

Eastern Racine County Transportation Task Force

Draft Report

June 21, 2018

A partnership between Racine County, City of Racine, Village of Caledonia, Village of Mount Pleasant, and Village of Sturtevant.

Project support from Southeast Wisconsin Regional Planning Commission and the Wisconsin Department of Transportation.

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Context for Establishing the Task Force

Connectivity between I-94 and the City of Racine has received attention since the construction of I-94 in 1966. Racine, as the 5th largest City, is the most populous city in the State that does not have direct access to the Interstate Highway System.

The most recent analysis to improve highway access for the City of Racine occurred in 2016 and 2017. At the request of the City, the Southeast Wisconsin Regional Planning Commission worked with potentially affected communities and Racine County to identify and consider ways to improve highway access to the City of Racine. A set of preliminary recommendations were issued just prior to announcements related to Foxconn and it was determined that further study should hold until additional information was known about the development.

The Eastern Racine County Transportation Task Force was established in March 2018 to develop transportation recommendations that incorporate the likely changes in travel behavior and patterns spurred by Foxconn and subsequent development. The planning process clarifies shared goals and decision-making needs, but does not replace a comprehensive planning process.

The goal of the Eastern Racine County Transportation Task Force is to develop pragmatic recommendations, working within existing parameters, to improve east-west travel times and help move workers to jobs.

Membership

Racine County established the Task Force including elected officials for municipalities in Eastern Racine County.

Task Force

Rusty Clark	Racine County Board
Dave DeGroot	Village of Mount Pleasant
Jonathan Delagrave, Chair	Racine County Executive
Jim Dobbs	Village of Caledonia
Jerry Franke	Racine County Consultant
Jayne Hoffman	Village of Sturtevant
Cory Mason	Racine County

Advisory Committee

Clement Abonigwa	Kenosha County
Amy Connelly	City of Racine
Trevor Jung	Visioning a Greater Racine
Keith Kohlmann	Racine Transit Historian / Visioning a Greater Racine
Mike Maierle	City of Racine
William Martin	Wisconsin Department Workforce Development
Willie MacDonald	RYDE
Robert Mozol	Uber Driver, formerly with Racine Police Department
Fiona Murphy	Visioning a Greater Racine
Dave Prott	Racine County Highway/Parks Supervisor
Cheryl Rice	A-N-T Transportation
Steve Rongstad	Owner, Kenson Enterprises
Gary Rudzianis	ResCare

Defining the Problem

Racine County identified two themes at the outset of the Task Force. These were stated as:

- East West Connection and Travel Time Improvements
- Moving workers to work (eliminate transportation barriers)

The Task Force clarified these themes by crafting structured problem statements in order to focus the types of solutions that should be evaluated. The problem statements include a brief description of the problem as well as where the problem occurs, time frame, and magnitude. The problems were further clarified through objectives stating specific expectations for the solutions.

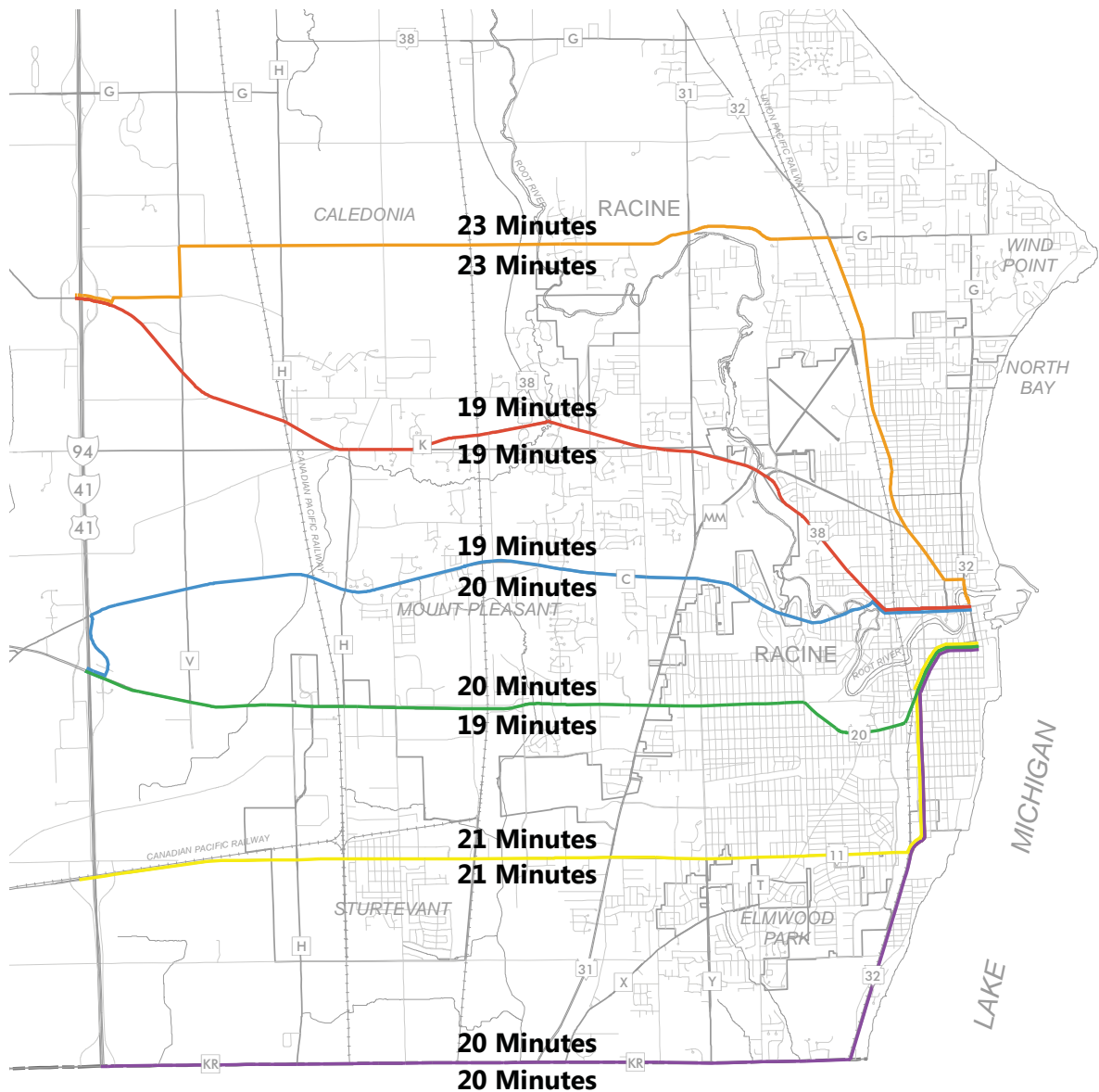
East-West Connection and Travel Time Improvements

Problem Statement	Objective (We want to...)
<p>The city of Racine is the largest city in Wisconsin that does not have direct freeway access, potentially limiting economic growth. The highway system between I-94 and downtown Racine has travel times ranging between 19 and 23 minutes. The distance is 10 miles. At a running speed of 35 mph and 45 mph would take 17 and 13 minutes respectively.</p> <p><i>Data from SEWRPC's travel time study</i></p>	<ul style="list-style-type: none"> • Provide reasonable travel times • Provide consistent travel times • Improve mobility and restrict land access • Improve safety and accident reduction • Provide reasonable cost solutions • Implement improvements before 2022

Data is shown in Map 1, Eastbound and Westbound Travel Times Along Routes Between the City of Racine and IH 94 During the Morning Peak Period.

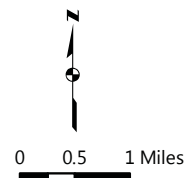
Map 1

**Eastbound and Westbound Travel Times Along Routes Between
the City of Racine and IH 94 During the Morning Peak Period**



ROUTES BETWEEN IH 94 AND MAIN STREET

- 4-MILE ROAD/STH 32 ROUTE
- CTH K/STH 38 ROUTE
- CTH C/STH 38 ROUTE
- STH 20/STH 32 ROUTE
- STH 11/STH 32 ROUTE
- CTH KR/STH 32 ROUTE



Defining the Problem : continued

Moving workers to work / eliminate transportation barriers / companies are unable to fill jobs

Problem Statement	Objective (We want to...)
<p>Some employment centers (including Foxconn) are not served by transit highlighting the mismatch between supply and demand for transit service. 98.4% of jobs in the City of Racine are located within ½ mile of a transit line while 834 (19.8%) in Caledonia, 8,663 (63.6%) in Mount Pleasant and 2,489 (65%) in Sturtevant.</p> <p><i>Data from Center for Neighborhood Technology All Transit Metrics</i></p>	<ul style="list-style-type: none"> • Provide transit service and infrastructure to more employment centers • Provide reasonable / consistent travel times for transit • Planned response rather than react after demand is established • Implement partnership solutions
<p>Workers have cited lack of transportation options for not accepting or leaving jobs across Southeast Wisconsin over the past several years. Transportation costs range between 20.9% and 22.9% of income for block groups within ½ mile of transit.</p> <p><i>Data from Center for Neighborhood Technology All Transit Metrics</i></p>	<ul style="list-style-type: none"> • Carefully thought out transit system • Make transit affordable for users and non-users • Focus on eastern Racine County resident's needs • Implement partnership solutions • Implement improvements by 2020 • Increase labor availability









Transit information is shown in Map 2, Public Transit Services in the Region: 2017.

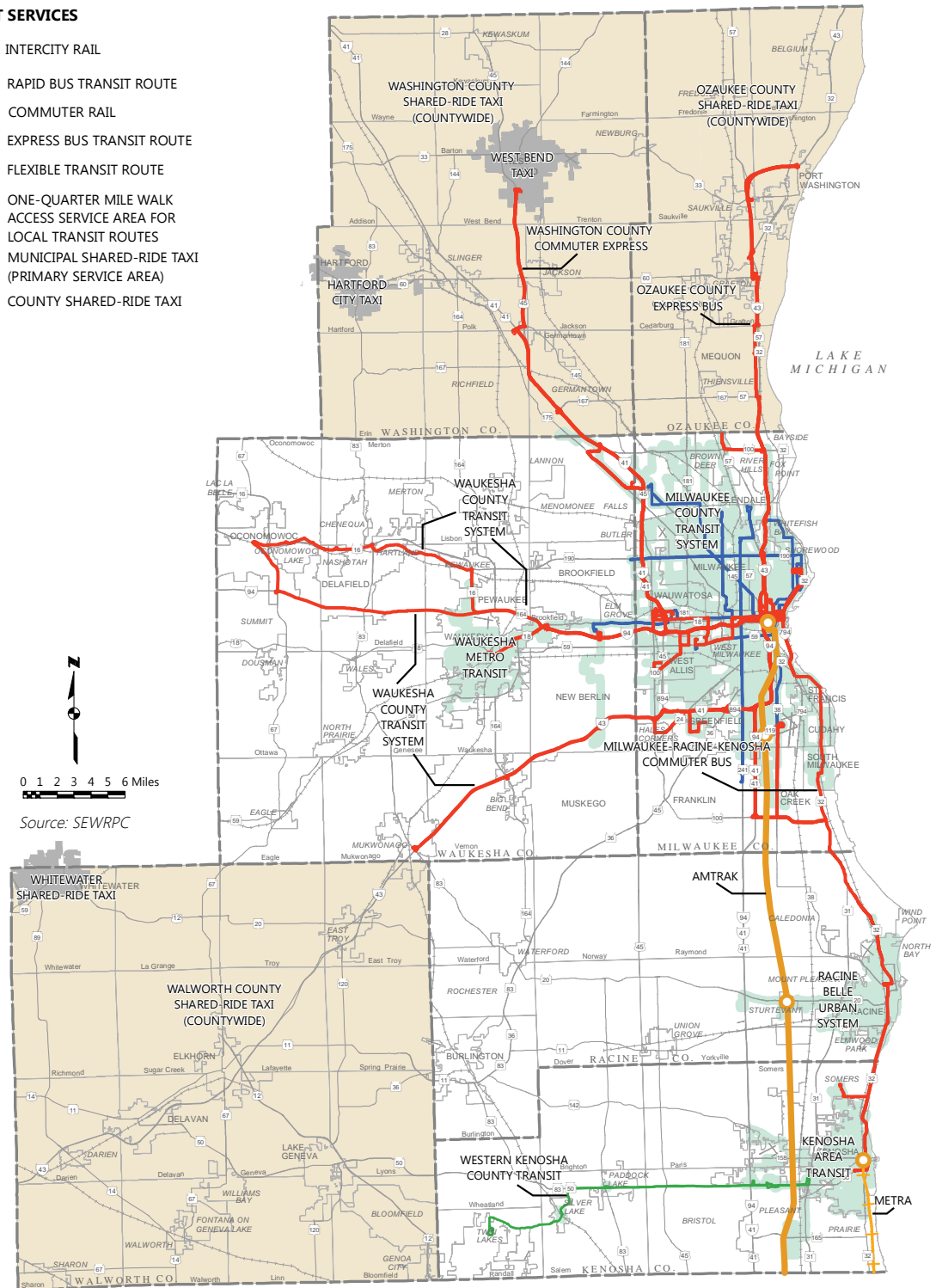
Eastern Racine County Transportation Task Force

Map 2

Public Transit Services in the Region: 2017

TRANSIT SERVICES

-  INTERCITY RAIL
-  RAPID BUS TRANSIT ROUTE
-  COMMUTER RAIL
-  EXPRESS BUS TRANSIT ROUTE
-  FLEXIBLE TRANSIT ROUTE
-  ONE-QUARTER MILE WALK ACCESS SERVICE AREA FOR LOCAL TRANSIT ROUTES
-  MUNICIPAL SHARED-RIDE TAXI (PRIMARY SERVICE AREA)
-  COUNTY SHARED-RIDE TAXI



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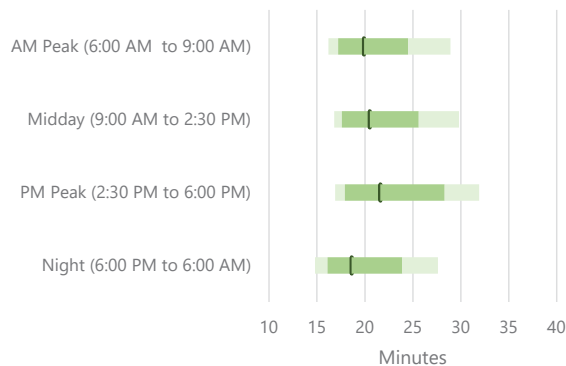
Existing Conditions : East-West Connection

The Task Force reviewed and considered a variety of existing conditions when recommending improvements. For the travel time problem, information was provided regarding existing travel speed, signal location and coordination, roadway automobile capacity, speed limits, and land access. This information is detailed through SEWRPC's previous study and summarized in Map 3. shows opportunity to improve conditions, along certain route segments. Individual issue maps are provided in the Appendix.

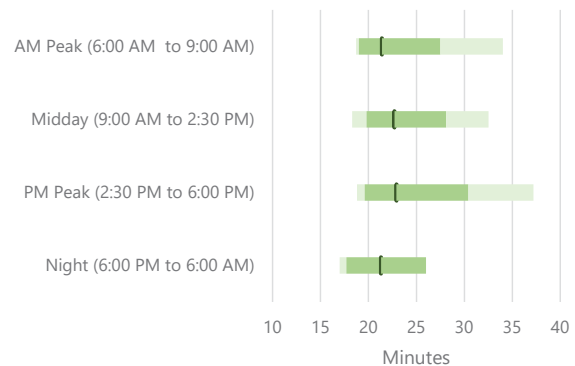
SEWRPC's travel survey and range of travel times experienced by travelers is confirmed through the National Performance Monitoring Research Data Set (NPMRDS) shown in Chart 1. 10 percent of observations show longer travel times, similar to what Task Force members and the public have shared as their experience.

Chart 1
Observed Travel Times from the 2017 NPMRDS

STH 20



STH 11



10 Percent of the Observations

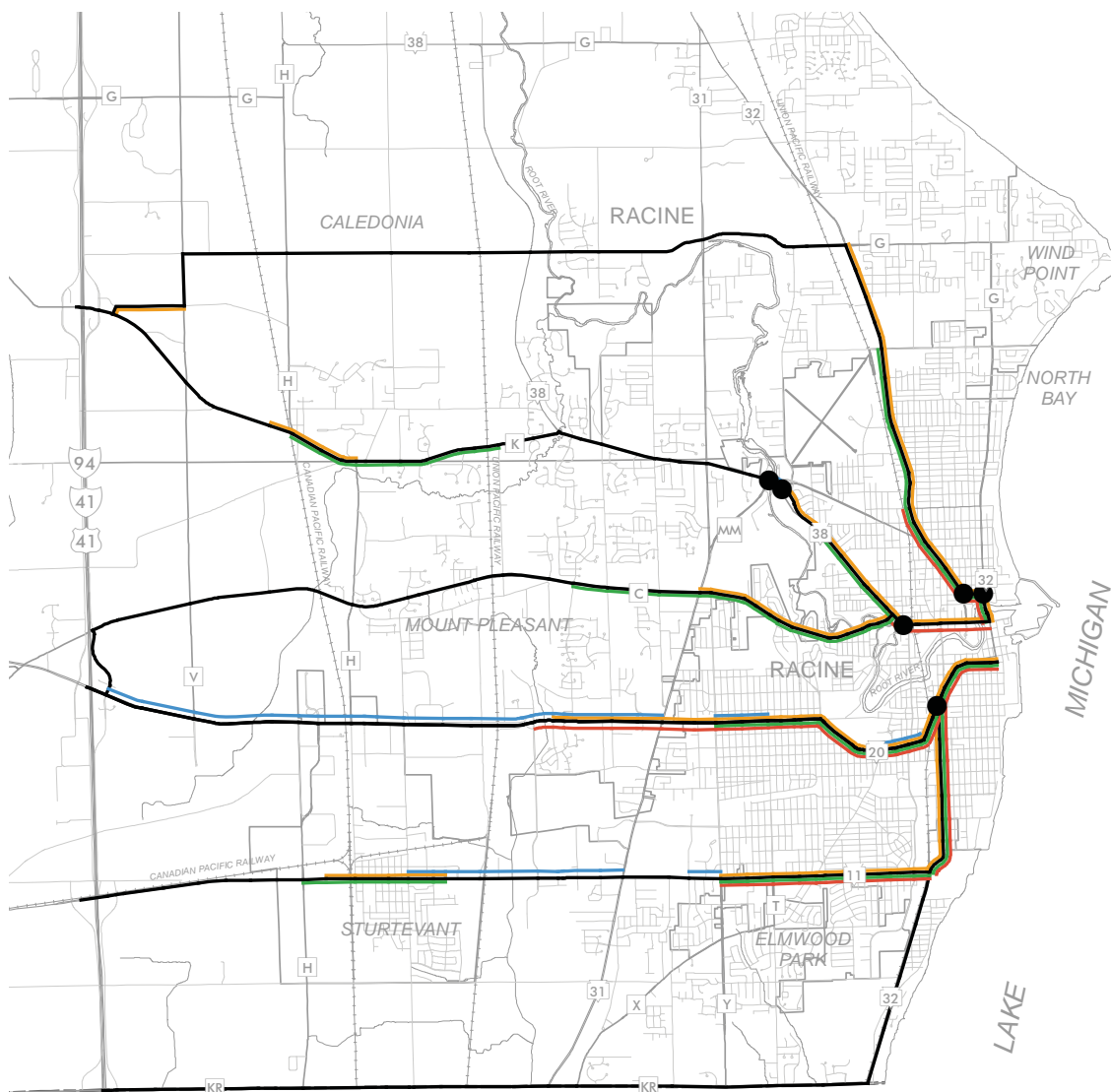
90 Percent of the Observations

Observed Median

Source: NPMRDS and SEWRPC

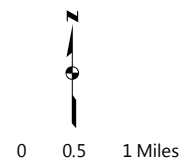
Map 3

Roadway Impediments Along Studied Routes to the City of Racine from IH 94



Routes Analyzed in Study

- ROUTE CENTERLINE
- INADEQUATE CAPACITY
- SPEED LIMIT LESS THAN 40 MPH
- SIGNIFICANT DIRECT LAND ACCESS
- LESS THAN ACCEPTABLE 0.5 MILE SIGNAL SPACING
- DIFFICULT INTERSECTIONS



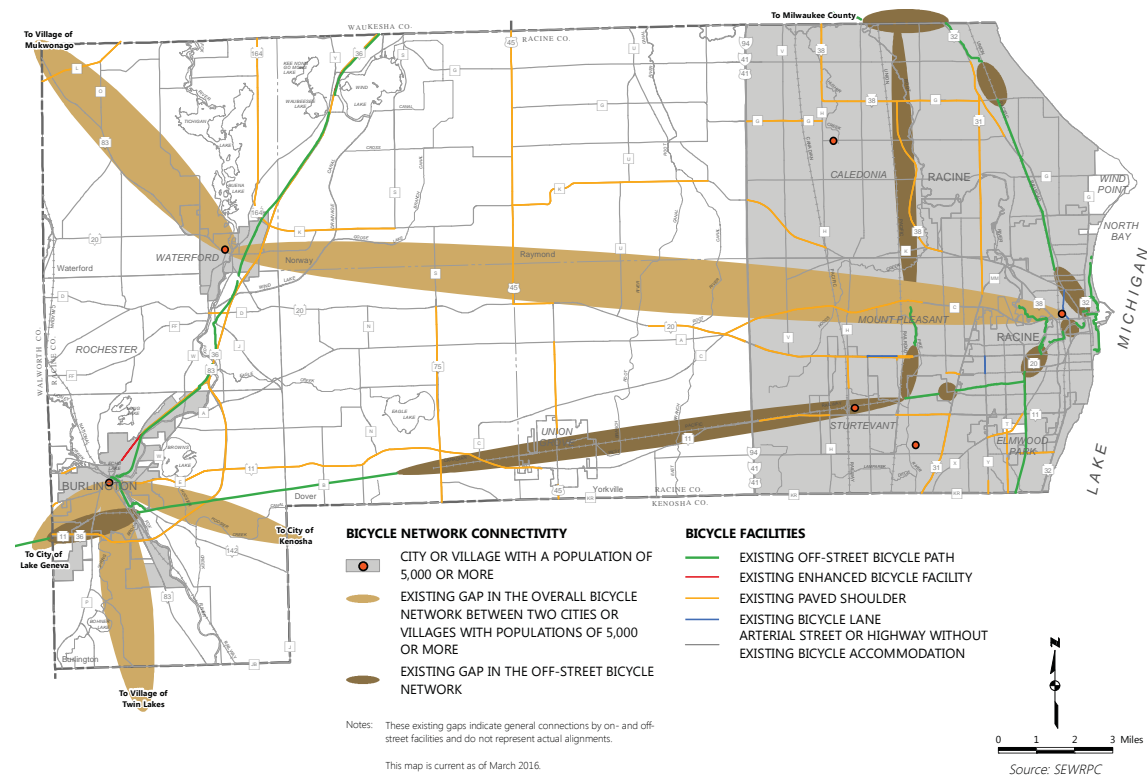
Source: SEWRPC

Existing Conditions : Moving Workers to Work

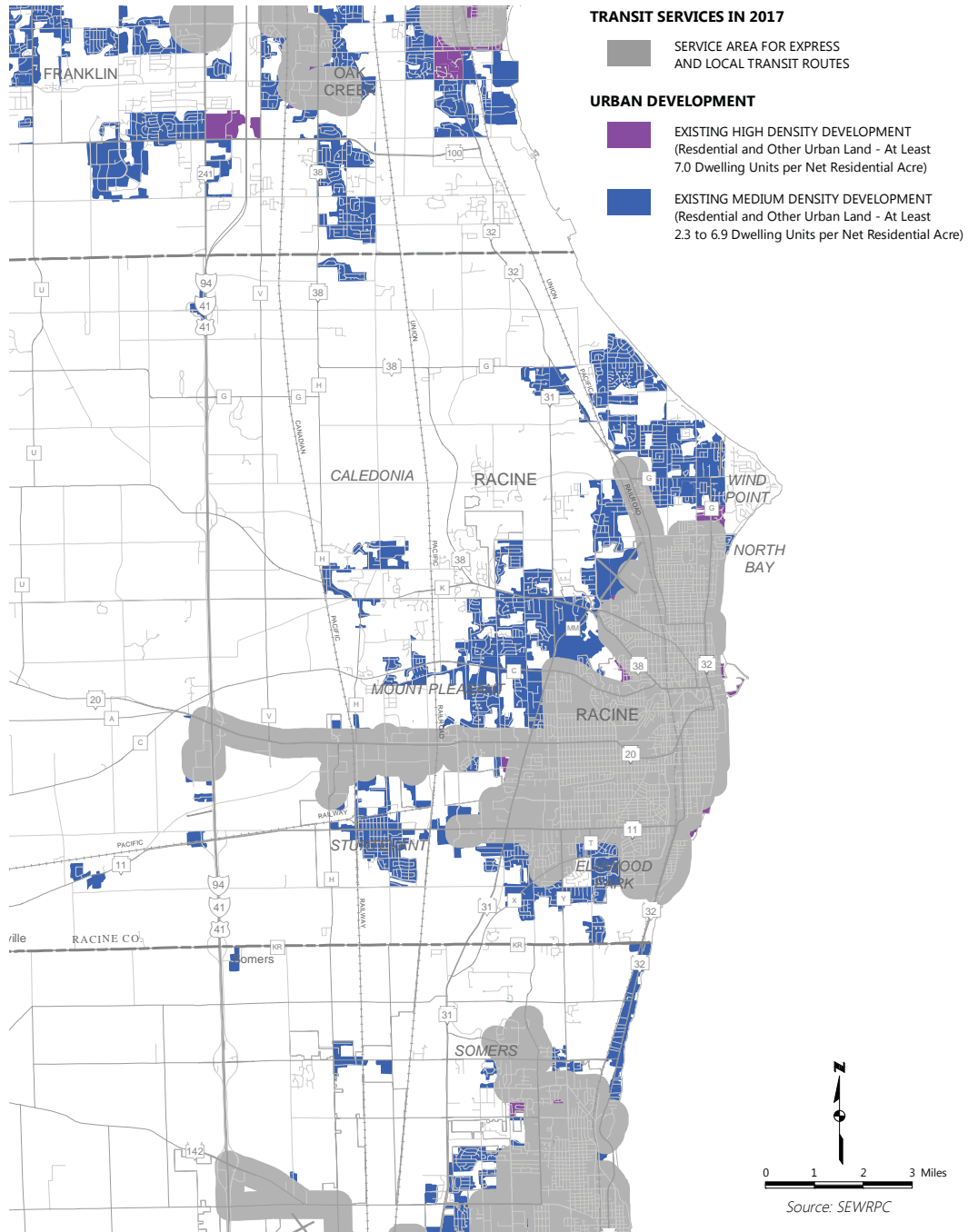
For the problem of existing employment centers not served by transit and lack of affordable transportation choices, information was provided regarding existing public transit service, urban development areas, employment areas, and bicycle network connectivity. Maps 4 and 5 are examples and others are provided in the Appendix.

Map 4

Existing Bicycle Network Connectivity in Racine County



Map 5
Existing Urban Development Not Served by Transit



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Eastern Racine County Transportation Task Force

Interventions : East-West Connection

Based on the opportunities identified through a review of existing conditions, the task force was asked to recommend system interventions to achieve their goals. This input is summarized below.

Eastern Racine County Transportation Task Force – Intervention Alternatives Worksheet

4/23/2018

Slow Travel Times – Summary of Responses

Think about systems that support and control traffic.

What interventions or changes to these systems help achieve our objectives?

4 worksheets received

1. Add interventions to the list below.

2. Select interventions best suited to the routes between I-94 and Downtown Racine.

	<i>Example</i>	Alternatives						
		CTH K / STH 38	STH 20 / STH 32	STH 11 / STH 32	CTH KR STH 32	4- Mile Rd / STH 32	CTH C / STH 38	
Interventions	Reduce number of traffic signals		1	1	1		1	
	Improve coordination of signals	X			1			
	Increase speed limit				1	1	2	
	Reduce direct land access points	X	2	1	2		1	
	Reduce turning conflict locations	X			2		1	
	Add capacity				1		1	
	Add capacity with Roundabouts							
	Traffic calming							
	Land use planning / zoning to prevent commercial development along the highway		1		1			
	Slow down and urbanize east of WIS 31			1				

Notes:

General

- Change title to “City Interstate Access”
- What about the connecting N/S routes? Don’t we want a good grid?

CTH K / WIS 38

- Great access and good road for I access

WIS 20 / WIS 32

- Slow down in city, this is our good urban street

WIS 11 / WIS 32

- Needs a corridor study for better access management in the city

CTH KR / WIS 32

- Restrict access

4-Mile Rd / WIS 32

- No comments received

CTH C / WIS 38

- In city, perhaps some better matching between design speed and actual speeds. This is a nice route w/o much parcel access.

Interventions : Moving Workers to Work

Eastern Racine County Transportation Task Force – Intervention Alternatives Worksheet

4/23/2018

Moving Workers / Eliminating Barriers

Think about the systems that present barriers to transportation or effect worker mobility.
What interventions or changes to these systems help achieve our objectives?

5 worksheets received

1. Add interventions to the list below.

2. Identify the location or provide details that limit where or how the intervention is implemented.

	Example	Locations
Public supported transit routes		Amazon; all of SEWRPC plan; prioritize commuter bus on KR; Implement the SEWRPC Plan; links to Parkside and Gateway; KR commuter bus
Employer supported transit routes	Employment Centers	Identify nodes and centralize;
Improve transit service frequency	Hwy 20	No left turns on 20 between Ohio and Lathrop; ??
Reduce walking distance to transit		On Foxconn Site; better sheltering and use smart aps to track;
Add Amtrak service + shuttles		??; Amtrak expensive
Increase user pay parking at employment centers		No, disincentize parking!; incent transit;
Incentivize employer commuter benefit programs		Yes; Yes; Identify nodes;
Incentivize employer carpool benefit program		Yes; Yes
Incentivize partnership on-demand transportation		??; not sure how this works;
Increase bicycle connectivity		On Braun Road, snow plow maintenance; Yes, but this only works 3-4 months;
Increase pedestrian connectivity		On Braun Road; yes, but this is an urban concept, won't work in suburbia
Invest in City-Industrial redevelopment		
Regional transit funding		
Metra Extension to MKE		
Transit-oriented development		
Land use planning!		

Notes:

General

- Go Riteway Airport
- Employer based
- Paul suggestion
- Highway V / Highway H (speed limits, look at north and south 31 and 38)
- Frontage Roads (Spring St. and KR)
- Good urban places are not highway accessible

Eastern Racine County Transportation Task Force

Interventions : continued

Comments received by staff during workshop

General

- Poor planning has resulted in the problems identified by this task force
- Locate additional park and rides connected to transit services

Slow Travel Times / City Interstate Access

- Remove turn lanes on WIS20
- Consider adjacent land uses – highway 20 is not highway oriented, highway 11 has more highway feel, consider how land use affects street character
- Slow travel time desirable in some areas
- To achieve interstate access, need to pick a lane to do it
- Not much you can do to improve on slow travel times in the City of Racine
- Future interchange at spring street
- Road speeds need to be reassessed
- Start to dedicate CTH C for freeway access
- Improvements on KR don't help Caledonia or Mt. Pleasant
- Is new interstate access easily implementable? What would be the process for this and what can the Task force expect?

Getting workers to work

- Disincentivize parking
- Like what SEWRPC is showing for transit improvements specifically the commuter bus serving Foxconn. Ideally this will be timed for shifts and maybe uses a nicer bus. Could charge more for fare.
- Bike paths exist in some areas already but need to be maintained year-round.
- Promote employer based transportation options
- Need an educational component with increased transit service to get higher utilization
- Need to identify where development can occur that would support transit
- Driverless car is on the horizon
- Zip car is an option
- Transit is an important part of the solution
- Implementing Commuter Rail connecting Kenosha, Racine, and Milwaukee along the lakefront should be a high priority for the State. It's the only way to effectively connect these lakefront communities, and would be a better solution for economic development than building a higher service connection between I-94 and downtown Racine.
- The State needs to work with Foxconn to discount transit for its employees and have paid parking at its campus to incentivize alternative modes of travel.
- Efforts should be made to ensure that housing for Foxconn workers is built at a density and concentration necessary to support robust transit service.
- Efforts should be made to complete the Waxdale spur bike trail, and the trail should be plowed in the winter.
- Bicycle facilities should be provided on major roads between the City of Racine and Foxconn, although the group felt that a bike facility along Hwy 20 in Mt. Pleasant would not be used due to a perceived lack of safety.
- Investments should be made in public or employer-sponsored on-demand/rideshare/vanpool services, particularly focusing on connecting the more rural parts of the County to Foxconn and jobs in Sturtevant and Mt. Pleasant.
- Stop spacing on local transit routes should be increased in more suburban areas to speed up existing transit services.
- The express/commuter route shown connecting downtown Racine, neighborhoods south of downtown, and Foxconn should be implemented along KR.
- Rapid Transit (I believe this person was referring to rail service) should be built next to the bike trail on the Waxdale spur.

Measures of Effectiveness

Measures were defined by technical experts in order to provide the task force with a way to evaluate the success of the proposed interventions. Proposed measures are listed below. Some measures could not be fully analyzed based on the scope of the study. Descriptions of the final measures of effectiveness are detailed below and reported along with the preliminary recommendations

Travel Time	Employment centers not served by transit
<ul style="list-style-type: none"> • Cost-Benefit Analysis • Direct Land Access and Street Network Density • Qualitative by Task Force • Traffic Operations Model • Turning Conflict Locations 	<ul style="list-style-type: none"> • Cost per Passenger • Level of Transit Service Available • Level of Transit Service Quality • Qualitative by Task Force • Transportation Choices • Workforce Available within a 30-minute commute
<ul style="list-style-type: none"> • Benefit-Cost Ratio – calculates the benefits and efficiency of the proposed transportation investments using the TREDIS economic modeling software. The ratio represents the net present value of project benefits, by assigning a monetary value to travel, over the net present value of project costs. <i>Note: Benefit-Cost Ratios are reported for individual corridors. When looking at the corridors together as a system, the overall benefit-cost ratio is positive. Minimal capital costs associated with the projects, combined with an overall improvement in travel time, vehicle hours traveled and average traveled speed results in an overall benefit, despite an overall increase in projected volumes.</i> • Traffic Operation Model – calculates travel time, vehicle miles traveled, vehicle hours traveled and speed. • Transit Capital and Operating Costs - calculates estimates of expected costs for various transportation interventions including revenue vehicle mile hours. Based on cost experience of RYDE and other operators in the Region. • Level of Transit Service - Availability - Population and employment within transit service area (walking distance to transit stop of 1/4 mile used for local service and 1/2 mile used for express/commuter bus services). Data includes existing routes and stop locations as well as population and employment data. • Level of Transit Service - Quality - Population within an area that is served by higher quality transit service. Data includes existing routes and stop locations as well as population and employment data. • Transportation Choices - The number and quality of transportation choices reasonably available to a location or population. • Workforce Available within 60-minute Commute - Estimated workforce within 60-minute travel time to Foxconn site by transit. 	

Preliminary Recommendations and Evaluation : East-West Connection

Recommended approaches to improve east / west travel times are based on input provided by the Task Force and are divided into four categories.

1. Projects classified as “Current” include existing projects such as Foxconn development roads.
2. Projects classified as “In Development” include projects that could occur without additional coordination in the near future.
 - Some improvements were in progress prior to the establishment of the Eastern Racine County Transportation Task Force that are likely to help accomplish the goals of the Task Force. These are included for reference and to provide an estimated level of improvement.
3. Projects classified as “Recommended for 1-4 years” identifies pragmatic improvements that can likely provide benefits in a shorter time and within existing budgets.
4. Projects classified as “Potential 5+ years” identifies projects that have many steps and were determined not to fall within the constraints of this study. For example, a generalized process for a new highway development is depicted in Chart 2 on the following page. Accomplishing projects in this category could range between 7 and 11 years.

Some additional travel time benefits may be realized by implementing recommendations from additional speed and safety, access management, and conflict elimination studies. These themes were not fully evaluated through this study, and require additional analysis to ensure improvements are feasible and warranted.

Current

Capacity expansion <ul style="list-style-type: none"> - WIS 11 between I94 and CTH H - Braun Rd. between I94 and 90th - CTH KR between I94 and 90th St 	Lead implementation agency: WisDOT Partner agencies: Local municipalities Funding: State Highway Rehabilitation
Signal coordination / Adaptive signals <ul style="list-style-type: none"> - WIS 11 between I94 and CTH H - Braun Rd between I94 and 90th St 	Lead implementation agency: WisDOT Partner agencies: Local municipalities Funding: CMAQ; State Highway Rehabilitation <i>*assumes coordination between State and local systems</i>

In Development

Capacity expansion <ul style="list-style-type: none"> - CTH KR between 90th St and Old Green Bay Road 	Lead implementation agency: WisDOT Partner agencies: Local municipalities Funding: State Highway Rehabilitation
Signal coordination / Adaptive signals <ul style="list-style-type: none"> - WIS 20 between West Frontage and WIS 31 - WIS 11 between CTH H and Ohio St - CTH KR between 90th and Old Green Bay Road 	Lead implementation agency: WisDOT Partner agencies: Local municipalities Funding: CMAQ; State Highway Rehabilitation <i>*assumes coordination between State and local systems</i>
Access management and speed limit analysis <ul style="list-style-type: none"> - Braun Rd between I94 and 90th St - CTH KR between I94 and Old Green Bay Road 	Lead implementation agency: WisDOT Partner agencies: Local municipalities Funding: State Highway Rehabilitation
Smart corridors <ul style="list-style-type: none"> - Not preclude additional communications and detection on all development roads 	Lead implementation agency: WisDOT Partner agencies: Local municipalities Funding: State Highway Rehabilitation

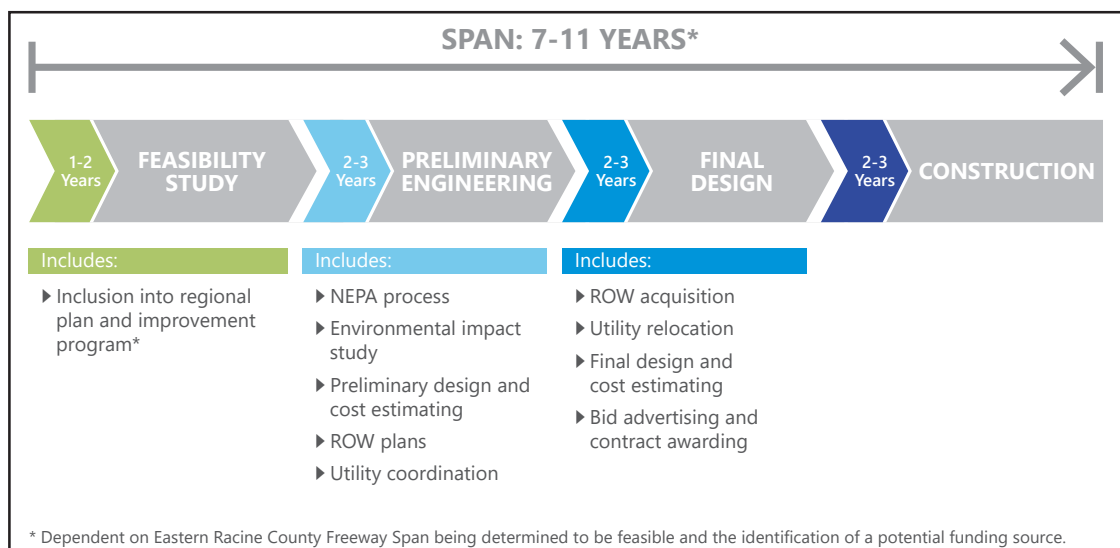
Recommended for 1-4 years

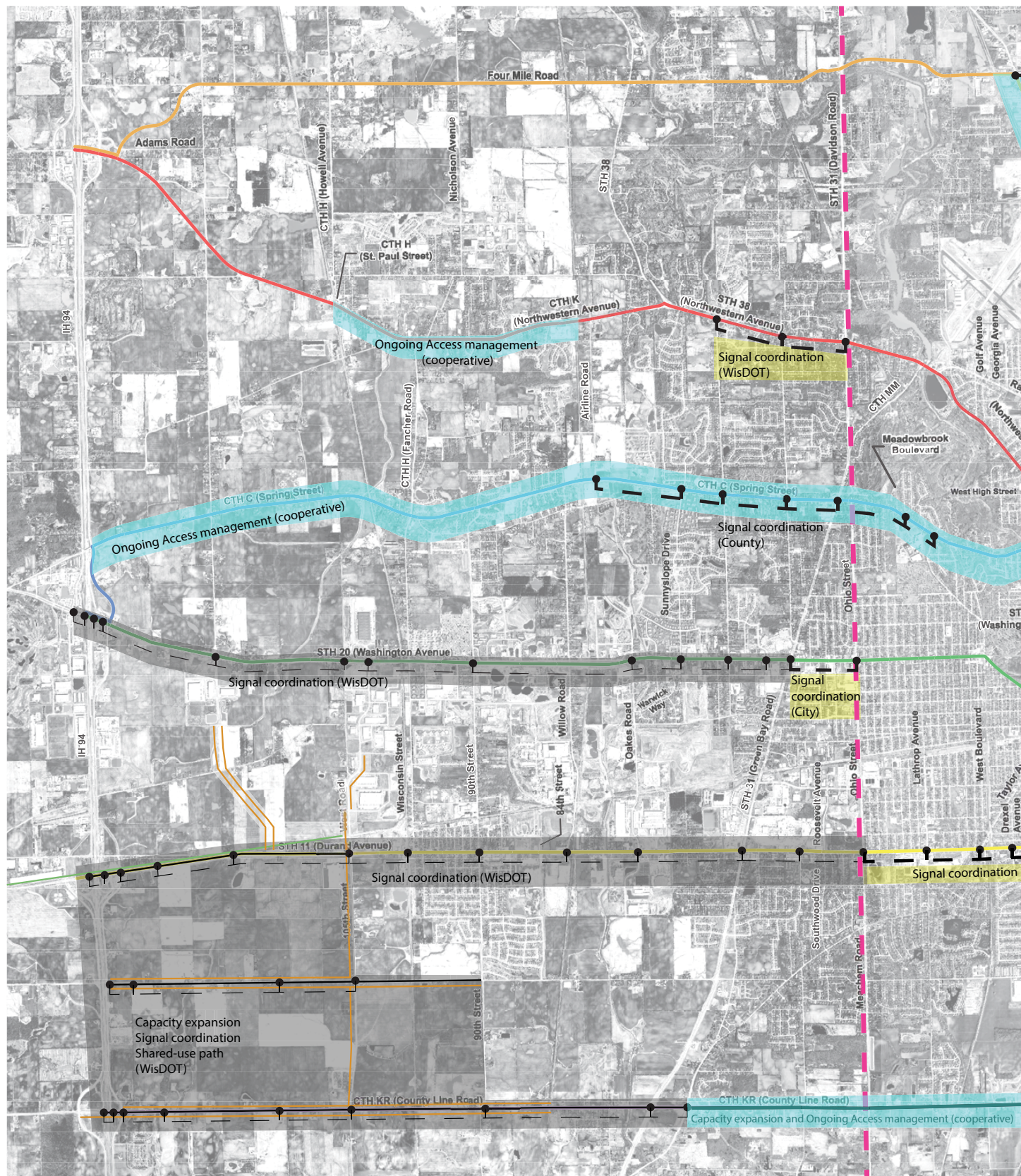
Capacity expansion <ul style="list-style-type: none"> - CTH KR from Old Green Bay Road to WIS 32 	Lead implementation agency: Maintaining authority Partner agencies: TBD Funding: TBD
Signal coordination / Adaptive signals <ul style="list-style-type: none"> - WIS 38 between Emmerttsen Rd and WIS 31 - WIS 32 between CTH KR and Main Street - WIS 20 from WIS 31 to Ohio Street - WIS 20 from 12th Street to 9th Street - CTH KR from WIS 31 to WIS 32 - CTH C from I94 to WIS 38 - WIS 11 from Ohio St. to WIS 32 - WIS 32 from 4-Mile to WIS 38 	Lead implementation agency: Maintaining authority Partner agencies: TBD Funding: TBD <i>*assumes coordination between State and local systems</i>
Access management and speed limit analysis <ul style="list-style-type: none"> - CTH C between I94 and WIS 38 - WIS 32 between Four Mile Rd and WIS 38 - CTH K between CTH H and UP Rail - WIS 32 between CTH KR and WIS 11 	Lead implementation agency: Maintaining authority Partner agencies: Adjacent local governments Funding: TBD
Smart corridors <ul style="list-style-type: none"> - Not preclude additional communications and detection on all development roads 	Lead implementation agency: Maintaining authority Partner agencies: TBD Funding: TBD

Potential 5+ years

Capacity expansion <ul style="list-style-type: none"> - Interstate Spur between I94 and City of Racine (CTH C) - WIS 20 from I94 to Oakes Rd (per development agreement) 	See separate process outline
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Chart 2

Potential Project Development Timeline for Eastern Racine County Freeway Spur

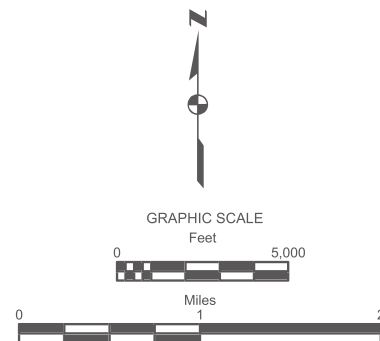


Preliminary Recommendations Summary

East - West Travel Times

Intervention Types and Recommended Schedule

- Intervention opportunity
- Signal coordination / adaptive signals (pending)
- Signal coordination / adaptive signals (1-4 years)
- Capacity expansion
- Proposed multi-use path
- Proposed Rail - to - Trail
- Existing / Underway / Pending improvements
- Proposed ongoing access management



- 4-Mile Road/STH 32
- CTH K/STH 38
- CTH C/STH 38
- STH 20/STH 32
- STH 11/STH 32
- CTH KR/STH 32



Eastern Racine County Transportation Task Force

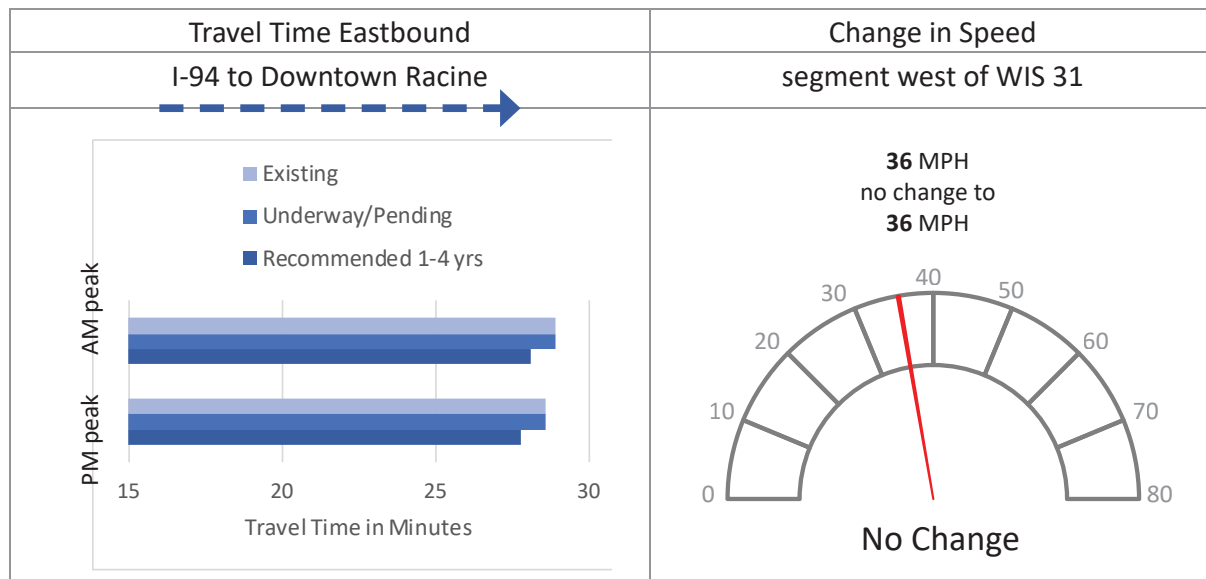
Preliminary Recommendations and Evaluation

4 Mile Road and WIS 32

Recommended 1-4 years

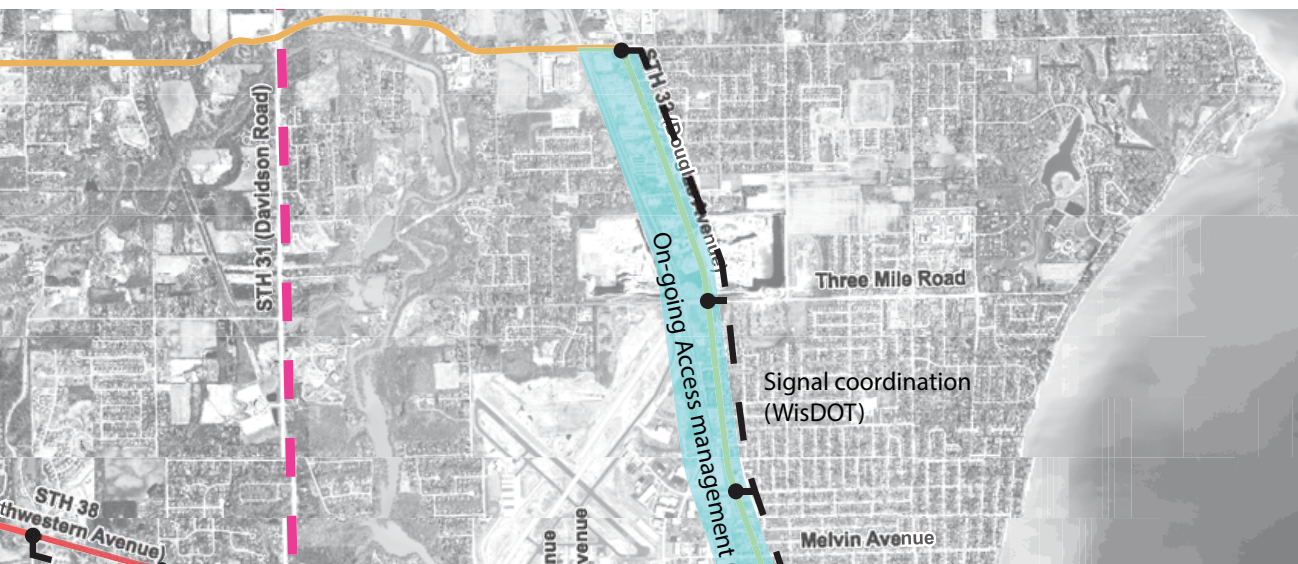
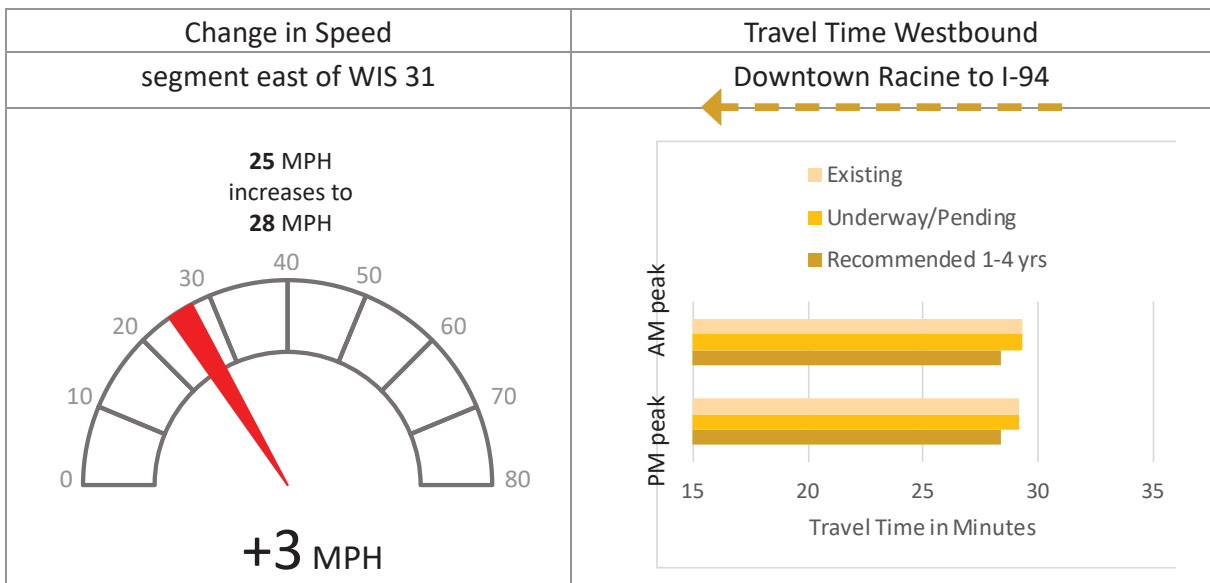
- Signal Coordination (WIS 32 from 4-Mile Road to WIS 38)
- Ongoing Access Management and Speed Study (from 4-Mile Road to WIS 38)

Recommended improvements on 4 Mile Road and WIS 32 is limited to signal coordination on WIS 32. This is anticipated to improve travel time with an increase in travel speeds from 25 MPH to 28 MPH on average. Of the conditions reviewed, there was little opportunity for practical solutions. The Task Force and Advisory Committee suggested increasing speed limits, but a speed study that verifies this needs was not available. Additional improvements to this corridor would include ongoing access management along WIS 32.



Eastern Racine County Transportation Task Force
Preliminary Recommendations and Evaluation
4 Mile Road and WIS 32

Benefit Cost Ratio	
Ratio	Description
Not Applicable	No cost associated with the transportation improvements.



Eastern Racine County Transportation Task Force

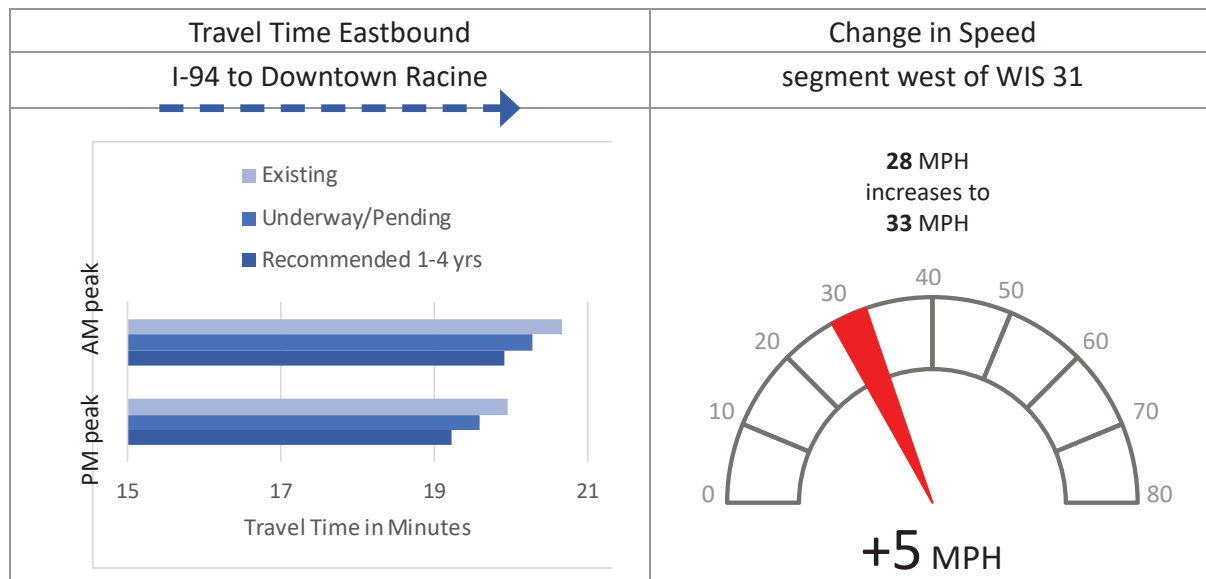
Preliminary Recommendations and Evaluation

CTH K and WIS 38

Recommended 1-4 years


- Signal Coordination (WIS 38 from Emmerttsen Rd to WIS 31)
- Ongoing Access Management and Speed Study (from CTH H to UP Rail)

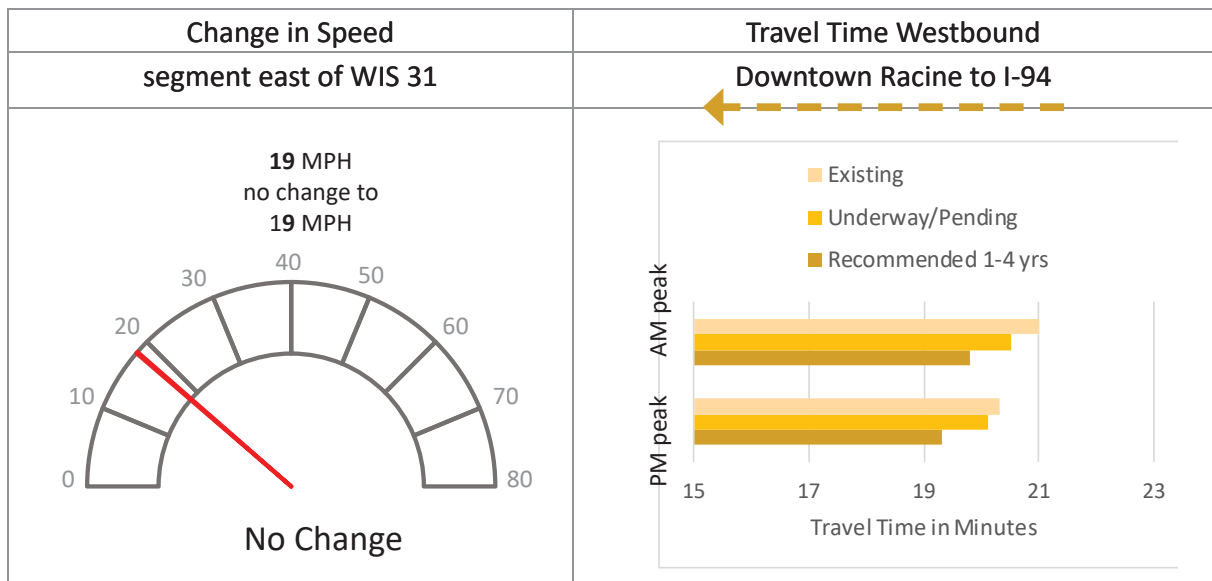
Recommended improvements on CTH K and WIS 38 include traffic signal coordination on WIS 38 just west of WIS 31. The Task Force and Advisory Committee identified this as a good route for accessing the Interstate. Signal coordination is anticipated to improve travel time and increase average travel speed from 28 MPH to 33 MPH west of WIS 31. A section of the corridor could benefit from additional ongoing access management.



Preliminary Recommendations and Evaluation

CTH K and WIS 38

Benefit Cost Ratio	
Ratio	Description
 <p>310</p> <p>Negative Neutral Positive</p>	Minimal proposed costs combined with decreased travel time and projected volumes, and increased average traveled speed results in a substantial positive benefit-cost ratio. It is possible that some actions surrounding access management could increase costs and impact the benefit-cost ratio.



Eastern Racine County Transportation Task Force

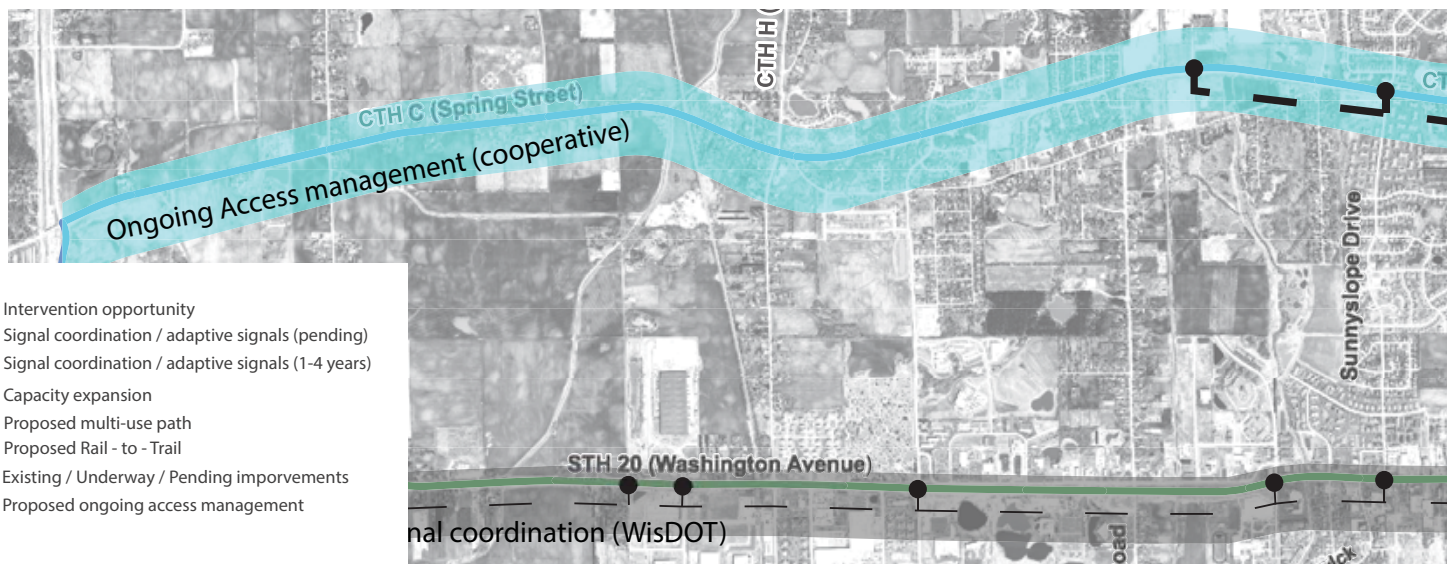
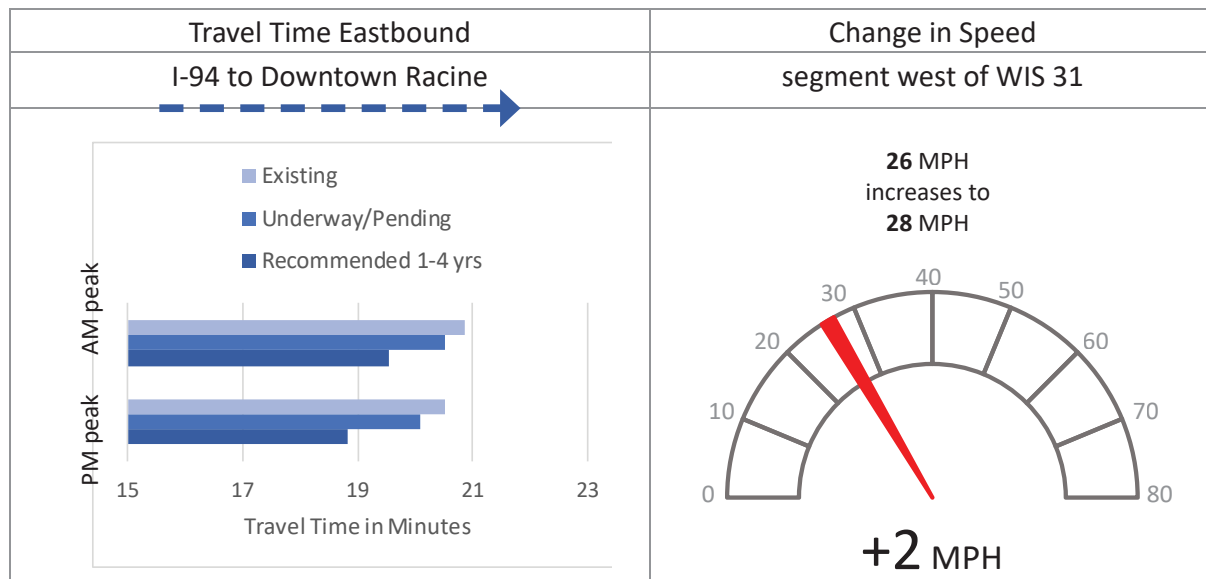
Preliminary Recommendations and Evaluation

CTH C and WIS 38

Recommended 1-4 years

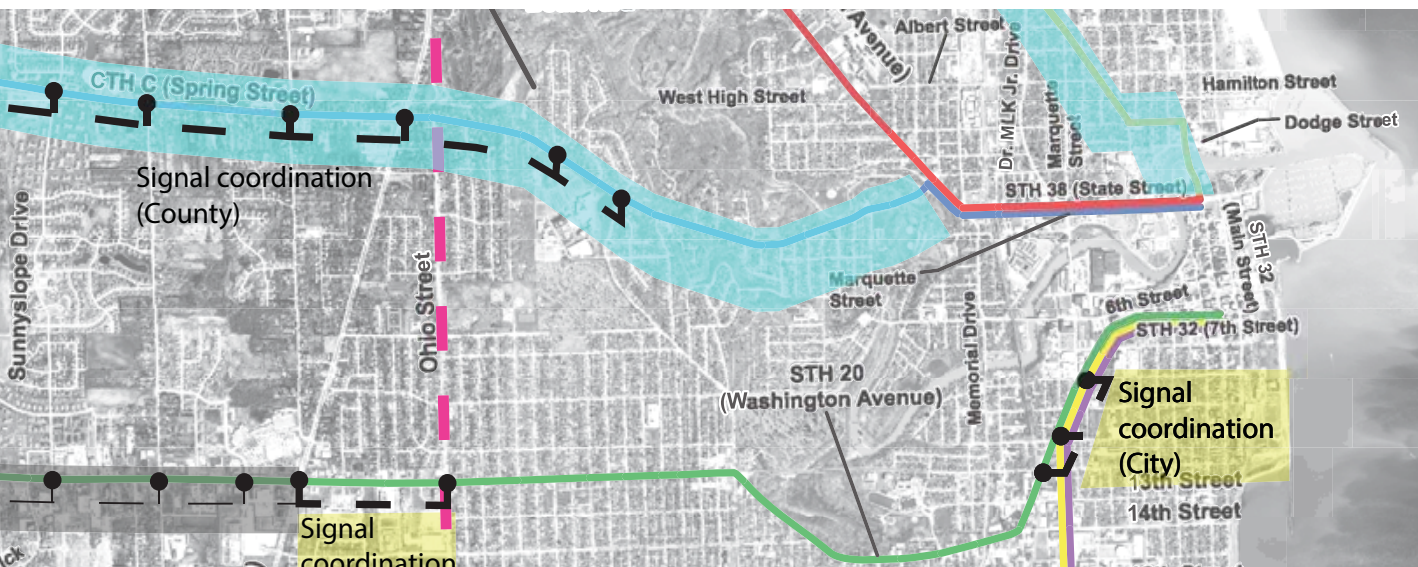
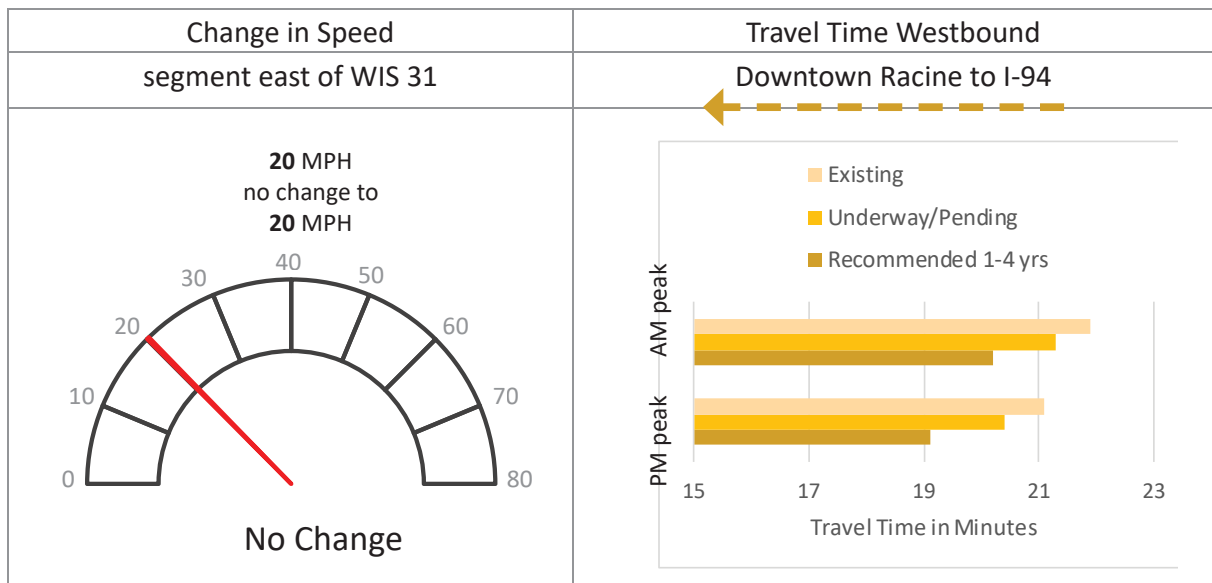
- Signal Coordination (CTH C from I94 to WIS 38)
- Ongoing Access Management and Speed Study (CTH C from I94 to WIS 38)

Recommended improvements to CTH C and WIS 38 include signal coordination and ongoing access management. Currently, CTH C does not have direct access to the Interstate, preventing it from functioning as a preferred route. Much of the corridor is unimpeded, so improvements are and estimated impacts are minimal. Signal coordination is anticipated to improve average travel speeds from 26 MPH to 28 MPH.



Eastern Racine County Transportation Task Force
Preliminary Recommendations and Evaluation
CTH C and WIS 38

Benefit Cost Ratio	
Ratio	Description
Not Applicable	No cost associated with the transportation improvements.



Eastern Racine County Transportation Task Force

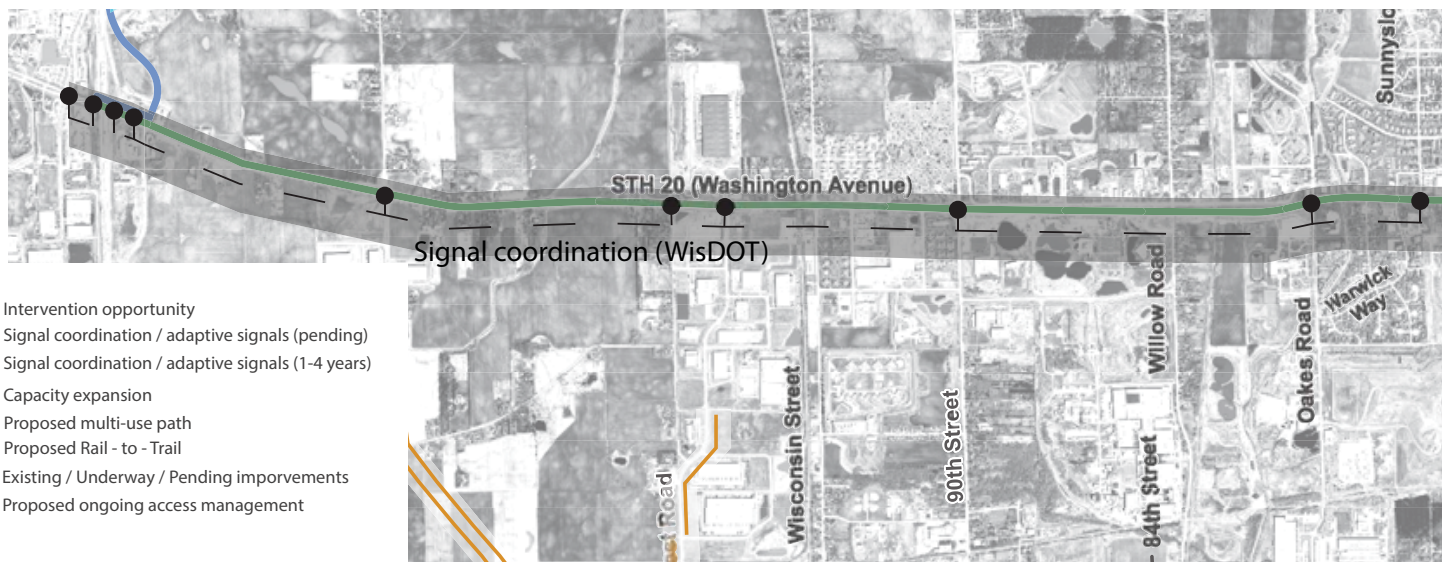
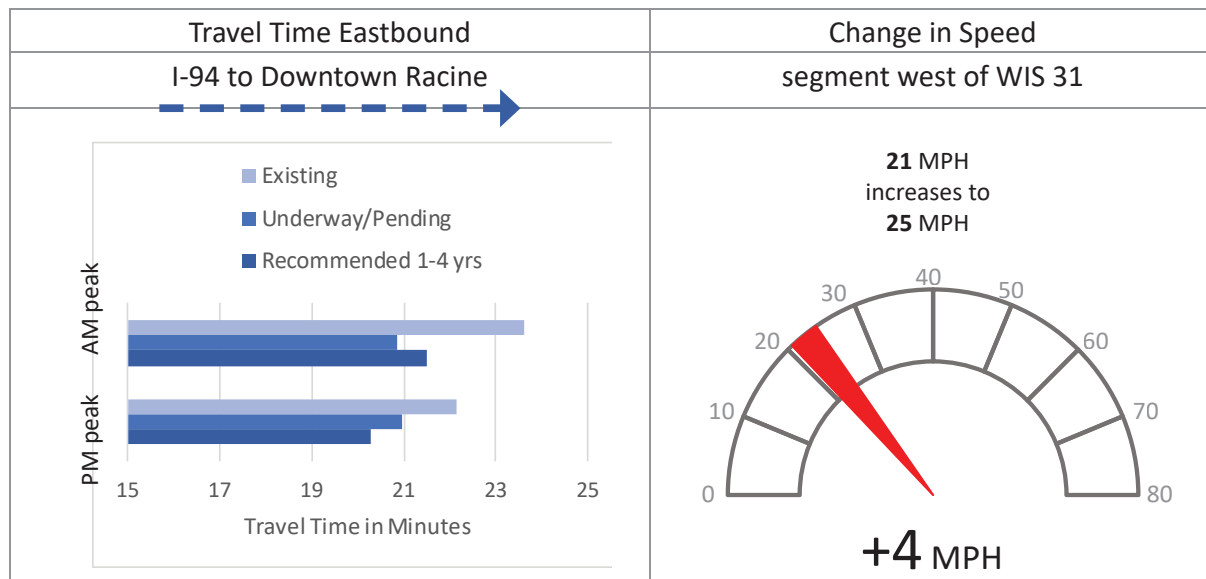
Preliminary Recommendations

WIS 20 and WIS 32

Recommended 1-4 years

- Signal Coordination (WIS 20 from WIS 31 to Ohio Street)
- Signal Coordination (WIS 20 from 12th Street to 9th Street)
- Ongoing Access Management and Speed Study (from 4-Mile Road to WIS 38)


Recommended improvements on WIS 20 and WIS 32 include signal coordination along much of the corridor. The Task Force and Advisory Committee describe WIS 20 as a good urban street east of WIS 31. Signal coordination east of WIS 31 is anticipated to improve traffic flow, but not increase travel speeds. The corridor west of Oakes Road is anticipated to expand based on a development agreement between WisDOT and the Village of Mount Pleasant.

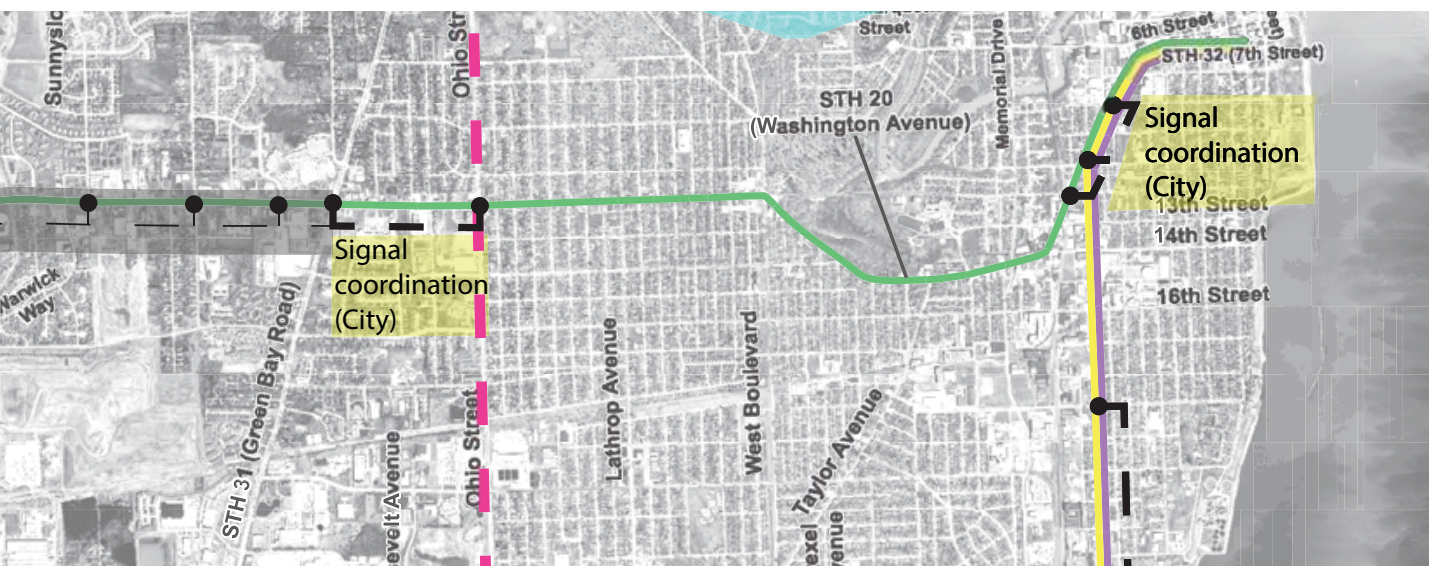
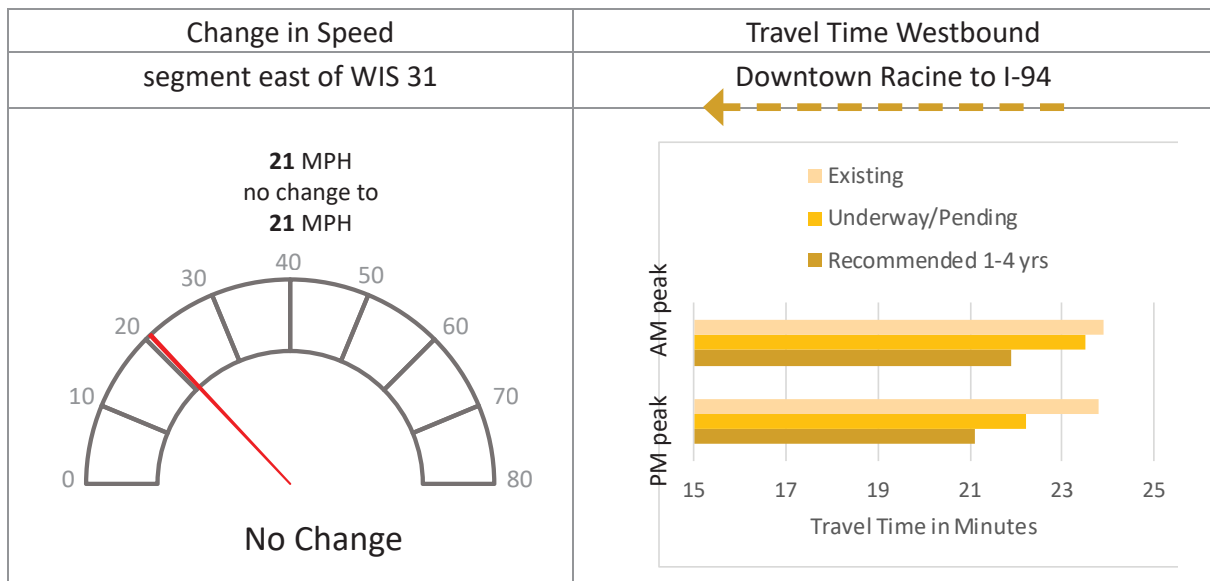


Eastern Racine County Transportation Task Force

Preliminary Recommendations

WIS 20 and WIS 32

Benefit Cost Ratio	
Ratio	Description
 <p>Negative Neutral Positive</p>	<p>A larger relative cost associated with traffic signal coordination, combined with an increase in projected volumes resulted in a slightly negative benefit-cost ratio. While travel time is decreasing and average traveled speed would increase, therefore improving an individual's travel experience, it is not enough to offset the overall increased travel demand (i.e., cost) to the corridor—a result of traffic re-routing from nearby roads.</p>



Eastern Racine County Transportation Task Force

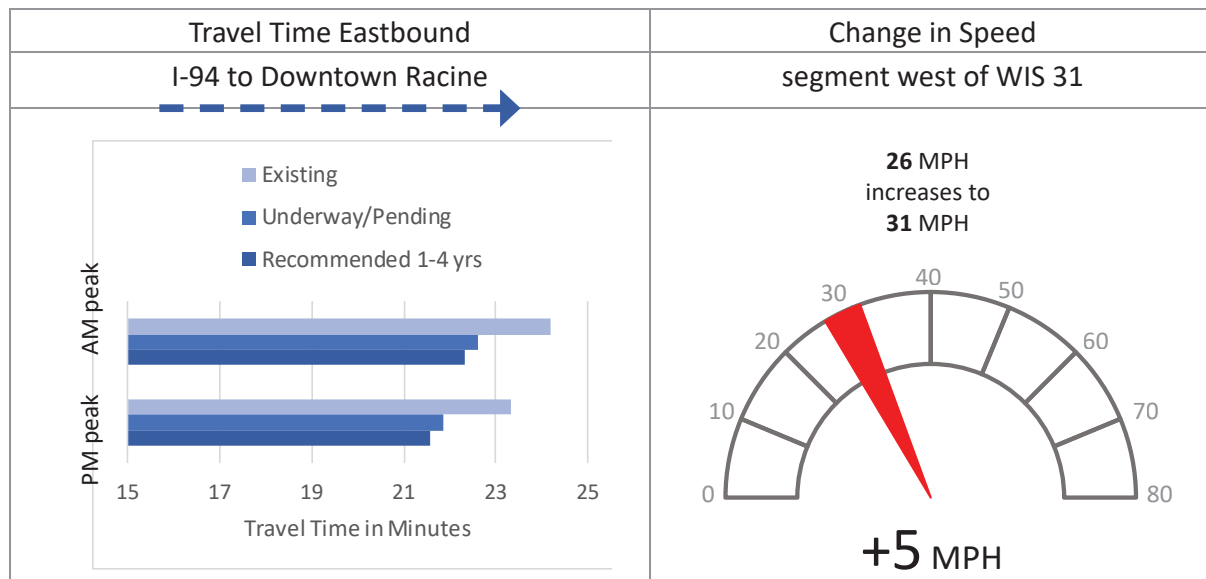
Preliminary Recommendations and Evaluation

WIS 11 and WIS 32

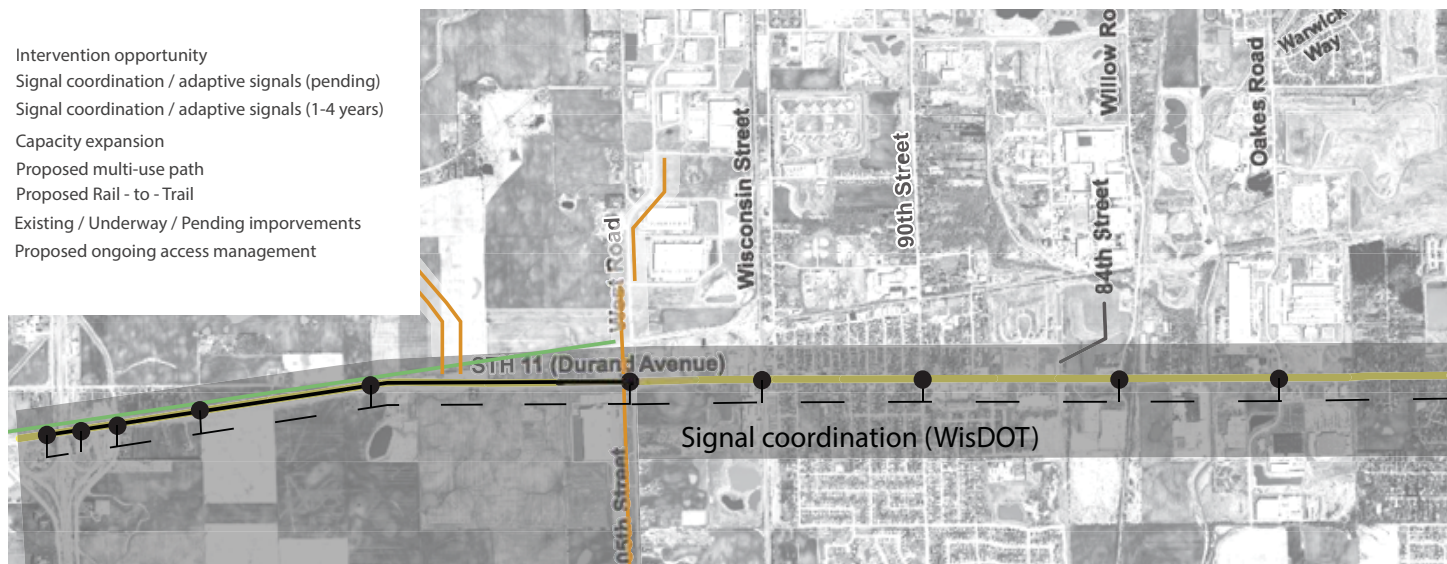
Recommended 1-4 years

- Signal Coordination (WIS 11 from Ohio Street to WIS 32)

Recommended improvements on WIS 11 and WIS 32 includes roadway expansion and signal coordination. Some improvements may be realized through existing or pending projects. Other improvements may be undertaken by the appropriate jurisdictions in the future. Signal coordination east of WIS 31 is anticipated to improve traffic flow, but only increase travel speeds by 1 MPH on average.



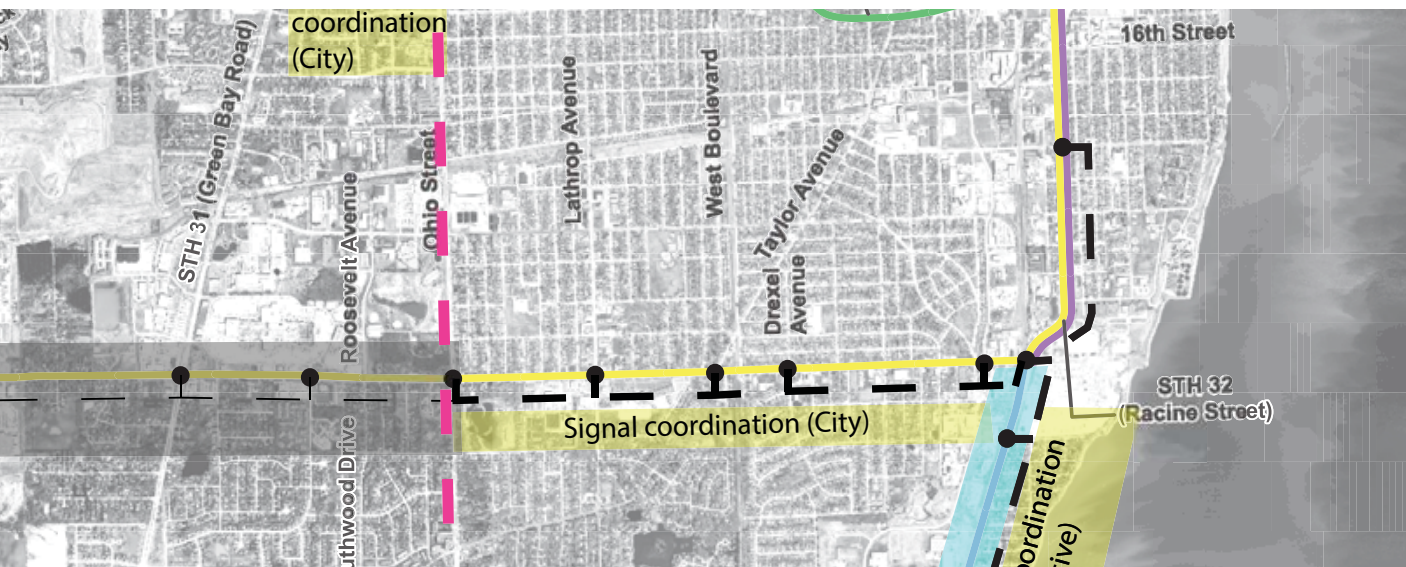
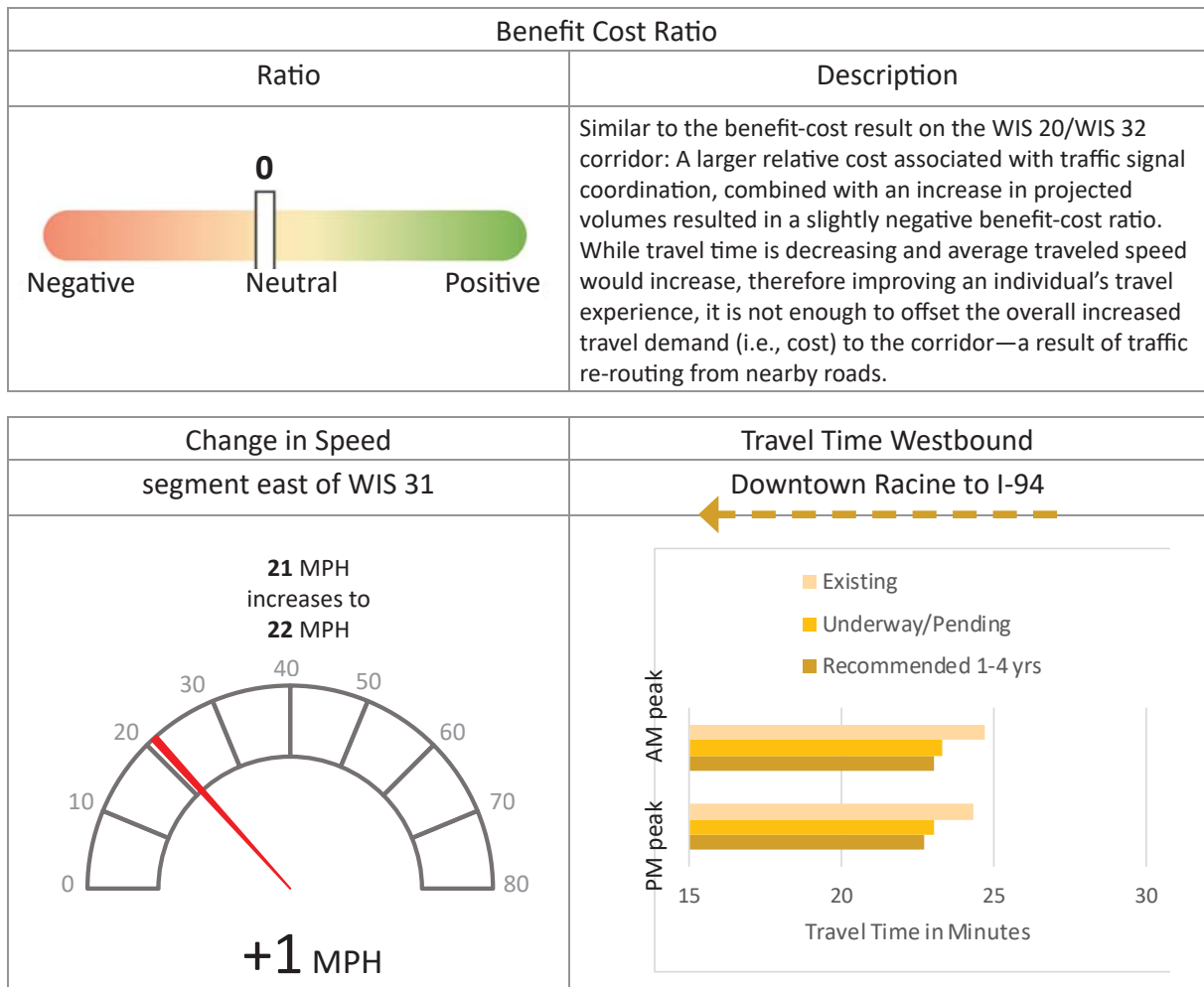
- Intervention opportunity
- Signal coordination / adaptive signals (pending)
- Signal coordination / adaptive signals (1-4 years)
- Capacity expansion
- Proposed multi-use path
- Proposed Rail - to - Trail
- Existing / Underway / Pending improvements
- Proposed ongoing access management



Eastern Racine County Transportation Task Force

Preliminary Recommendations and Evaluation

WIS 11 and WIS 32



Eastern Racine County Transportation Task Force

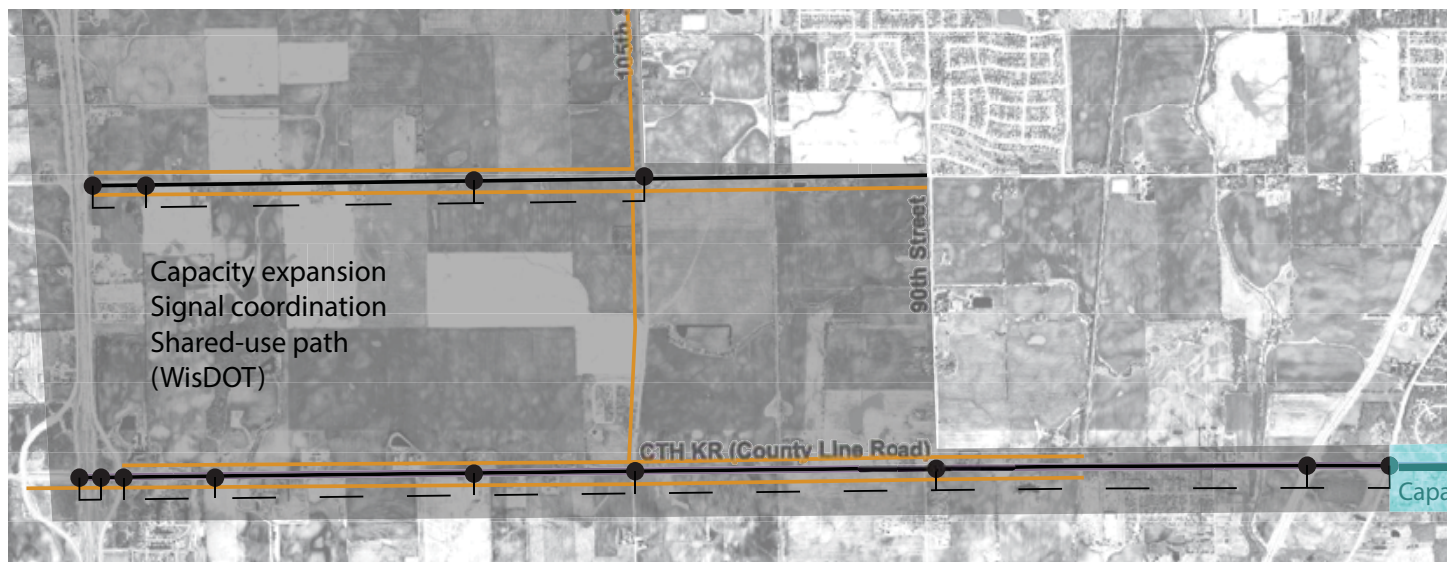
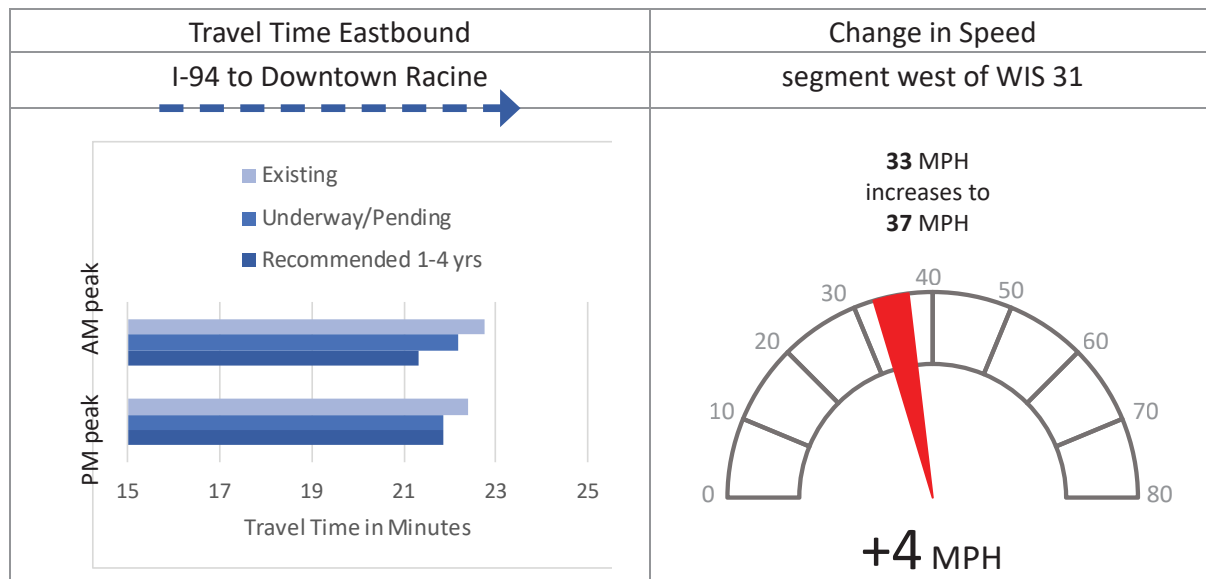
Preliminary Recommendations and Evaluation

CTH KR and WIS 32

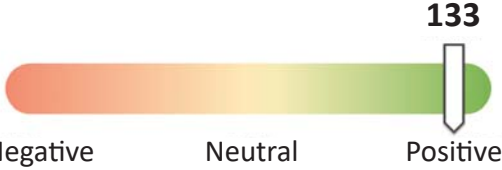
Recommended 1-4 years

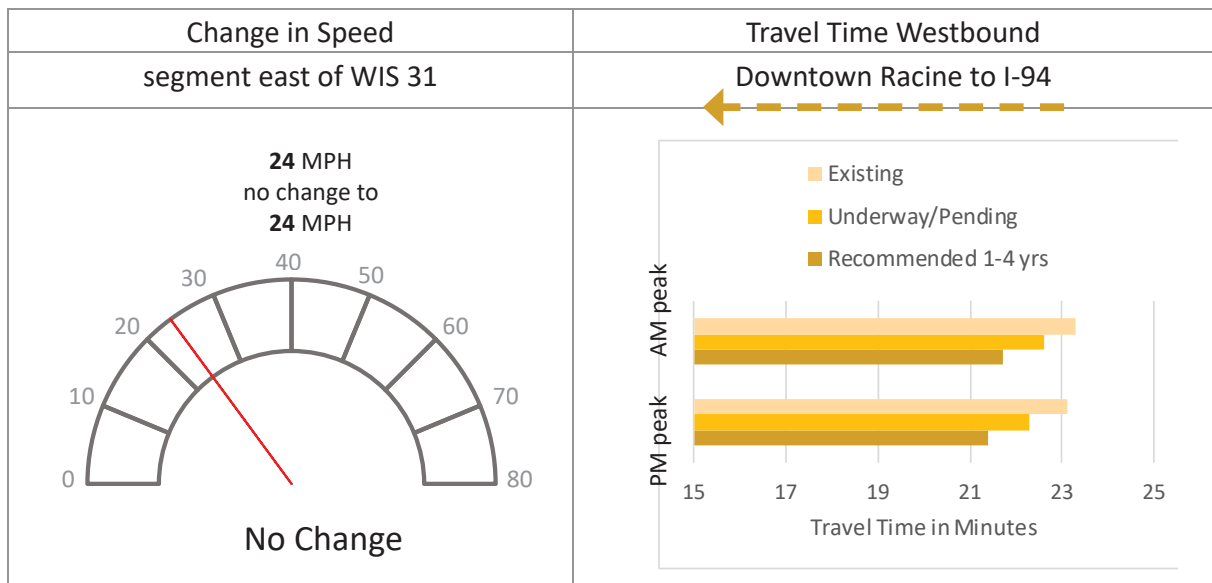
- Signal Coordination (WIS 32 from CTH KR to Main Street)
- Ongoing Access Management and Speed Study (from 4-Mile Road to WIS 38)

Recommended improvements on CTH KR and WIS 32 include roadway expansion, signal coordination and ongoing access management. The Task Force and Advisory Committee highlighted CTH KR as having the greatest opportunity for travel time improvement. The evaluation shows that solutions currently available would improve travel time and increase average travel speeds from 33MPH to 37 MPH west of WIS 31. Additional improvements may be gained from ongoing access management along the corridor.



Eastern Racine County Transportation Task Force
Preliminary Recommendations and Evaluation
CTH KR and WIS 32

Benefit Cost Ratio	
Ratio	Description
 <p>Negative Neutral Positive</p>	<p>Minimal proposed costs combined with decreased travel time and projected volumes, and increased average traveled speed results in a substantial positive benefit-cost ratio. It is possible that some actions surrounding access management could increase costs and impact the benefit-cost ratio.</p> <p><i>Note, capacity expansion between Old Green Bay Road and WIS 32 was not included in the benefit cost analysis.</i></p>



Preliminary Recommendations and Evaluation - Moving Workers to Work

Recommended approaches to improve moving workers are based on input provided by the Task Force and information gathered through the Southeast Wisconsin Regional Planning Commission VISION 2050: A Regional Land Use and Transportation System Plan for Southeastern Wisconsin.

1. Projects classified as “Current” include existing resources like the Wisconsin RIDESHARE Program, a carpool matching software.
2. Projects classified as “In Development” include projects that could occur without additional coordination in the near future.
 - Some improvements were in progress prior to the establishment of the Eastern Racine County Transportation Task Force that are likely to help accomplish the goals of the Task Force. These are included for reference and to provide an estimated level of improvement.
3. Projects classified as “Recommended for 1-4 years” identifies pragmatic improvements that can likely provide benefits in a shorter time and within existing budgets.
4. Projects classified as “Potential 5+ years” identifies projects that have many steps or require existing service to warrant full implementation.

Current

Wisconsin RIDESHARE Program - Existing Statewide Program	Lead: WisDOT Funding: State Appropriation 464
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In Development

Multi-use path - CTH KR (both sides) - Braun Rd (both sides) - International Dr. (both sides) - CTH H (west side)	Lead: WisDOT Funding: State Highway Rehabilitation
Locate additional Park and Rides	Lead: WisDOT Funding: TBD
Transit stops - Don't preclude, ensure that space is available for retrofit in the future	Lead: WisDOT Funding: Cost share state and local
Traffic signal priority for transit - CTH KR - Braun Rd.	Lead: Funding:

Recommended for 1-4 years

Commuter bus routes as proposed by SEWRPC <ul style="list-style-type: none"> - I-41/I-94 between Milwaukee and WIS 165 - CTH KR and WIS 32 between Racine and Foxconn - Braun Rd between H and Foxconn - CTH H between WIS 20 and Foxconn - WIS 11 between Burlington and Foxconn 	Lead: City of Racine / Milwaukee County Funding: TBD
Local bus routes as proposed by SEWRPC <ul style="list-style-type: none"> - Braun Rd between CTH H and WIS 31 - CTH H between WIS 20 and Braun 	Lead: City of Racine Funding: TBD
Express bus routes as proposed by SEWRPC <ul style="list-style-type: none"> - WIS 20 - WIS 31 	Lead: City Racine Funding: TBD
Multi-use path <ul style="list-style-type: none"> - Wisconn Valley Way - WIS 11 (Rail to Trail North side) 	Lead: TBD Funding: TBD
Additional commuter options <ul style="list-style-type: none"> - TNC - Employer based commuter benefit - Educational regarding commuter options 	Lead: TBD Funding: TBD
Studies <ul style="list-style-type: none"> - Parking policies - Transit oriented development 	Lead: Racine Funding: TBD

Potential 5+ years

Traffic signal priority for buses <ul style="list-style-type: none"> - WIS 32 - CTH KR 	Lead: City of Racine Funding: TBD
Parking studies	Lead: Racine Funding: TBD

Eastern Racine County Transportation Task Force

Proposed Additional Fixed-Route Transit in Eastern Racine County

COMMUTER BUS ROUTE & PARK-RIDE

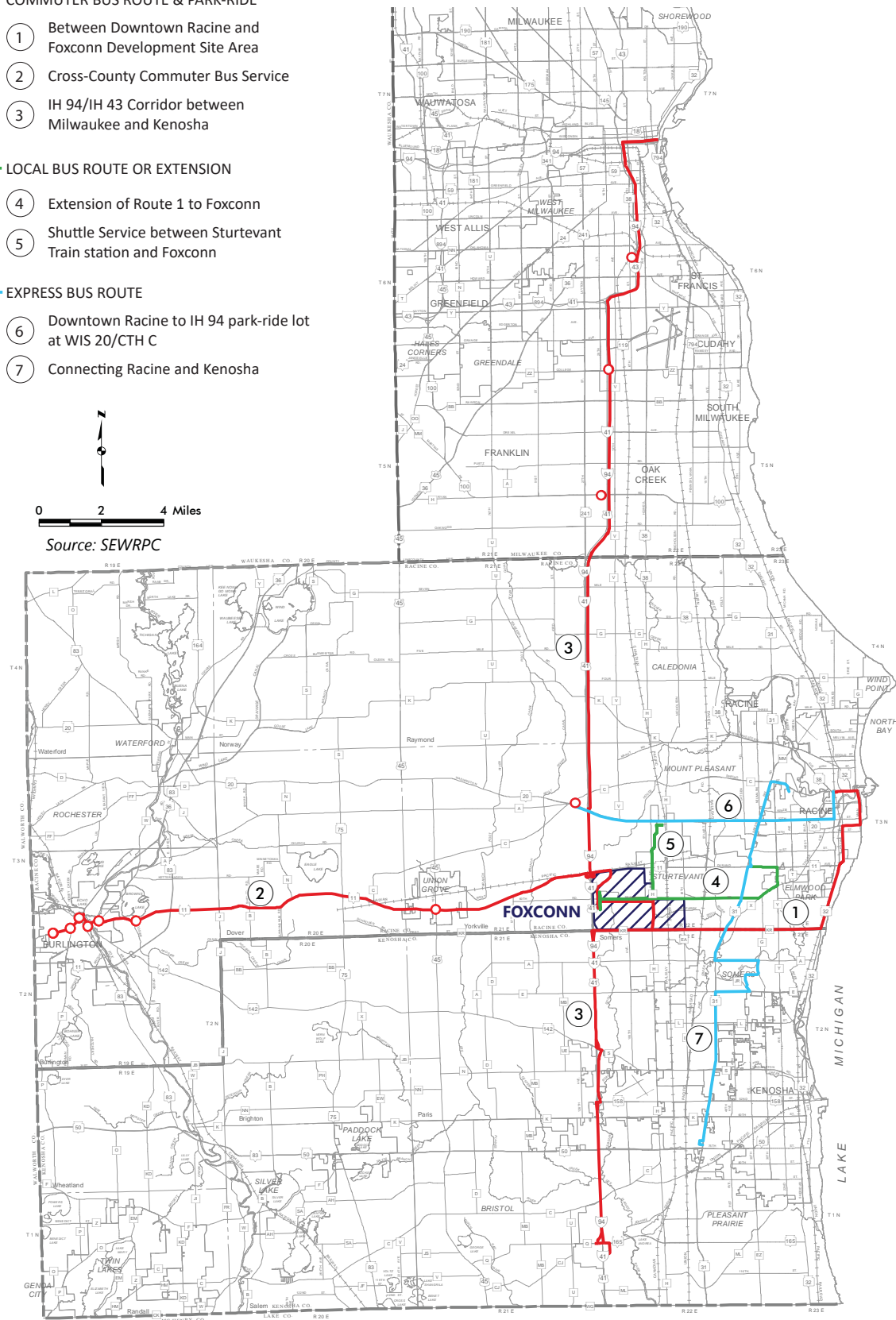
- 1 Between Downtown Racine and Foxconn Development Site Area
- 2 Cross-County Commuter Bus Service
- 3 IH 94/IH 43 Corridor between Milwaukee and Kenosha

LOCAL BUS ROUTE OR EXTENSION

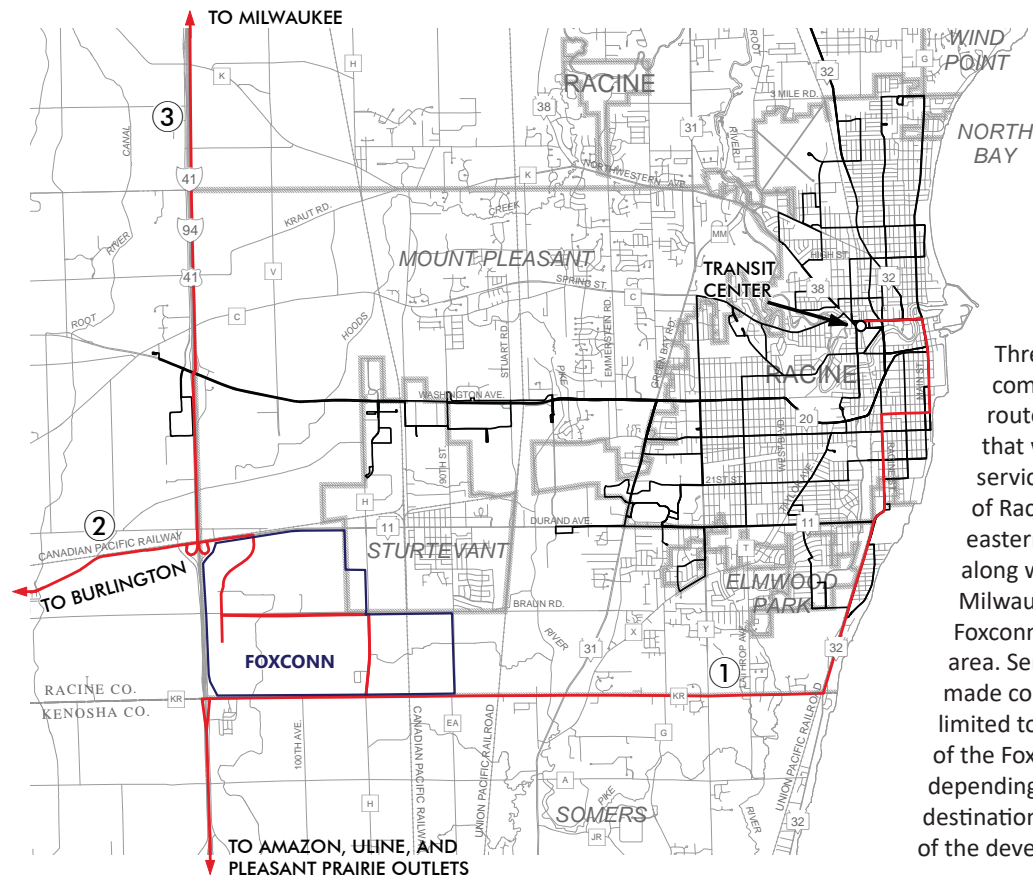
- 4 Extension of Route 1 to Foxconn
- 5 Shuttle Service between Sturtevant Train station and Foxconn

EXPRESS BUS ROUTE

- 6 Downtown Racine to IH 94 park-ride lot at WIS 20/CTH C
- 7 Connecting Racine and Kenosha



Commuter Bus Service



Three potential commuter bus service routes were identified that would provide radial service connecting areas of Racine County (including eastern Racine County), along with Kenosha and Milwaukee Counties, to the Foxconn development site area. Service hours could be made compatible with, or limited to, shift-change times of the Foxconn development depending on the other destinations served in the area of the development.

① Commuter bus from Downtown Racine

This potential service would consist of a limited-stop commuter route that could potentially operate east from the Corinne Reid-Owens Transit Center, making occasional stops in downtown Racine, before heading south on WIS 32 and west on CTH KR, with stops as needed in and near Foxconn. It would operate primarily along Braun Road and the proposed Wisconn Valley Way once it reaches Foxconn and nearby development. This route could also connect to the existing Kenosha-Racine-Milwaukee bus service at the Transit Center (and at a potential transfer point near the intersection of WIS 32 and CTH KR), allowing potential workers from Milwaukee and Kenosha to access jobs at the Foxconn manufacturing campus. It is assumed that the City of Racine would hire a private operator to provide this service.

② Cross-County Commuter Bus Service

This potential route would provide peak morning and evening service between Burlington and Foxconn and nearby development, serving Union Grove, along State Highway 11.

③ Commuter Bus Service in IH 94/IH 43 Corridor Between the City of Milwaukee and the Village of Pleasant Prairie

This potential commuter bus service would connect downtown Milwaukee, the Holt Avenue park-ride lot, the College Avenue park-ride lot, and the Foxconn Manufacturing Campus before heading south to also serve Amazon, Uline, and the Pleasant Prairie Prime Outlets. The route should be scheduled to allow for commuting in both directions.

Estimated Potential Costs

Commuter Bus Service	Potential Costs	
	Initial Capital Costs	Annual Operating Costs
1 ^a	\$0 ^b	\$392,000
2 ^c	\$55,000	\$51,200
3 ^d	\$0 ^b	\$562,000

^a Four round trips per day and a cash fare between \$2.50 and \$3.00 were assumed.

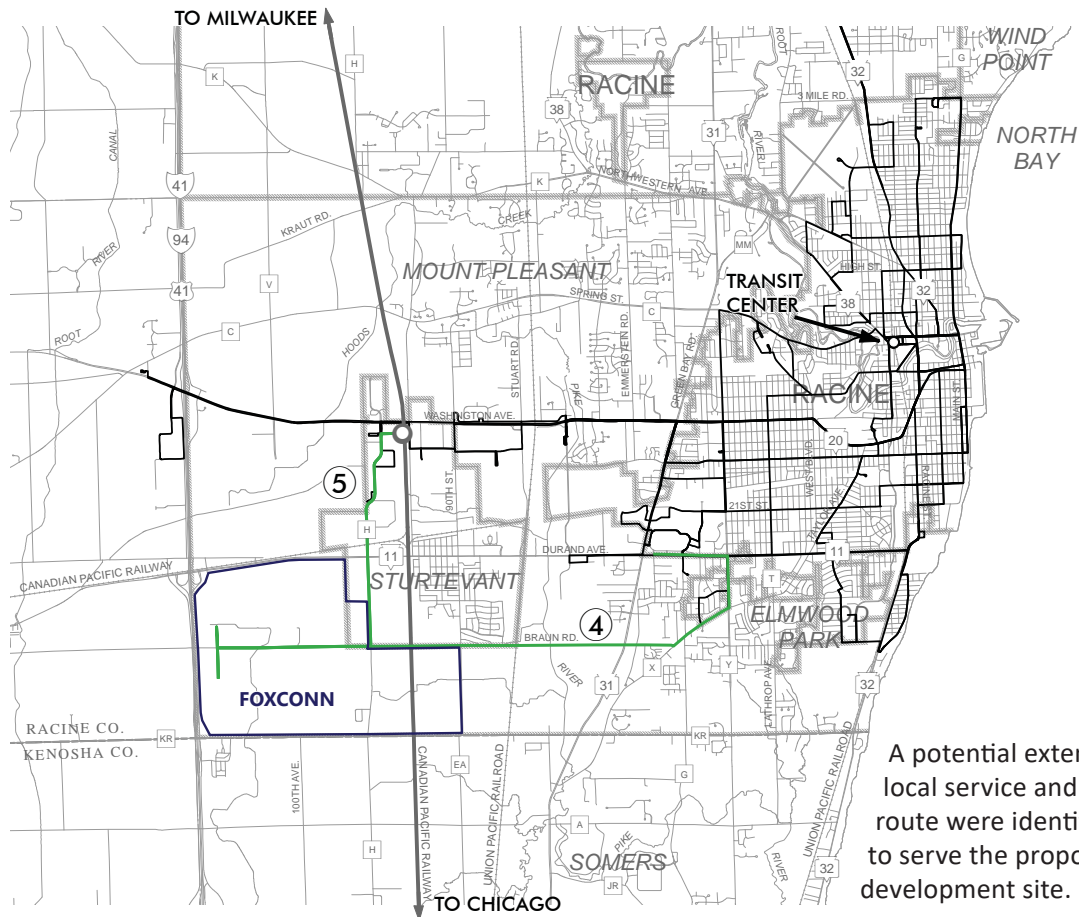
^b Assumes a private transportation operator provides service, and therefore, no upfront capital costs.

^c One round trip per day timed to shift changes was assumed. The level of service could be increased based on the demand. Assumes \$1.00 – \$2.00 cash fares.

^d Four round trips per day timed to shift changes were assumed. The level of service could be increased or decreased based on the demand. Assumes a \$4.00 cash fare with free transfers to existing MCTS and RYDE services.

Eastern Racine County Transportation Task Force

Local Bus Service Additions



A potential extension of existing local service and a new shuttle route were identified that could to serve the proposed Foxconn development site.

4 Extension of Route 1 to Foxconn

RYDE's Route 1 could potentially be extended south to Braun Road and then west to the Foxconn manufacturing campus from its current southern terminus at Taylor Avenue and Meachem Road. Regency Mall could serve as a transfer point to and from other local routes. This potential extension could run all day or only during shift changes. All day service could benefit potential future development anticipated in the vicinity of the Foxconn manufacturing campus such as hospitality, retail, and commercial land uses.

5 Shuttle service from Sturtevant train station

This potential service would consist of a new shuttle service timed with the Amtrak Hiawatha schedule that could directly connect the Foxconn manufacturing campus and surrounding development to the Sturtevant Amtrak Station via CTH H and Braun Road. This concept may require increasing the frequency of service on the Hiawatha line (currently being studied by WisDOT), but would allow limited (but travel-time competitive) service from Milwaukee and Chicago.

Estimated Potential Costs

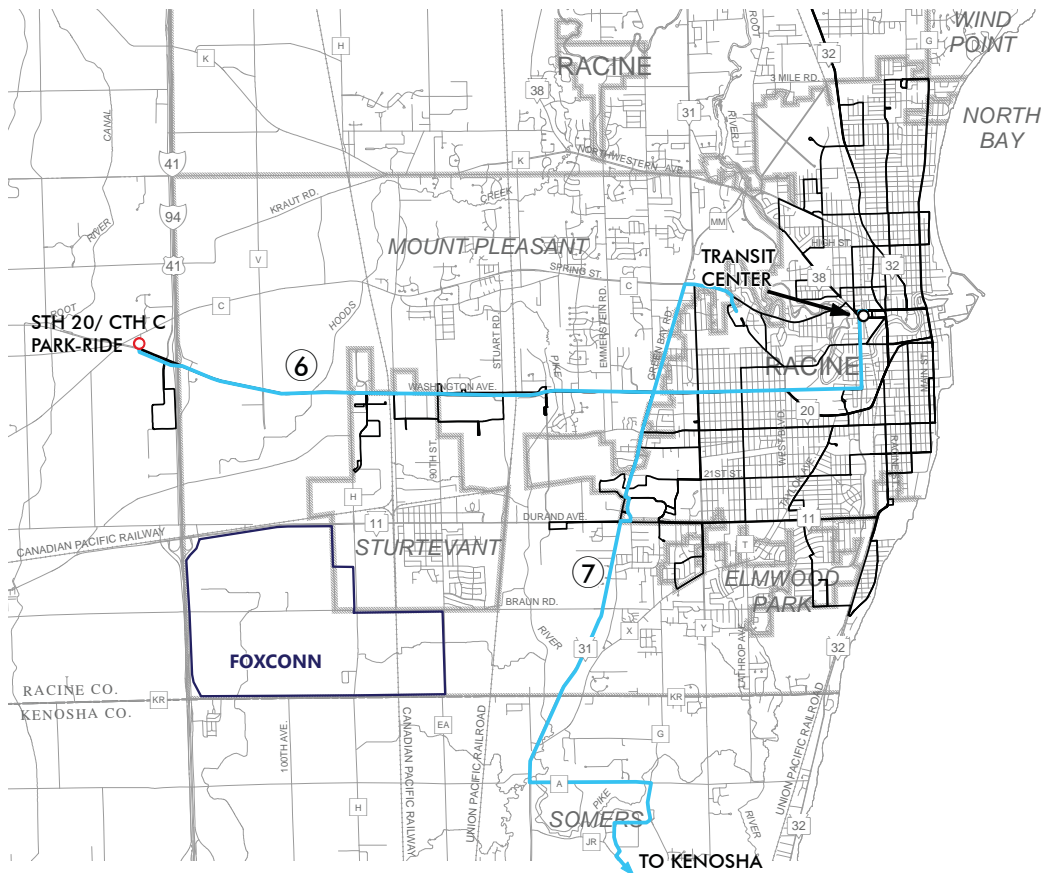
Local Bus Service	Potential Costs	
	Initial Capital Costs	Annual Operating Costs
4 ^a All Day ^b	\$500,000	\$270,100
Shift Changes	\$500,000	\$109,100
5 ^c	\$55,000	\$36,000

^a Assumes fares would be comparable to those charged for similar RYDE services

^b All day service is anticipated to extend current RYDE bus service with 30 minute headways on weekdays and 60 minute headways on weekends.

^c It was assumed that service to and from the Sturtevant station would be provided for the current five weekday and two weekend Hiawatha stops that accommodate the anticipated shift times. Fares are assumed to be \$1.00 per trip

Express Bus Service



Two potential express routes were identified to provide a higher level of service in eastern Racine and Kenosha Counties. While these routes would not directly service the Foxconn development site, the two potential local service routes described previously would serve to connect passengers from the potential express bus services to the Foxconn development site. Additionally, these routes could be modified to more directly serve the Foxconn site. For these potential express bus service routes, stops are envisioned to be spaced at least one-half mile apart, and further apart in areas with little or no development. Service frequency is envisioned to be at least every 30 minutes in the peak, and every hour off-peak.

6 Connecting downtown Racine to park-ride lot at IH 94 and WIS 20/CTH C

This potential route would travel primarily along WIS 20 between downtown Racine and the existing park-ride lot west of IH 94/IH 43 near the intersection of WIS 20 and CTH C.

7 Connecting the Cities of Racine and Kenosha

This potential route would travel between All Saints Hospital in the City of Racine and Southport Plaza in the City of Kenosha primarily along WIS 31, including a diversion to serve the University of Wisconsin – Parkside campus.

Estimated Potential Costs

Express Bus Service ^a	Potential Costs	
	Initial Capital Costs	Annual Operating Costs
6 ^b	\$1,500,000	\$713,100
7 ^c	\$2,000,000	\$1,012,600

^a Assumes 30 minute frequency during the peak and 60 minute frequency off-peak

^b Assumes that current fares would be changed

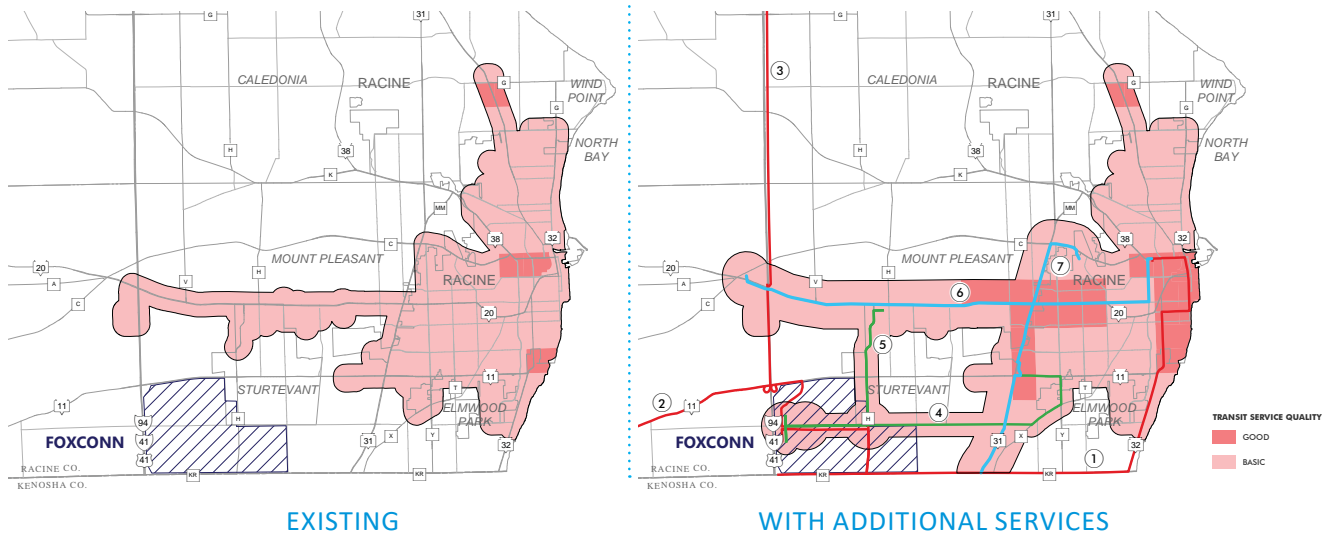
^c Assumes fares would be comparable to those charged for similar services provided by RYDE and Kenosha Area Transit.

Eastern Racine County Transportation Task Force

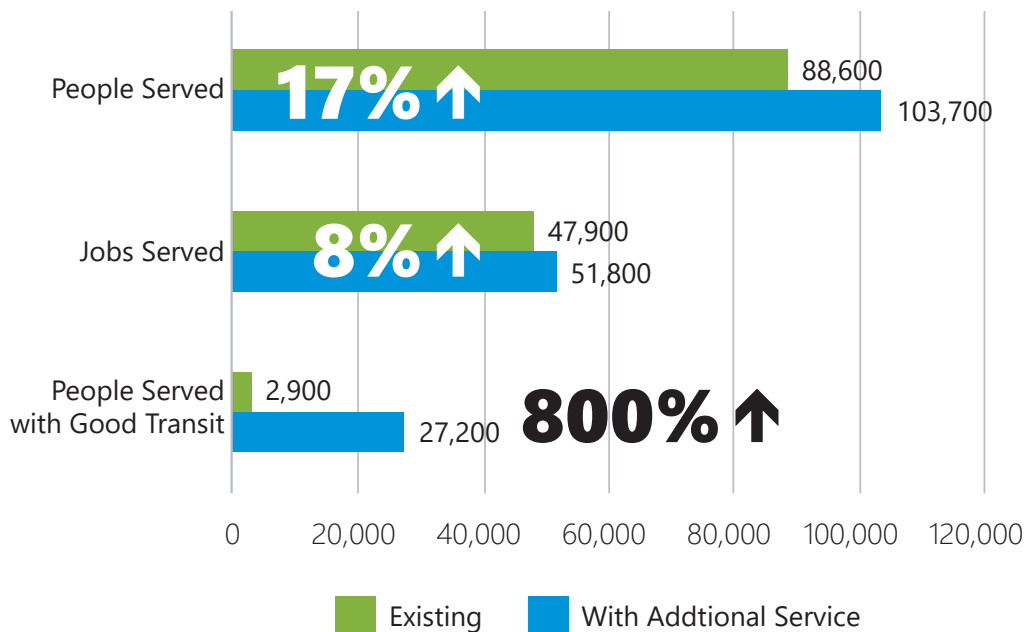
Results of Evaluations of Expanded Transit Services

The information provided below demonstrates how these services would achieve the goals of the Eastern Racine Task Force. Implementation of the identified potential commuter, local, and express bus service will be expected to improve accessibility for workers to the Foxconn development site and improves the extent and quality of the existing transit service provided in the City of Racine, as well as the City of Kenosha and in Milwaukee County.

Improvements to Service Availability and Quality



Results In...



An estimated **20,500** workers in Racine County will have access to the Foxconn development site within 60 minutes.

Partnership with Transportation Network Companies

Pros

- Could help businesses with apprenticeship or seasonal work
- Best serves short distance trips not well served by transit
- Reservations not required, short wait times

Cons

- High cost per rider
- Typically requires a cell phone and credit card
- Vehicles are unlikely to be accessible for people with disabilities

This option involves the County or local governments partnering with local employers, like Foxconn, to fund or partially fund the transportation of workers utilizing a shared transportation network company (TNC) service, such as Uber and Lyft. The service under the partnership could be for trips within a certain geographic area, such as eastern Racine County. As an alternative, the service could provide first- and last-mile trips between an employer and an existing transit stop, such as the Amtrak station, or a park-ride lot. In addition to trips being booked through a TNC-produced website or smartphone application, a call-in number can be made available for workers without a smartphone or Internet access. Under the partnership, either the county or a local government and/or an employer could subsidize a portion (through a coupon) or all of the cost for the TNC trip.

National Examples

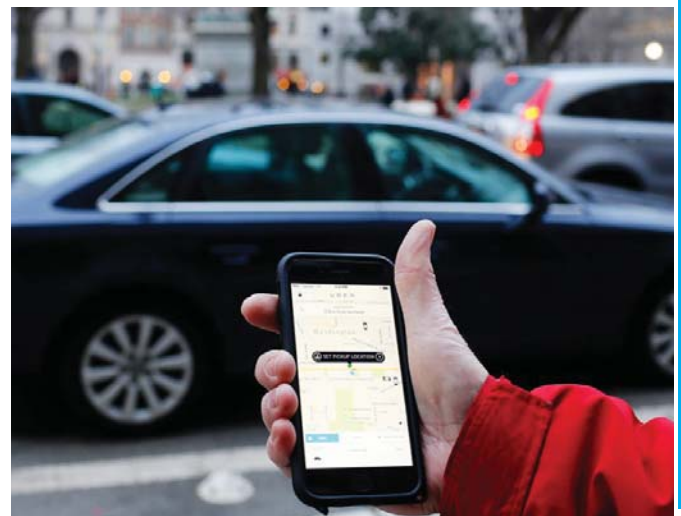
Go Centennial (Centennial, Colorado)

- Six-month public private partnership to serve commuters' first and last mile needs from a nearby light rail station
- Rides on Lyft within a 3.75 miles service area of the light rail station were subsidized by Go Centennial, a public private partnership
- Go Centennial provided rides at no cost to travelers to go to or from the light rail station. Each trip was subsidized at market rate, which was on average \$4.70, ranging from \$2.56 to \$16.24
- The Go Centennial service resulted in a 78 percent reduction in total costs compared to the existing Call-n-Ride service operated by the Regional Transit District



Pinellas Suncoast Transit Authority (Pinellas County, Florida)

- Partnered with Uber (and additional services that offer wheelchair accessible transport) to subsidize rides starting in February 2016 to address first and last mile needs through their Direct Connect program
- Direct Connect allows riders to use Uber to travel within a specific geographic zone to or from a series of designated bus stops
- The Transit Authority pays the first \$3.00 per ride within designated service zones from bus stops and the typical rider costs the passenger \$1.00 on average
- The program was recently expanded to serve the entire County and to include Lyft



Eastern Racine County Transportation Task Force

Employer-Sponsored Transportation

This option involves an employer sponsoring a shuttle service for its employees, particularly those without access to a personal vehicle. Similar to a partnership with a transportation network company (TNC), such as Uber or Lyft, the employer-sponsored shuttle service could provide trips between the employer and an existing transit stop, such as the Amtrak station, or a park-ride lot. The shuttle services may be funded solely by the employer or through a partnership with local transit operators. As technology evolves, this service could be provided by an autonomous vehicle, reducing the costs.

Examples of Employer-Sponsored Transportation Programs

- Apple, Inc. – provides shuttle service for its employees to transport them between points in the San Francisco Bay Area and the Cupertino, CA campus
- Seattle Children’s Hospital – runs its own 22-shuttle system, moving employees between the worksite and transit hubs, which has resulted in 20 percent of employees using transit
- Lake County Transportation Management Association – the Shuttle Bug Program links 13 Pace shuttle routes to rail stations, resulting in 1,000 daily trips. Employers and the public sector split 50/50

Employer-Based Commuter Benefit

May Include:

- Carpool matching service, such as Wisconsin’s RIDESHARE program (rideshare.wi.gov)
- Vanpool services
- Financial incentives for carpoolers, vanpool users, cyclists, or pedestrians
- Commuter information center
- Free or reduced public transit fares

This option involves employers initiating programs to encourage employees to travel to work by carpooling, transit, walking, or biking, as opposed to driving alone. For instance, an employer could charge employees for parking, encouraging employees to take transit, carpool, bike, or walk to work. Alternatively, an employer could determine its costs for providing parking to employees, and offer employees that don’t require a parking spot a portion or all of the employer’s savings for not needing to provide and maintain that parking space.



Summary of Benefits for Transit Interventions

Intervention Approaches	Improves Service Availability	Reduces Single-Occupancy Auto Travel	Provides Flexible or On-Demand Service	Accommodates High Passenger Demand	Provides All-Day Service	Improves Service Quality ^a
Commuter Bus Service						
Between Downtown Racine and Foxconn Development Site Area	☑	☑	--	☑	--	☑
Cross-County Commuter Bus Service	☑	☑	--	☑	--	☑
IH 94/IH 43 Corridor Between the City of Milwaukee and the Village of Pleasant Prairie	☑	☑	--	☑	--	☑
Local Bus Service Additions						
Extension of Route 1 to Foxconn	☑	☑	--	☑	☑ ^b	--
Shuttle Service from Sturtevant Train Station	☑	☑	--	☑	--	☑
Express Bus Service						
Connecting Downtown Racine to Park-Ride Lot at IH 94 and STH 20/CTH C	☑	☑	--	☑	☑	-- ^c
Connecting the Cities of Racine and Kenosha	☑	☑	--	☑	☑	☑
Partnership with Transportation Network Companies (TNC)	☑	--	☑	--	☑	☑
Employer-Sponsored Transportation	☑	☑	--	☑	--	☑
Employer-Based Commuter Benefit	--	☑	--	--	--	--

^a Transit service quality is generally defined by travel speed and frequency.

^b Could be provided all day or scheduled to match shift times at the Foxconn development site.

^c Initially this service would provide 30 minute frequencies during the peak commute times. However, if frequencies increase to every 15 minutes, the quality of the service would also increase.