



# *Emerging Transportation Trends*

*A look at 70 years of transportation debate*

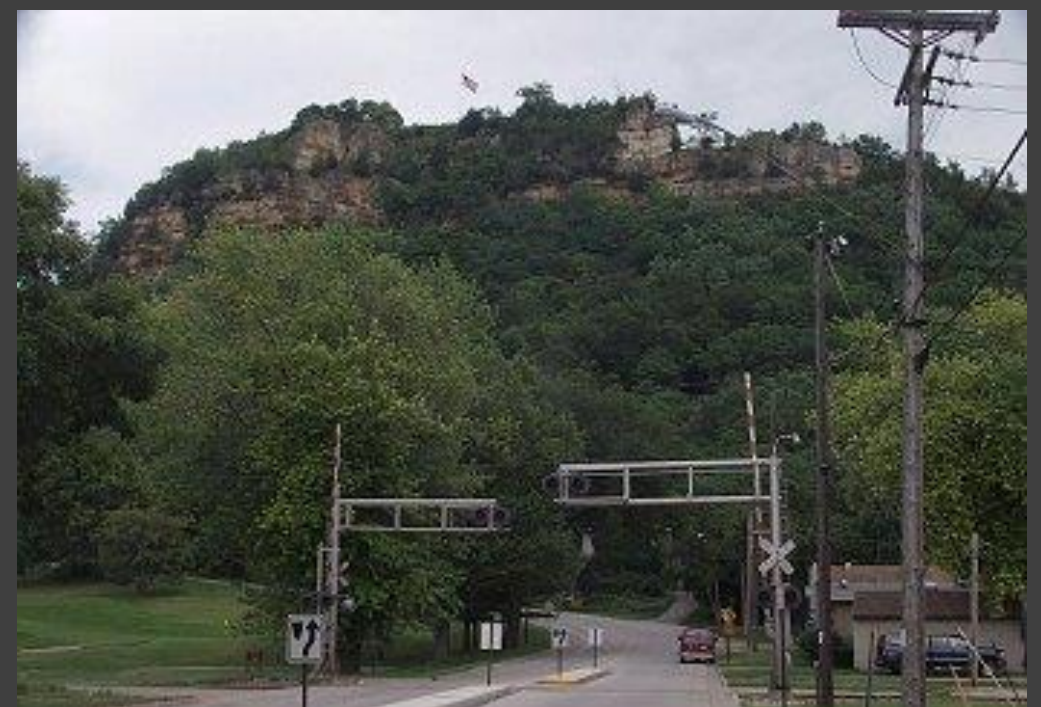
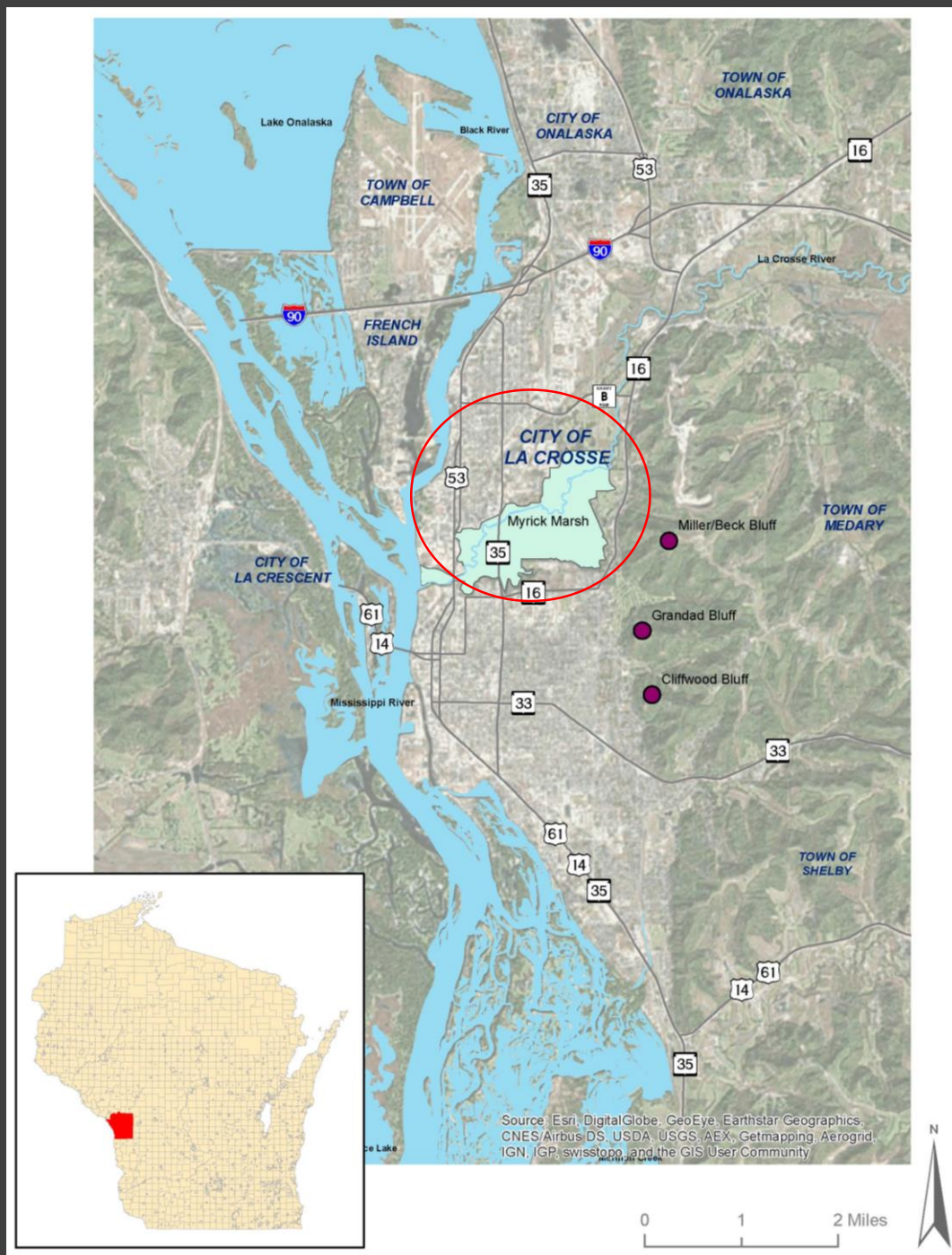
APA-WI Annual Planning Conference  
September 22, 2016

*Darren Fortney, AICP*  
*Nate Day, AICP*





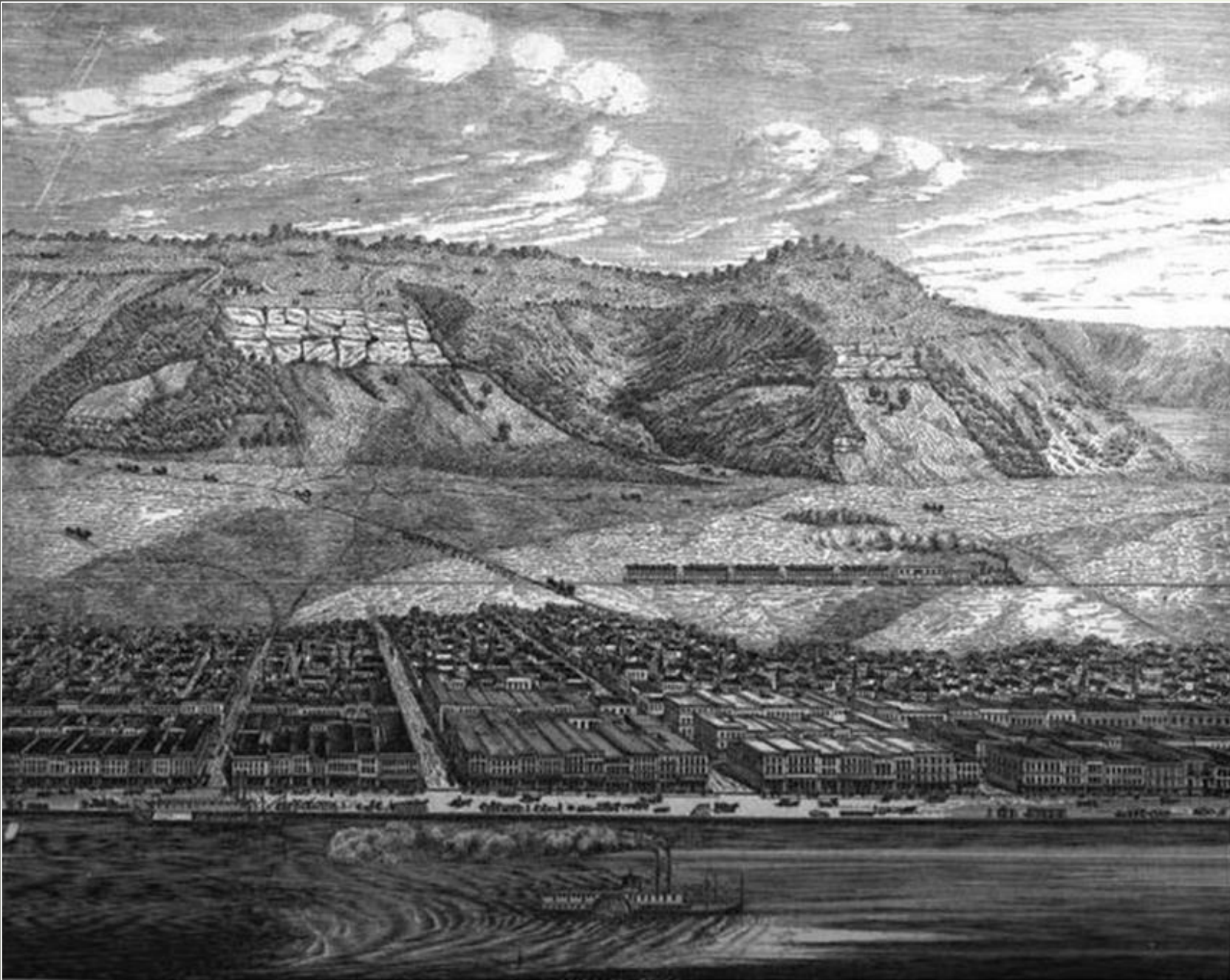








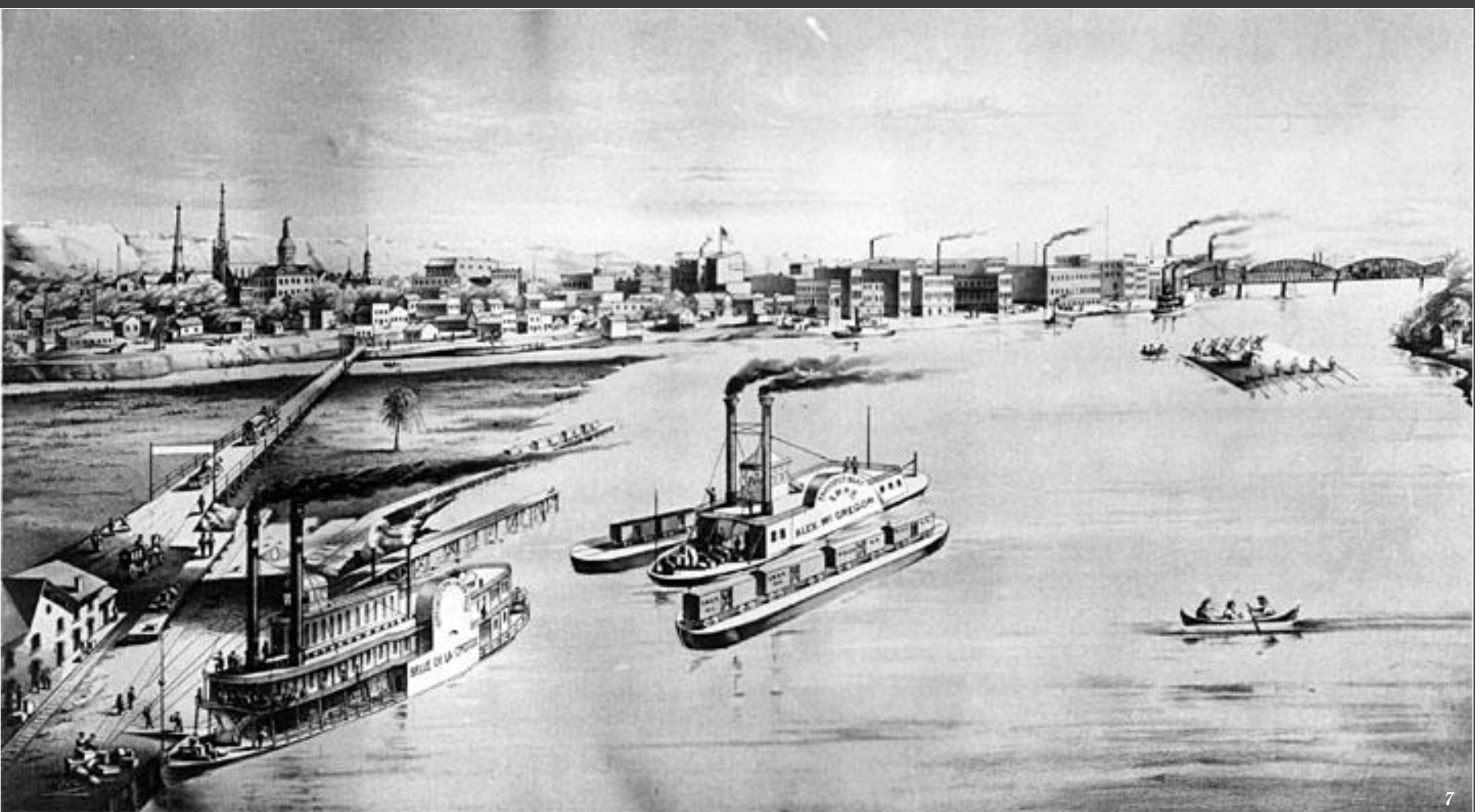
















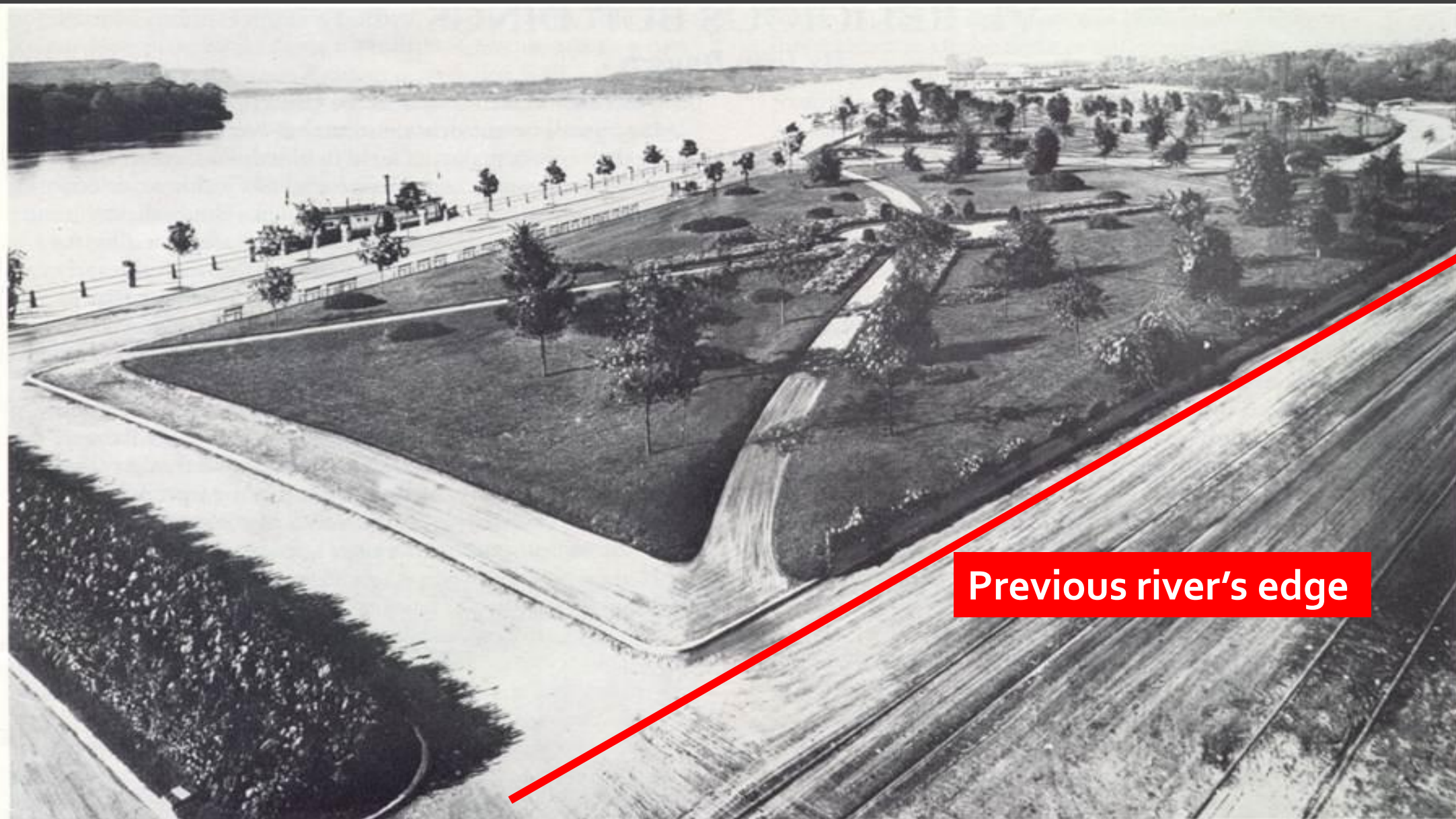












Riverside Park (Levee Park) John Nolen, Landscape Architect, 1911 (photo c. 1914)













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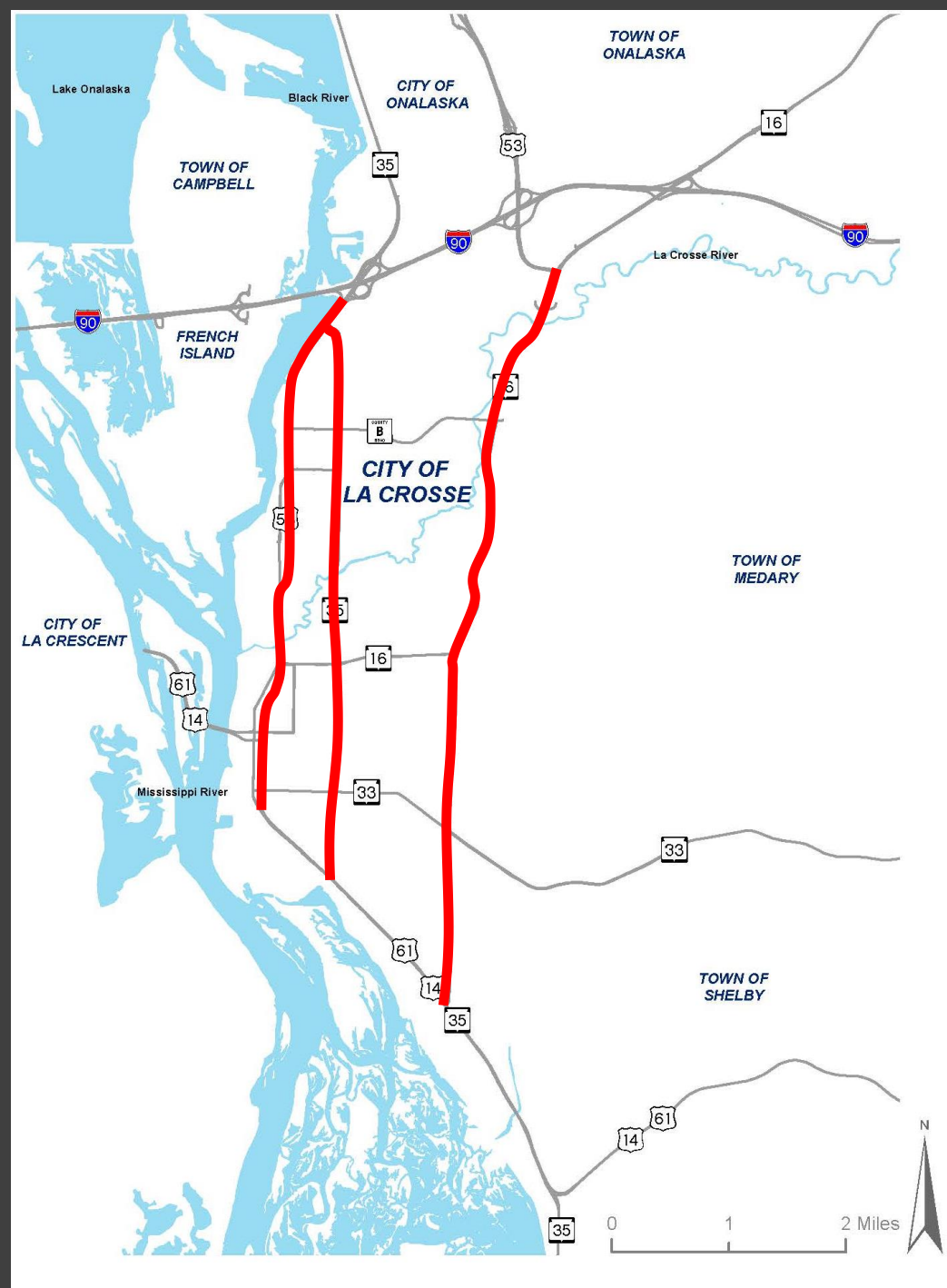
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# Roads



# Freight – Port of La Crosse

Handles 1 million tons annually

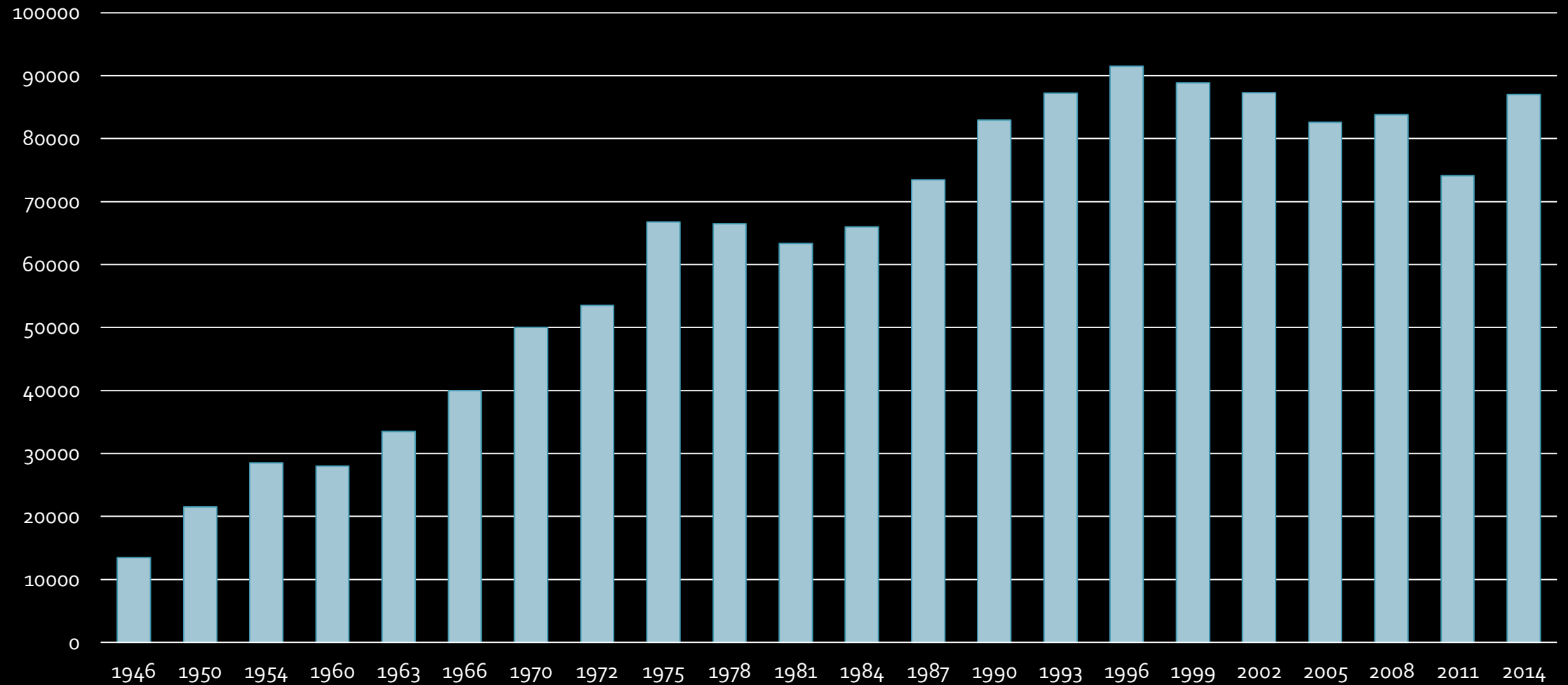
- Liquids
- Cement
- Grain
- General bulk products

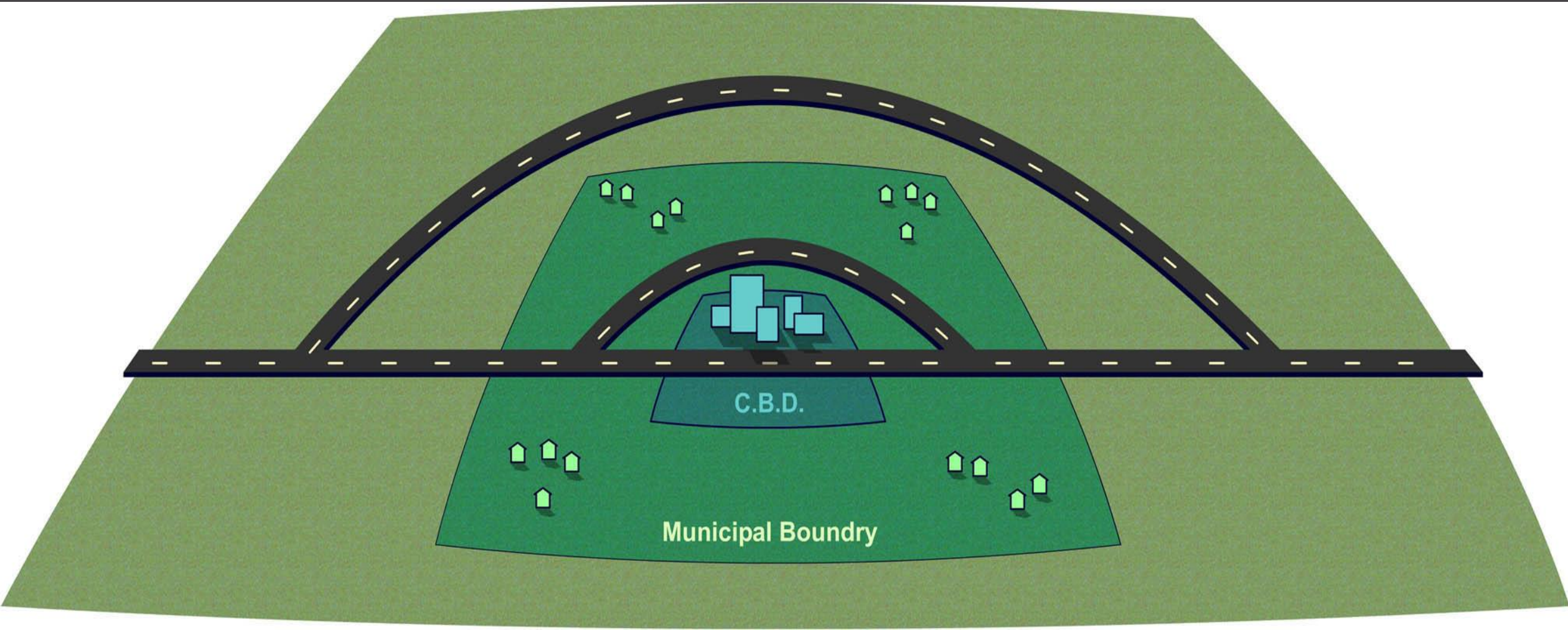
Mode of Transportation	Tons of Cargo	Bushels of Cargo	Gallons of Cargo
 One Barge	1,500 tons	52,500 bushels	453,600 gallons
 One Rail Car	100 tons	3,500 bushels	30,240 gallons
 100-car Train Unit	10,000 tons	350,000 bushels	3,024,000 gallons
 Large Semi	26 tons	910 bushels	7,865 gallons

Source: Iowa DOT



Total Traffic at  
the La Crosse River  
US 53, WIS 16, WIS 35



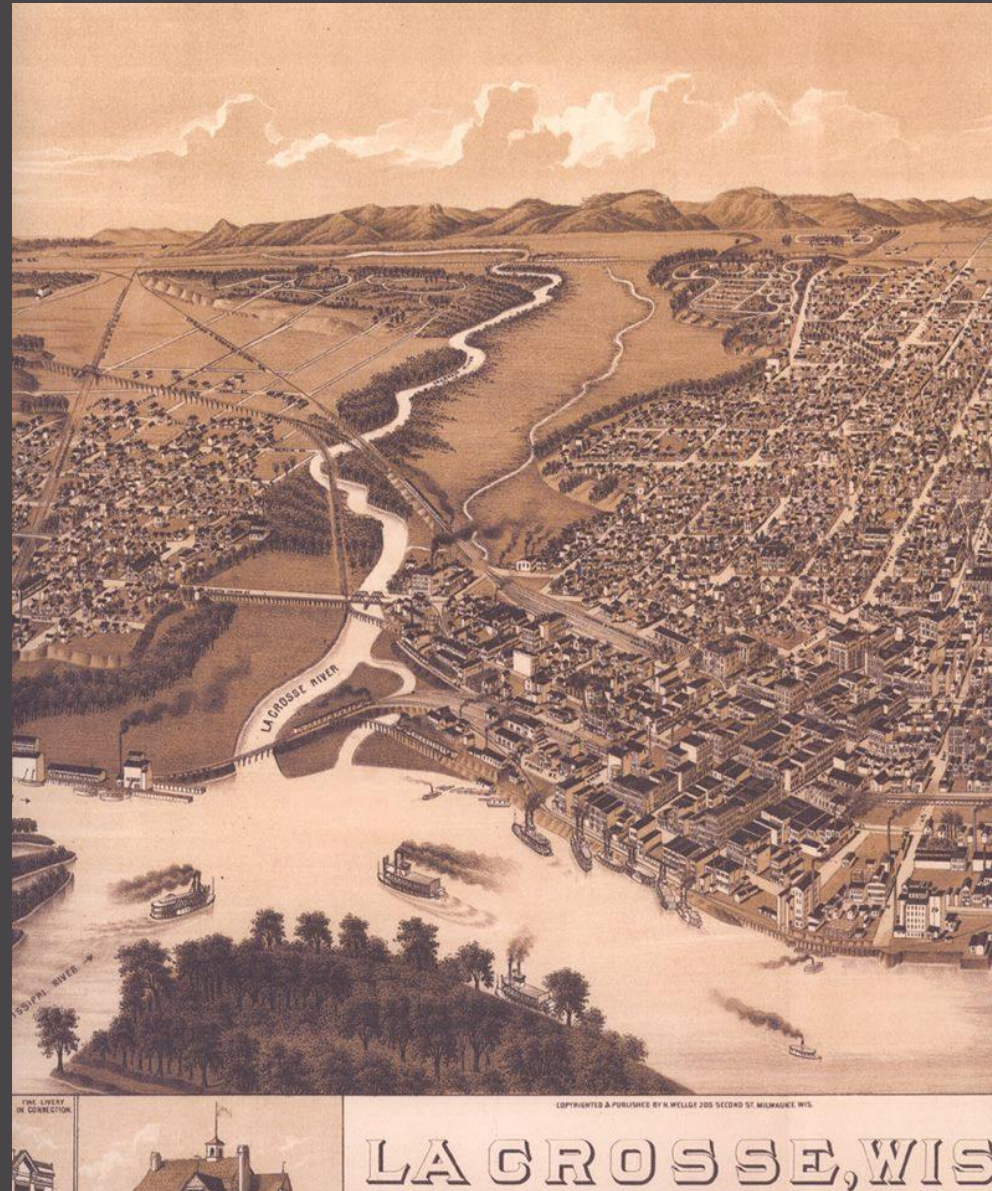






WEST TOWNE SHOPPING CENTER  
Mineral Pt. & Gammon Rds., Madison, Wis.  
STONE & ROBINSON Assoc. Inc.  
Consulting Engineers  
Photo No. 3800C August 28, 1970  
Photo Copy Service, Verona, Wis. 53593

# 1932 – First Road through marsh (Lang Drive)





# 1940 - 1960

*Uncle Ray's Corner*  
 La Crosse Major Street Plan, Discussed More Than Four Years,  
 To Come Before Common Council For Approval At August Meeting

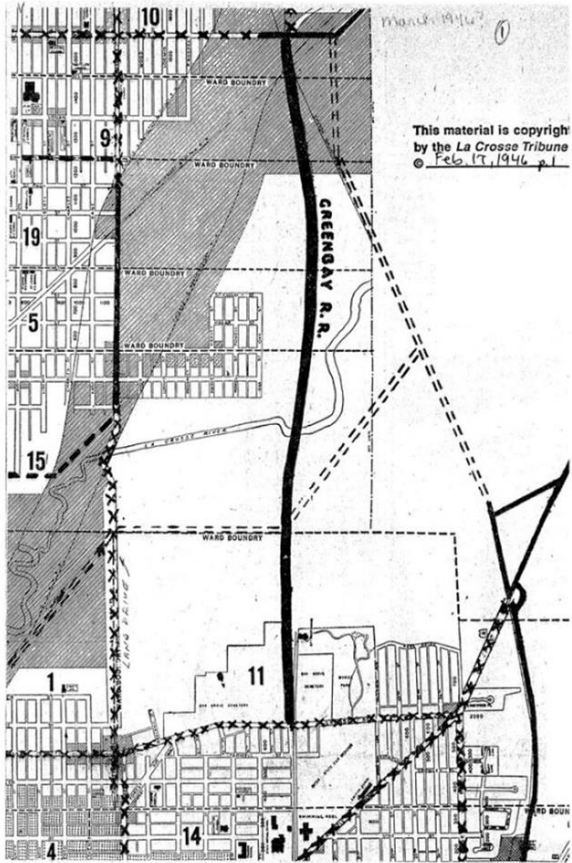
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City Plan Commission  
 Favors Constructing New  
 Highway Through Marsh

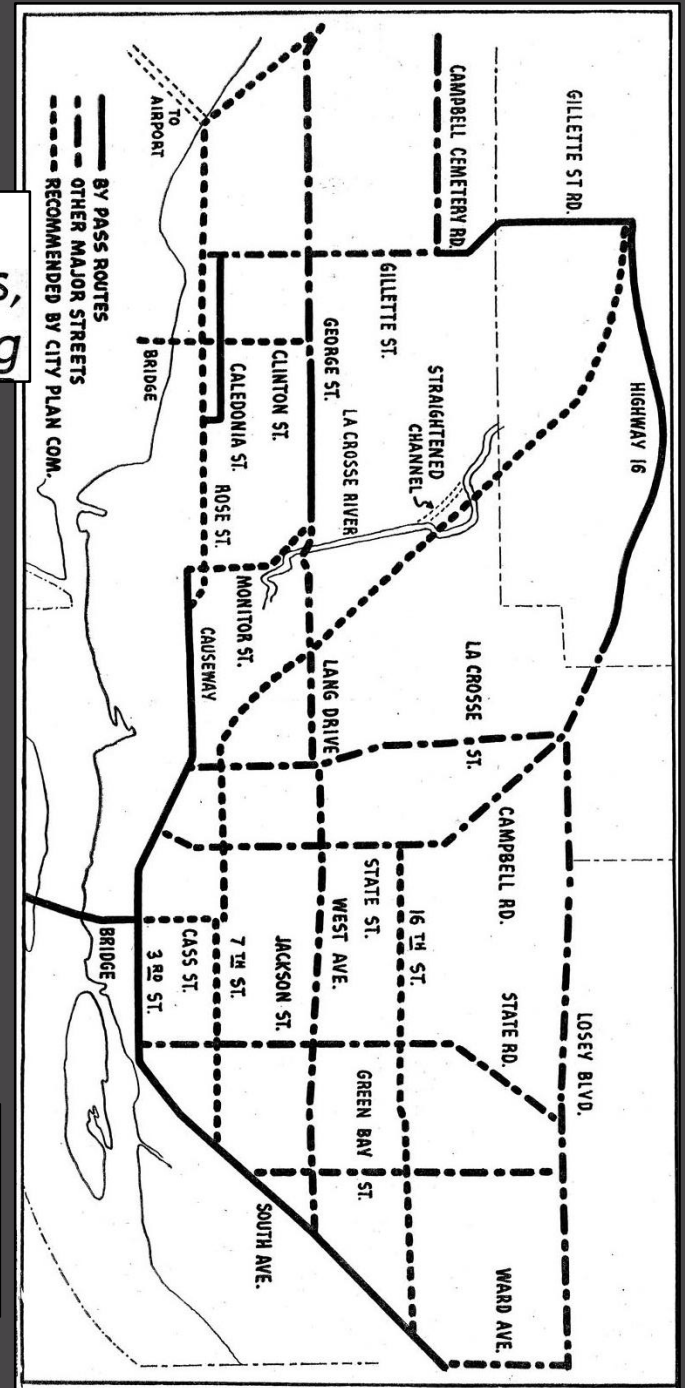
THE LA CROSSE TRIBUNE, FRIDAY EVENING, MARCH 8, 1946

## Council Committees Defer Action On Using Old Green Bay Right-Of-Way As New Street

After hearing the city plan ten by J. M. Albers, of the Wisconsin state planning board to the city, Roellig said, "I think it's a beautiful plan if it can be done. I doubt if you can get the



A Short And Direct Route between the north and south sides of La Crosse, proposed by Alderman Fred A. Kraft for inclusion in the city's major street plan, is shown by the heavy black line on the map above. The highway as suggested would begin at Gillette street and follow the Green Bay railroad right of way south across the marsh to La Crosse street. The broken lines on the map show suggestions for by-pass routes across the marsh as recommended under the tentative major street plan; the cross-cross lines indicate through streets on the tentative plan and the lighter black line on the right a proposed through highway from South avenue to the Medary overhead. The major street plan has not yet been approved by the common council.





## Area Freeway May Be 25 Years Away

While waiting for the proposed expressway to materialize, local transportation officials are implementing the first of the two alternatives suggested by the 1977 updated transportation plan conducted by the La Crosse Area Planning Committee.

Ronald Bracegirdle      Ronald Nelson      Bernard Mullenbach

According to Oleson, if all improvement projects on existing roadways were completed today it would sufficiently handle today's traffic flow. "But in 15 or 20 years, it's not going to be adequate," he said.

Although the demand for gasoline has not been greatly decreased by the price, he expects it will in the future.

"Energy will get so expensive that we can't afford to drive like that. Traffic will get so bad that we will give up private automobiles," he said.

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approved by the La Crosse Area  
Plan Commission (LAPC) in  
May 1977.

\$200,000 for a preliminary design investigation and engineering study of the segment of the plan.

LAX TRIB

At La Crosse Street, S  
Street would be designated

streets one-way plan would  
\$3.5 million.  
Moore said that since he  
6-12-7

cost plan should be scrapped.  
"We have to look at it  
paring lights — one is the short

in two  
t-range

be true — Tuesday: bridges  
be need- heads

and over-

criticizes the two alternative dated transactions. La Croix

are implementing the first alternatives suggested by the 19 transportation plan conducted by the Area Planning Com-



**Ronald Brackley**

egirdle Roma



Ed Oelson

**Bernard Mullenbach**

jects on existing roadways. "If we do not build the new road today it would suffice today's traffic flow. But in 10 years it's not going to be adequate."

24



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# North Side Dike Breaks; Dike Raised On Hwy. 53

## 80 Feet Of Dike Along Black River Goes Out

Raising Dike  
On 53 Two Feet  
Water Surrounds 25 Homes;  
No Injuries, People Leaving

By DONALD W. AFFOLTER  
(La Crosse Tribune Staff Writer)

City crews began adding sandbags at midnight Sunday to raise part of the dike along Highway 53 two feet as a safety precaution. Highway 53 traffic was routed over George Street to avoid interference.

The dike originally was built to be two feet above the expected crest of the Black River. But city engineering crews Sunday found the river along the dike was higher than estimated.

South Side River readings are taken from equipment at the foot of Mount Vernon Street, but the North Side reading must be estimated.)

Water north of the La Crosse cent pike continued rising, going over old Highway 61 first, then over new Highway 61 early Monday. The new roadway had three to four inches of water Monday morning.

Minnesota Highway Department crews were diking the old highway Monday morning, to prevent water from going over the new one and from washing out a connecting road between the two.

They were having some success, as the water level between old and new Highways 61 had dropped between 8 and 11 a.m.

Houston County Sheriff Byron Whitehouse told the La Crosse Tribune about 10:30 a.m. Monday he expects that the road will remain open, but that two of the four lanes may have to be closed for workers.

Department crews are holding the dike at all costs. H. L. Fiedler, chief maintenance engineer for Wisconsin District 5, said Monday.

An 18-foot crest, expected Wednesday, will put water 12 feet lower than the top of the Wisconsin dike and 3.4 feet below the West Channel Bridge.

"We will continue our 24-hour watch on the dike and bridge as we have done for the past week," said Fiedler.

Henry Langer of the Corps of Engineers speculated that the Mississippi was backing up into the Black River because the West Channel Bridge is holding back some water, and this throws off engineering estimates.

Because of the tricky estimates, the Highway 53 dike is being raised two feet.

See DIKES, Page 3

A 75 to 80-foot section of dike along the Black River west of St. Andrew and Sumner Streets broke about 8 a.m. Monday and rushing water surrounded about 25 homes in the south end of the North Side.

"When I left for work this morning there wasn't a drop of water," said Robert Secor, 47, Sumner St. Now his house is surrounded by water.

The onrushing water caused a 250,000-gallon Texaco gasoline storage tank in the area to tilt and the smell of gasoline is heavy in the area. It is believed the tank contains 107,600 gallons of gasoline. The La Crosse Fire Department has ordered no smoking west of Copeland Avenue. Texaco officials, however, do not believe the tank is leaking.

Company officials felt that without any more onrushing waters, the tank should stay in place.

Representatives of the State Civil Defense, in Civil Defense headquarters in City Hall, reported they had received offers from area fire departments offering to come to La Crosse or any area down river endangered by gasoline.

The damaged dike was holding water along the east bank of the Black River. The dike will not be repaired because it is now too far out in deep water. The water was leveling out in the area and it is believed it will not go past Sumner Street.

Two national guard trucks are standing by to evacuate affected persons. Some people are moving clothing out of their homes.

Police ordered people in the following area to leave their homes: Haggar Street south of the Milwaukee Road roundhouse and from the alley west of Copeland Avenue to the Black River.

Within 15 to 20 minutes after the break, water had reached Sumner Street.

One city fireman estimated about eight feet of water surrounds the Texaco tanks between St. Andrew and Island Streets.

Five Texaco and five Murphy Corp. tanks are surrounded by water.

Cause of the dike break is not known. The dike was covered by

heavy plastic sheeting. Mrs. Paul Payne of 423 Sumner St., said she was told about 8:15 a.m. to get out of her home because of the break. She plans to stay with friends on the South Side.

Water is up to the Milwaukee roundhouse on the west side. Plastic sheeting is being placed around the building.

All engines and motors have been removed and other equipment moved off the floor. Two motors on the Milwaukee Road bridge between the North Side and French Island were re-placed. Each is valued at about \$2,500.

The river stage at 11:30 a.m. Monday was 17.1, 5.1 over flood stage. A crest of 18 feet is due Wednesday.

Behind some of the homes in the area where the dike broke, Monday morning washing was hanging on lines. Water was almost up to some of the clothing.

Everett Yerly, of the Yerly Corporation, 701 Sumner St., said water had come up to the back of his office building, and that further high waters probably would force him to evacuate.

He was filling his large tank with water to keep it from floating away. Other tankers were closed so water wouldn't endanger them.

Water pressure forced a break in a French Island dike Monday morning. County Highway Commissioner Oryal Smith reported that about 5:30 a.m. sandbags blew out of a culvert under the Fairbridge Street dike in the 1600 block.

Smith said the pressure on the culvert was so great that the culvert was blown out. The estimated weight about 100 pounds each when wet, "flew out like popcorn."

The department dumped 10 loads of dirt in to seal the break and set another 10 up if more would be needed.

Smith reported that the Goose Island bridge has been damaged by water. "It has sunk on one end and may have to be rebuilt," he said.

The work of building up County Highway 2N in the Town of Onalaska, the only road now open to several hundred Erice Prairie residents, is still continuing.

See FLOOD, Page 2

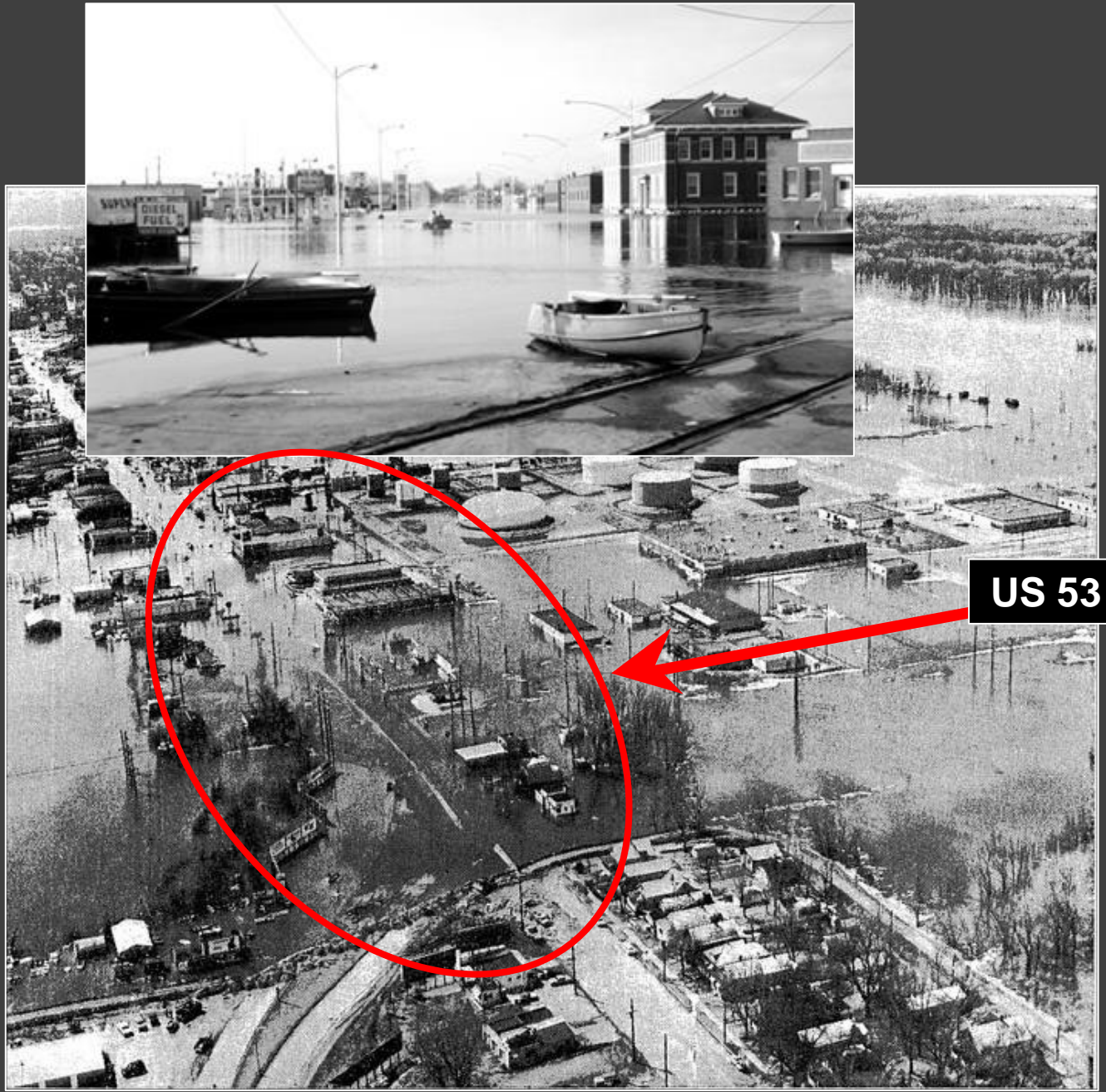


TO THE RESCUE—When a dike broke on the North Side Monday morning Doug Kurtz, 16, came to the rescue of Pam Wright, 15. A piggyback ride kept her feet dry.—AP Photo.



ARROWS INDICATE AREA WHERE DIKE BROKE MONDAY  
Center Oil Storage Tank Has Tipped Slightly.

—AP Photo





# Bicentennial Expressway (1970's)

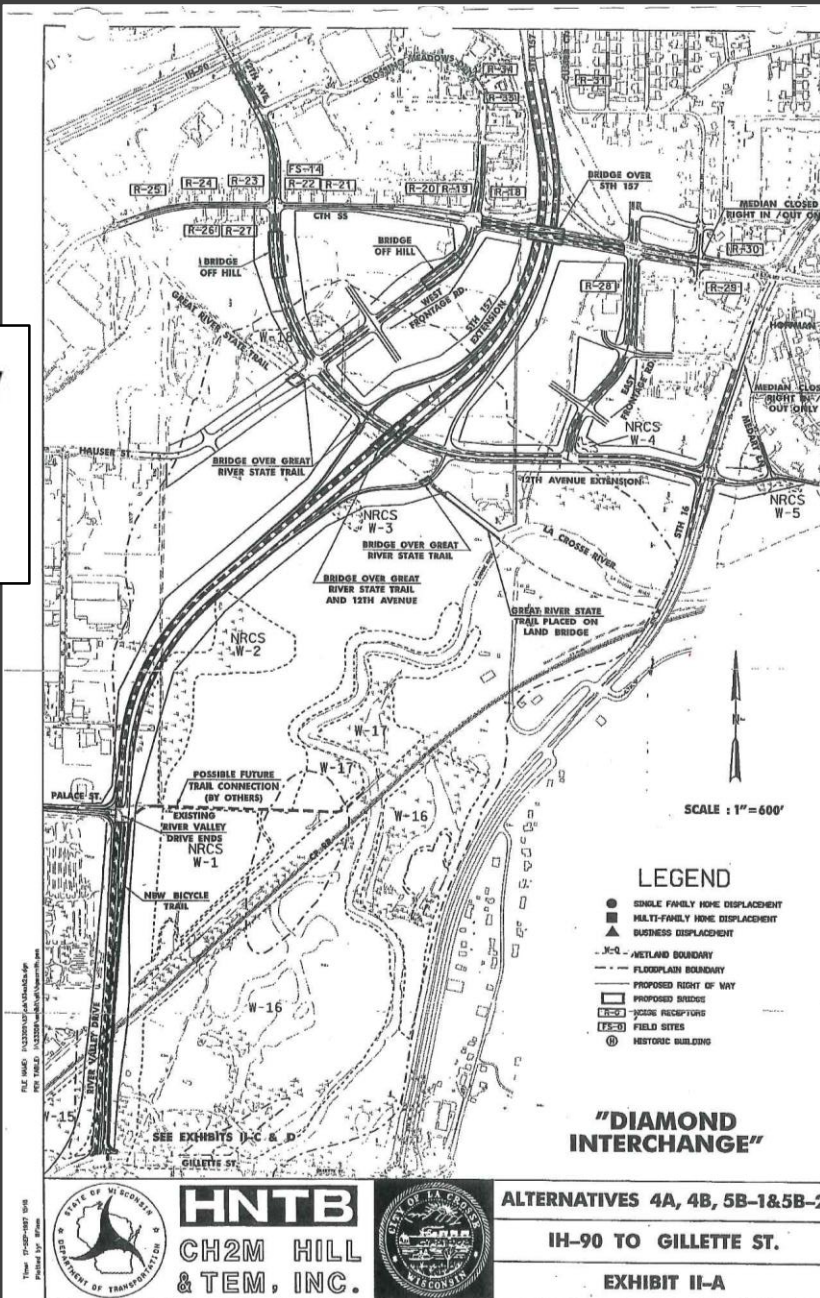
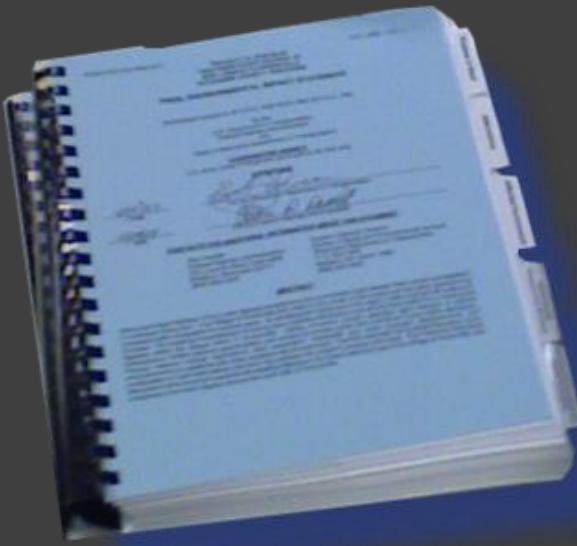




1980 - 2000

## Paving the way

DOT unveils plan for proposed  
La Crosse north-south corridor



## Leaders OK transportation plan for area

① Lax - Transportation - General  
② Lax - Streets - North South Corridor  
Lax Rib 2-19-98 D-1  
By REID MAGNEY for the plan, he made it clear he

## Panel backs La Crosse's corridor plan

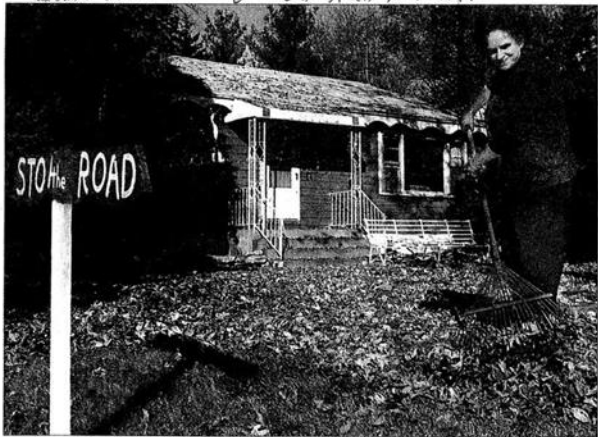
✓ Lax - City Planning Lax Rib 1-24-97 A-1  
■ No surprise: Backers, critics say  
main fight might be in Legislature

1980 - 2000

## Paving the way

DOT unveils plan for proposed  
La Crosse north-south corridor

## Homes or highway?



BETTY SIMPSON, 73, is against a proposed north-south road and has a personal reason for her view: She will lose her home in the Indian Hill neighborhood if the road is built.

Indian Hill residents would lose homes to road

TODAY  
A Town Hall Meeting  
NORTH-SOUTH ROAD

THE LA CROSSE TRIBUNE and News 19 are sponsoring a town hall meeting on the proposed north-south road at 7 p.m. today at UW-La Crosse's Cleary Alumni Center. The show will be broadcast live on News 19.

NEWS 19  
Your Hometown Team

ON NEWS 19: Rush-hour rides with a commuter on the 10 p.m. report.

COMING FRIDAY

LA CROSSE

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## 'We hope the mayor is listening'

Livable Neighborhoods hands in 3,500 signatures for north-south road referendum

## North-south road divides La Crosse

By JOAN KENT

La Crosse Streets North-South La Crosse Tribune 6-21-98 A-1  
plan, and by a phone survey taken in April by

## Group to road foes: Propose alternative

La Crosse Tribune 7-19-98 C-1  
By JOAN KENT  
Of the Tribune staff

La Crosse Streets North-South Corridor  
publish an action agenda with ideas for alternative transportation, said president Kevin Mack. The agenda will this campaign is about jobs, progress, preservation and safety." In addition to the industrial park,

Unitarians slate road debate

## Group links downtown growth with better interstate access

By MINDA MAURER  
Of the Tribune staff

La Crosse Tribune 9-25-98 D-1

La Crosse Streets North-South Corridor

There are many positive signs of growth in downtown La Crosse send the message to prospective investors that downtown La

## Exploding the myths about the road

### Land use

La Crosse Tribune 6-25-98 A-10  
La Crosse Streets North-South Corridor  
Continued from A-1

something for everyone, and the 5B-1 Alternative will provide for the long-term economic, social, recreational and environmental needs of our area," he said.

"Over the past 10 years, various groups and individuals have given their input on what kind of transportation system will serve the needs of our area," Tracy said. "And while there has not been universal agreement on all points, there has been a



Erik Daily of the Tribune staff



# 1998 Referendum

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## ROADBLOCK

City voters reject north-south road



**YES**  
11,951

**NO**  
7,076

"NOW I CAN KEEP MY HOME," said Indian Hill resident Betty Simpson as she hugged Livable Neighborhoods president Kevin Mack Tuesday night at Jules in downtown La Crosse. City residents rejected Wisconsin Department of Transportation proposals for a new north-south road through La Crosse by overwhelmingly telling the Common Council not to pay the highway construction.

By JOAN KENT  
Of the Tribune staff

La Crosse voters said loud and clear Tuesday that they don't want a new north-south road.

The vote on the referendum resolution, which blocks a new road, was 11,951 for the referendum to 7,076 against it. A "yes" vote opposed the road. A "no" vote favored it.

Road opponents celebrated victory at Jules coffee shop, 327 Pearl St., toasting wine and coffee, sharing hugs and applauding one another.

"This is one of the greatest days in the history of the city of La Crosse, and you all contributed to this victory of the people," said Chip DeNure, a road foe who contributed about \$1,800 to the campaign.

"This has renewed my faith in the democratic process and in the fact that vision and belief and philosophy and soul do make a difference because that's what this was all about," said

Vote binds Common Council for two years / A-8

Carol Erickson, an organizer and former president of Livable Neighborhoods.

"Now I can keep my house," said Betty Simpson, who lives on Indian Hill, which was in the path of the road. "It's wonderful. Now I can sleep pretty good tonight. The people all just knew what was right."

"The only thing that is going to get tweaked is the mayor's nose," Common Council Member Charles Clemence, a member of Livable Neighborhoods, said referring to Mayor John Medinger, who supported a new road. But Clemence said Option 5B-1 proposed by the Wisconsin Department of Transportation needed to be tweaked in segments.

The mood at the People for

See ROAD, A-8

### DECISIONS

■ **TOWN OF CAMPBELL:** Voters back a proposed deal in which the town would buy water from La Crosse.

■ **TOWN OF ONALASKA:** Voters said the town should participate in a pool project with Holmen but refused to approve spending \$80,000 on the project.

■ **SPARTA:** With eight of 10 precincts reporting, voters in the Sparta School District had said yes to a nearly \$30 million referendum, by a vote of 2,575 to 1,612.

■ **BLACK RIVER FALLS:** With five of 19 precincts reporting, voters in the Black River Falls School District rejected a \$10.575 million proposal.

■ **VIROQUA:** Voters in the Viroqua School District rejected a \$4.2 million auditorium and addition proposal.

## Road: Opponents prevail in vote

Continued from A-1

Community Solutions gathering at 525 S. Third St. was somber.

"If this vote had been last spring, the vote would have been even more against a road," said PCS spokesman Lee Rasch. "We did a good job of getting our message out. I think we did the best we could, and I believe everyone did the best they could to make it a positive message. I am proud of the community that it took a very intense issue and debated it thoroughly. It was a very positive discussion of a very complex issue."

"The road affects the marsh and neighborhoods, and there is a cost to it," said fellow spokesperson Deb Suchla. "It impacted many hot spots, and that affected the voters' choice."

Medinger was philosophic. "I saw the yes vote coming, but I didn't think it would be that big," he said. "I love passion in politics, and the passion was on the side of the (people against the road)."

"This was a clear mandate about 5B-1, because both sides focused on that," he said. "I have received the message that people in this community do not want 5B-1."

"This was a very parochial vote tonight," he said. "The yes people were very good at convincing people that it was not good for the city. But we can't put up a wall around the city of La Crosse."

I saw the yes vote coming, but I didn't think it would be that big. I love passion in politics, and the passion was on the side of the (people against the road). This was a clear mandate about 5B-1, because both sides focused on that.

— Mayor John Medinger

Some areas of the city that would have been affected by the road voted 3-to-1 against it. In the 4th District, which includes Indian Hill, the vote was 488 in favor of the referendum to 127 opposed.

In the 7th District, which includes a segment of Sixth and Seventh streets, where the road would have become a one-way pair, the vote was 607 for and 225 against it. In the 11th district, which also includes Sixth and Seventh streets, 527 voters cast ballots for the referendum to 140 against it.

The University of Wisconsin-La Crosse area, District 5, voted more than 7-1 against the road.

The four North Side districts all supported the referendum. Only three South Side districts opposed it. But the margins were narrow. In the 15th district, the vote was 741 opposed to 712 in favor. In the 16th district, the vote was 704 opposed to 688 in favor. And in the 18th district, the vote was 763 opposed to 679 in favor.

"People feel strongly about the beauty of this area," Livable Neighborhoods president Kevin Mack said when asked why he thought the vote was so overwhelming. "They have seen 50 years of the consequences of highway projects in other cities and they didn't want to see the same thing happen in this beautiful place."

The election marked the end of a long debate over whether a fourth north-south road would help or hurt La Crosse.

Livable Neighborhoods, which opposed the road, petitioned last summer to put a binding referendum on the ballot. The state's referendum law, which requires that referendum resolutions be positive statements, caused the situation in which voters had to vote yes if they oppose the road and no if they favor it.

The city's share of the DOT option on the table, called 5B-1, would have been \$3 million to \$10 million of the total \$80 million cost. State and federal funds would pay the rest.

Road supporters argued that the road would be a lifeline from the interstate, which the city needs to keep from withering as development increases north of Interstate 90. Residents have not indicated a willingness to change their lifestyles to incorporate alternative means of transportation such as biking, they said.

Organized labor joined with business leaders in the coalition supporting the road. Their slogan was, "Now you know, vote no."

Opponents argued that taking the homes, businesses and marsh necessary to build the road is not worth the few minutes it will save drivers, and said residents and leaders must look to other means, including more use of alternatives such as car pooling, to alleviate congestion on the three existing north-south roads.

Their slogan was, "Vote yes. Stop the road."

Despite the passion with which both sides presented their views, the debate on the referendum was for the most part civil. PCS far outsold road foes, and produced television, radio and newspaper ads. Road opponents campaigned with activities including marsh walks and a Monday night marsh candlelight vigil.

## Road foes agree transportation problems remain

① Lax streets - North-South ② Lax Transportation - general ③ Lax Lake Monona

# 2000 - Present

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## North-south road still is part of long-range plan

By JOAN KENT  
Of the Tribune staff

A city planner says the need for a new north-south road in La Crosse still exists, two years after a heated referendum blocked the city from spending money on the project.

The debate might heat up again. The north-south corridor project remains part of a long-range transportation plan that will be presented Tuesday at an informational meeting of the La Crosse Area Planning Committee. "The (November 1998) referendum

The referendum indicated the city can't spend any money on (a north-south road), but that doesn't remove it from the plan.

— David Truckenbrod, planner

indicated the city can't spend any money on (the road), but that doesn't remove it from the plan," said David Truckenbrod,

city senior planner. "It has been in the plan since it was adopted."

Data shows the road is needed, and the fact that residents did not feel the need, he said. "If that's the position the public wants, then we need to see how we can eliminate the need. We have to change the lifestyles or traffic patterns."

Kevin Mack, a leader of Livable Neighborhoods, which opposed a new road, said the group likes all aspects of the transportation plan except the

See ROAD, A-7

### MEETING

■ **WHAT:** Public information meeting  
■ **TOPIC:** Long-range transportation plan  
■ **WHEN:** 6:30 p.m. Tuesday  
■ **WHERE:** Auditorium, Main Public Library, 800 Main St.

## Group wants budget for North-South Corridor eliminated

By STEVE CAHALAN  
Tribune business editor



■ **WHO:** Acting secretary of the Wisconsin Department of Transportation, since April.  
■ **PREVIOUS JOBS:** Carlsen had been chief operating officer of the department

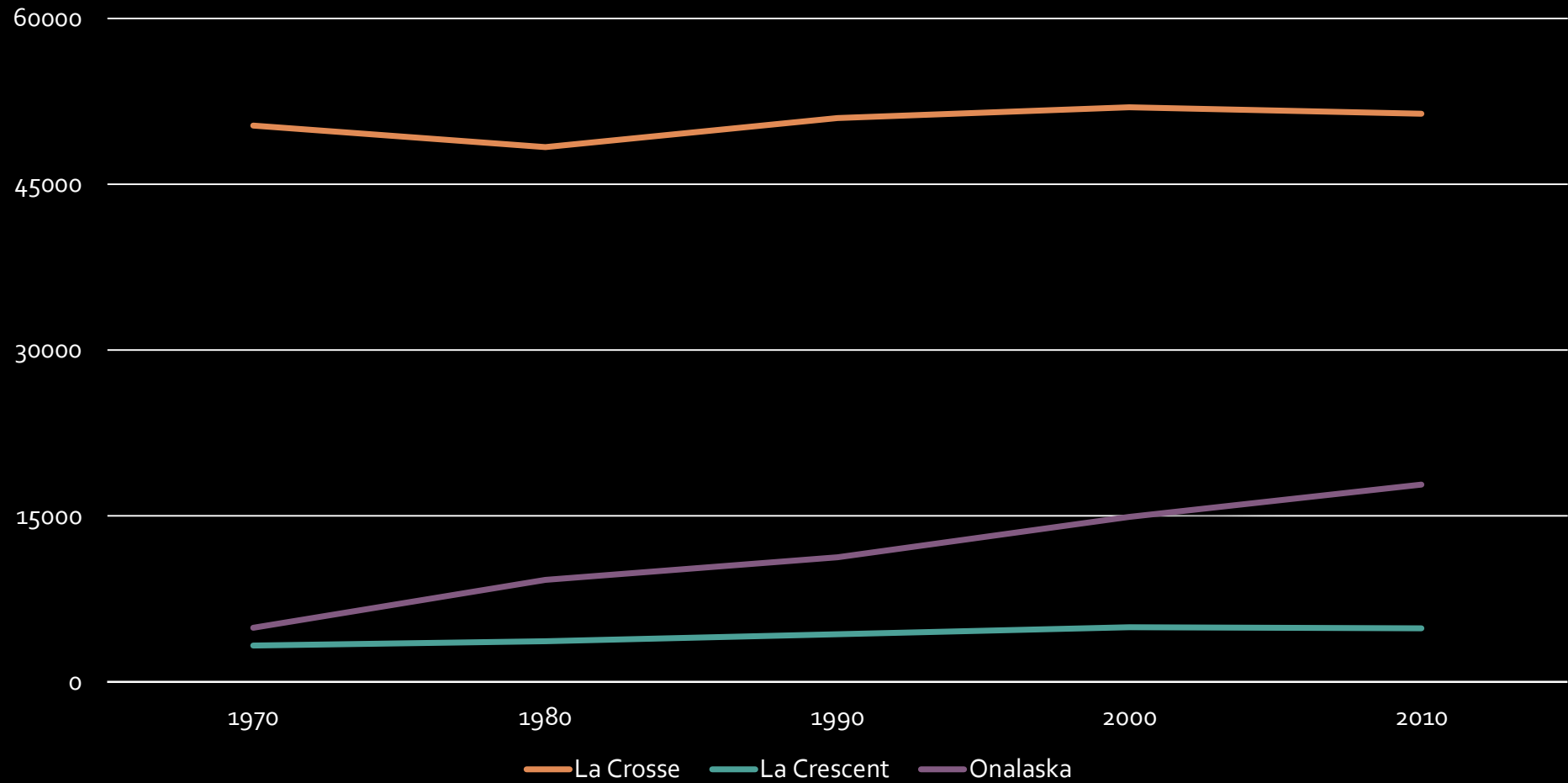
Livable Neighborhoods, which opposed the North-South Corridor proposal that was defeated in a November 1998 referendum, wants the Wisconsin Department of Transportation to quit earmarking state and federal funds for the project.

But the agency will continue to for the time being, DOT Acting Secretary Tom Carlsen said Wednesday during a question-and-answer session after his speech on transportation issues. He spoke to about 45 people at a luncheon hosted by the Greater La Crosse Area Chamber of Commerce at the Forest Hills restaurant and banquet center.

At the time of the referendum, the project's cost was estimated at \$80 million, with \$70 million coming from the state and federal governments and about \$10 million to come from the city of

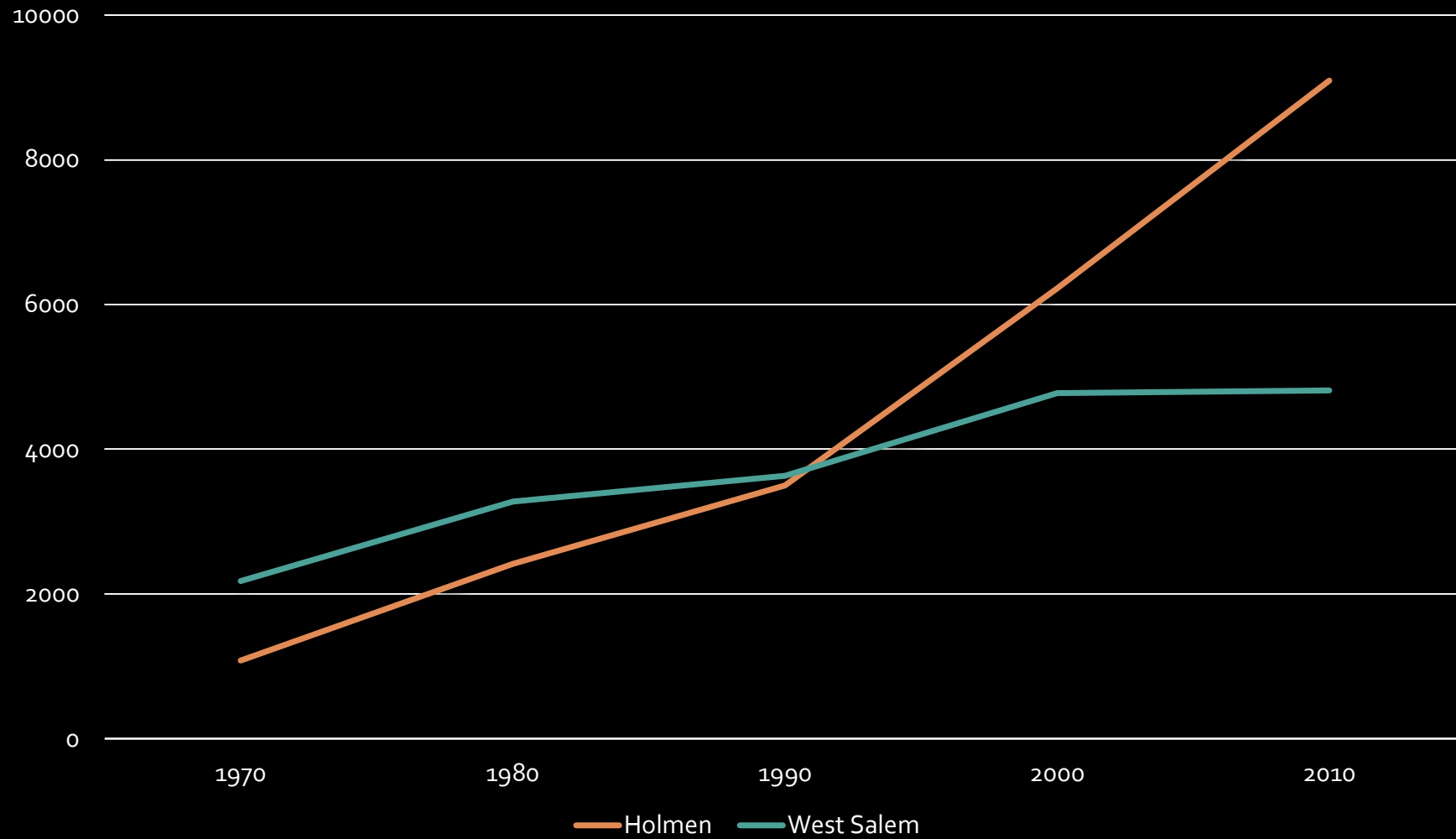


## Cities



*\*Source: US Census Bureau*

# Villages



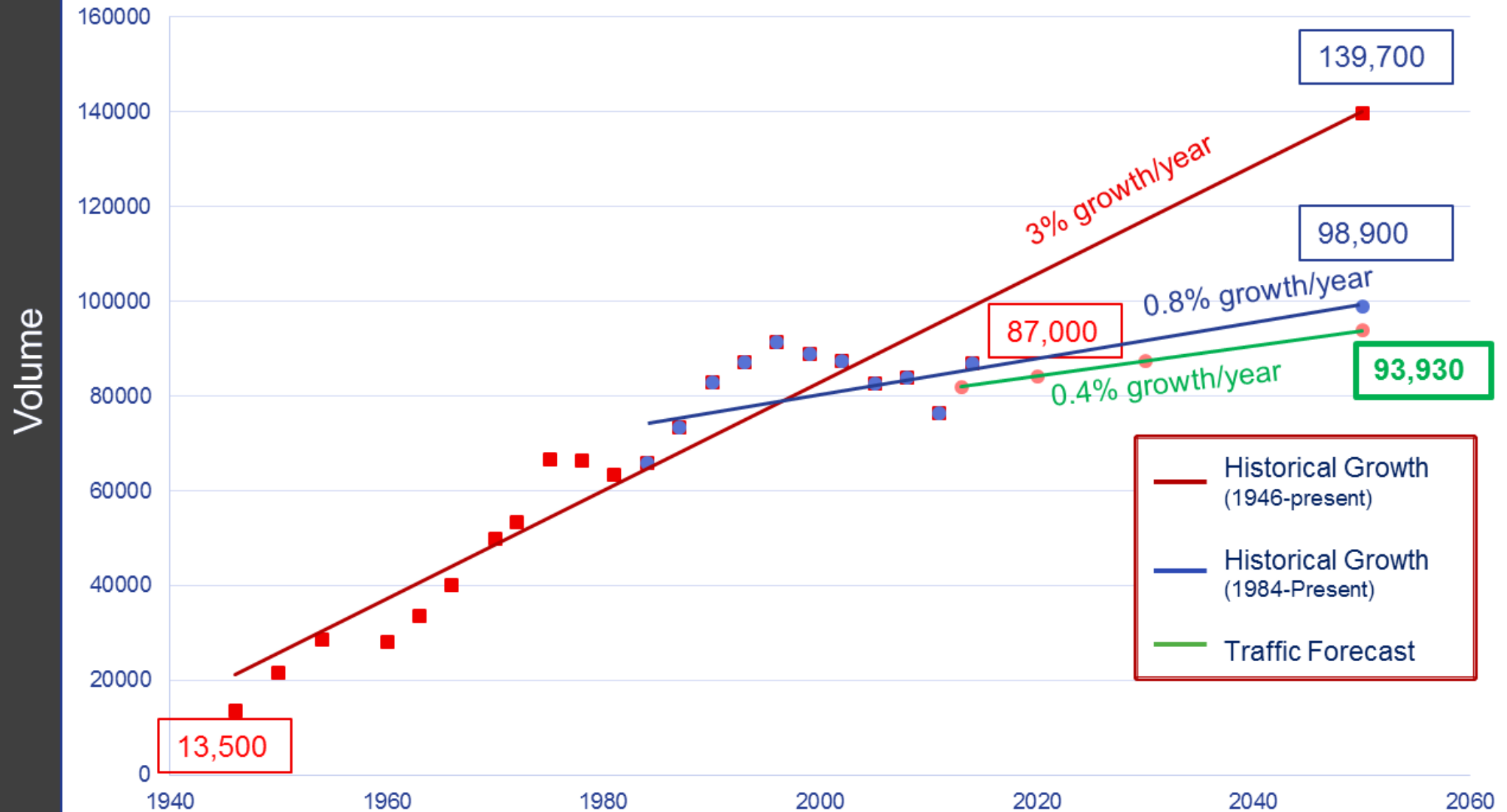
*\*Source: US Census Bureau*



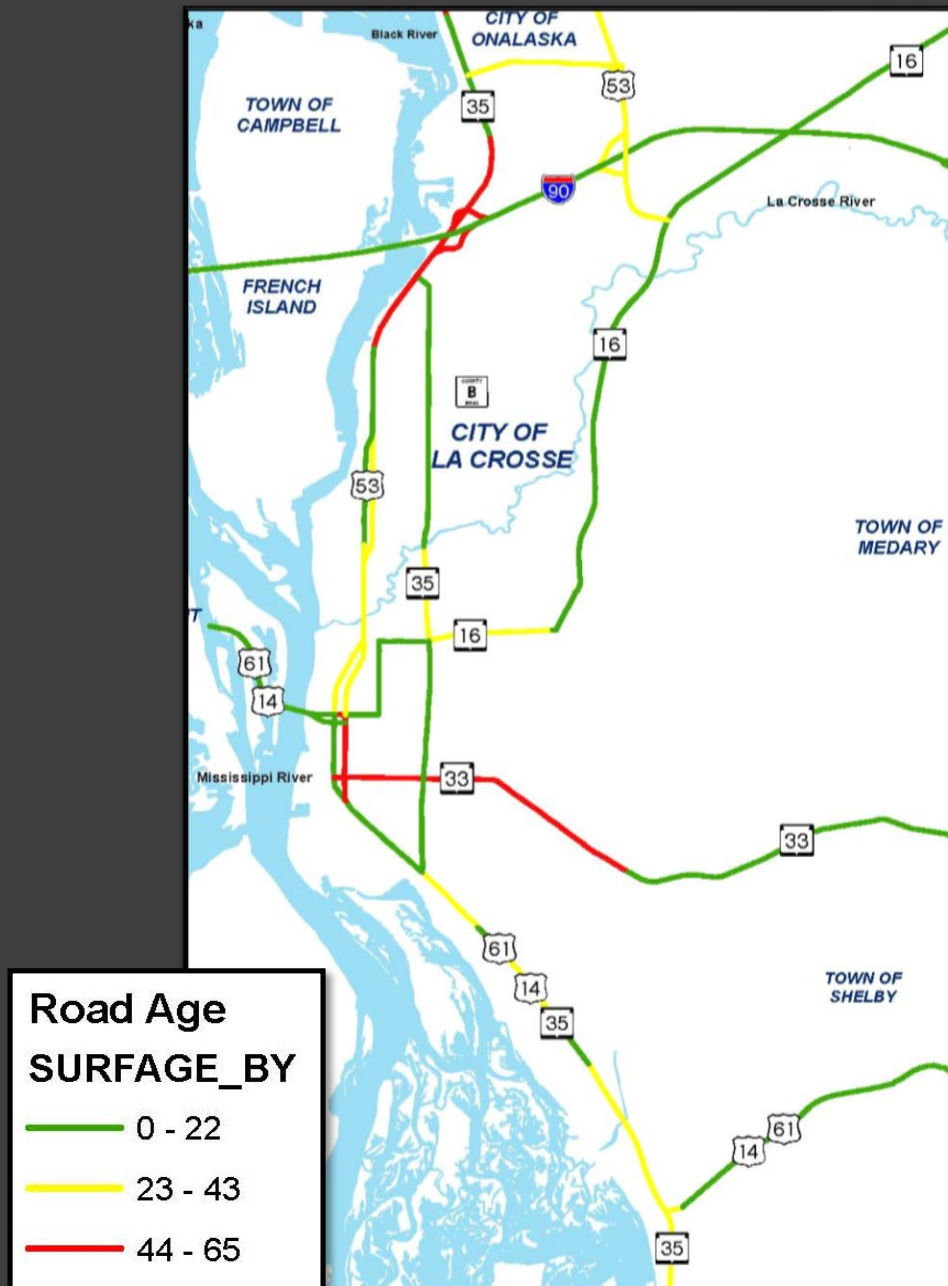
**NOT**  
**HAPPY**  
**BACK**  
**YARD**



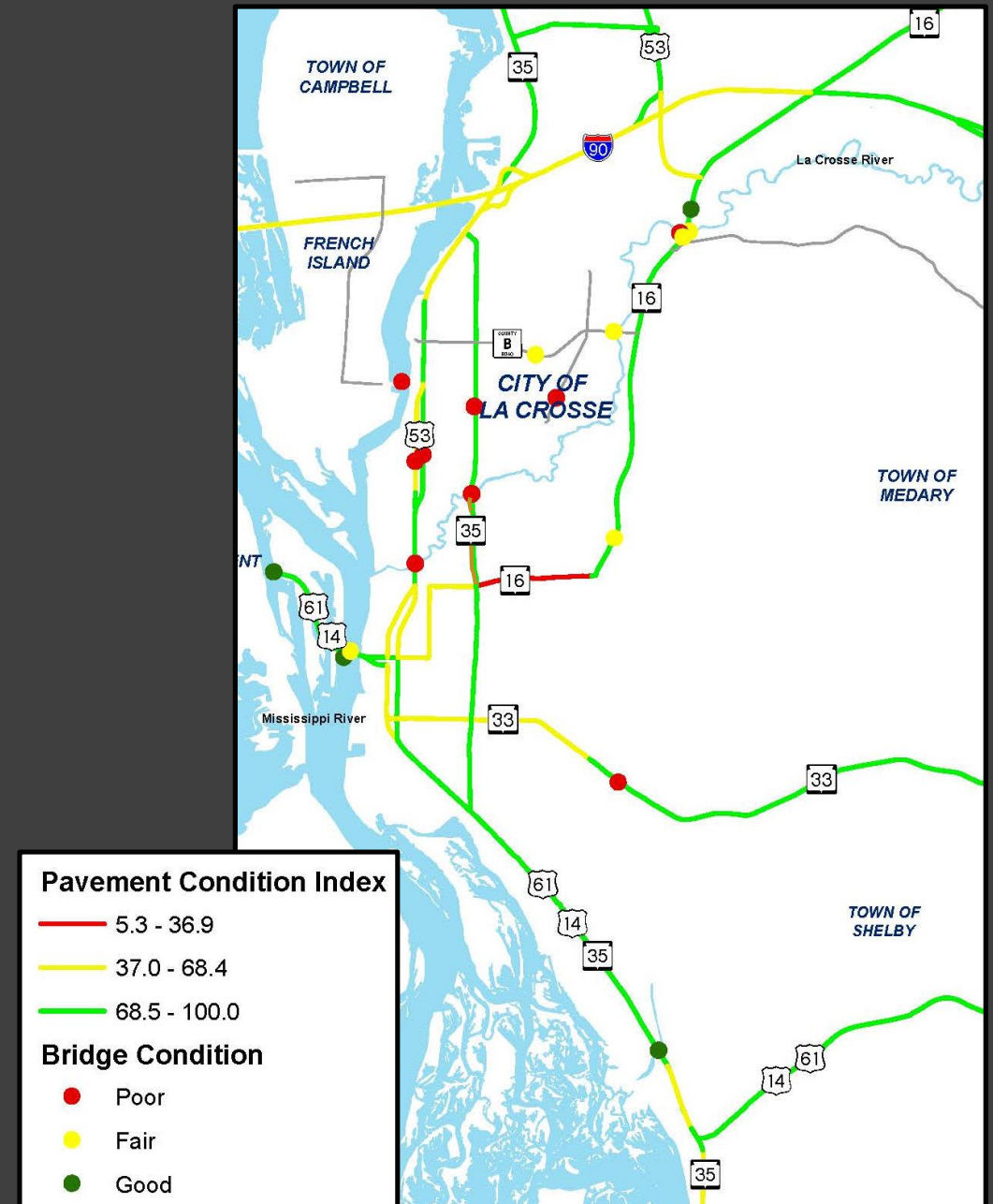
## Growth Trend Lines



## Pavement Surface Age

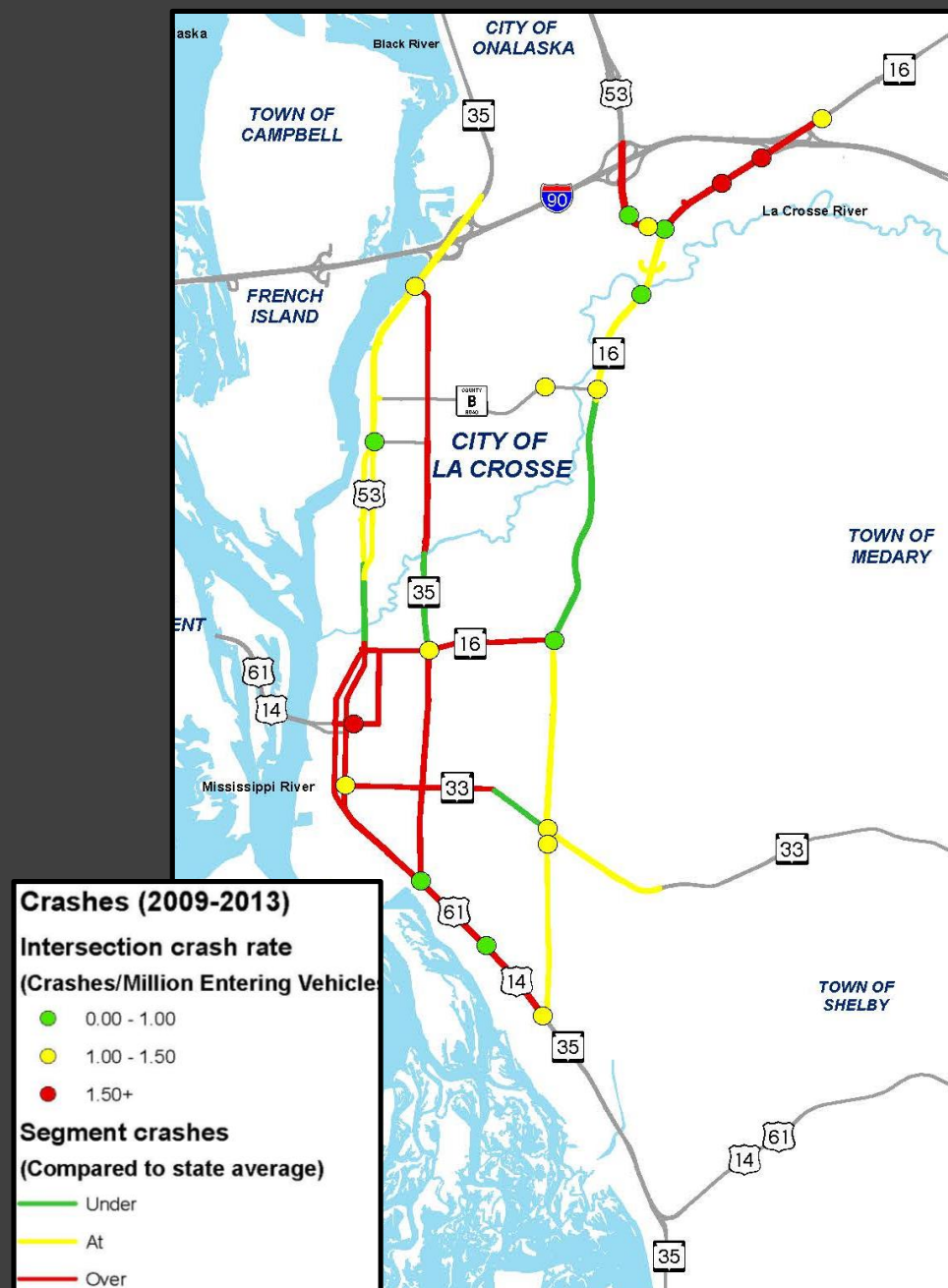


## Pavement and Bridge Condition

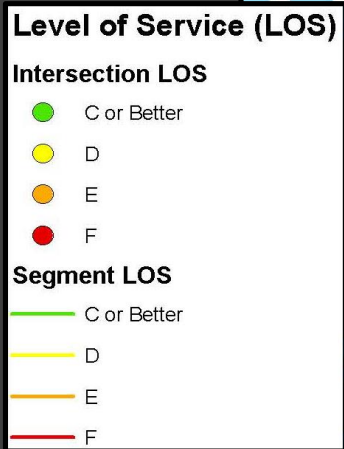
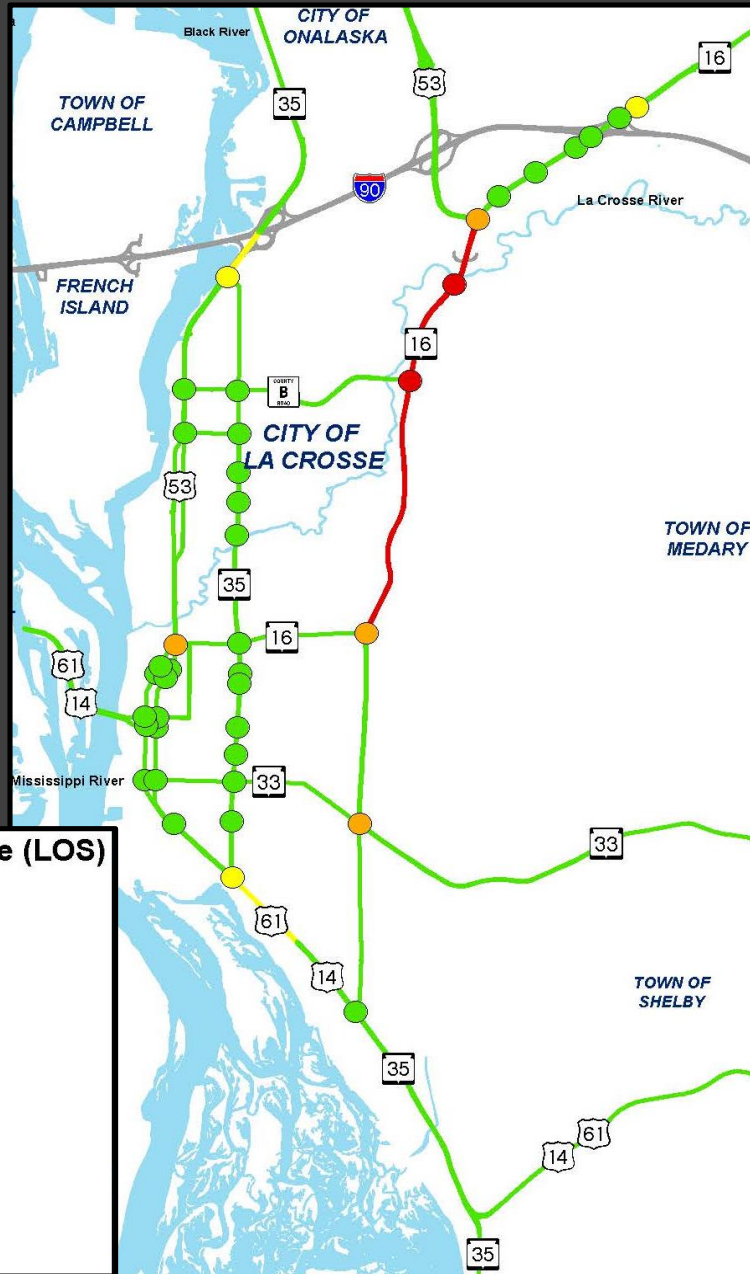




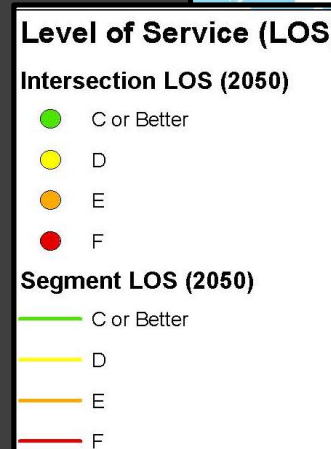
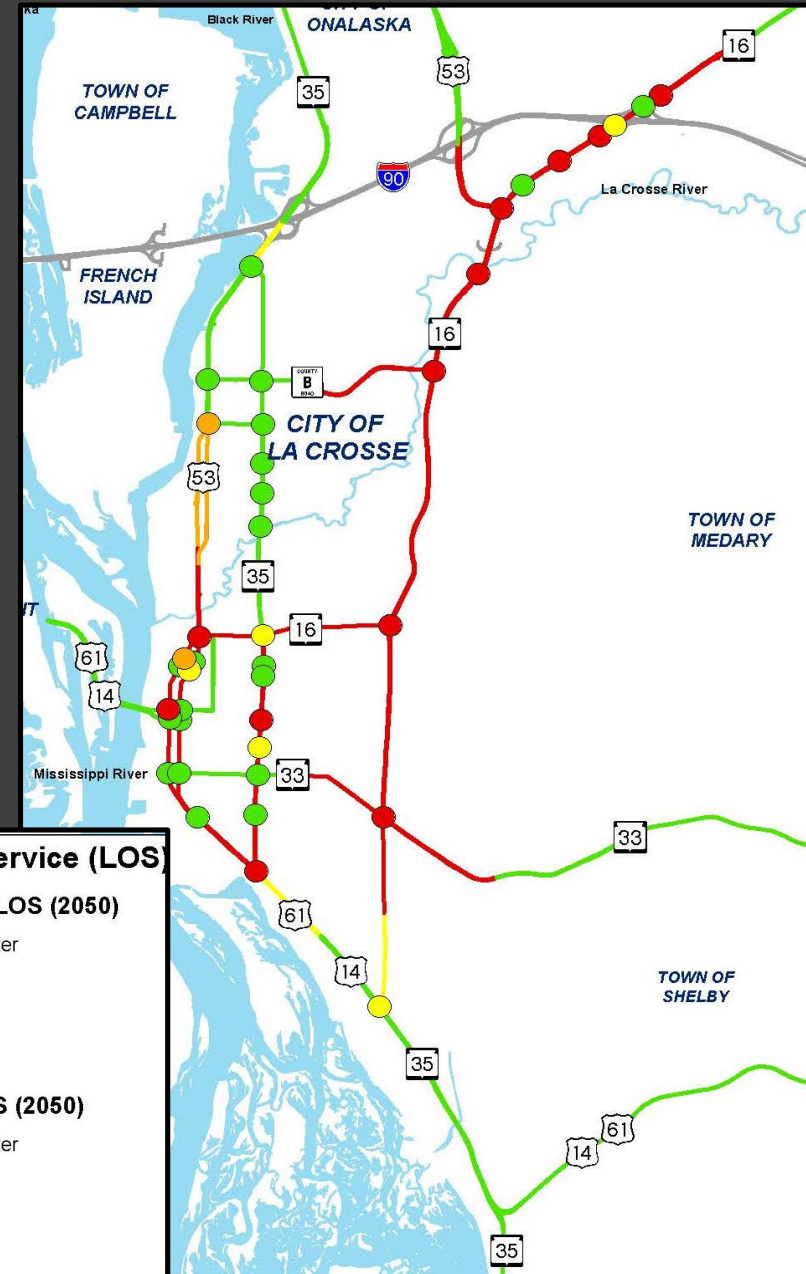
## Existing Crash Rates (2009-2013)



# Capacity/LOS Existing (2013)



# Capacity/LOS Future (2050)

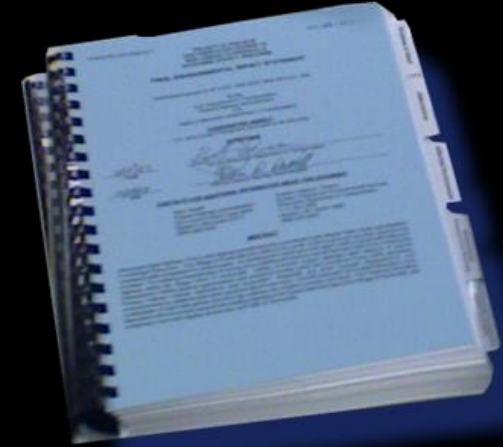
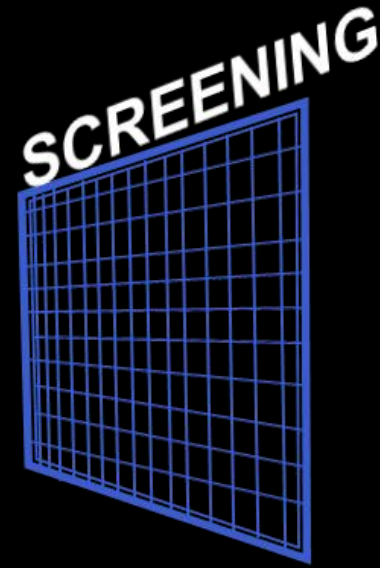
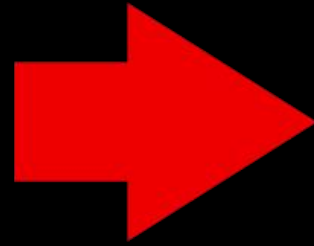




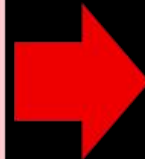
# What is Planning & Environment Linkages (PEL)?

- A collaborative approach to transportation decision making that links planning to National Environmental Policy Act (NEPA) by:
  - Considering the area's long-term environmental, community and economic goals
  - Engaging a broad spectrum of agencies and community stakeholders
  - Allowing the resulting planning data, analysis, products and decisions to be used in NEPA
- A program that promotes tools and resources focused on shortening project delivery time
  - FHWA “Every Day Counts” initiative
  - Limits duplication of efforts during NEPA

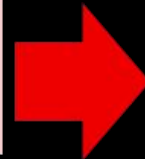




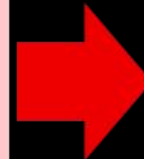
**Develop  
Problem  
Statement,  
Goals**



**Develop  
Objectives**



**Develop  
Strategies  
and Evaluate  
(Screen)**



**Identify  
Strategies to  
Bring  
Forward into  
NEPA**

**2015 (One Year)**



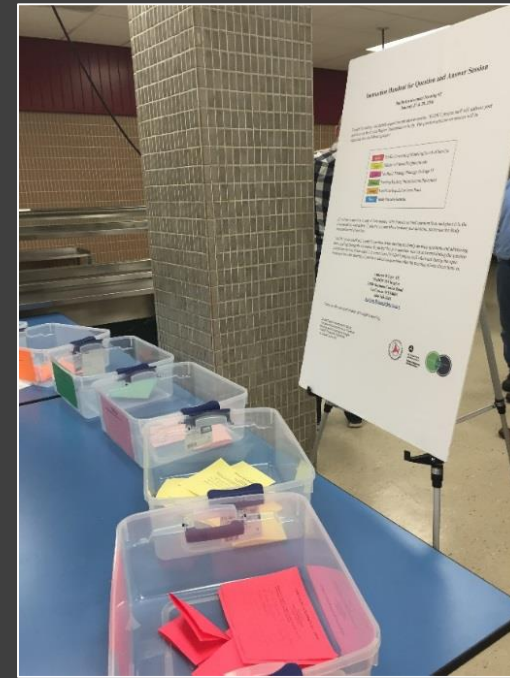
# Project Development Process

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

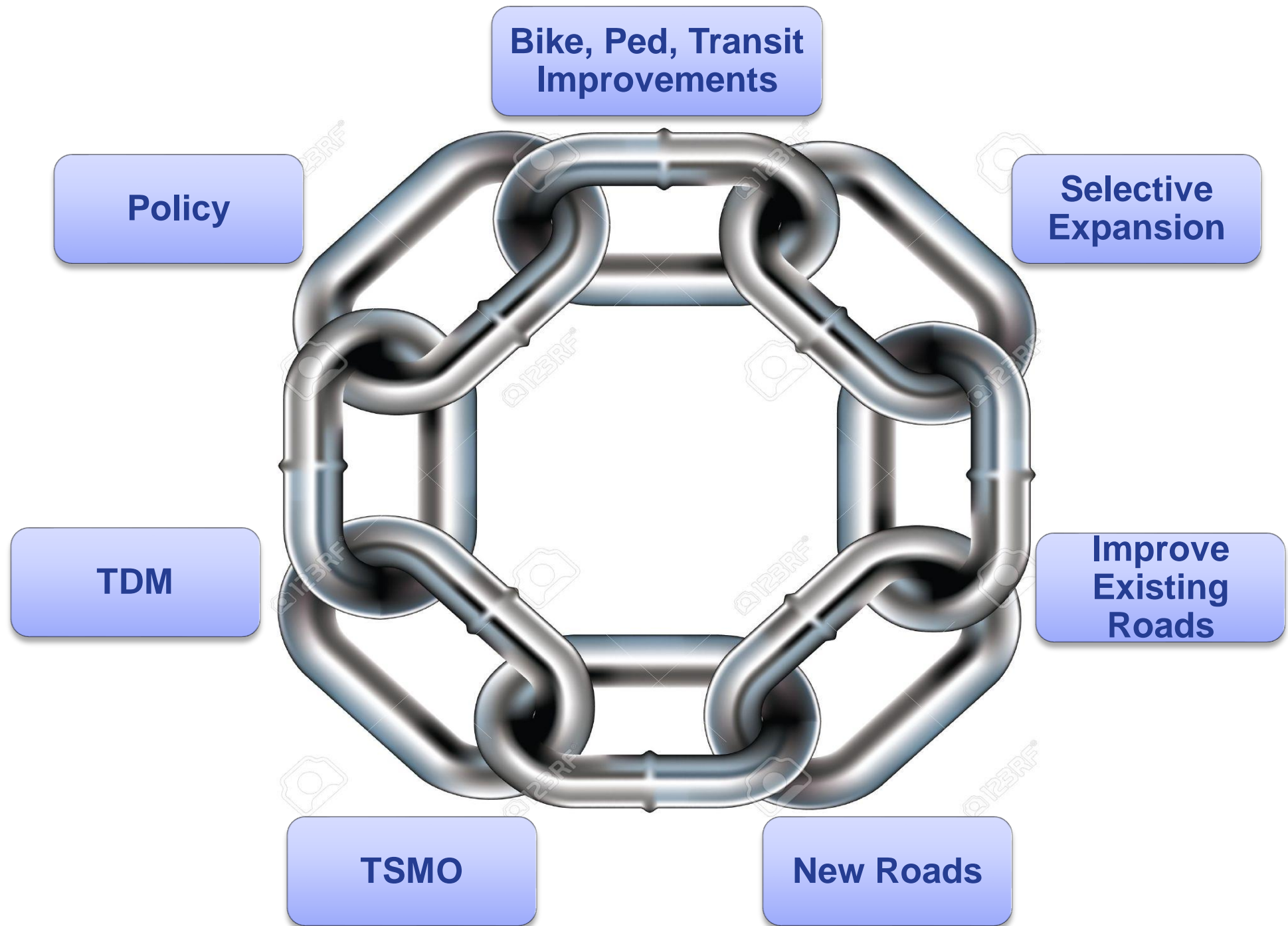
Project Development Process



2016 → 2017 → 2020 → 2023 → 2025







**Strategy Packages**



Goal and  
Objectives

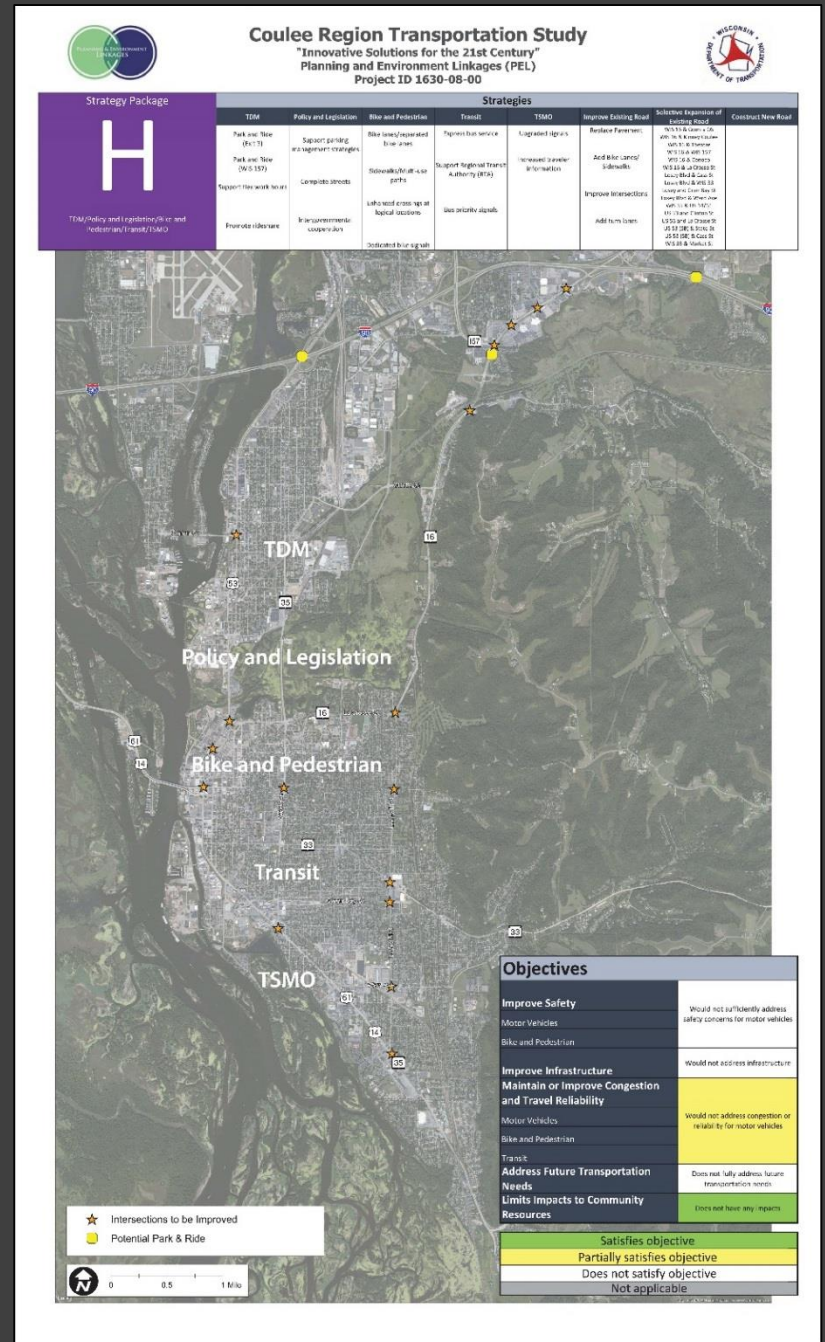
**Recommended  
Strategy Packages**





# Strategy Package H

- Transit Facilities and Improvements
- TDM
- Bike and Pedestrian Facilities and Improvements
- TSMO
- Intersection Improvements
- Policy and Legislation
- Package has the ability to reduce future traffic demand by 4% but this is not enough to meet future needs



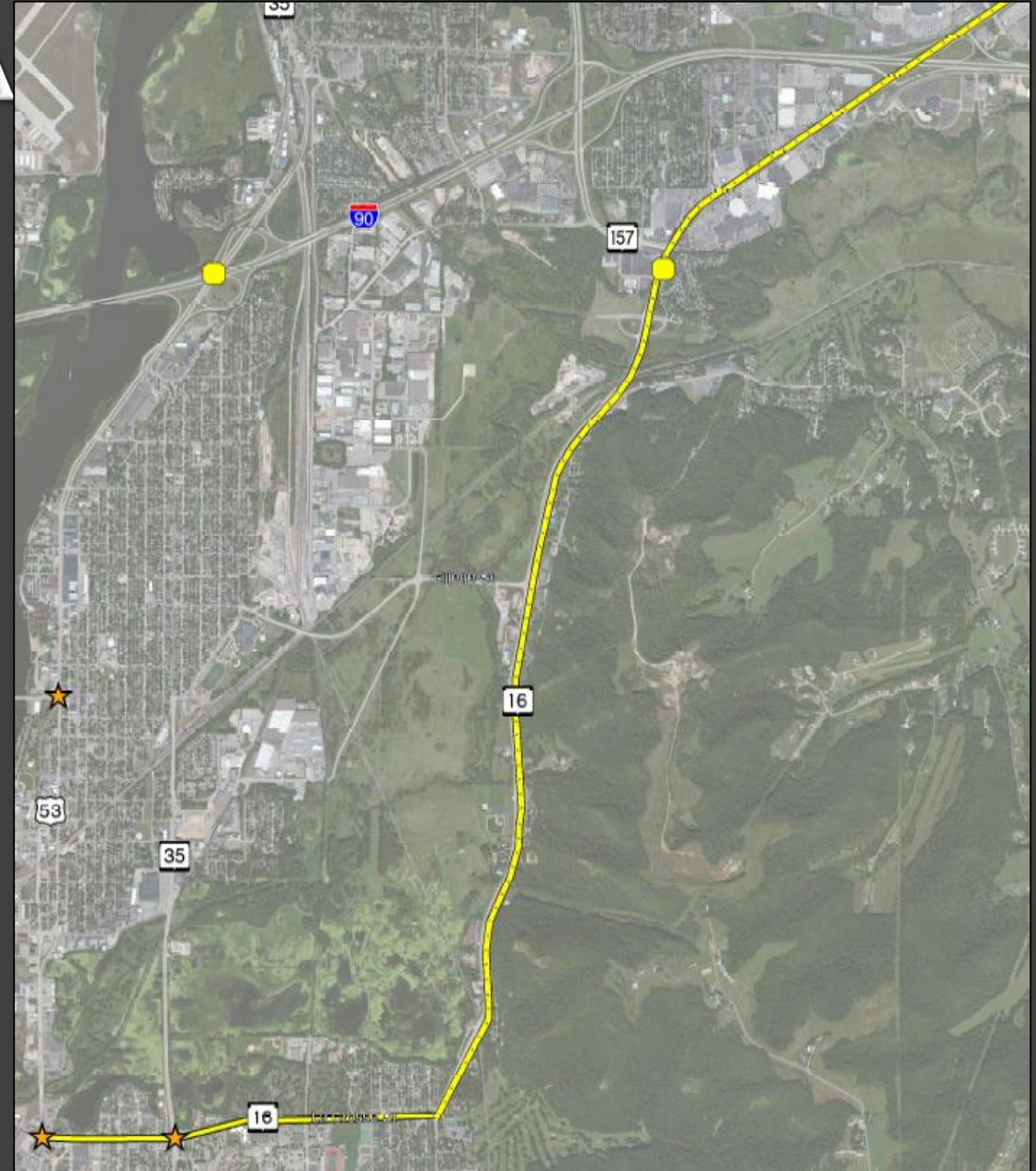




# Strategy Package H + A

## WIS 16 Expansion

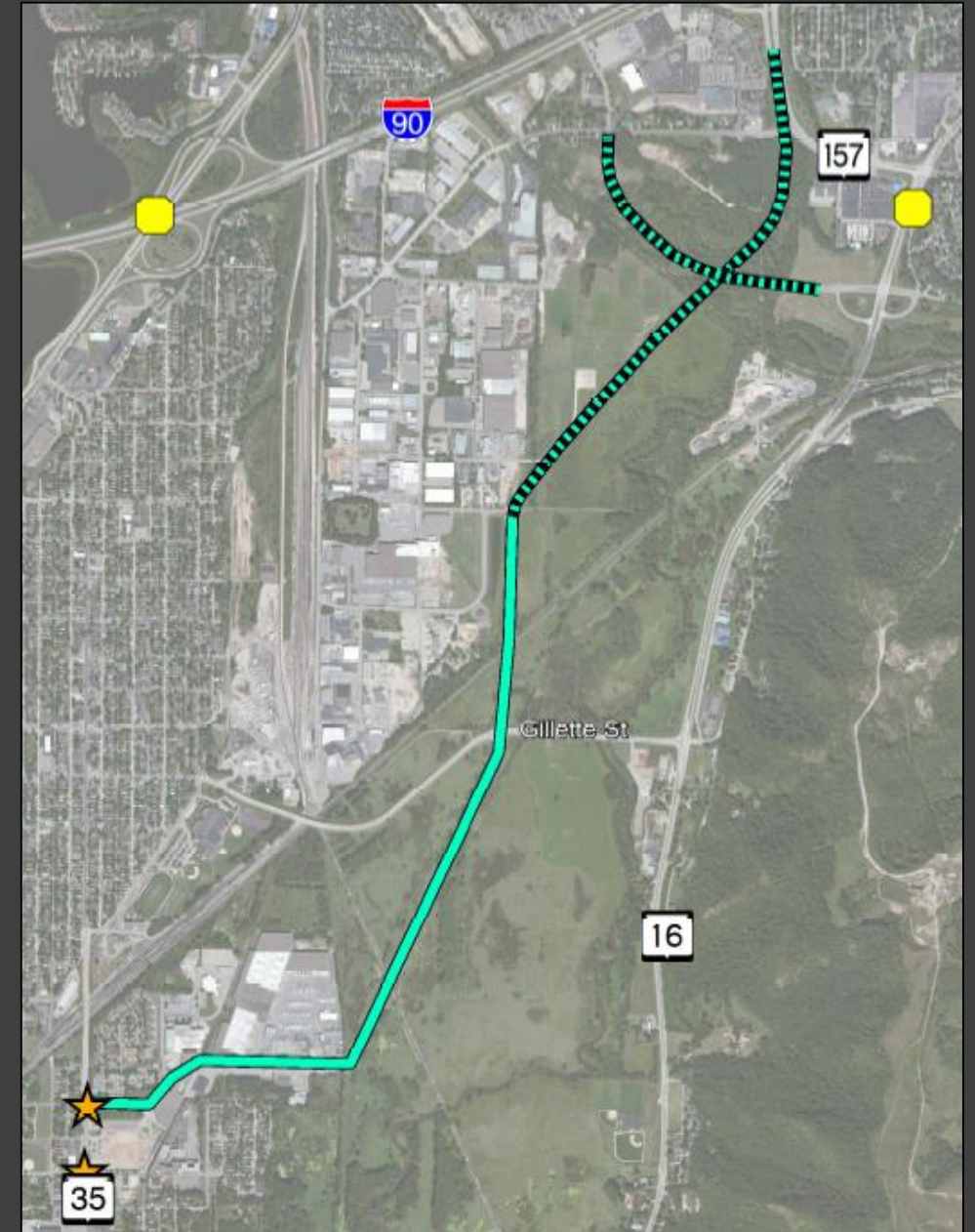
- 6-lane WIS 16 from I-90 to La Crosse Street
- 4-lane La Crosse Street
- 25-45 mph roadways
- Maintains current level of operations on WIS 16
- Some minor operational improvements to WIS 35 & US 53
- Some added operational pressure to Losey Blvd





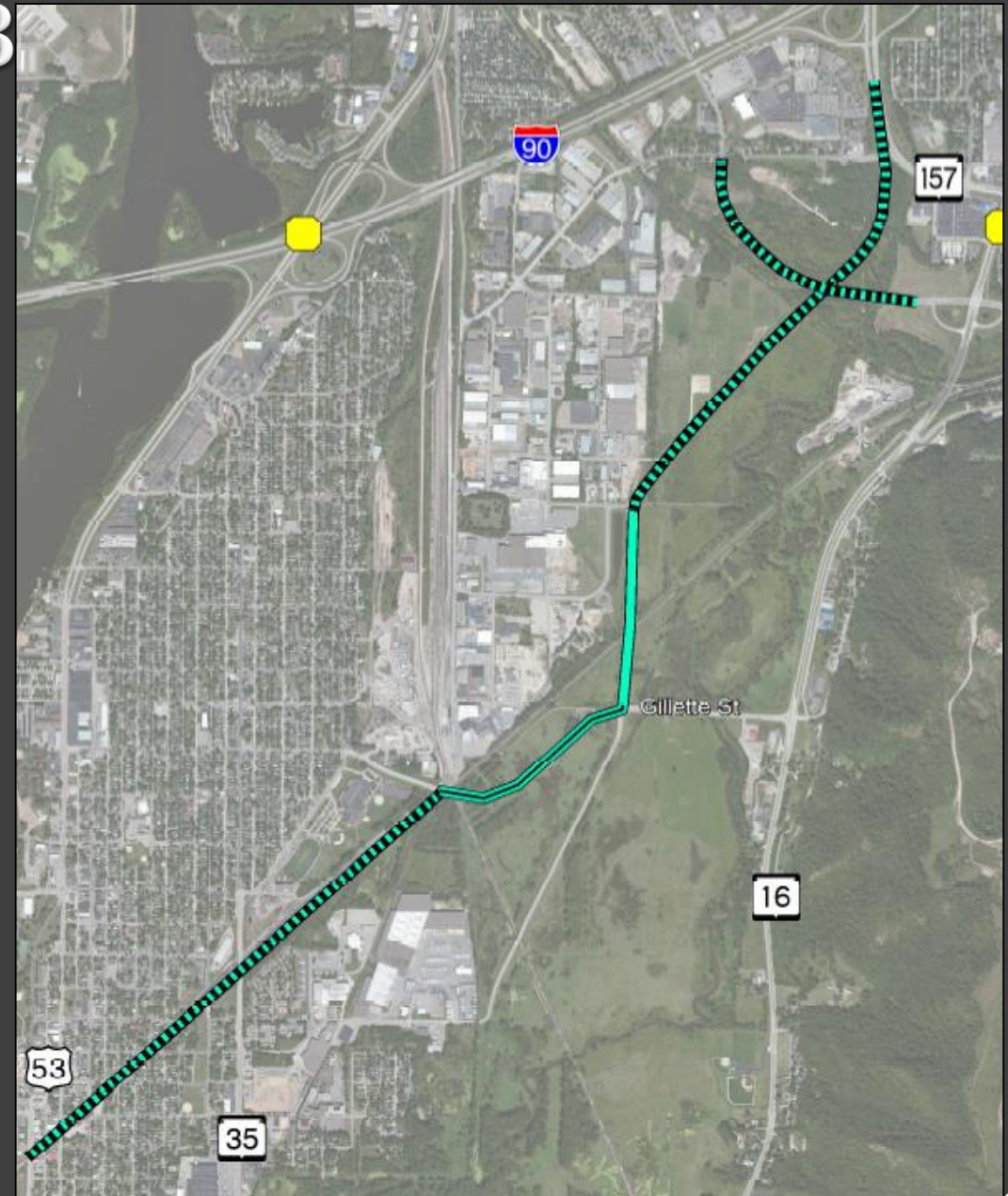
# Strategy Package H + F1 Central Corridor

- Extend US 53 south, connect to WIS 35 at St. Cloud Street
- 4-lane roadway
- 25-45 mph roadways
- Significant operational improvements to WIS 16
- Removes bottleneck at WIS 16 & WIS 157
- Some operational improvements to US 53
- Some added operational pressure on WIS 35



# Strategy Package H + F3 Central Corridor

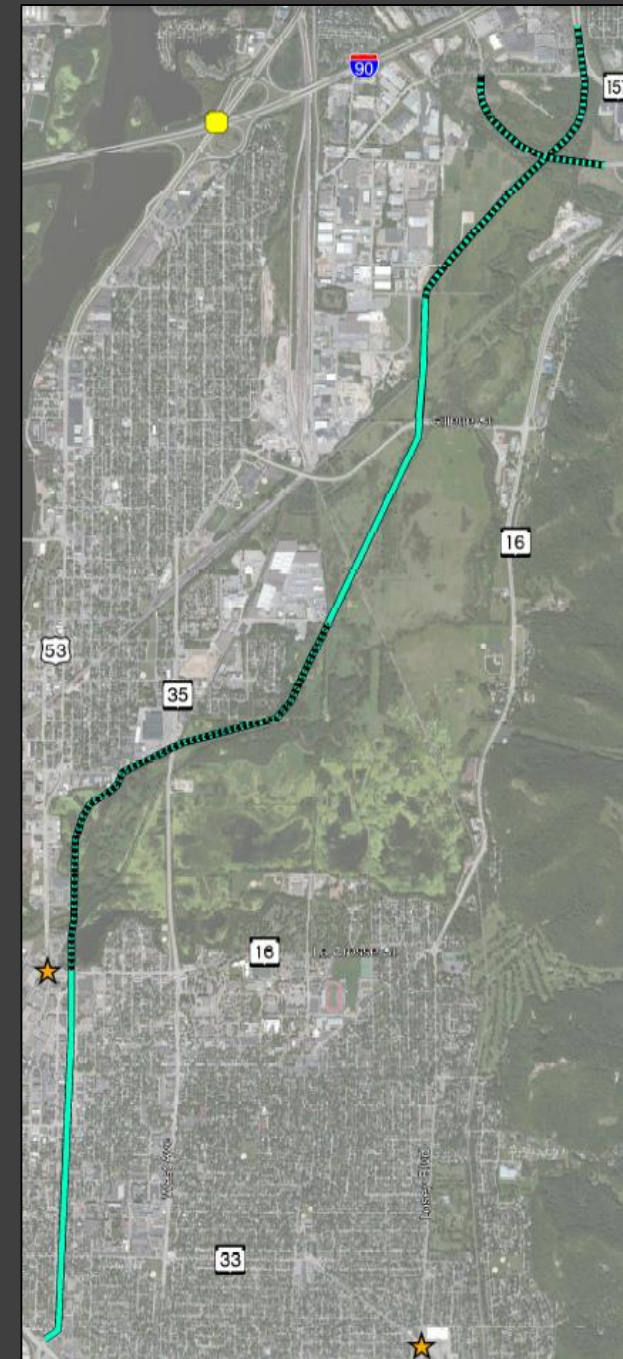
- Extend US 53 south, use Gillette Street to connect to WIS 35 and US 53 along railroad corridor
- 4-lane roadway
- Significant operational improvements to WIS 16
- Removes bottleneck at WIS 16 & WIS 157
- Some operational Improvements to 35 & 53





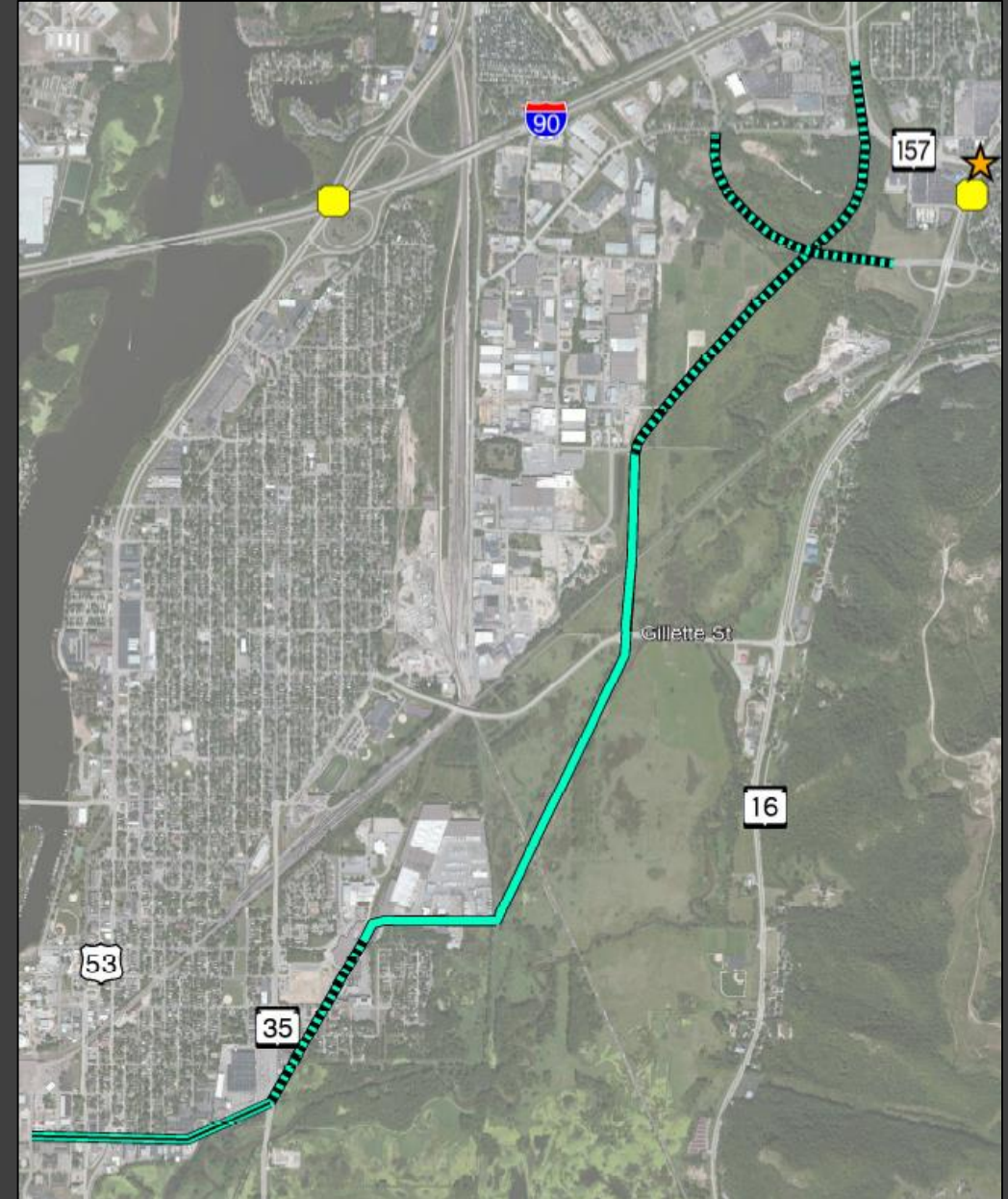
# Strategy Package H + F4 Central Corridor

- Extend US 53 south, cross WIS 35, continue south to US 14
- 4-lane roadway
- 25-45 mph roadways
- Significant operational improvements to WIS 16
- Removes bottleneck at WIS 16 & WIS 157
- Significant operational improvements to WIS 35 & US 53
- Additional crossing of La Crosse River



# Strategy Package H + F5 Central Corridor

- Extend US 53 south, connect to WIS 35 at Monitor Street
- 4-lane roadway
- 25-45 mph roadways
- Significant operational improvements to WIS 16
- Removes bottleneck at WIS 16 & WIS 157
- Some operational improvements to US 53
- Some operational pressure on WIS 35

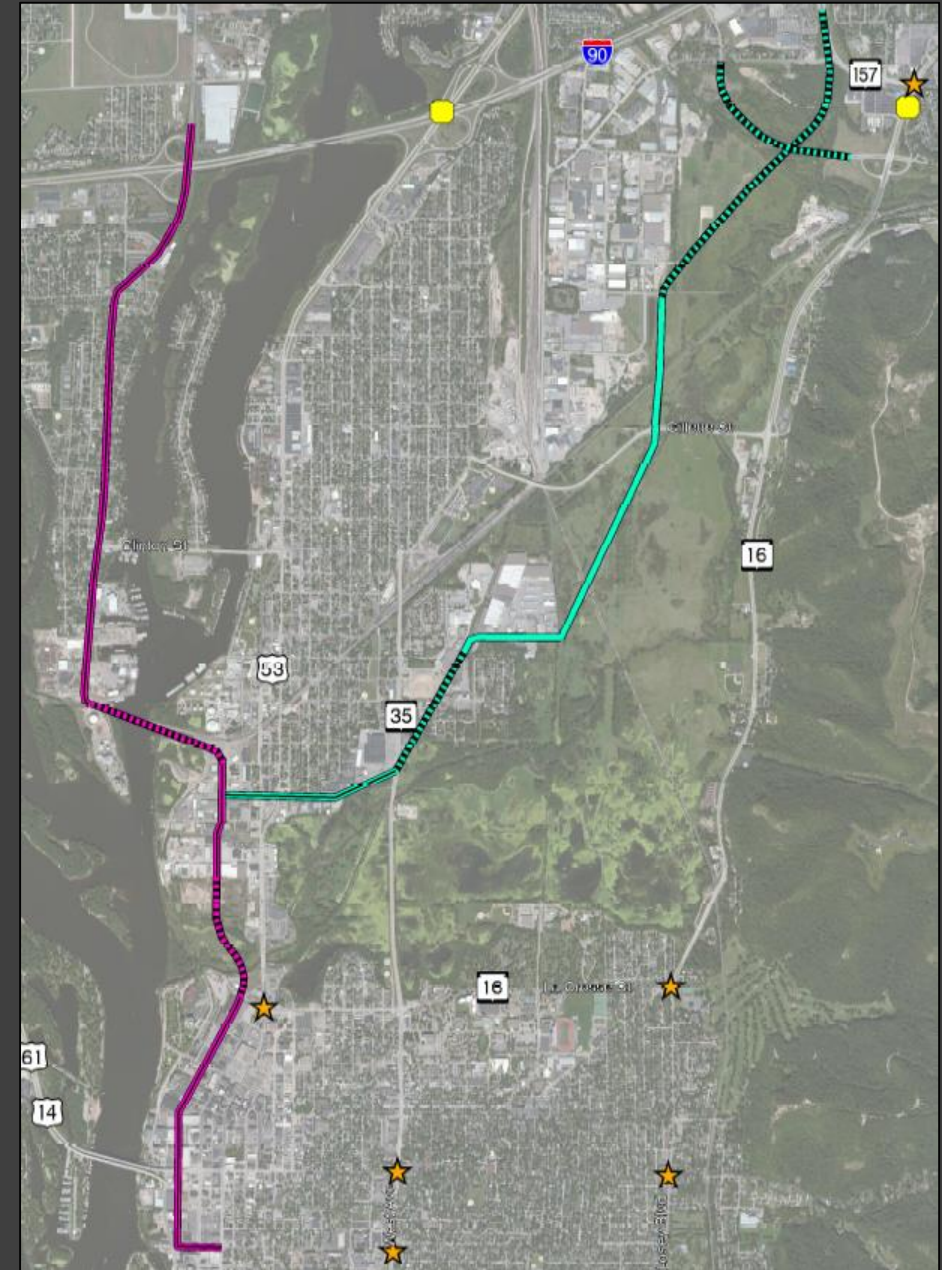




# Strategy Package H + E2 + F5

## Central + West Corridor

- Significant operational improvements to WIS 16
- Removes bottleneck at WIS 16 & WIS 157
- Significant operational improvements to WIS 35 & US 53
- Improves connection to Downtown
- Adds additional crossing of La Crosse River



# 2015 - Present

FUNDING

## WI: Transportation Study Rolls Along

CHRIS HUBBUCH ON JUN 8, 2015

SOURCE: LA CROSSE TRIBUNE

Home / News / Local

### North-South redux? Neighborhood, environmental groups condemn new study

Recommend 158 Tweet G+1 0 Share 2 Print Email



With one north-south artery, Lang Drive, running through the La Crosse River marsh — and an electorate that soundly rejected a proposed second road through the marsh — La Crosse officials were reluctant to sign on to a study by the Wisconsin Department of Transportation DOT. Four of the DOT's proposed solutions to traffic problems include some sort of marsh road to supplement the city's three main north-south roads: Lang Drive, Hwy. 16 and Rose Street.

January 20, 2016 12:00 am • By Chris Hubbuch (150) Comments

### Coulee Region Transportation Study works to engage community again

Recommend 7 f t G + 3

By Tianna Vanderhei, Multi-Media Journalist  
Posted: Jan 25, 2016 4:10 PM CST  
Updated: Feb 08, 2016 4:10 PM CST

CONNECT



Home / News / Local

### Marsh road, French Island connection among options in DOT plan

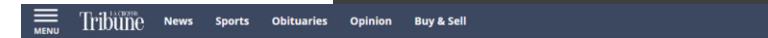
### Transportation plan outlines challenges, strategies for next quarter century

La Crosse Tribune (WI), 2015-08-08

### Transportation project dissects La Crosse

### Marsh group rejects DOT transportation study

### Coulee Region Transportation Study strategy packages



### Planning panel approves transportation study, urges DOT to revisit no-build option

CHRIS HUBBUCH chubbuch@lacrossetribune.com 6 hrs ago 12

### WisDOT rules out no-pave option for La Crosse transportation study

CHRIS HUBBUCH chubbuch@lacrossetribune.com Sep 2, 2016 18

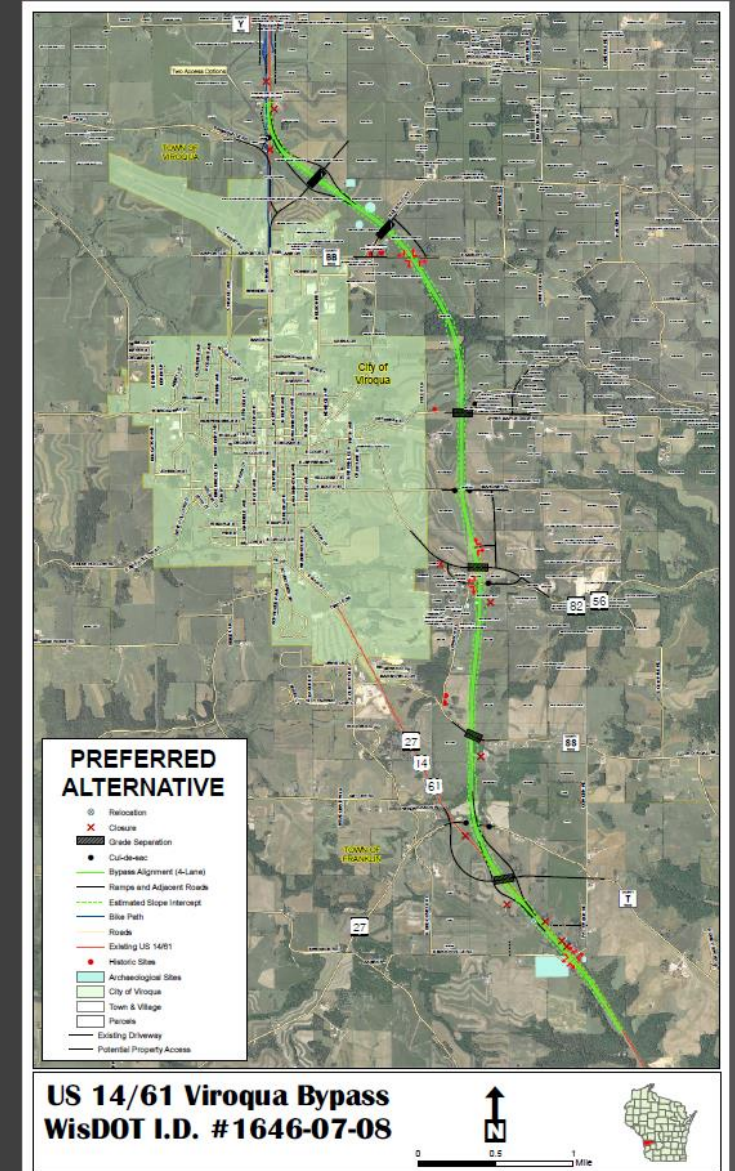
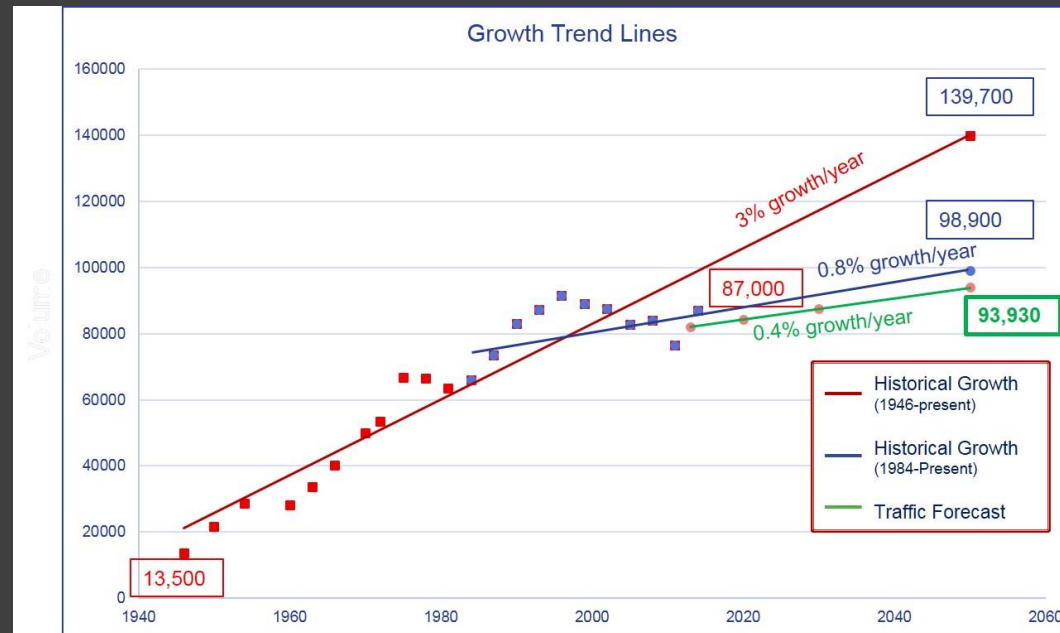
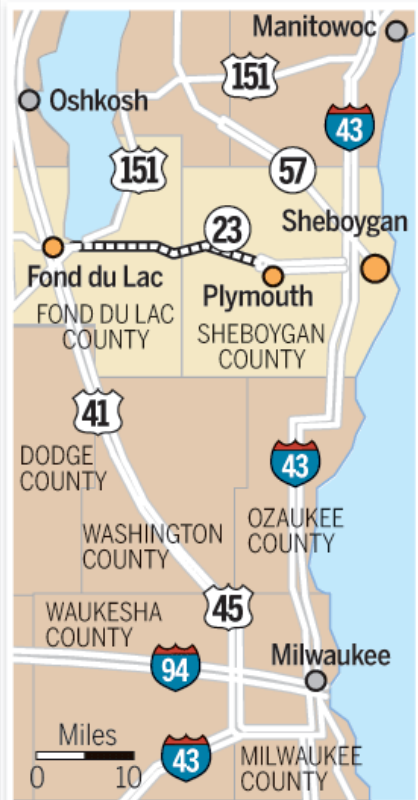


# Emerging Trends and Topics

# Traffic Forecasts

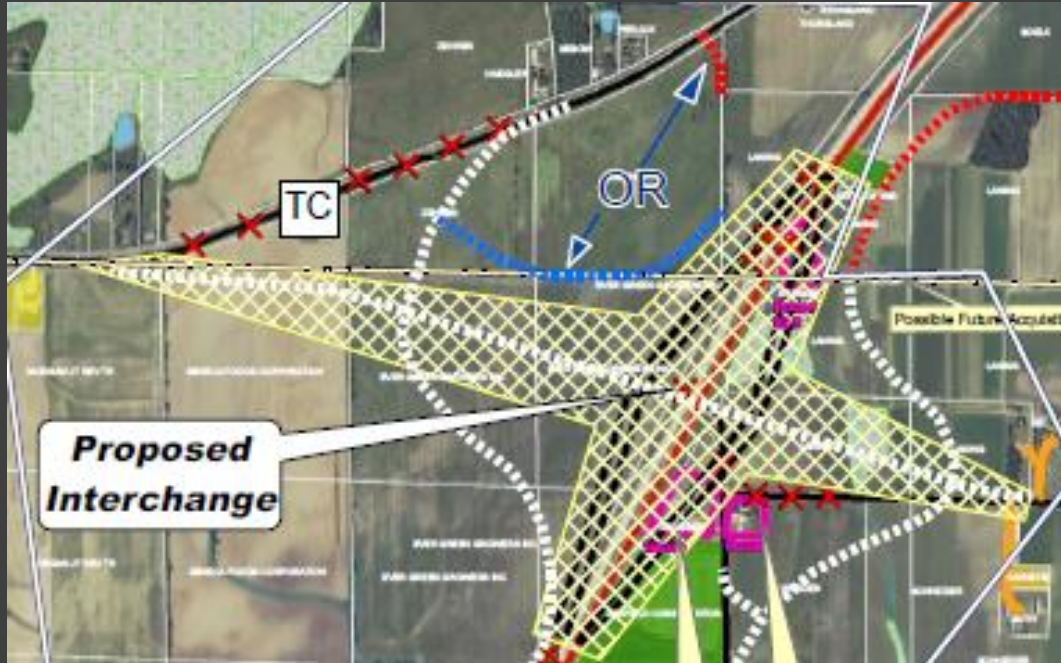
## Project challenge

A 19-mile expansion project of Highway 23 between Fond du Lac and Plymouth is the focus of a legal challenge. The project is scheduled to begin in 2012.





# No-Build Options/Preservation













# Alternative Transportation Modes

**MILLENNIALS WANT MORE PUBLIC  
TRANSPORTATION**

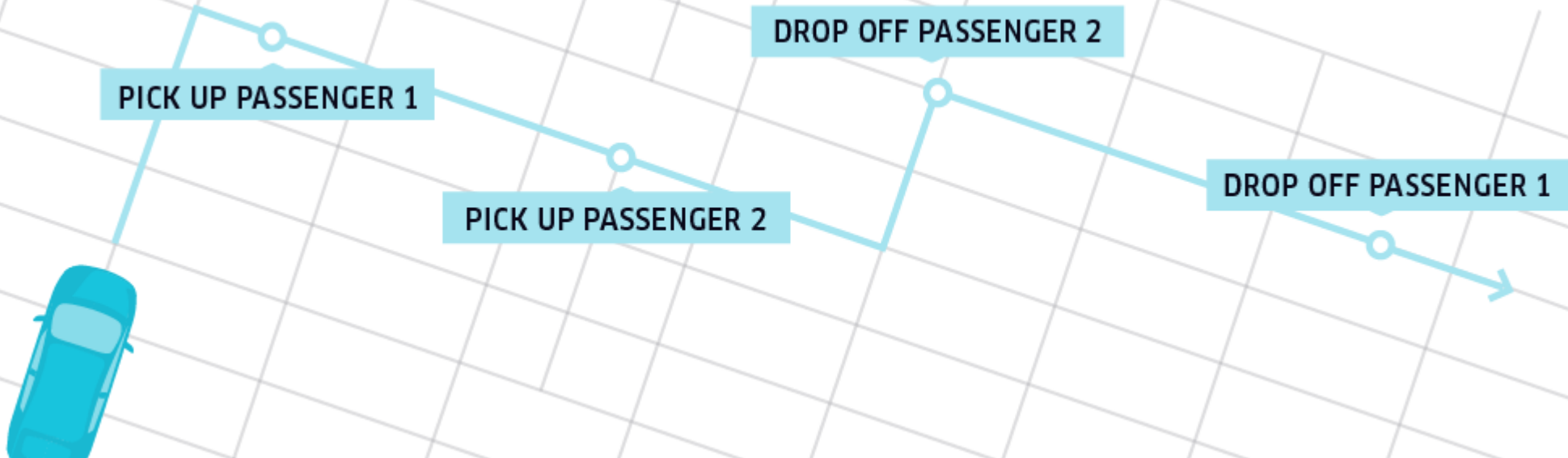




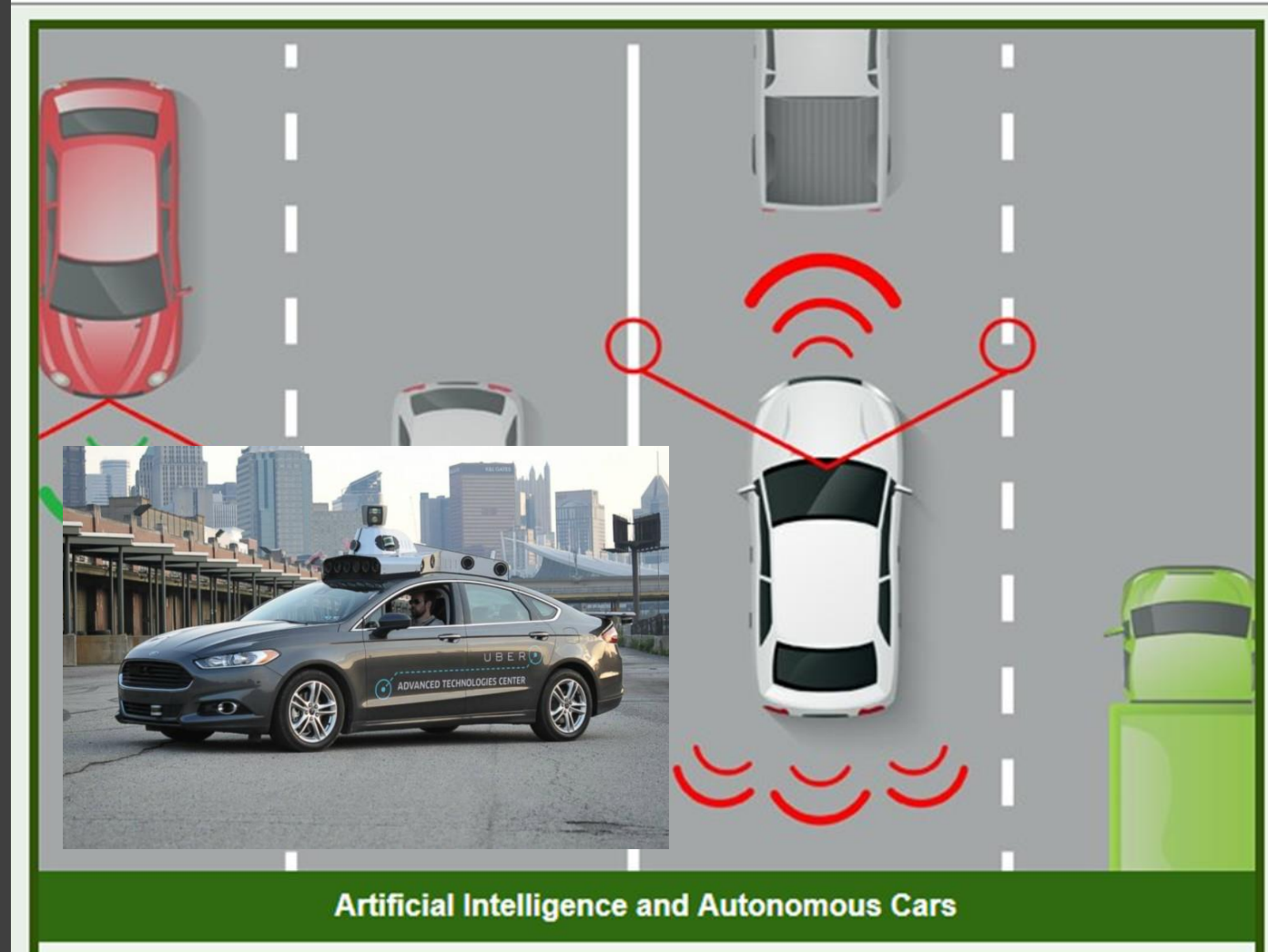


INTRODUCING:

# uberPOOL



# Technologies





# Technologies

**Optical Detector**

**Signal Controller**

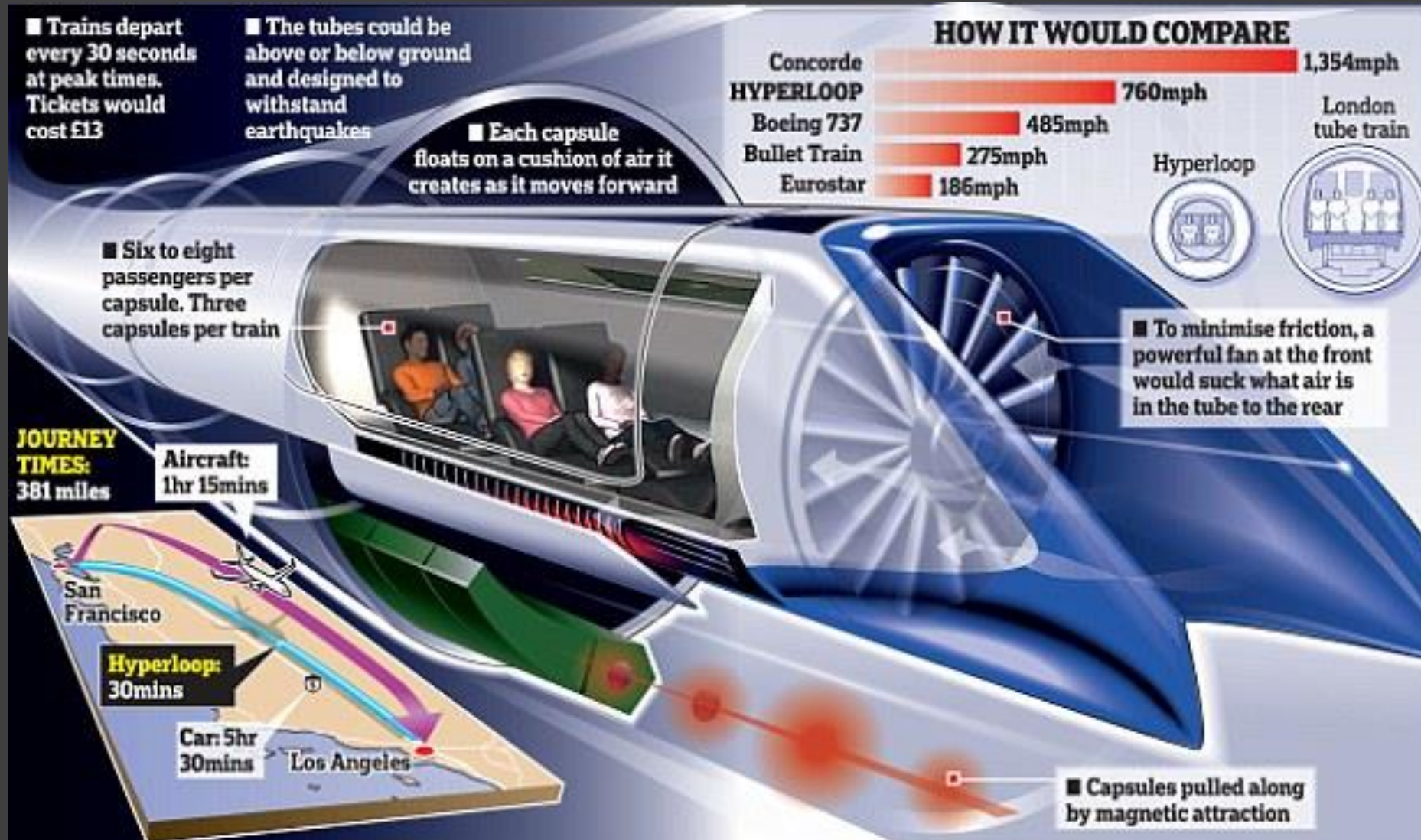
**Emitter**

**Queue Jump**

BUS

BUS

# Technologies





# Technologies

## This autonomous, 3D-printed bus starts giving rides in Washington, DC today

COMMENTS

By [Tamara Warren](#) on June 16, 2016 11:00 am [Email](#) [@tamaraotam](#)



# Technologies

## Mcity: A 32-Acre Outdoor Lab



McCity is the world's first full-scale simulated urban environment designed expressly for testing the performance and safety of connected, automated, and autonomous vehicles under controlled and realistic road conditions. It is a 32-acre outdoor laboratory for advanced mobility systems that includes:

- Urban and suburban streets, including various lane configurations and sidewalks, pedestrian crossings, bike lanes, ADA ramps, street lights, parallel and diagonal parking, and a bus turnoff/stop.
- Instrumentation throughout, including a control network to collect data about traffic activity using wireless, fiber optics, Ethernet, and a highly accurate real-time kinematic positioning system.

Other features include:

**Straight gravel roadway** with a railroad crossing.

**Traffic circle**, a smaller version of a roundabout that is common in Europe and some older cities in the U.S.

**Signalized intersections** in different configurations, with mast arms, wood and metal poles, and pedestrian crossings.

**Trunk line road**, a rural roadway with a fully equipped railroad crossing, guard rail, and temporary and permanent pavement markings.

**Brick paver road** simulated with stamped concrete.

**Underpass**, simulated by a tunnel that blocks vehicles from wireless and satellite signals.

**Roundabout**, an increasingly common approach to intersection design intended to improve safety.

**Open test area** that can be configured for a wide range of scenarios, including parking lots and novel intersection geometries.

**4-way stop intersection**, with straight as well as tight and sweepingly curved approaching roadways.

**Tree canopy**, a simulated tree cover that reproduces the attenuation of signals that pass through trees.

**Metal bridge deck**, a bridge surface that poses special challenges for radar and image processing sensors.

**Moveable building facades** up to two stories high allow researchers to test the effects of various materials and geometries on sensor performance.

**Meandering gravel roadway**

**Limited access freeway** with access ramps, highway signage, guardrails, crash attenuators, and a concrete jersey-style barrier.

**Calibration mound** to calibrate inertial measurement sensors on vehicles.

**Open test area** that can be configured for a wide range of scenarios, including parking lots and novel intersection geometries.







# *Emerging Transportation Trends*

*A look at 70 years of transportation debate*

APA WI Annual Planning Conference  
September 22, 2016

*Darren Fortney, AICP*  
*Nate Day, AICP*

