Eastern Racine County Sub area Multi-modal Transportation Plan

Eastern Racine County Transportation Task Force

August 16, 2018

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

Project support from Southeastern 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.

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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

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Dave DeGroot

Jonathan Delagrave, Chair

Jim Dobbs

Jerry Franke

Jayme Hoffman

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Racine County Executive

Village of Caledonia

Racine County Consultant

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Racine County

Advisory Committee

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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

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.

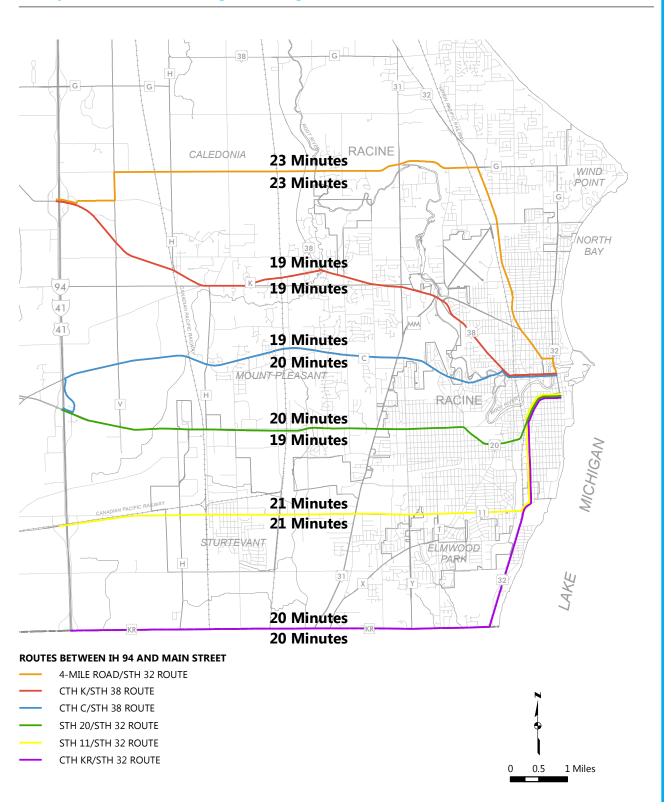
Data from SEWRPC's travel time study

Objective (We want to...)

- 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



Defining the Problem: continued

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

Problem Statement

Some employment centers (including Foxconn) are not served by transit highlighting the mismatch between supply and demand for transit service. 32,818 (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. Data from Center for Neighborhood

Objective (We want to...)

- 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

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.

Data from Center for Neighborhood Technology All Transit Metrics

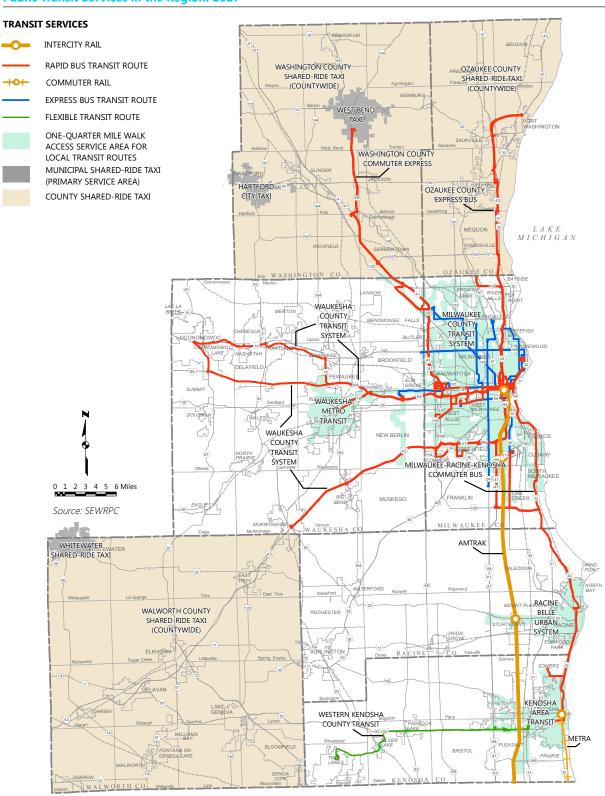
Technology All Transit Metrics

- 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.

Map 2

Public Transit Services in the Region: 2017

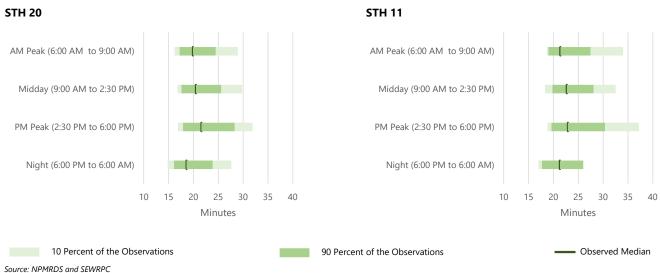


Existing Conditions: East-West Connection

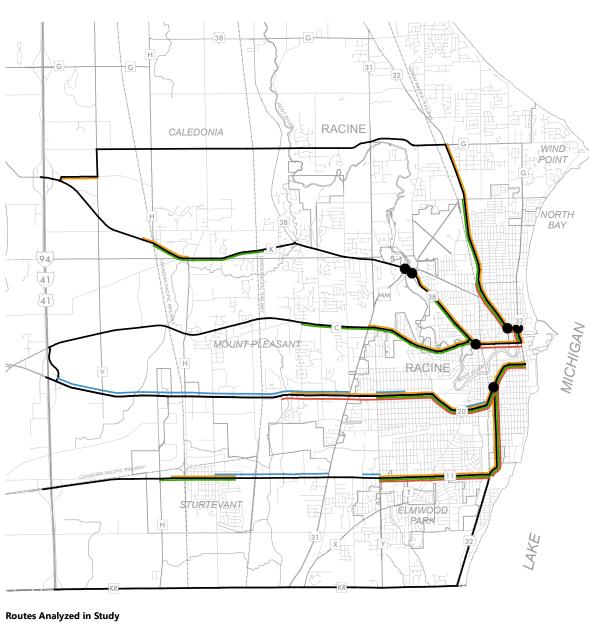
The Task Force reviewed and considered a variety of existing conditions when recommending improvements. For the travel time problem, information was provided regarding existing travel speed, signal location and coordination, roadway automobile capacity, speed limits, and land access. This information is detailed through SEWRPC's previous study and is summarized in Map 3, which shows the potential 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. Five 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



Map 3 Roadway Impediments Along Studied Routes to the City of Racine from IH 94



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- --- ROUTE CENTERLINE
- INADEQUATE CAPACITY
- SPEED LIMIT LESS THAN 40 MPH
- LESS THAN ACCEPTABLE 0.5 MILE SIGNAL SPACING

SIGNIFICANT DIRECT LAND ACCESS

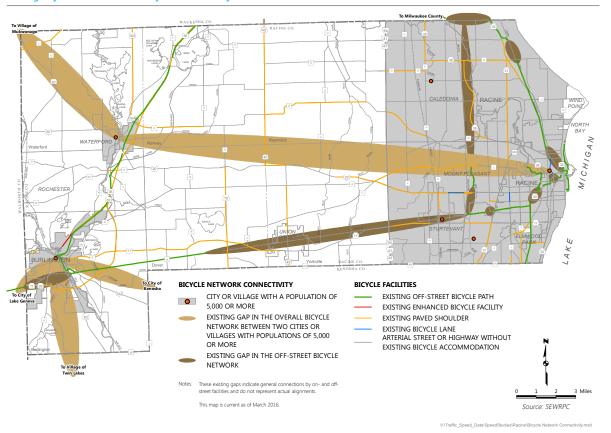
DIFFICULT INTERSECTIONS

0.5 1 Miles Source: SEWRPC

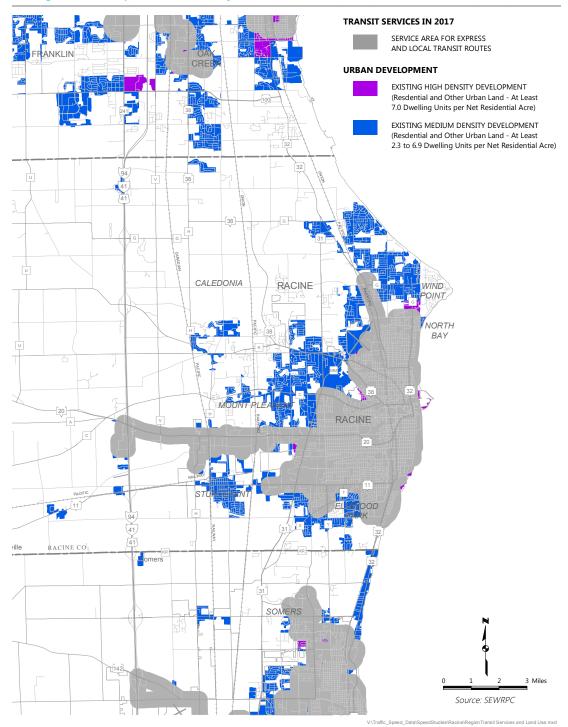
Existing Conditions : Moving Workers to Work

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 Netowrk Connectivity in Racine County



Map 5
Existing Urban Development Not Served by Transit



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 Slow Travel Times – Summary of Responses

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

4/23/2018

Think about systems that support and control traffic.

4 worksheets received

1. Add interventions to the list below.

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

					Alterr	natives			
							4-		
		5	CTILIZ	STH	STH	CTH	Mile	CTIL C	
		Example	CTH K / STH	20 / STH	11 / STH	KR STH	Rd / STH	CTH C / STH	
			38	32	32	32	32	38	
	Reduce number of traffic signals			1	1	1		1	
	Improve coordination of signals	X				1			
us	Increase speed limit					1	1	2	
	Reduce direct land access points	X	2	1	1	2		1	
Interventions	Reduce turning conflict locations	X				2		1	
irve	Add capacity					1		1	
Inte	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					

Other comments from worksheets:

General

- Change title to "City Interstate Access"
- What about the connecting N/S routes? Don't 4-Mile Rd / WIS 32 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
- 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

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 Lathop; ??
	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;
suc	Incentivize employer commuter benefit programs		Yes; Yes; Identify nodes;
Interventions	Incentivize employer carpool benefit program		Yes; Yes
erve	Incentivize partnership on-demand transportation		??; not sure how this works;
<u>Int</u>	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!		

Other comments from worksheets:

General

- Go Riteway Airport
- Employer based
- 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

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.

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Measures of Effectiveness

Measures were defined by technical experts in order to provide the task force with a way 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.

Travel Time	Employment centers not served by transit
Cost-Benefit Analysis	Cost per Passenger
Direct Land Access and Street Network Density	Level of Transit Service Available
Qualitative by Task Force	Level of Transit Service Quality
Traffic Operations Model	Qualitative by Task Force
Turning Conflict Locations	Transportation Choices
	Workforce Available within a 30-minute commute

Descriptions of the final measures of effectiveness are detailed below and the results are reported along with the preliminary recommendations

 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.

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.

- **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 Foxconn development roads.
- 2. Projects classified as "In Development" include projects that could occur without addition 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 - WIS 11 between I94 and CTH H - Braun Rd. between I94 and 90th - CTH KR between I94 and 90 th St	Lead implementation agency: WisDOT Partner agencies: Local municipalities Funding: State Highway Rehabilitation
Signal coordination / Adaptive signals - WIS 11 between I94 and CTH H - Braun Rd between I94 and 90 th St	Lead implementation agency: WisDOT Partner agencies: Local municipalities Funding: TBD *assumes coordination between State and local systems

In Development

Capacity expansion	Lead implementation agency: WisDOT
 CTH KR between 90th St and Old Green Bay Road 	Partner agencies: Local municipalities
	Funding: State Highway Rehabilitation
Signal coordination / Adaptive signals	Lead implementation agency: WisDOT
 WIS 20 between West Frontage and WIS 31 	Partner agencies: Local municipalities
 WIS 11 between CTH H and Ohio St 	Funding: CMAQ; Local Funds
 CTH KR between 90th and Old Green Bay Road 	*assumes coordination between State and local systems
Access management and speed limit analysis	Lead implementation agency: WisDOT
- Braun Rd between I94 and 90 th St	Partner agencies: Local municipalities
 CTH KR between I94 and Old Green Bay Road 	Funding: TBD
Smart corridors	Lead implementation agency: WisDOT
 Not preclude additional communications and 	Partner agencies: Local municipalities
detection on all development roads	Funding: TBD

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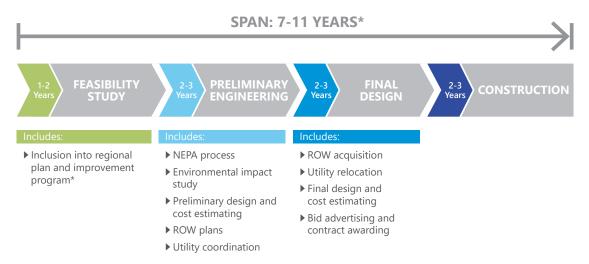
Recommended for 1-4 years

Capacity expansion - CTH KR from Old Green Bay Road to WIS 32	Lead implementation agency: Maintaining authority Partner agencies: TBD Funding: TBD
Signal coordination / Adaptive signals - 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 *assumes coordination between State and local systems
Access management and speed limit analysis - 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 Smart corridors	Lead implementation agency: Maintaining authority Partner agencies: Adjacent local governments Funding: TBD Lead implementation agency: Maintaining authority
Not preclude additional communications and detection on all development roads	Partner agencies: TBD Funding: TBD

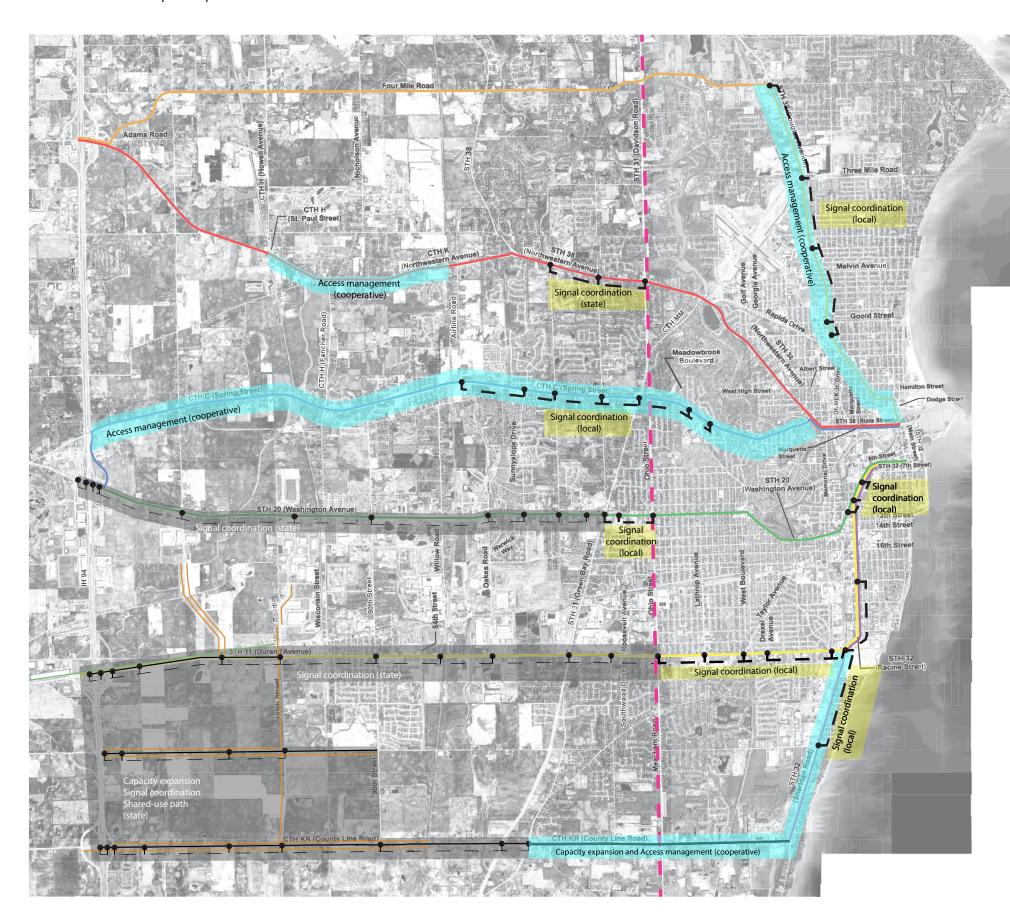
Potential 5+ years

Capacity expansion	See separate process outline
 Interstate Spur between I94 and City of Racine (CTH C) 	
- WIS 20 from I94 to Oakes Rd (per development agreement)	

Chart 2 Potential Project Development Timeline for Eastern Racine County Freeway Spur



^{*} Dependent on Eastern Racine County Freeway Span being determined to be feasible and the identification of a potential funding source.

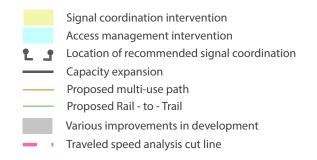


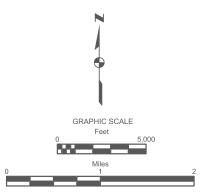
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Preliminary Recommendations Summary

East - West Travel Times

Intervention Types and Improvements





4-Mile Road / WIS 32

CTH K / WIS 38

CTH C / WIS 38

WIS 20 / WIS 32

WIS 11 / WIS 32

CTH KR / WIS 32

4 Mile Road and WIS 32

Recommended 1-4 years

- Signal Coordination (WIS 32 from 4-Mile Road to WIS 38)
- 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 access management along WIS 32.

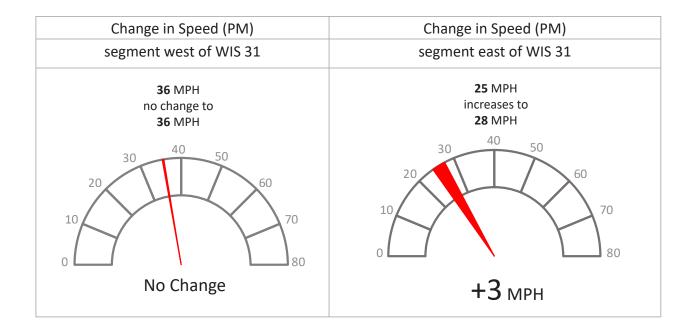


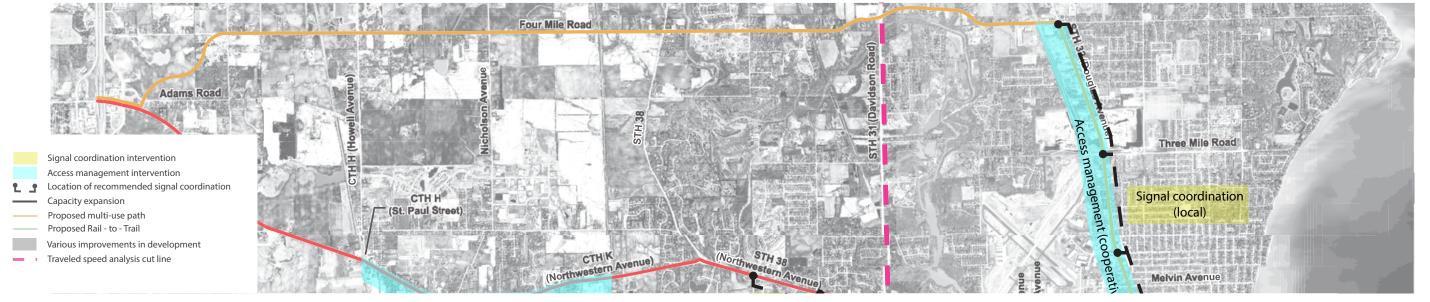
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Preliminary Recommendations and Evaluation

4 Mile Road and WIS 32

Benefit Cost Ratio			
Ratio	Description		
Not Applicable	Transportation improvement costs unknown at this time.		



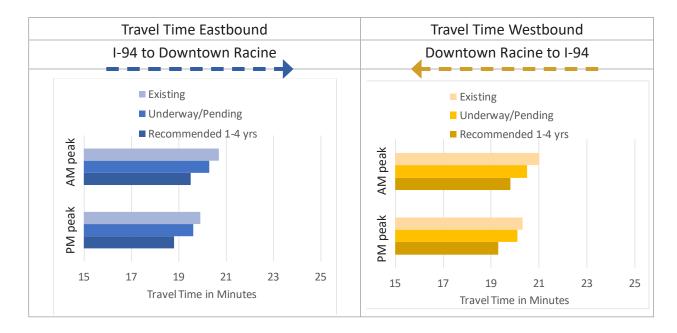


CTH K and WIS 38

Recommended 1-4 years

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

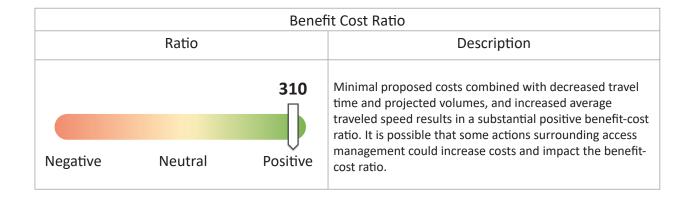
Recommended improvements n CTH K and WIS 38 include traffic signal coordination on WIS 38 just west of WIS 31. The Task Force and Advisory Committee identified this as a good route for accessing the Interstate. Signal coordination is anticipated to improve travel time and increase average travel speed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

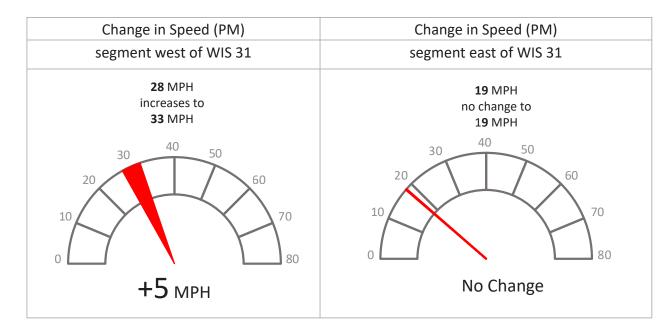


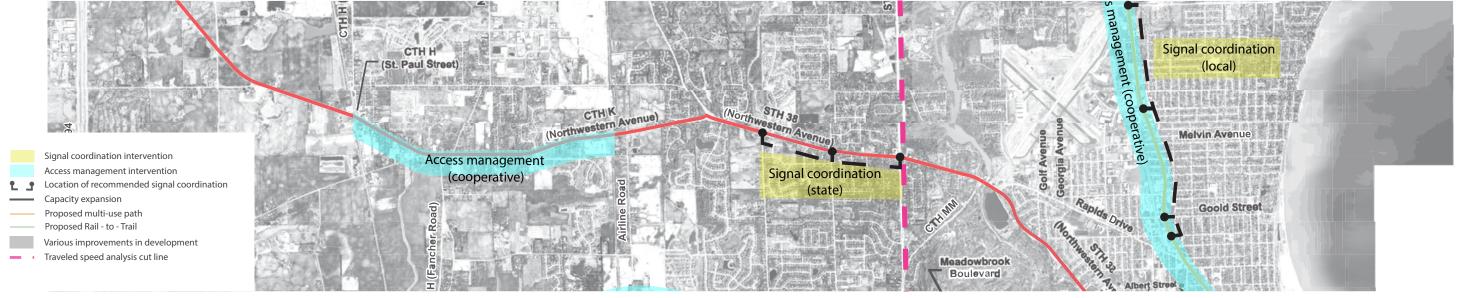
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Preliminary Recommendations and Evaluation

CTH K and WIS 38





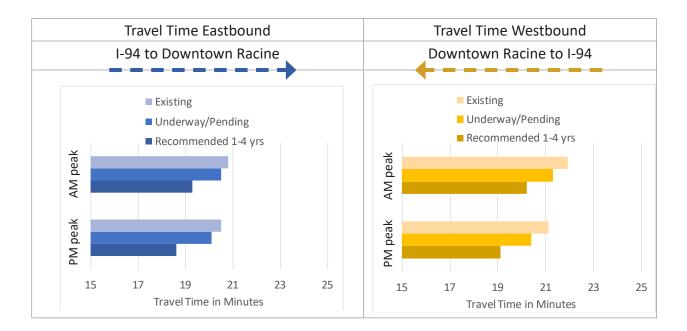


CTH C and WIS 38

Recommended 1-4 years

- Signal Coordination (CTH C from 194 to WIS 38)
- Access management and Speed Study (CTH C from I94 to WIS 38)

Recommended improvements to CTH C and WIS 38 include signal coordination and 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.

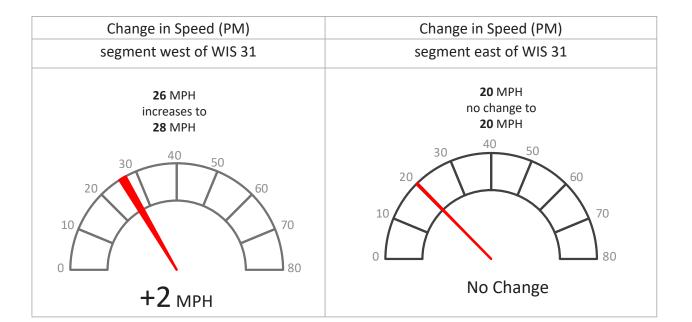


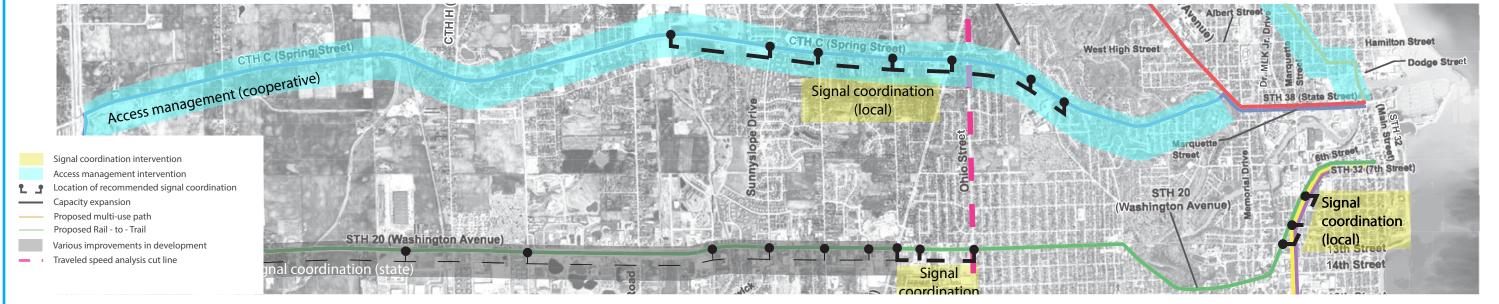
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Preliminary Recommendations and Evaluation

CTH C and WIS 38

Benefit Cost Ratio			
Ratio	Description		
Not Applicable	Transportation improvement costs unknown at this time.		





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)

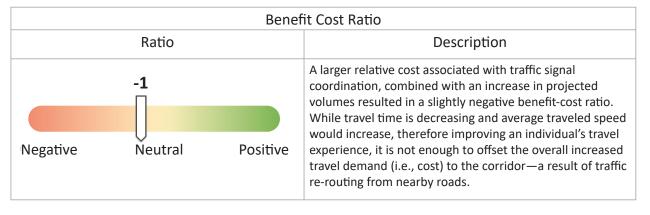
Recommended improvements on WIS 20 and WIS 32 include signal coordination along much of the corridor. The Task Force and Advisory Committee describe WIS 20 as a good urban street east of WIS 31. Signal coordination east of WIS 31 is anticipated to improve traffic flow, but not increase travel speeds.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

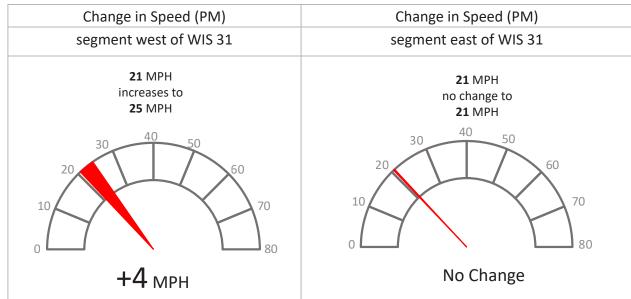


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Preliminary Recommendations

WIS 20 and WIS 32



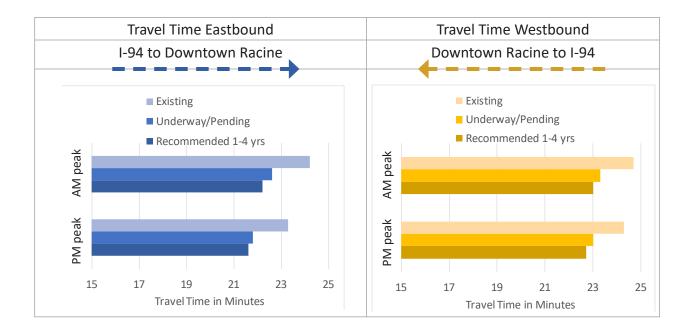




WIS 11 and WIS 32

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.

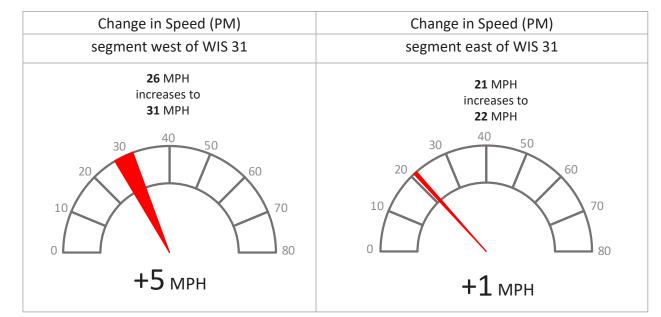


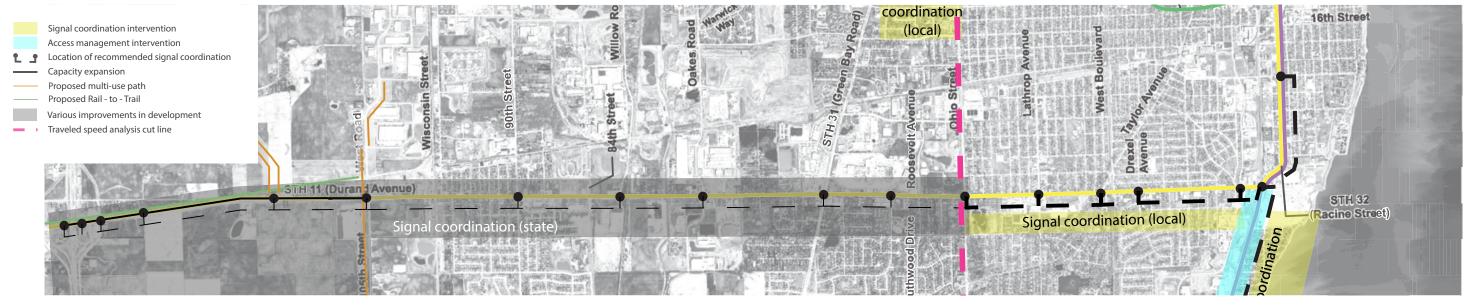
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Preliminary Recommendations and Evaluation

WIS 11 and WIS 32

	Benefit Cost Ratio			
	Ratio		Description	
Negative	O Neutral	Positive	Similar to the benefit-cost result on the WIS 20/WIS 32 corridor: 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.	

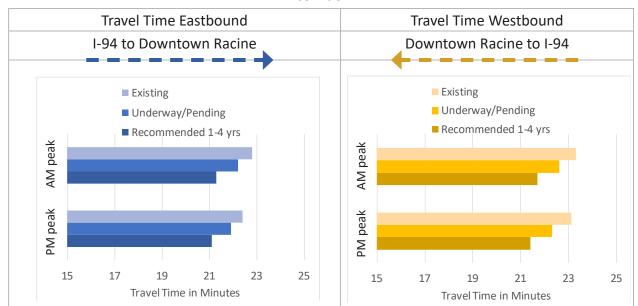




CTH KR and WIS 32

Recommended 1-4 years

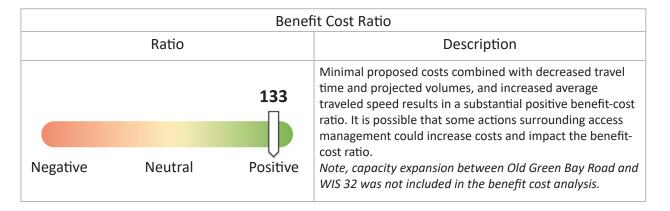
 Signal Coordination (WIS 32 from CTH KR to Main Street) Recommended improvements on CTH KR and WIS 32 include roadway expansion, signal coordination and access management. The Task Force and Advisory Committee highlighted CTH KR as having the greatest opportunity for travel time improvement. The evaluation 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 access management along the corridor.

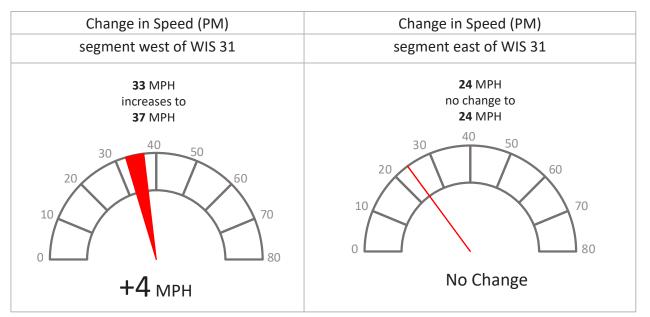


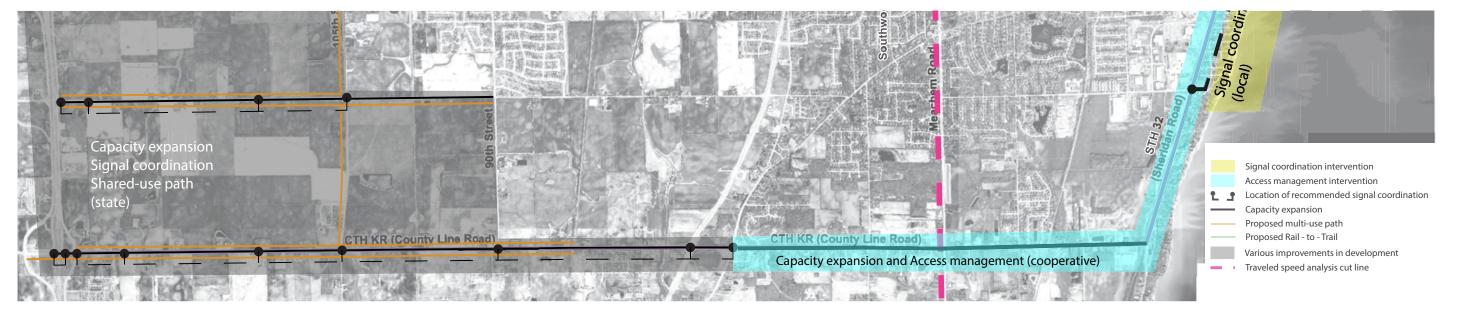
30



CTH KR and WIS 32







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.
- 2. Projects classified as "In Development" include projects that could occur without addition 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	Lead: WisDOT
- Existing Statewide Program	Funding: State Appropriation 464

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, Local
Locate additional Park and Ride(s)	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:

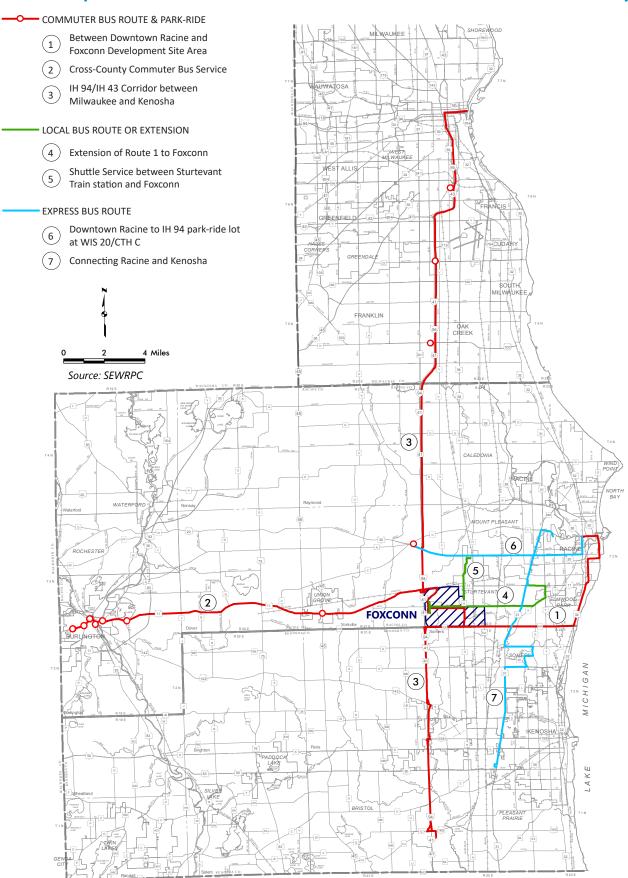
Recommended for 1-4 years

Ctbt	Land City of Danier / Nailway In a County
Commuter bus routes as proposed by SEWRPC - 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 - 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 - WIS 20 - WIS 31	Lead: City Racine Funding: TBD
Multi-use path - Wisconn Valley Way - WIS 11 (Rail to Trail North side)	Lead: TBD Funding: TBD
Additional commuter options - TNC - Employer based commuter benefit - Educational regarding commuter options	Lead: TBD Funding: TBD
Studies - Parking policies - Transit oriented development	Lead: Racine Funding: TBD

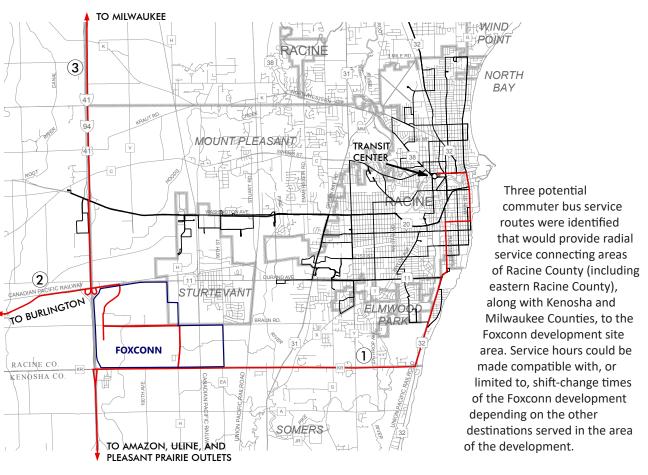
Potential 5+ years

Traffic signal priority for buses - WIS 32 - CTH KR	Lead: City of Racine Funding: TBD
Parking studies	Lead: Racine Funding: TBD

Proposed Additional Fixed-Route Transit in Eastern Racine County



Commuter Bus Service



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

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

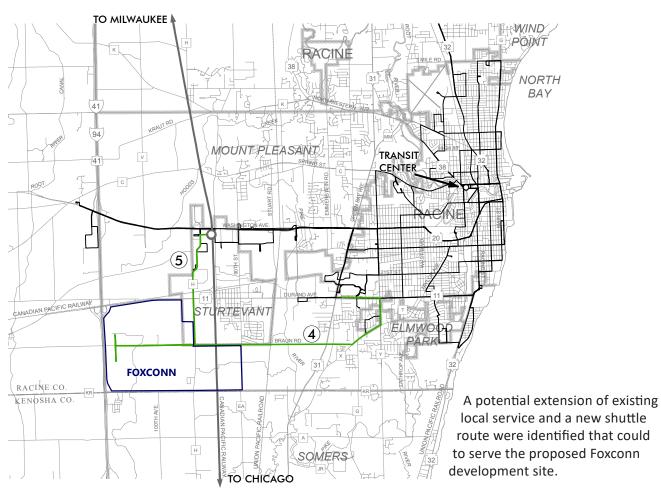
^a Four round trips per day and a cash fare between \$2.50 and \$3.00 were assumed.

^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.

Local Bus Service Additions



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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

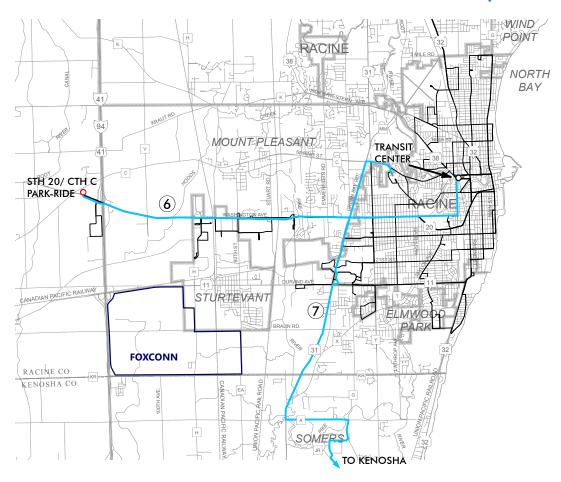
This potential service would consist of a new shuttle service timed with the Amtrak Hiawatha schedule that could directly connect the Foxconn manufacturing campus and surrounding development to the Sturtevant Amtrak Station via CTH H and Braun Road. This concept may require increasing the frequency of 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

	Potenti	al Costs	
	Annual Operating		
Local Bus Service	Initial Capital Costs	Costs	
4ª 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

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.

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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

	Poten	tial Costs		
Express Bus	Initial	Annual Operating		
Service ^a	Capital Costs	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 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

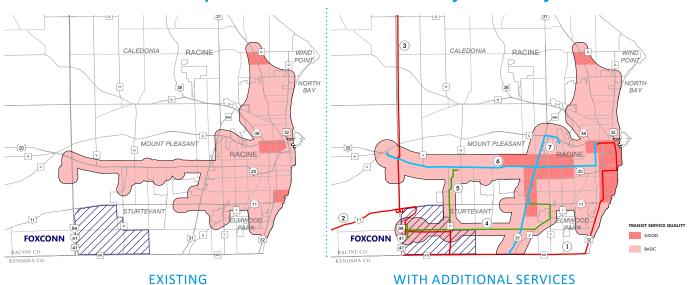
^b Assumes that current fares would be changed

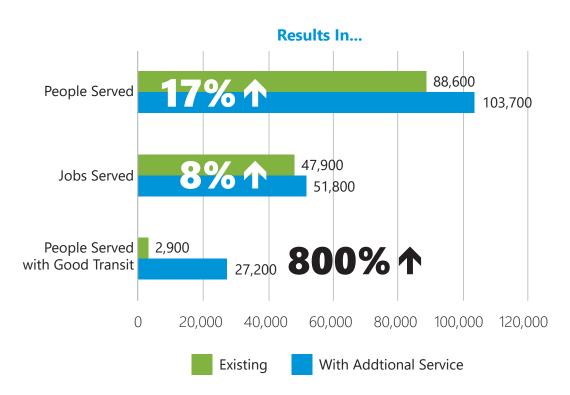
^c Assumes fares would be comparable to those charged for similar services provided by RYDE and Kenosha Area Transit.

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





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

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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

National Examples

Go Centennial (Centennial, Colorado)

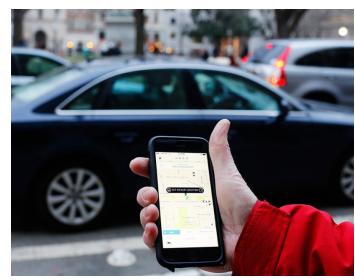
- Six-month public private partnership to serve commuters' first and last mile needs from a nearby light rail station
- Rides on Lyft within a 3.75 miles service area of the light rail station were subsidized by Go Centennial, a public private partnership
- Go Centennial provided rides at no cost to travelers to go to or from the light rail station.
 Each trip was subsided 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

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 parkride 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.





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.



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Summary of Benefits for Transit Interventions

		Reduces Single-				
Intervention Approaches	Improves Service Availability	Occupancy Auto Travel	Provides Flexible or On-Demand Service	Accommodates High Passenger Demand	Provides All-Day Service	Improves Service Quality
Commuter Bus Service						
Between Downtown Racine and Foxconn Development Site Area	D	D	1	D	1	D
Cross-County Commuter Bus Service	₪	₪	1	D	1	D
IH 94/IH 43 Corridor Between the City of Milwaukee and the Village of Pleasant Prairie	>	১	1	D	+	D
Local Bus Service Additions						
Extension of Route 1 to Foxconn	₪	₪	;	D	Ŝ	1
Shuttle Service from Sturtevant Train Station	₪	₪	1	D	:	D
Express Bus Service						
Connecting Downtown Racine to Park-Ride Lot at IH 94 and STH 20/CTH C	D	₽	!	۵	₽	o
Connecting the Cities of Racine and Kenosha	₪	₪	1	Σ	₽	D
Partnership with Transportation Network Companies (TNC)	D	-	D		D	D
Employer-Sponsored Transportation	区	₪	1	Ъ	+	区
Employer-Based Commuter Benefit	1	D	1	1	1	1

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

Could be provided all day or scheduled to match shift times at the Foxconn developm

Final Recommendations and Implementation Plan: East-West Connection

The following priorities and actions are the Task Force's recommendations based on their understanding and analysis of near-term developments in Eastern Racine County. Assumptions for the 1-4 year time-frame includes 2,000 new jobs, a combination of 8-hour shift for professional staff and two 12-hour shifts for non-professional staff. Additional population and land use projections and travel forecasting was not completed due to the short-term scope of this plan.

In addition to actions, this plan suggests an operational framework for implementing the recommendations.

- 1. Coordinated decision-making
 - Work collaboratively on land use and transportation decision-making through the Southeastern Wisconsin Regional Planning Commission or other working groups.
- 2. Use local planning authority to achieve goals
 - Adopt recommendations into local zoning and subdivision ordinances.
- 3. Involve the public in decision-making

Continue to seek and use public input when making plans and decisions.

The implementation tables focus on the "In Development" and "Recommended 1-4 years" categories to achieve the pragmatic solutions identified in the Task Force's goal statement. Projects are grouped based on estimated or perceived benefits. Actions are the steps that can be taken to implement the project and often end with funding the project. Roles include Local Officials (elected, appointed and staff), Public, and WisDOT. Each action identifies whether it is a lead or supporting action.

Priority of Projects In Development

Priority	Category	Project Grouping	Act	ions	Roles (Lead and support)
1.			A. B.	Lead the project development process Support by engaging in WisDOT project	
	management (194 to Old Green Bay Rd.) Braun Rd C. Support by identifying loc management and signal c	development processes. Support by identifying local access management and signal coordination priorities that can be included in	Public		
			project plans.		
2.	Signal Coordination	WIS 20 (West Frontage to WIS 31) WIS 11 (CTH H to Ohio St.)	A.	Support CMAQ applications by sending letters of support for signal coordination projects.	Local Officials
3.	Smart Corridors	All development roads (WIS 11, Braun, CTH KR, West Frontage Road, East Frontage Road, Wisconn Valley Way and CTH H)	A. B.	Lead by implementing connected vehicle communication and detection devices at intersections and roadways. Support by encouraging implementation of connected vehicle communication and detection devices. Support by maintaining technology infrastructure under respective jurisdictions.	WisDOT, Local Officials

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Priority of Projects Recommended for 1-4 years

Priority	Category	Project Grouping	Actions	Roles (Lead and support
1.	Capacity Expansion Studies	CTH KR (Old Green Bay Rd. to WIS 32)	A. Lead by conducting preliminary engineering and project development process. B. Support by engaging in project development processes.	Local Officials, Public
		CTH C & Interchange (I94 to WIS 38) WIS 11 (Railroad Grade Separation)	 A. Lead by conducting a feasibility study B. Support by engaging in feasibility study. C. Lead by incorporating results of feasibility study into regional plan and begin preliminary engineering. 	Local Officials, Public
2.	Signal Coordination	WIS 20 (WIS 31 to Ohio St.) WIS 20 (12th St. to 9th St.) WIS 11 (Ohio St to WIS 32) WIS 32 (CTH KR to Main St.)	 A. Lead by prioritizing corridors for improvement B. Lead by conducting additional operations and safety studies to ensure appropriate signal coordination if needed. C. Lead the review of municipal and County Capital Improvement Plans for opportunities to fund projects. D. Support by providing existing signal timing plans that can be extended to local infrastructure. 	Local Officials, WisDOT
3.	Access management and speed limit analysis	WIS 31 (Four Mile Road to CTH KR) WIS 32 (4-Mile Rd. to WIS 38) CTH K (CTH H to UP Rail) CTH C (194 to WIS 38) CTH KR/WIS 32 (Old Green Bay Rd. to WIS 11)	 A. Lead by prioritizing corridors for study. B. Lead by engaging in Multi-jurisdictional Access Management Study and document results. C. Support by conducting access management and or speed studies on State and Connecting Highways. D. Lead by adopt study recommendations into local subdivision and/or zoning ordinances. 	Local Officials, WisDOT
4.	Signal Coordination	CTH C (I94 to WIS 38) WIS 32 (4-Mile Rd. to WIS 38) WIS 38 (Emmerttsen Rd. to WIS 31)	 A. Lead by prioritizing corridors for improvement B. Lead by conducting additional operations and safety studies to ensure appropriate signal coordination if needed. C. Lead the review of municipal and County Capital Improvement Plans for opportunities to fund projects. D. Support by providing existing signal timing plans that can be extended to local infrastructure. 	Local Officials, WisDOT

Funding for 1-4 year Implementation

Additional revenue is not required to implement these actions. However, re-prioritizing existing funds to schedule these projects may result in the delay of other projects. The recommendations contained in this plan should be carefully considered with all other community needs.

Eastern Racine County Transportation Task Force ______ Eastern Racine County Transportation Task Force

Final Recommendations and Implementation Plan: Moving Workers to Work

The following priorities and actions are the Task Force's recommendations based on their understanding and analysis of near-term developments in Eastern Racine County. Assumptions are the same as described in the previous section.

Implementing improvements for moving workers to work includes multi-modal transportation, transit, additional plans and studies, and additional commuter program options. Roles in addition to Local Officials, and public are identified for some of the recommended actions. These include Transit Operators and Businesses Officials.

Priority of Projects In Development

Priority	Category	Project Grouping	Actions	Roles (Lead and support)
1.	Multi-modal	Multi-use paths (CTH KR) (Braun Road) (International Drive) (CTH H) Locate additional Park	A. Lead the process to construct multi-use paths on designated roadways. B. Support by engaging in WisDOT project development process. C. Lead a study to replace the WIS 11 Park and Ride lot.	WisDOT, Local Officials, Public
		and Rides	 Support by identifying local priorities that can be included in project plans. 	
2.	Transit	Transit stops (near development)	 A. Lead efforts to coordinate between transit providers, municipalities, and developers to understand transit access to development site. B. Support by leaving space between the curb and the multi use path for bus stop infrastructure C. Support by constructing stop infrastructure when route information is established. 	Local Officials, WisDOT
		Transit signal priority (Along Braun Road serving Route 1 Extension)	 A. Lead by implement communications infrastructure that can be used for transit signal priority at relevant intersections. B. Support by encouraging implementation of transit signal priority. C. Support by maintain infrastructure once installed. 	WisDOT Local Officials, Transit Operators

The preliminary recommendations include implementing a Commuter Bus Route and Park-Ride connection along the IH 94/IH 43 corridor between Milwaukee and Kenosha. This route is a priority under this plan and its implementation is anticipated to be led by Milwaukee County. Planning and analysis separate from the Eastern Racine County Transportation Task Force is underway.

Priority of Projects Recommended for 1-4 years

Priority	Category	Project Grouping	Act	ions	Roles (Lead and support)
1.	Transit	Commuter Bus Route & Park-Ride (Downtown Racine to Foxconn development site area)	A. B.	Lead by identifying primary implementing agency. Lead by hosting a meeting with	Transit Operators Business Officials Local Officials
		Braun Road Local Bus (CTH H to WIS 31) CTH H Local Bus (WIS 20 to Braun Road)	C.	transit agencies, businesses, and others to identify funding sources and partnerships. Support by participating in meetings and working together to find solutions. Lead by funding transit service that meets community needs.	
2.	Multi-modal	Multi use path (Waxdale Spur Rail Trail) (Wisconn Valley Way)	A. B. C.	Lead the acquisition of the Waxdale Spur. Support by prioritizing the design and funding of Waxdale Spur Rail Trail. Support by coordinating with WisDNR on project design and construction.	WisDNR, Local Officials, Business Officials
3.	Studies	Parking	А. В.	Lead a review ordinances for parking requirements. Lead an update of ordinances if necessary.	Local Officials
		Transit Oriented Development	C.	Lead the creation of transit supportive land use density and mix along transit corridors. Lead an update zoning ordinances and building codes to require higher-density, pedestrian oriented development near transit hubs.	
4.	Commuter Options	Employer-based programs	A.	Lead with a point of contact to continue dialog with developers regarding commmuter options.	Local Officials, Business Officials
		Transportation Network Company	В.	Lead by coordinating between TNC's and employers. Identify key contacts to explore partnerships between transportation agencies.	
5.	Transit	Commuter Bus Route & Park-Ride (Cross County Commuter Bus Service) (IH 94/IH 43 Corridor between Milwaukee and Kenosha) Express Bus Route (Downtown Racine to IH 94/IH 43 Park-Ride lot at WIS20 / CTH C) (Connecting Racine and Kenosha)	А.	Lead by identifying primary implementing agency. Lead by identifying funding sources and partners.	Transit Operators Business Officials Local Officials
6.	Multi-modal	Multi-modal accommodations on WIS 31 (WIS 20 to Wis 11)	Α.	Lead by requiring or recommending accommodations during redevelopment and projects.	Local Officials

Final Recommendations and Implementation Plan: Moving Workers to Work: Continued

Funding for 1-4 year Implementation

The projected decline in transit service based on available funding highlights the discrepancy between the plan recommendations and ability to implement. Additional revenue is required to implement some of the recommended actions.

While the goal of the task force was to work within existing parameters, adjusting existing transit services is not anticipated to provide a net benefit to the system. Connecting workers to the Foxconn development is best accomplished by adding routes that connect to the existing system. This additional service will require additional funding.

Adding one or more commuter bus service options would also require additional revenue if publicly sponsored. However, private funds could supplement or cover the cost so long as the transportation service has a published schedule can is open to anyone.

Additional Recommendations

At the Eastern Racine County Transportation Task Force meeting on June 21st, Visioning a Greater Racine Transportation WAVE team presented their Recommendations for Transportation Improvements in Preparation for Foxconn Development. These include:

- Commuter bus connecting Downtown Racine and surrounding neighborhoods to Foxconn
- Express Bus Frequent bus service from Regency Mall to Foxconn
- Bus Route from Amtrak to Foxconn
- Intermodal station within Foxconn Project Areas
- Expanded bus service hours and more frequency (evenings and weekends to match shift demands)

- Pedestrian and bicycle infrastructure along commercial corridors
- Commuter rail extension from Kenosha to Racine and Milwaukee
- Modernize transit rider information technology