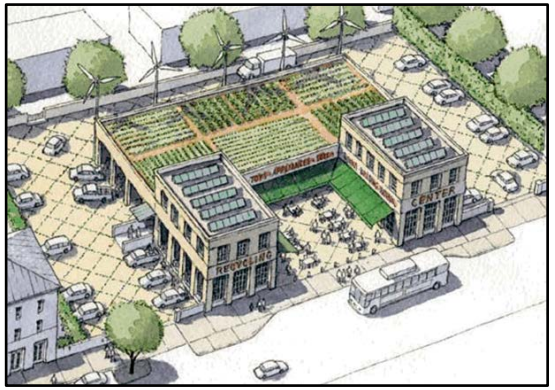
Root Objective	Desired Outcome	Screening Considerations
1. Safety	Reduce rate and severity of pedestrian, bicycle and vehicular crashes.	Some safety benefits should be expected with shifts away from motor vehicle use. This strategy alone will not address all safety needs.
2. Infrastructure	Address pavement, structural, geometric deficiencies and utilities	Will not address future infrastructure needs.
3. Improve Congestion and Travel Reliability		
Multimodal (Pedestrian/Bicycle/Transit)	Provide Comfortable, direct, reliable and convenient access for all modes of transportation Promote/encourage the use of alternate modes of travel	Will promote a variety of transportation modes and reduce congestion for motor vehicles, especially during peak hours. However, this strategy will not fully meet the objective as a stand alone strategy.
Motor Vehicles	Provide reliable travel times for both reoccurring and nonrecurring congestion Reduce motor vehicle use during peak periods.	
4. Plan for future transportation needs	Promote smart growth that considers all transportation modes along with changes to land use.	Will promote a variety of transportation modes in areas of heavy traffic as an alternative to single occupant vehicle use in the future.
5. Limit impacts to community's resources	Consider strategies that balance transportation needs with protection of the environmental and communities resources	Will require little or no land acquisition, resulting in few physical impacts, and has the potential to reduce impacts to the environment by promoting alternative modes of transportation.

Broad Strategies

- TDM
- **Policy and Legislation**
- Bike and Pedestrian
- Transit
- TSMO
- Roadways
  - Improve Existing Roads
  - Selective Expansion
  - New Roads

Policy & Legislation

Public Comments Overview



- 25 comments
- Repeated themes:
  - Continue implementation of Complete Streets
  - Increase intergovernmental cooperation
  - Develop new user fee/tax
  - Implement pay for parking in select areas
  - Development review criteria
  - Overlay zoning
  - Design standards
  - Parking management

Policy and Legislation

Objective Screening Process

Does Not Satisfy Objective
Partially Satisfies Objective
Strongly Satisfies Objective

Root Objective	Desired Outcome	Screening Considerations
1. Safety	Reduce rate and severity of pedestrian, bicycle and vehicular crashes.	Some safety benefits should be expected with shifts away from motor vehicle use. This strategy alone will not address all safety needs.
2. Infrastructure	Address pavement, structural, geometric deficiencies and utilities	Will not address future infrastructure needs.
3. Improve Congestion and Travel Reliability Multimodal (Pedestrian/Bicycle/Transit) Motor Vehicles	Provide Comfortable, direct, reliable and convenient access for all modes of transportation Promote/encourage the use of alternate modes of travel Provide reliable travel times for both reoccurring and nonrecurring congestion Reduce motor vehicle use during peak periods.	Will encourage the use of alternative transportation modes and reduce congestion for motor vehicles. However, this strategy will not fully meet the objective as a stand alone strategy.
4. Plan for future transportation needs	Promote smart growth that considers all transportation modes along with changes to land use.	Includes policies that support future transportation needs and smart growth.
5. Limit impacts to community's resources	Consider strategies that balance transportation needs with protection of the environmental and communities resources	Will require little or no direct land acquisition, resulting in few physical impacts. Has the potential to protect community resources and support healthy development.

Broad Strategies

- TDM
- Policy and Legislation
- **Bike and Pedestrian**
- Transit
- TSMO
- Roadways
  - Improve Existing Roads
  - Selective Expansion
  - New Roads

Bike and Pedestrian

Public Comments Overview

- Total: 140 comments
  - 59 from public
  - 81 from focus group
- Repeated themes:
  - Increase amount of bike lanes and shared use paths throughout the Coulee Region
  - Improve crossings to increase safety
  - Improve existing routes
  - There were also several general comments not assigned to a location
  - Separate bike lanes
  - Safer crossings

Bike and Pedestrian
Objective Screening Process

Does Not Satisfy Objective
Partially Satisfies Objective
Strongly Satisfies Objective

Root Objective	Desired Outcome	Screening Considerations
1. Safety	Reduce rate and severity of pedestrian, bicycle and vehicular crashes.	Should create safer operations for Bikes and pedestrians, but will not address motor vehicle safety concerns related to existing roadway/design deficiencies.
2. Infrastructure	Address pavement, structural, geometric deficiencies and utilities	Will address infrastructure needs for bicycle and pedestrian transportation. However, this strategy will not fully meet the objective as a stand alone strategy.
3. Improve Congestion and Travel Reliability Multimodal (Pedestrian/Bicycle/Transit) Motor Vehicles	Provide Comfortable, direct, reliable and convenient access for all modes of transportation Promote/encourage the use of alternate modes of travel Provide reliable travel times for both reoccurring and nonrecurring congestion Reduce motor vehicle use during peak periods.	Will Improve congestion and reliability by encouraging bicycle and pedestrian use. However, this strategy will not fully meet the objective as a stand alone strategy.
4. Plan for future transportation needs	Promote smart growth that considers all transportation modes along with changes to land use.	Supports future bicycle and pedestrian use.
5. Limit impacts to community's resources	Consider strategies that balance transportation needs with protection of the environmental and communities resources	Has limited environmental impacts and may reduce impacts related to the needs of other modes of transportation.

Broad Strategies

- TDM
- Policy and Legislation
- Bike and Pedestrian
- **Transit**
- TSMO
- Roadways
  - Improve Existing Roads
  - Selective Expansion
  - New Roads

Transit

Public Comments Overview

- Total: 151 comments
  - 49 from public
  - 102 from focus group
- Repeated themes:
  - Increased service hours, frequency, and routes
  - Develop park and ride express bus service
  - Increase regional routes
  - Develop Bus Rapid Transit
  - Create a Regional Transit Authority

PLANNING & ENVIRONMENT LINKAGES

Transit
Objective Screening Process

Does Not Satisfy Objective
Partially Satisfies Objective
Strongly Satisfies Objective

Root Objective	Desired Outcome	Screening Considerations
1. Safety	Reduce rate and severity of pedestrian, bicycle and vehicular crashes.	Will not address safety concerns related to existing roadway/design deficiencies.
2. Infrastructure	Address pavement, structural, geometric deficiencies and utilities	Will address infrastructure needs for transit. However, this strategy will not fully meet the objective as a stand alone strategy.
3. Improve Congestion and Travel Reliability Multimodal (Pedestrian/Bicycle/Transit) Motor Vehicles	 Provide Comfortable, direct, reliable and convenient access for all modes of transportation Promote/encourage the use of alternate modes of travel Provide reliable travel times for both reoccurring and nonrecurring congestion Reduce motor vehicle use during peak periods.	 Will Improve congestion and reliability by encouraging transit use. However, this strategy will not fully meet the objective as a stand alone strategy.
4. Plan for future transportation needs	Promote smart growth that considers all transportation modes along with changes to land use.	Supports future transit use.
5. Limit impacts to community's resources	Consider strategies that balance transportation needs with protection of the environmental and communities resources	Has limited environmental impacts and may reduce impacts related to the needs of other modes of transportation.

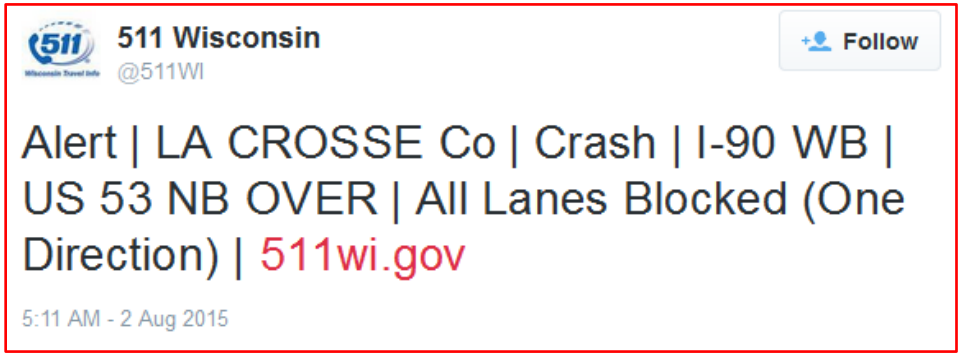
Broad Strategies

- TDM
- Policy and Legislation
- Bike and Pedestrian
- Transit
- **TSMO**
- Roadways
  - Improve Existing Roads
  - Selective Expansion
  - New Roads

Transportation System Management, Operations (TSMO)

Public Comments Overview

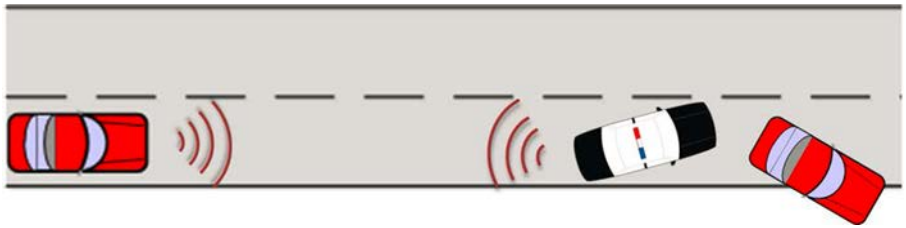
- 29 comments
- Repeated themes:
  - Improve signal timing on WIS 35, WIS 16, WIS 157, and US 53
  - Signal phasing changes – left turn arrows
  - Dynamic messaging signs
- Repeated focus on WIS 35 & 16 and US 53



Transportation System Management, Operations(TSMO)

Strategies

- Real-time traveler information
  - Dynamic message signs
  - Hybrid static-dynamic travel time signs
  - In-vehicle/mobile phone
  - Social media
- Connected vehicle technology
- Adaptive traffic signal control



Transportation System Management, Operations(TSMO)

- Short Term Solutions
  - Workshop
- Mid Term Solutions
  - Traffic Signal upgrades(technology that exists)
  - Driver information
- Long Term
  - Technology that doesn't exist today (will address and incorporate in future)

Transportation System Management, Operations (TSMO)

Objective Screening Process

Does Not Satisfy Objective
Partially Satisfies Objective
Strongly Satisfies Objective

Root Objective	Desired Outcome	Screening Considerations
1. Safety	Reduce rate and severity of pedestrian, bicycle and vehicular crashes.	Will improve safety with better traffic controls. However, this strategy will not fully meet the objective as a stand alone strategy.
2. Infrastructure	Address pavement, structural, geometric deficiencies and utilities	Will reduce the need for some infrastructure needs by improving travel efficiency. However, this strategy will not fully meet the objective as a stand alone strategy.
3. Improve Congestion and Travel Reliability Multimodal (Pedestrian/Bicycle/Transit) Motor Vehicles	Provide Comfortable, direct, reliable and convenient access for all modes of transportation Promote/encourage the use of alternate modes of travel Provide reliable travel times for both reoccurring and nonrecurring congestion Reduce motor vehicle use during peak periods.	Will Improve congestion and reliability by improving efficiency, but will not be enough to improve LOS beyond failing levels in many locations as a stand alone strategy.
4. Plan for future transportation needs	Promote smart growth that considers all transportation modes along with changes to land use.	Will consider the future needs of all transportation modes.
5. Limit impacts to community's resources	Consider strategies that balance transportation needs with protection of the environmental and communities resources	Will improve efficiency with limited to no environmental impacts.

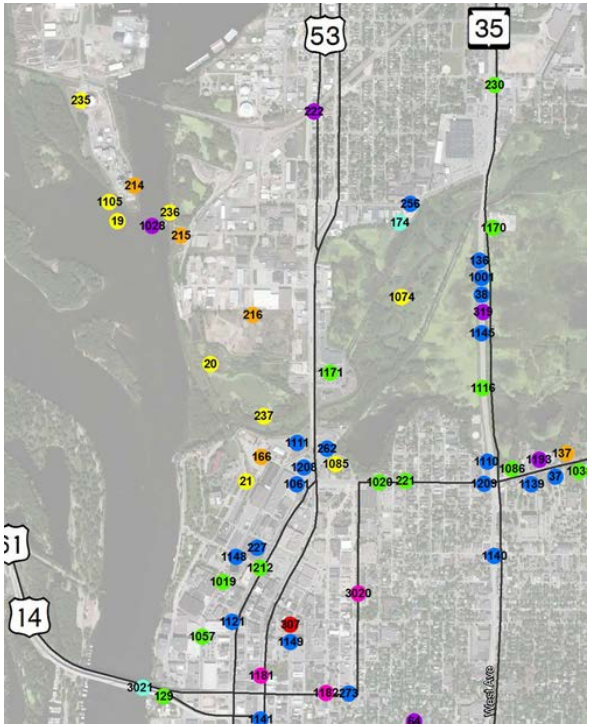
Broad Strategies

- TDM
- Policy and Legislation
- Bike and Pedestrian
- Transit
- TSMO
- **Roadways**
  - **Improve Existing Roads**
  - Selective Expansion
  - New Roads

Improve Existing Roads

Public Comments Overview

- Improve Existing Roads
  - 111 comments
  - Repeated themes:
    - Improve intersection/construct roundabout at La Crosse St (WIS 16) and Losey Blvd
    - Construct grade-separated or roundabout intersection at WIS 16 & County Road B East and County Road B West
    - Replace pavement on Lang Drive (WIS 35)
    - Replace pavement on La Crosse St (WIS 16)

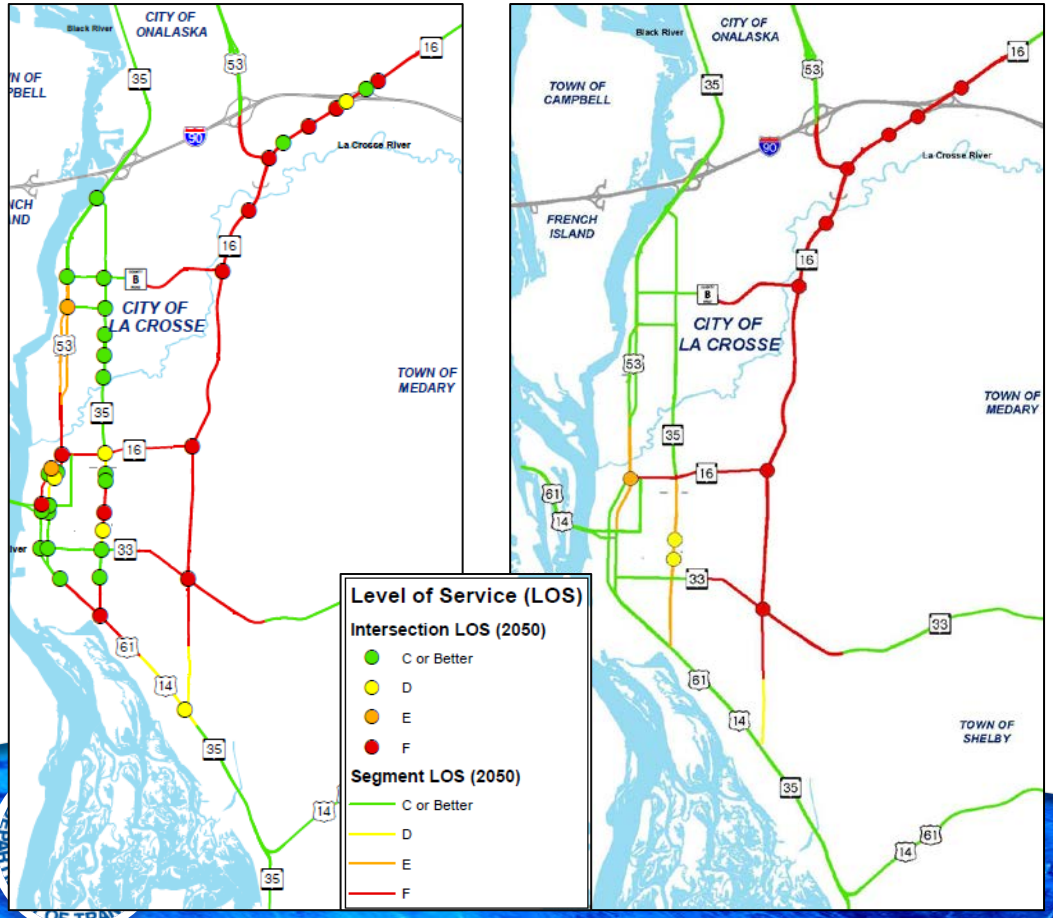


Improve Existing Roads

Modeling Intersection At-grade Improvements

2050 LOS No build

2050 LOS Improved Intersections



Intersections that can be improved:

- US 53 & Clinton Street
- 3rd Street & State Street
- 3rd Street & Cass Street

Improve Existing Roads

Intersection At-grade Improvements

Objective Screening Process

Does Not Satisfy Objective
Partially Satisfies Objective
Strongly Satisfies Objective

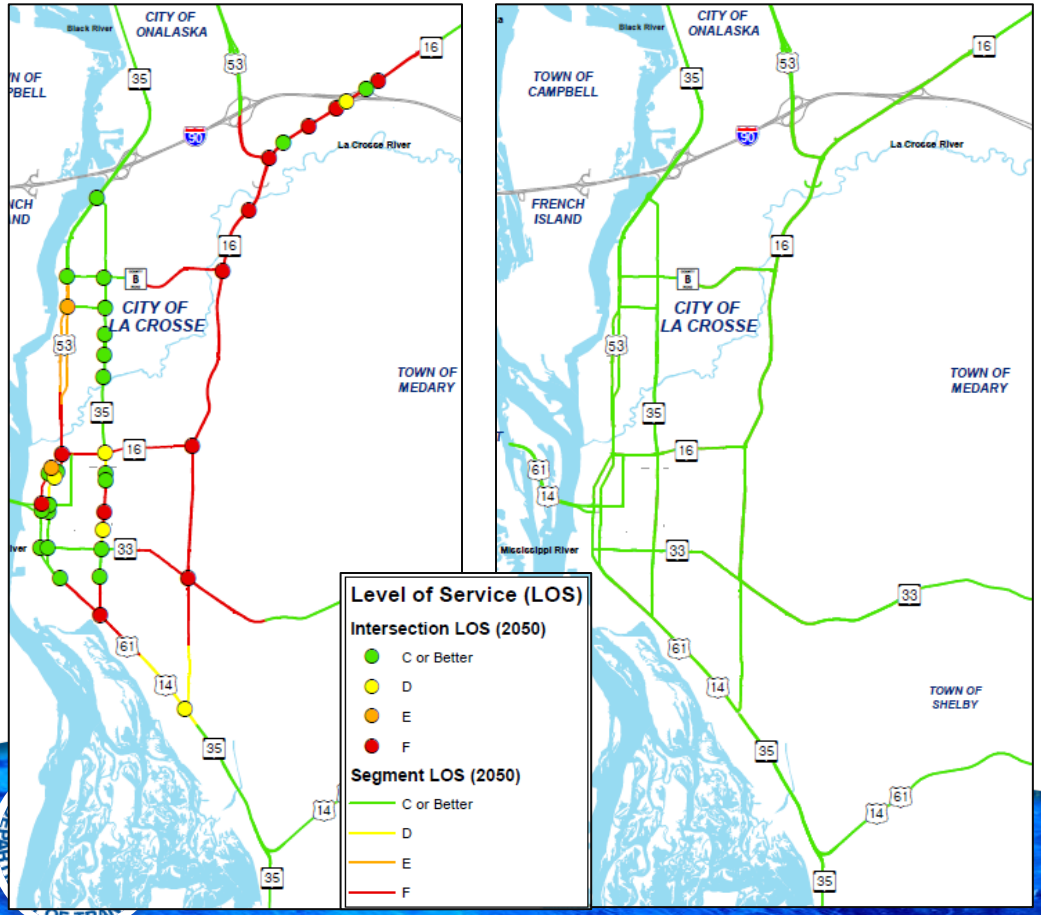
Root Objective	Desired Outcome	Screening Considerations
1. Safety	Reduce rate and severity of pedestrian, bicycle and vehicular crashes.	Will improve safety related to intersection deficiencies. However, this strategy will not fully meet the objective as a stand alone strategy.
2. Infrastructure	Address pavement, structural, geometric deficiencies and utilities	Will address infrastructure needs for intersections that will need future improvements. However, this strategy will not fully meet the objective as a stand alone strategy.
3. Improve Congestion and Travel Reliability Multimodal (Pedestrian/Bicycle/Transit) Motor Vehicles	Provide Comfortable, direct, reliable and convenient access for all modes of transportation Promote/encourage the use of alternate modes of travel Provide reliable travel times for both reoccurring and nonrecurring congestion Reduce motor vehicle use during peak periods.	Will have the potential to significantly improve congestion and reliability in cases where intersections are causing such issues. However, this strategy will not fully meet the objective as a stand alone strategy.
4. Plan for future transportation needs	Promote smart growth that considers all transportation modes along with changes to land use.	Will meet future transportation needs for some modes of transportation in certain locations. However, this strategy will not fully meet the objective as a stand alone strategy.
5. Limit impacts to community's resources	Consider strategies that balance transportation needs with protection of the environmental and communities resources	Will have some direct impacts to property. Impacts will be minor compared to corridor improvements. However, this strategy will not fully meet the objective as a stand alone strategy.

Improve Existing Roads

Modeling Intersection Grade-separated Improvements

2050 LOS No build

2050 LOS Improved Intersections



Intersections that can be improved:

- WIS 16 & Main/OS
- WIS 16 & Pralle
- WIS 16 & Theater
- WIS 16 & WIS 157
- WIS 16 & County B
- WIS 16 & Gillette
- WIS 16/Losey & La Crosse Street
- Losey & WIS 33
- US 53 & La Crosse
- US 53 & Cass
- US 53 & Clinton
- US 53 & State
- WIS 35 & Cass

PLANNING & ENVIRONMENT LINKAGES

Examples of Grade Separation

Improve Existing Roads

Intersection grade separated Improvements

Objective Screening Process

Does Not Satisfy Objective
Partially Satisfies Objective
Strongly Satisfies Objective

Root Objective	Desired Outcome	Screening Considerations
1. Safety	Reduce rate and severity of pedestrian, bicycle and vehicular crashes.	Will improve safety related to intersection deficiencies.
2. Infrastructure	Address pavement, structural, geometric deficiencies and utilities	Will address infrastructure needs for intersections that will need future improvements.
3. Improve Congestion and Travel Reliability Multimodal (Pedestrian/Bicycle/Transit) Motor Vehicles	 Provide Comfortable, direct, reliable and convenient access for all modes of transportation Promote/encourage the use of alternate modes of travel Provide reliable travel times for both reoccurring and nonrecurring congestion Reduce motor vehicle use during peak periods.	 Will have the potential to significantly improve congestion and reliability in cases where intersections are causing such issues.
4. Plan for future transportation needs	Promote smart growth that considers all transportation modes along with changes to land use.	Will meet future transportation needs for some modes of transportation in certain locations. However, this strategy will not fully meet the objective as a stand alone strategy.
5. Limit impacts to community's resources	Consider strategies that balance transportation needs with protection of the environmental and communities resources	Will have some direct impacts to property. Impacts will be minor compared to corridor improvements. However, this strategy will not fully meet the objective as a stand alone strategy.

Broad Strategies

- TDM
- Policy and Legislation
- Bike and Pedestrian
- Transit
- TSMO
- **Roadways**
  - Improve Existing Roads
  - **Selective Expansion**
  - New Roads

Selective Expansion of Existing Roads
Public Comments Overview

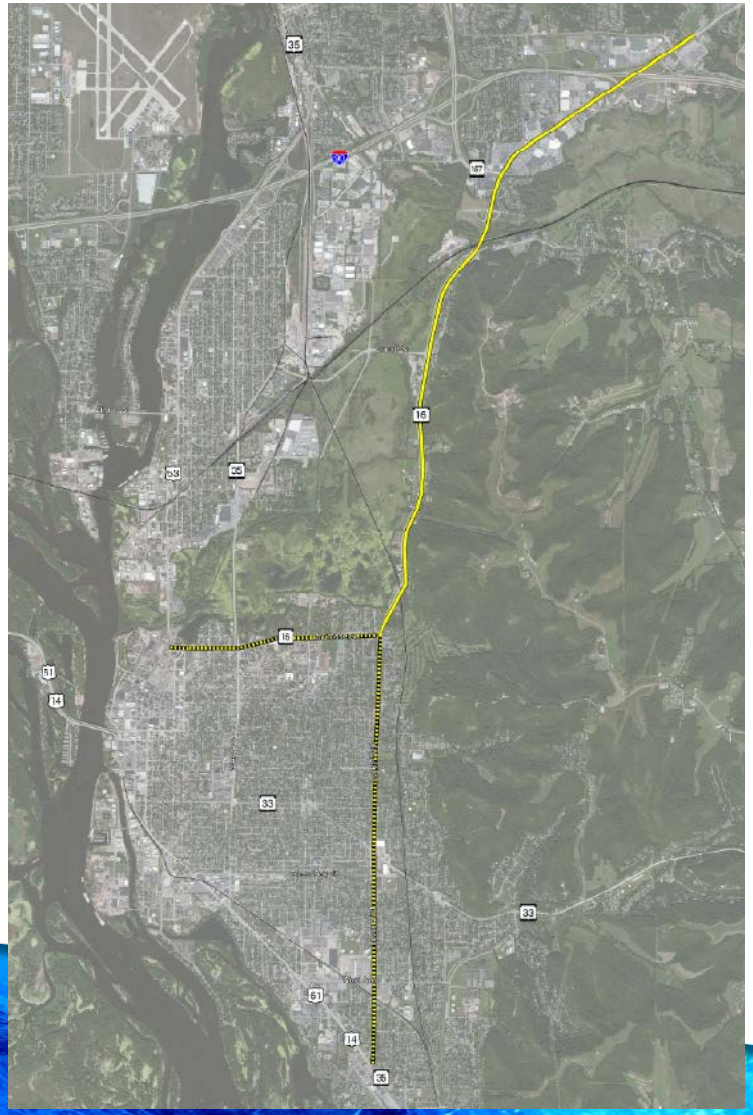
- Selective Expansion of Existing Roads
  - 23 comments
  - Repeated themes:
    - Expand WIS 16
    - Add and/or lengthen turn lanes
    - Most comments centered on WIS 16 & WIS 157 intersection and WIS 16 corridor

Selective Expansion of Existing Roads

Strategy A

Expansion to 6-lane

- Option 1
  - 4 lane La Crosse St.
- Option 2
  - 6 Lane Losey Blvd



Selective Expansion of Existing Roads

Strategy B
US 53/14/61

Expansion to 6-lane

Selective Expansion of Existing Roads

Strategy C

STH 35/George St
Expansion to 4-lane

Selective Expansion of Existing Roads

Strategy G

One-way pair conversion

- Option 1(US 53)
  - 4th Street 2 - 4 Lanes
- Option 2(US 53)
  - 3rd Street 2 - 4 Lanes

Broad Strategies

- TDM
- Policy and Legislation
- Bike and Pedestrian
- Transit
- TSMO
- **Roadways**
  - Improve Existing Roads
  - Selective Expansion
  - **New Roads**

Construct New Roads

Public Comments Overview

- Construct New Roads
  - 27 comments
  - Repeated themes:
    - WIS 157 to River Valley Drive – "North Build"
    - French Island route from I-90 to 2nd Street in La Crosse

Construct New Roads

Strategy D

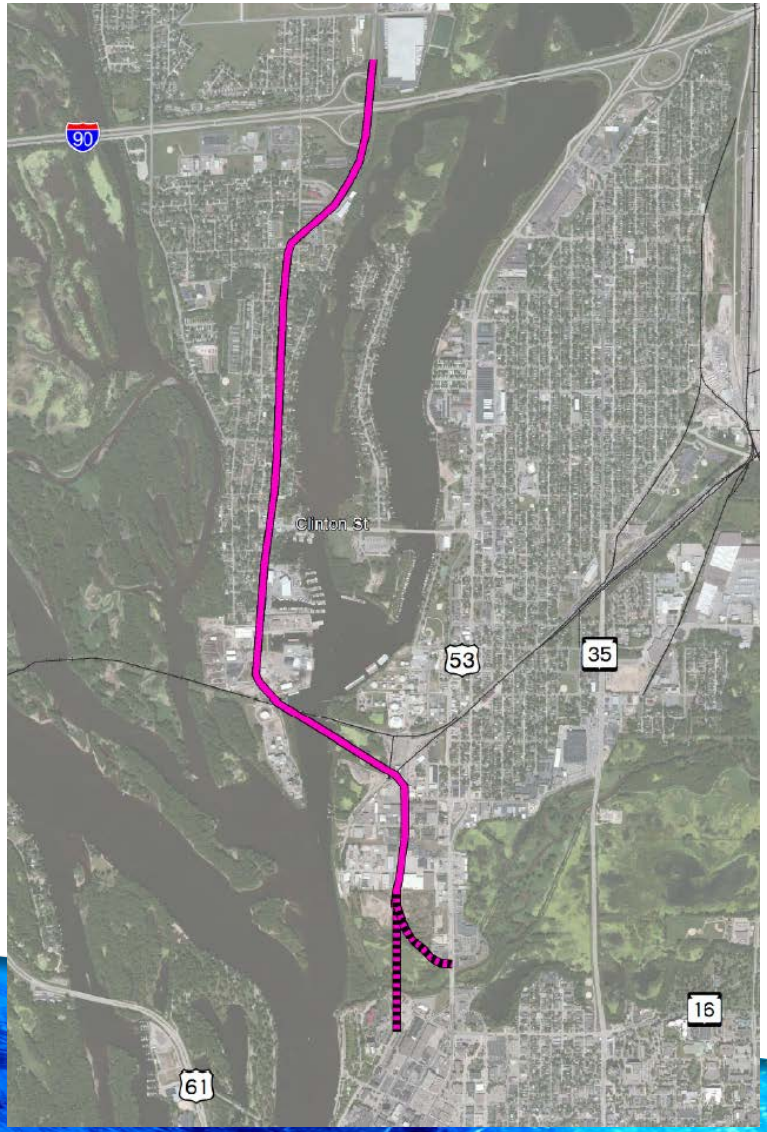
East Corridor
New Road

Construct New Roads

Strategy E

New Road
West

- Option 1
  - Connect to Copeland
- Option 2
  - Connect to 2nd St Downtown

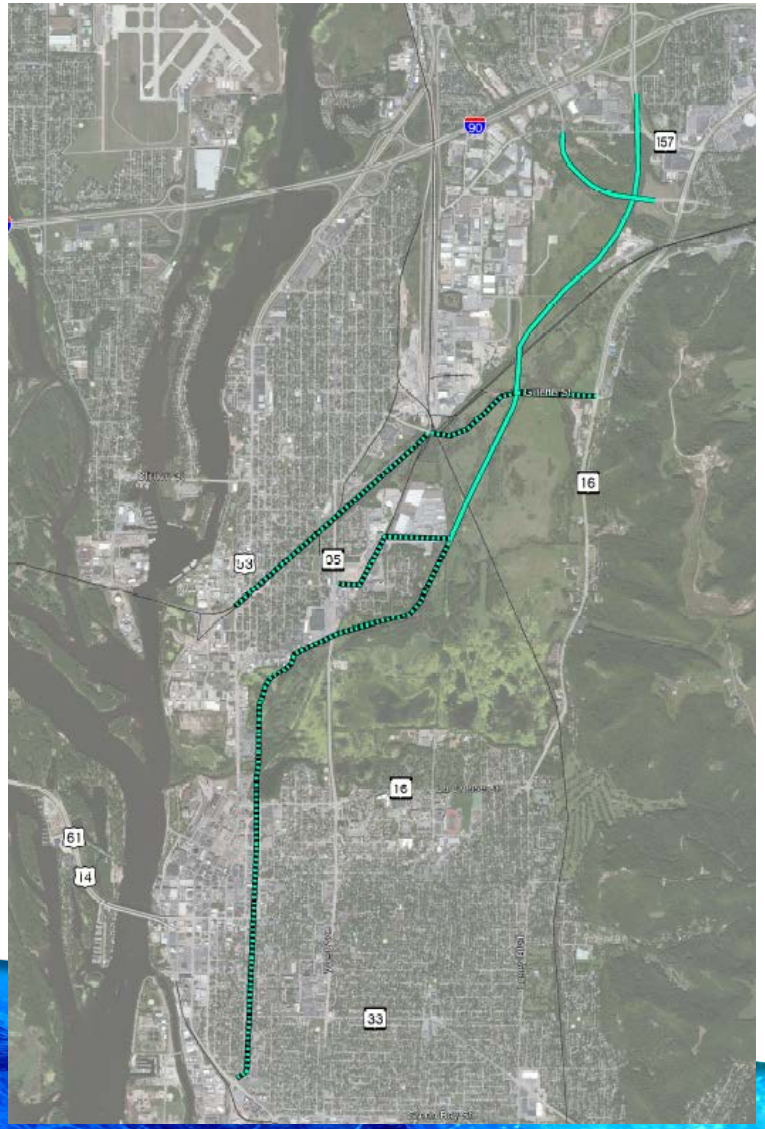


Construct New Roads

Strategy F

Central

- Option 1
  - Connect to 35 Lang Dr
- Option 2
  - Connect to 16
- Option 3
  - Connect to 35 & 53 Along railroad
- Option 4
  - Connect to 6/7th Street Downtown



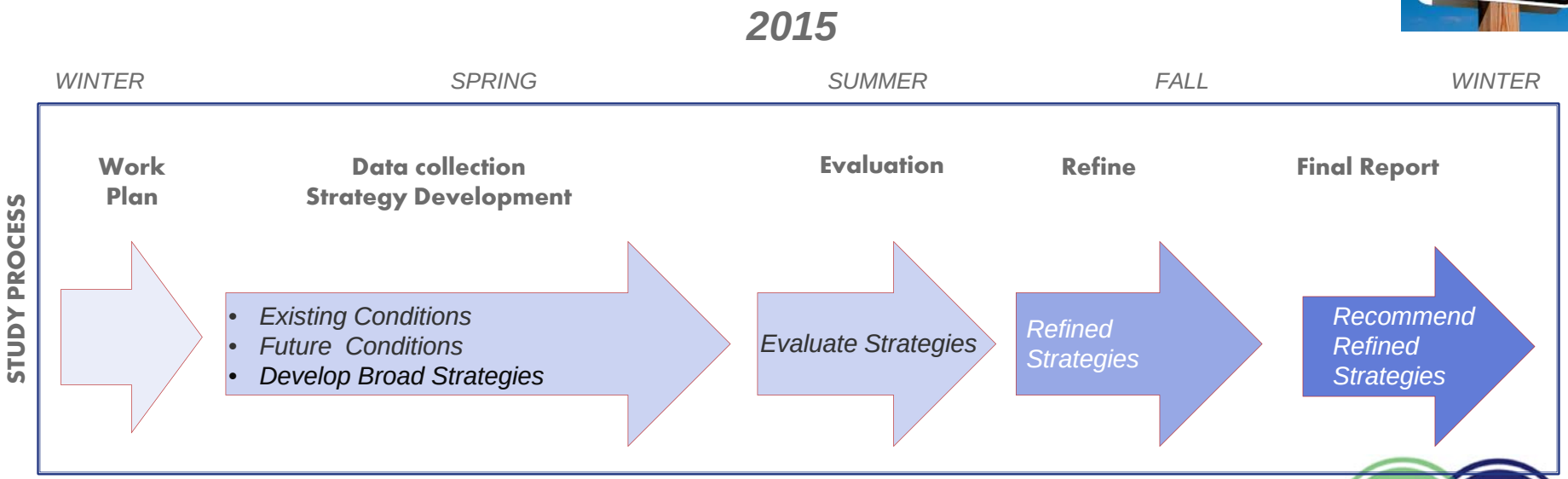
Strategy Development
Summary

Summary of Strategies

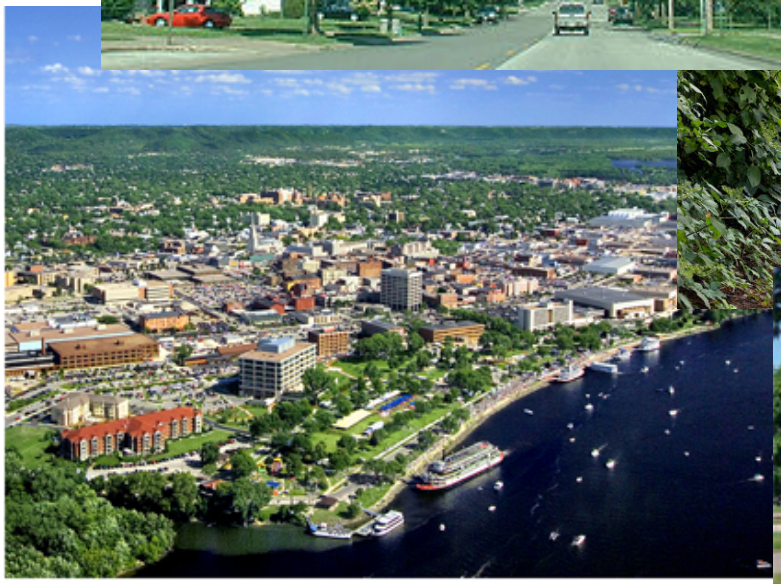
Strategies	Objectives 1	2	3	4	5
Travel Demand Management (TDM) Only					
Policy and Legislation Only					
Transit Only					
Bike and Pedestrian Only					
TSMO					
TDM/Policy/Transit/Bike/Ped/TSMO					
Evaluate intersections at grade without adding any through capacity					
Evaluate intersections grade separated without adding any through capacity					
	-	-	-	-	-
Selective Expansion: Alternative A	-	-	-	-	-
Selective Expansion: Alternative B	-	-	-	-	-
Selective Expansion: Alternative C	-	-	-	-	-
Construct New Roads: Alternative D	-	-	-	-	-
Construct New Roads: Alternative E	-	-	-	-	-
Construct New Roads: Alternative F	-	-	-	-	-

Next Steps

- PIM 3: September 23 – Eagle Bluff Elementary, Onalaska
  September 24 – Central High School, La Crosse
- PIM 4: November 2015
  - Focus: Present refined strategy packages



Benefits of future planning in the Coulee Region



PLANNING & ENVIRONMENT LINKAGES

WISCONSIN DEPARTMENT OF TRANSPORTATION