



VISION

2050



One Region, Focusing on Our Future

"Erie Plaza" from the VISION 2050 Portraits of the Region photo contest
Credit: Gregory Patin



VISION 2050

One Region, Focusing on Our Future

VISION 2050: A REGIONAL LAND USE AND TRANSPORTATION SYSTEM PLAN FOR SOUTHEASTERN WISCONSIN

SUMMARY



Prepared by the
Southeastern Wisconsin Regional Planning Commission
W239 N1812 Rockwood Drive
P.O. Box 1607
Waukesha, Wisconsin 53187-1607
www.sewrpc.org

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December 2016



An environmental corridor in southern Milwaukee County
Credit: SEWRPC

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PUBLIC TRANSIT

KEY RECOMMENDATIONS

- Develop a rapid transit network
- Improve existing express bus service and add service to new corridors
- Increase the frequency and expand the service area of transit
- Implement "transit-oriented" designs on urban streets

One of the 82 public workshops held during the VISION 2050 process
Credit: SEWRPC



THE VISION 2050 PROCESS

Developing VISION 2050 involved substantial work over a five-year period, culminating with the Regional Planning Commission adopting the plan on July 28, 2016. The process was guided by the Commission’s Advisory Committees on Regional Land Use Planning and Regional Transportation System Planning, with input also provided by the Commission’s Environmental Justice Task Force, Jurisdictional Highway Planning Committees for each county, and VISION 2050 Task Forces on key areas of interest (see the *Acknowledgments* section for more information).



Workshop with Milwaukee Urban League in Fall 2013
Credit: Milwaukee Community Journal

- 2 regional advisory committees guided the process
- 5 rounds of public involvement were held
- 7 county committees provided input
- 9 task forces considered key issues
- 82 total workshops were held
- 1,400+ people used the interactive web tools
- 1,500+ residents responded to a telephone preference survey
- 1,600+ residents attended a workshop
- 30,000+ residents participated in a travel survey

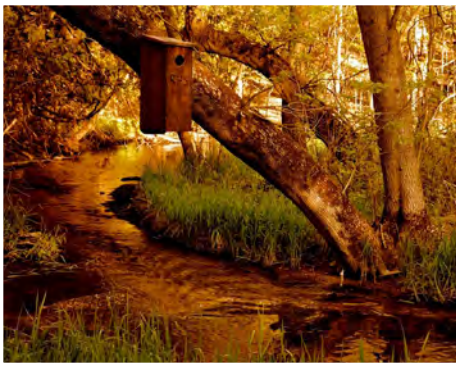
GROUNDWORK FOR VISION AND PLAN DEVELOPMENT

Commission staff began by collecting and analyzing information on the existing and historic land use and transportation system in the Region. Staff then prepared forecasts of future needs for resources, land, and transportation based on the data. This information was vital in establishing a basis for preparing a technically sound plan.

Inventory

Collecting relevant data was the first step in the process, and was crucial for preparing accurate forecasts and selecting alternative courses of action. Staff collected major inventories of the population, economy, land use, natural resource base, public utilities, and local comprehensive plans in the Region. Staff also collected major transportation inventories, including extensive travel surveys and the characteristics and use of highway and transit facilities. The inventory step also involved reviewing implementation of the previous year 2035 regional land use and transportation plans.

As part of the inventory process, staff compared the Milwaukee metropolitan area to other metro areas in the Midwest and throughout the Nation. The comparison, found in SEWRPC Memorandum Report No. 221: *A Comparison of the Milwaukee Metropolitan Area to its Peers*, examined how well the four-county metro area compares with other areas in a number of key measures, including population growth and characteristics, the economy, and transportation. It also examined how the City of Milwaukee compares to the principal city in each metro area, and the differences that exist within each metro area—specifically differences between the principal city and the remainder of the metro area. The findings highlight a number of critical issues facing the Milwaukee area: slower population growth and greater job loss than nearly all other metro areas; disparities between white and minority populations (in regards to education, income, and poverty levels) that are more pronounced than nearly all other metro areas; and a well-performing highway system compared to other metro areas, but a transit system that has experienced more severe declines in ridership and service levels than nearly all other metro areas. These findings provided valuable information to consider while developing VISION 2050.



Some of the Region's Many Natural Resources Inventoried for VISION 2050
Credit: Jenna Rosenfeldt

Analyses and Forecasts

Inventories provide factual information about the present situation, but analyses and forecasts are necessary to provide estimates of future needs for resources, land, and transportation. Analyzing the inventory data helped staff understand the existing situation, trends of change, and the factors influencing those trends. Staff used the findings, along with year 2050 population, household, and employment projections developed early in the planning process, to forecast future demands for land use and travel.

DEVELOPING THE VISION AND PLAN

Commission staff conducted a visioning and scenario planning process to prepare VISION 2050. The purpose was to develop a shared long-range vision of future land use and transportation in Southeastern Wisconsin that is understood and embraced by the Region's residents. It involved extensive public outreach to obtain residents' input at each step of the process, as well as expanding public knowledge on the implications of existing and future land use and transportation development in the Region.

Staff engaged residents in a variety of ways, including five rounds of interactive workshops held during the process to obtain input from the public at every step. During each round, the Commission hosted one workshop in each of the Region's seven counties, with eight community organizations partnering with the Commission to hold individual workshops for their constituents. These partnerships were designed to reach and engage certain groups that have traditionally been underrepresented—in particular, minority populations, people with disabilities, and low-income individuals—and encourage them to participate and provide input. Feedback from all workshops was summarized and made available on the VISION 2050 website (www.vision2050sewis.org), along with information about the process and how to get involved.

Visioning

VISION 2050 included substantial resident engagement designed to develop a shared vision for the future. The initial phase of this visioning occurred through a variety of activities and surveys, including the first two rounds of workshops during fall 2013 and winter 2013-14. The result was an initial vision comprised of a set of VISION 2050 Guiding Statements, which generally describe the desired future direction of growth and change in the Region with respect to land and transportation system development. *Guiding the Vision*, published in June 2014, presents this initial vision.



Telephone Preference Survey

One visioning activity was a telephone survey of over 1,500 randomly selected residents, asking them about their preferences for future types and styles of housing and development, as well as their preferences for future transportation investment in the Region. The statistically significant survey, conducted in fall 2013 by the University of Wisconsin-Milwaukee's Center for Urban Initiatives and Research (CUIR) and Department

of Economics, provided great insight into the general preferences of residents from each of the seven counties. Over 300 additional residents responded to a companion online questionnaire, which asked the same questions as the telephone survey. The survey results can be found on the VISION 2050 website and are referenced throughout this summary.



How Should
New Development
in the Region Occur?

92%

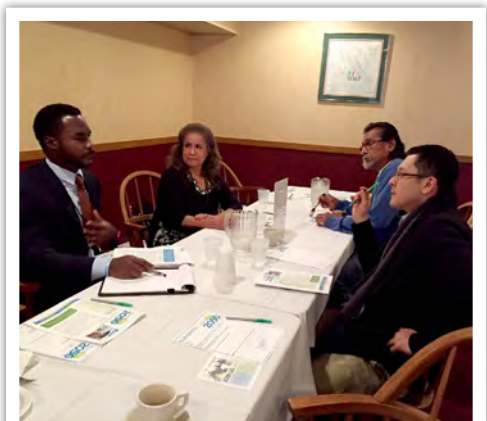
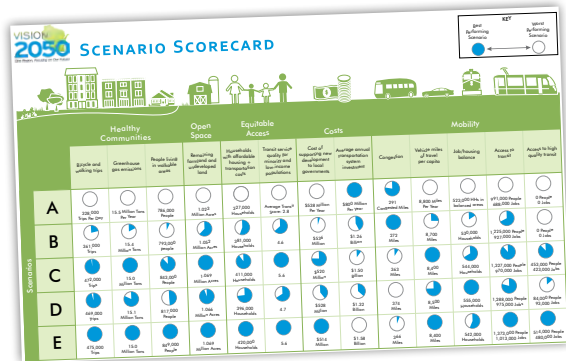
OF RESIDENTS SUPPORTED
REDEVELOPMENT AND INFILL
DEVELOPMENT IN EXISTING CITIES & VILLAGES



Public Workshop in Milwaukee in Fall 2014
Credit: SEWRPC

Conceptual Scenarios

Initial visioning feedback led into a scenario planning effort. This step involved comparing a series of five conceptual land use and transportation scenarios. Among the scenarios was a baseline scenario representing a continuation of current trends, along with four additional scenarios representing a wide range of possible futures for land use and transportation that could achieve the initial vision. A series of 13 basic criteria were employed for the comparison, which became the focus of the third round of workshops in fall 2014.



Workshop with Racine-Kenosha Urban League in Fall 2015
Credit: SEWRPC

Alternative Plans

Following input on the scenarios, a series of three detailed land use and transportation alternatives were prepared and thoroughly evaluated and compared. Two alternative plans were designed to meet a series of plan objectives developed during this step. A “trend” alternative, representing a continuation of recent trends, was also developed as a baseline against which the alternative plans were compared. A series of 50 evaluation criteria were identified and used to evaluate how well each alternative met the plan objectives.

The alternatives and their evaluation were the focus of the fourth round of workshops in fall 2015.

Draft Plan

Input on the detailed alternatives was considered as staff prepared a preliminary recommended regional land use and transportation system plan, referred to as the Draft Plan. The Draft Plan included a proposed land use development pattern and transportation system, together representing a desired future vision for the Region. Staff also proposed specific land use and transportation recommendations.

Like the alternatives, the Draft Plan was thoroughly evaluated based on the plan objectives and 50 associated criteria, comparing the Draft Plan to existing conditions and the Trend developed in the alternatives stage. Following Federal guidelines, staff also compared the estimated costs and reasonably expected revenues for the Draft Plan's transportation system. This analysis identified a funding gap for the public transit element, resulting in the need to identify a "fiscally constrained" version of the transportation system in compliance with Federal requirements. The fiscally constrained transportation system would include a reduction in transit service in the Region rather than the significant improvement proposed under the Draft Plan. Staff identified possible ways to address the transit funding gap so that the Draft Plan could be fully implemented.

The fifth and final round of workshops was held in spring 2016 to obtain public comment on the Draft Plan as well as the fiscally constrained transportation system.

Final Plan

The five-year effort to create VISION 2050 was completed in the summer of 2016. The input received on the Draft Plan was considered during the final step of the VISION 2050 process, as staff prepared a final recommended year 2050 land use and transportation system plan for Southeastern Wisconsin. The final plan, simply referred to as VISION 2050, includes changes to the Draft Plan based on feedback received on the Draft Plan. VISION 2050 and its recommendations are presented throughout this summary, including the actions needed to implement the plan and the parties responsible for carrying out those actions.



Workshop with Southside Organizing Committee in Spring 2016

Credit: SEWRPC

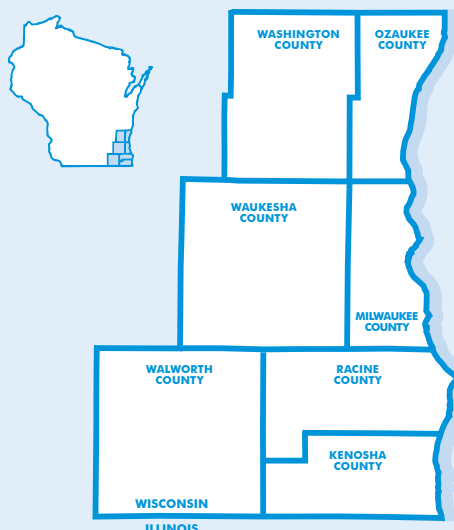
As with the Draft Plan, staff compared the estimated costs and reasonably expected revenues for the recommended transportation system and identified a funding gap for the public transit element, resulting in the need to identify a fiscally constrained version of the recommended transportation system in order to meet Federal metropolitan transportation planning requirements. This Fiscally Constrained Transportation Plan (FCTP) includes a reduction in transit service in the Region (other than committed projects) rather than the significant improvement recommended under VISION 2050. It then identifies possible ways to address the transit funding gap so that VISION 2050 can be fully implemented. More information on the FCTP and the transit funding gap can be found in the *Funding the Plan* section.



"Soccer Beneath the 35th Street Viaduct," Best in Show from the VISION 2050 Portraits of the Region photo contest
Credit: Dan Adams

INTRODUCTION TO THE PLAN

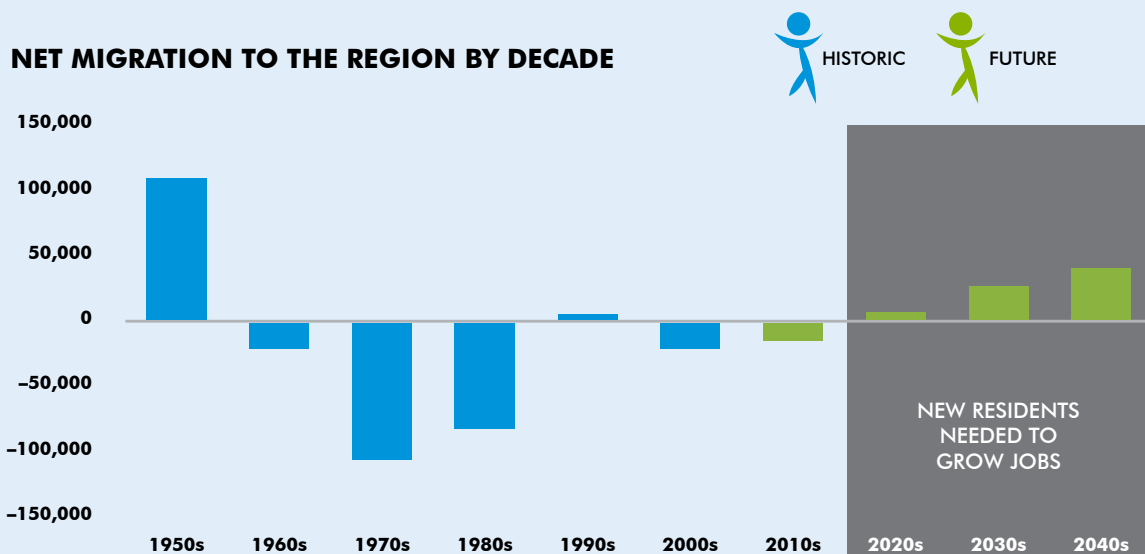
Southeastern Wisconsin contains about five percent of the total area of Wisconsin, but accounts for about 36 percent of the State’s population, about 34 percent of its jobs, and about 37 percent of its wealth. The Region is located in a good position with regard to continued growth and development, and has grown slowly but steadily for many decades. Southeastern Wisconsin is bounded on the east by Lake Michigan, which is an integral part of a major international transportation network. It is bounded on the south by the rapidly expanding metropolitan region of northeastern Illinois, and on the west and north by the fertile agricultural and desirable recreation areas of the rest of the State of Wisconsin. Many of the most important industrial areas and heaviest population concentrations in the Midwest are within 250 miles of the Region.



A Pivotal Point in Regional Development

A major shift is occurring in Southeastern Wisconsin’s development and growth. For the past decades, the Region has been able to grow its labor force from within its existing population base, through women joining the workforce and the significant increase in the size of the labor force provided by the Baby Boom generation. However, as the Baby Boomers exit the workforce, the following generations are each no larger than the Baby Boomers, meaning that there will not be enough residents of working age to fill additional, new jobs. **To grow jobs in the future, the Region will need to attract new residents from the rest of the Nation and world for the first time in decades**, putting Southeastern Wisconsin in direct competition with other metro areas. If the Region does not compete to attract needed workers, economic growth could be stifled by a lack of labor.

NET MIGRATION TO THE REGION BY DECADE



A Plan to Sustainably Develop Our Region

This document summarizes VISION 2050, Southeastern Wisconsin's long-range land use and transportation plan, produced by the Southeastern Wisconsin Regional Planning Commission (SEWRPC). VISION 2050 seeks to build on the Region's existing strengths and improve areas where the Region does not compete well with its peers, in order to increase the quality of life for residents and businesses and attract new growth to the Region.

VISION 2050 recommends:

- Encouraging sustainable and cost-effective **growth**
- Preserving the Region's **most productive farmland and primary environmental corridors**, which encompass the best remaining features of the Region's natural landscape
- Encouraging **more compact development**, ranging from high-density transit-oriented development to traditional neighborhoods with homes within walking distance of parks, schools, and businesses
- Significantly **improving and expanding public transit**, including adding rapid transit and commuter rail, and improving and expanding local and express transit services to support compact growth and enhance the attractiveness and accessibility of the Region
- **Enhancing the Region's bicycle and pedestrian network** to improve access to activity centers, neighborhoods, and other destinations
- Keeping existing major streets in a **state of good repair** and **efficiently using the capacity** of existing streets and highways
- Strategically adding capacity on highly congested roadways, incorporating "complete streets" roadway design concepts to **provide safe and convenient travel for all**, and addressing key issues related to moving goods into and through the Region

Accomplishing the Plan

These recommendations require more to be spent on the transportation system in the future, particularly on building and operating a competitive and advanced transit system. The transit system included in VISION 2050 would attract new Federal funding to the Region, but would require approximately \$160 million each year in additional local or State funding for transit. Until additional public investment is provided, the public transit element of VISION 2050 cannot be built and operated.

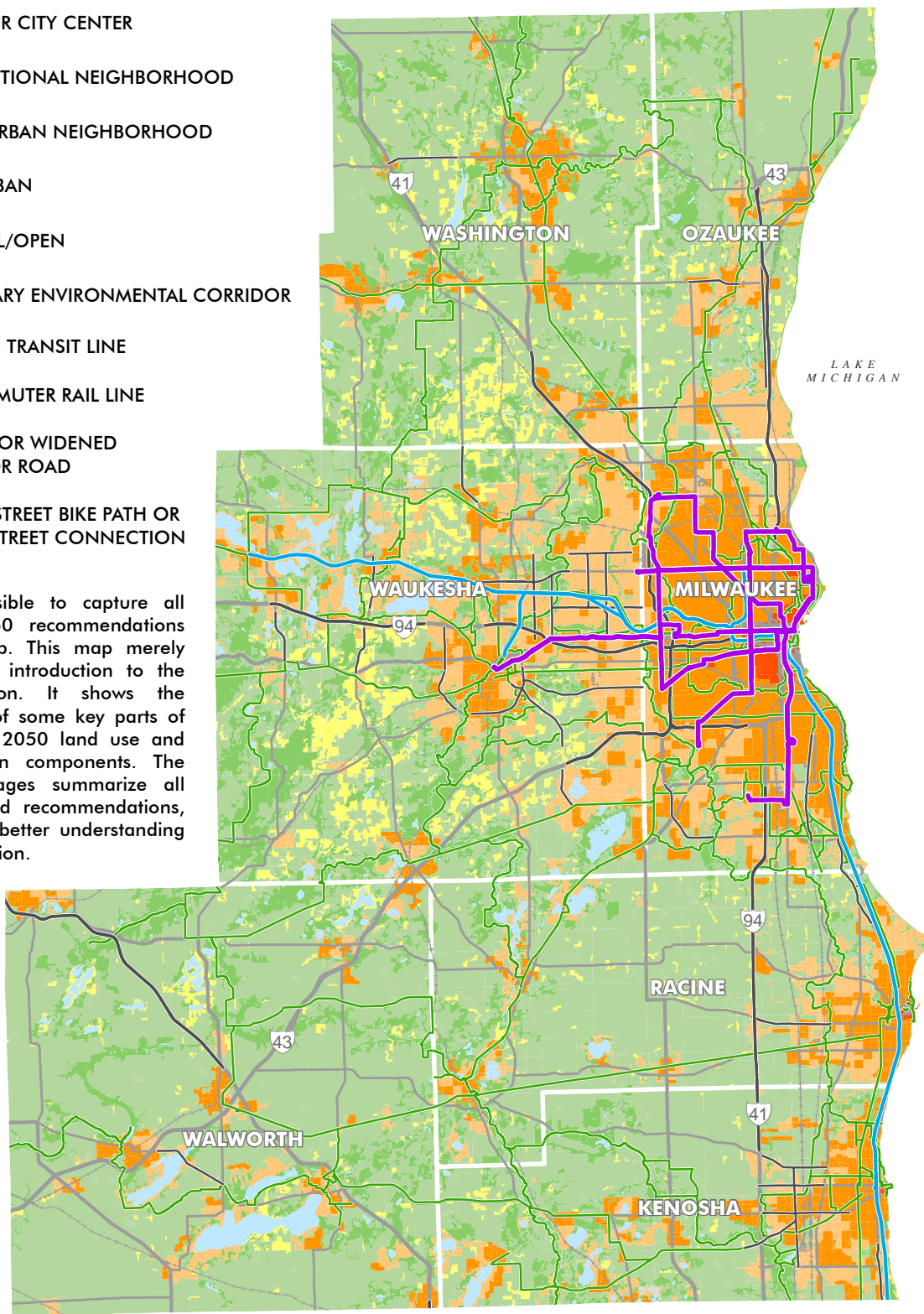
Raising additional public funds for transit would place an additional burden on the Region's residents, but would also provide significant benefits to the Region, including but not limited to:

- Increasing the Region's competitiveness with other metro areas by providing attractive transit, bicycling, and walking options, addressing traffic congestion, and building walkable communities with easy access to schools, parks, and businesses
- Increasing the ability of residents without cars to access jobs, education, and daily needs
- Reducing low-income individuals' reliance on social services by providing access to higher-paying jobs
- Reducing residents' out-of-pocket transportation expenses and local government costs for other infrastructure and other services

VISION 2050 OVERVIEW

- MAJOR CITY CENTER
- TRADITIONAL NEIGHBORHOOD
- SUBURBAN NEIGHBORHOOD
- EXURBAN
- RURAL/OPEN
- PRIMARY ENVIRONMENTAL CORRIDOR
- RAPID TRANSIT LINE
- COMMUTER RAIL LINE
- NEW OR WIDENED MAJOR ROAD
- OFF-STREET BIKE PATH OR ON-STREET CONNECTION

NOTE:
 It is impossible to capture all VISION 2050 recommendations on one map. This map merely provides an introduction to the overall vision. It shows the integration of some key parts of the VISION 2050 land use and transportation components. The following pages summarize all elements and recommendations, providing a better understanding of the full vision.





Walkable development in Pewaukee
Credit: SEWRPC

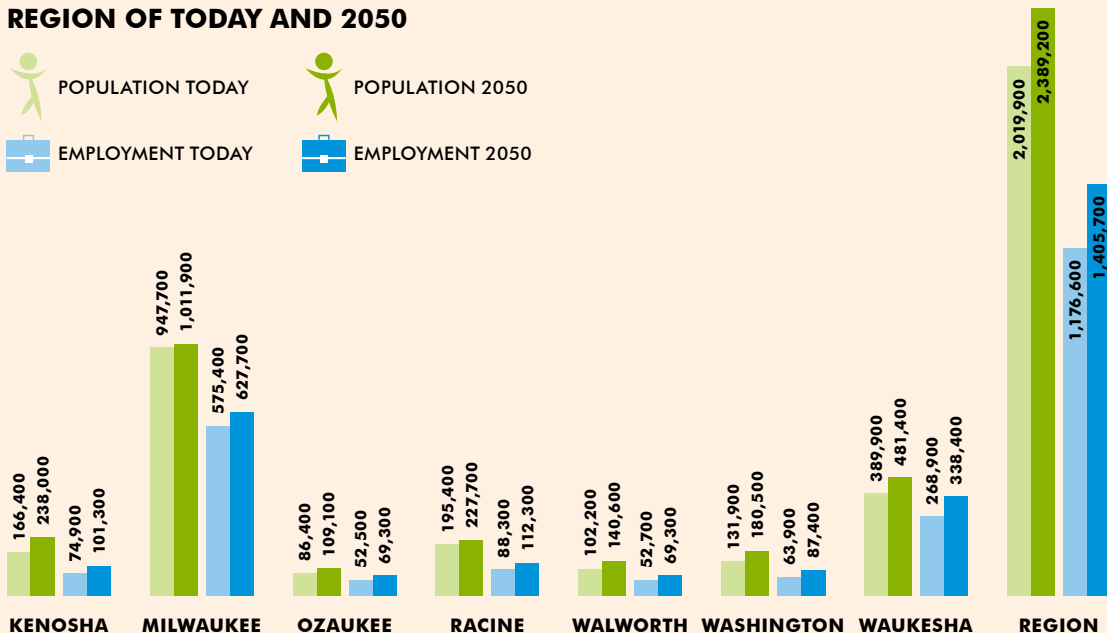
LAND USE

The Region of 2050 will be different than the Region of today. The plan anticipates 370,000 more residents and 230,000 more jobs. To maintain the workforce needed to fill these jobs, the Region will need to attract tens of thousands of new residents for the first time in decades. This will put Southeastern Wisconsin in direct competition with other regions across the Country facing the same situation.

To enhance the Region’s competitiveness, VISION 2050 recommends a compact development pattern that ranges from high-density transit-oriented development (TOD), to neighborhoods in smaller communities with housing in easy walking distance of amenities such as parks, schools, and businesses. VISION 2050 recommends this type of development because it has a number of benefits, including:

- Minimizing impacts on natural and agricultural resources
- Minimizing impacts to water resources and air quality
- Positioning the Region to attract potential workers and employers
- Maximizing redevelopment in areas with existing infrastructure
- Minimizing the cost of infrastructure and public services
- Meeting the needs of the Region’s aging population
- Achieving walkable neighborhoods that encourage active lifestyles
- Providing a variety of housing options near employment
- Supporting transit connections between housing and employment
- Increasing racial and economic integration throughout the Region

REGION OF TODAY AND 2050



Land Use Categories

The recommended VISION 2050 land use pattern was developed by allocating new households and employment envisioned for the Region under the Commission’s year 2050 growth projections to a series of seven land use categories that represent a variety of development densities and mixes of uses.



MIXED-USE CITY CENTER
 Mix of very high density offices, businesses, and housing found in the most densely populated areas of the Region



MEDIUM LOT NEIGHBORHOOD
 (showing lots of about 15,000 square feet)
 Primarily single-family homes on ¼- to ½-acre lots found at the edges of cities and villages



LARGE LOT NEIGHBORHOOD (showing lots of about ½ acre)
 Primarily single-family homes on ½-acre to one-acre lots found at the edges of cities and villages and scattered outside cities and villages



MIXED-USE TRADITIONAL NEIGHBORHOOD
 Mix of high-density housing, businesses, and offices found in densely populated areas



LARGE LOT EXURBAN (showing lots of about 1.5 acres)
 Single-family homes at an overall density of one home per 1.5 to five acres scattered outside cities and villages



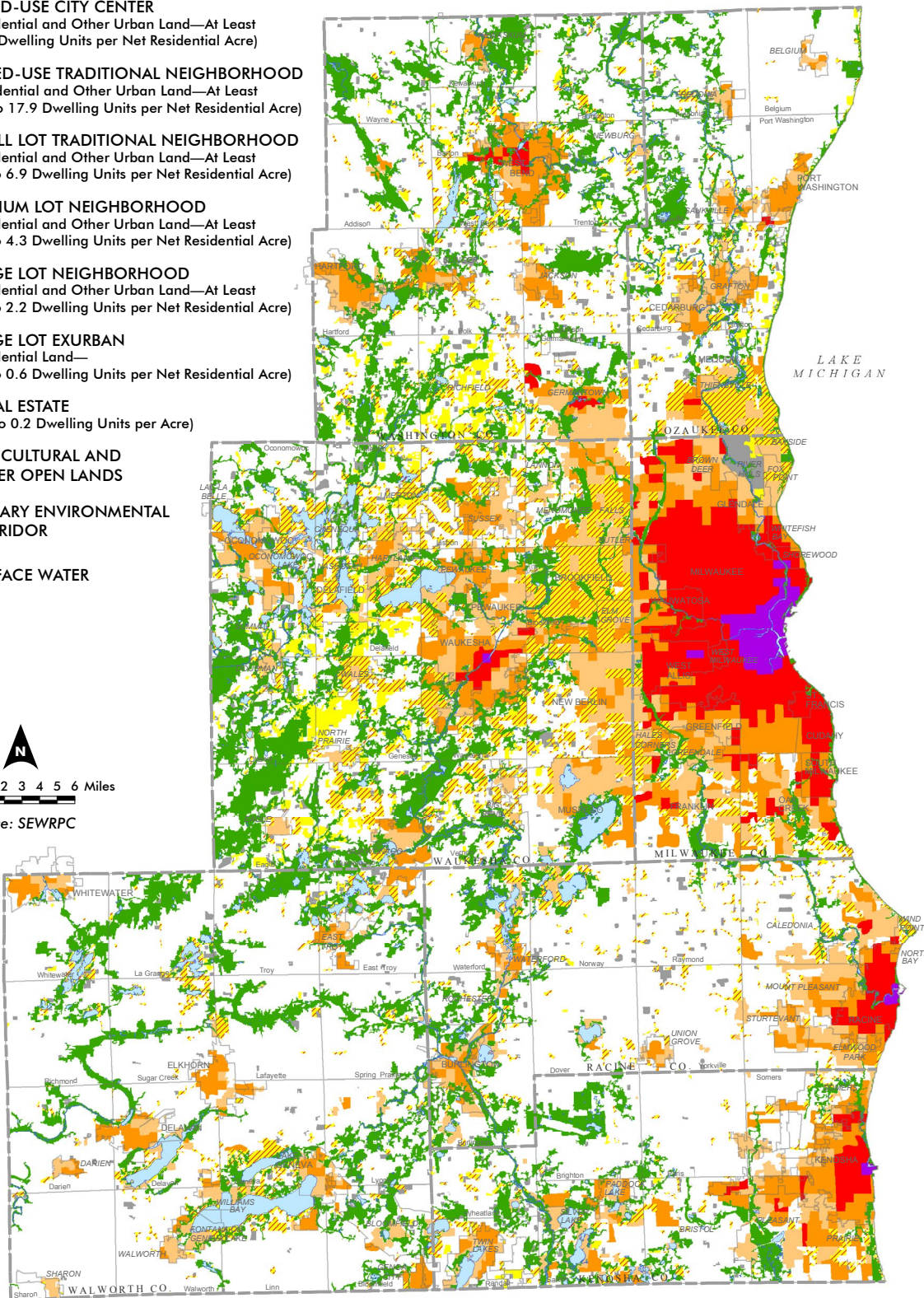
SMALL LOT TRADITIONAL NEIGHBORHOOD
 (showing lots of about 7,000 square feet)
 Mix of housing types and businesses with single-family homes on lots of ¼-acre or less found within and at the edges of cities and villages



RURAL ESTATE
 (showing a cluster subdivision with one-acre lots)
 Single-family homes at an overall density of one home per five acres scattered outside cities and villages

VISION 2050 LAND USE DEVELOPMENT PATTERN


- MIXED-USE CITY CENTER**
(Residential and Other Urban Land—At Least 18.0 Dwelling Units per Net Residential Acre)
- MIXED-USE TRADITIONAL NEIGHBORHOOD**
(Residential and Other Urban Land—At Least 7.0 to 17.9 Dwelling Units per Net Residential Acre)
- SMALL LOT TRADITIONAL NEIGHBORHOOD**
(Residential and Other Urban Land—At Least 4.4 to 6.9 Dwelling Units per Net Residential Acre)
- MEDIUM LOT NEIGHBORHOOD**
(Residential and Other Urban Land—At Least 2.3 to 4.3 Dwelling Units per Net Residential Acre)
- LARGE LOT NEIGHBORHOOD**
(Residential and Other Urban Land—At Least 0.7 to 2.2 Dwelling Units per Net Residential Acre)
- LARGE LOT EXURBAN**
(Residential Land—0.2 to 0.6 Dwelling Units per Net Residential Acre)
- RURAL ESTATE**
(0.1 to 0.2 Dwelling Units per Acre)
- AGRICULTURAL AND OTHER OPEN LANDS**
- PRIMARY ENVIRONMENTAL CORRIDOR**
- SURFACE WATER**



KEY RECOMMENDATIONS

► **Preserve primary environmental corridors**

The best remaining features of the Region’s natural resource base (lakes, rivers, streams, wetlands, and woodlands, among others) occur in linear patterns in the landscape. The largest and most well-connected of these linear patterns have been identified as primary environmental corridors. Primary environmental corridors, which encompass about 18 percent of the Region, should be preserved in natural, open uses.



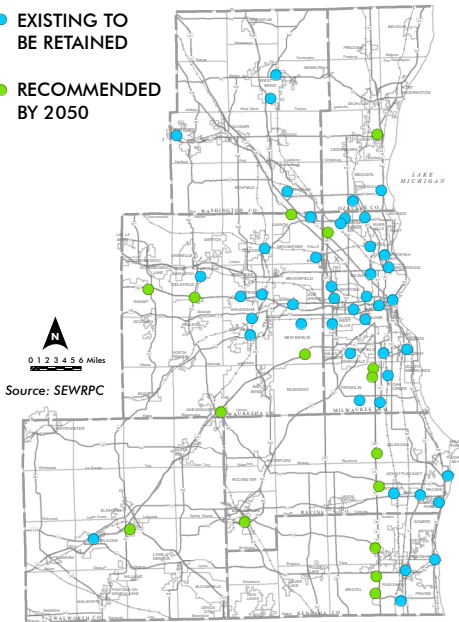
OVER 90%
of residents think **IT IS IMPORTANT** to preserve natural and agricultural resources
(telephone survey result)

VISION 2050 would preserve **ALL** primary environmental corridors and **95%** of agricultural land



VISION 2050 MAJOR ECONOMIC ACTIVITY CENTERS

- EXISTING TO BE RETAINED
- RECOMMENDED BY 2050



► **Preserve the Region’s most productive agricultural land**

Each county in the Region, except Milwaukee County, has adopted a farmland preservation plan identifying areas to preserve in agricultural use. VISION 2050 proposes these areas, and additional agricultural lands in the Region that have the highest quality soils (Class I and Class II soils), be preserved for agricultural use.

► **Preserve areas with high groundwater recharge potential**

Groundwater is the source of water for agriculture in the Region, and for nearly 40 percent of the Region’s population. Preserving the Region’s primary environmental corridors and prime farmland will preserve substantial areas in the Region with the highest recharge potential.

► **Focus urban development in areas that can be efficiently served by essential municipal facilities and services**

Encourage infill, redevelopment, and new development within and around the urban centers of each county, that is, those communities of each county in the Region with public sanitary sewer service and public water service.

► **Provide a mix of housing types near employment-supporting land uses**

Develop commercial land and business parks in mixed-use settings where compatible, or near a mix of housing types to avoid job-worker mismatches.

► **Encourage and accommodate economic growth**

Encourage economic growth by continuing to develop the 61 existing and developing major economic activity centers in the Region, including a focus on developing and redeveloping long-established major centers. Major centers have a concentration of at least 2,000 retail jobs or 3,500 total jobs.

▶ **Develop urban service areas with a mix of housing types and land uses**

Allow a mix of housing types, including multi-family housing and single-family homes on smaller lots (one-quarter acre or less). This type of development can be provided with urban infrastructure and services at lower public cost than single-family homes on larger lots, and tends to be more affordable to a wider range of households. Also develop walkable neighborhoods with housing near parks, schools, and businesses.

▶ **Focus TOD near rapid transit and commuter rail stations**


Focus transit-oriented development (TOD) near rapid transit and commuter rail stations.

▶ **Consider cluster subdivision design in residential development outside urban service areas**

Accommodate the demand for homes in an open space setting outside urban service areas on a limited basis using cluster subdivision design, with no more than one acre of residential land (house and yard) for each dwelling while maintaining an overall density of one home per five acres. This will minimize impacts to natural and agricultural resources, maintain rural character, and avoid excessive demand on rural public services.

WHAT IS TOD?

TOD is compact, mixed-use development located near a fixed-guideway transit station with streets and sidewalks that provide convenient and safe access for walking and bicycling to the station.



ALMOST 90% of residents **WANT** walkable neighborhoods
(telephone survey result)



ALMOST 90% of **NEW HOUSING** would be in walkable neighborhoods

ADDITIONAL RECOMMENDATIONS




- Limit low-density development outside urban service areas
- Provide new governmental and institutional developments in mixed-use settings
- Provide neighborhood parks in developing residential areas
- Preserve secondary environmental corridors and isolated natural resource areas
- Preserve natural areas and critical species habitat sites
- Develop a regional food system
- Manage stormwater through compact development and sustainable development practices
- Target brownfield sites for redevelopment



Looking at riders' signatures on the "150 Years of Transit" bus
Credit: Milwaukee County Transit System

PUBLIC TRANSIT

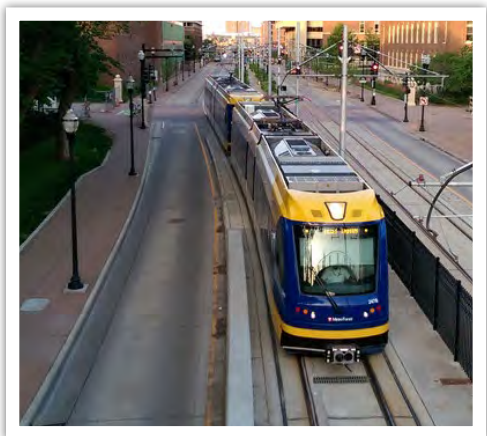
VISION 2050 recommends significant improvement to and expansion of public transit in Southeastern Wisconsin, including eight rapid transit lines, four commuter rail lines, and significantly expanded local bus, express bus, commuter bus, and shared-ride taxi services. Routes and areas served by the various components of the recommended transit system would provide service that is time-competitive with a car in many of the Region's major travel corridors, and provide those without a car access to jobs, education, and other daily needs. VISION 2050's expansion of public transit would have many benefits, including:

- Expanding the traffic carrying capacity in the Region's major travel corridors, helping to mitigate congestion by providing a reliable alternative to driving on congested roadways, with consistent travel times and minimal wait times.
- Focusing jobs and housing around fixed-guideway transit stations, leading to more compact, walkable neighborhoods that encourage active transportation and improve public health. 
- Enabling an increasing number of residents aged 75 and older across Southeastern Wisconsin to age in place, without needing to move from their home as their ability to drive declines. 
- Improving access to jobs, healthcare, education, and other daily needs for households without a car. Although many of the Region's jobs are currently accessible via transit, the lack of fast, frequent transit service in much of the Region limits access to a large number of the Region's jobs due to excessive travel time. 57 percent of the Region's residents would be able to use transit to reach 10,000 jobs or more in less than 30 minutes under VISION 2050, compared to 32 percent currently. 
- Providing employers with access to a larger labor force, by increasing the number of available candidates for job openings.
- Bringing Southeastern Wisconsin in line with competing metro areas. Other than Milwaukee, only five out of 39 metropolitan areas with more than 1.5 million residents in the United States (Cincinnati, Columbus, Detroit, Indianapolis, and San Antonio) do not have light rail, bus rapid transit, or commuter rail.
- Saving the Region's residents \$144 million a year by 2050 in transportation expenses, by enabling some households to save about \$4,500 per year by replacing a car with transit use.
- Decreasing the demand for parking, which would allow communities to reduce or eliminate parking requirements in denser areas, developers to build fewer parking garage spaces (costing \$25,000 each), and commercial and residential tenants to pay less in rent.
- Reducing carbon emissions from transportation slightly, by about 2 percent.

Achieving these benefits for the Region will require additional revenue, such as a sales tax (see the *Funding the Plan* section for a discussion on potential revenue sources). It also would be most easily implemented by a regional transit agency to build and operate the recommended transit system, although a regional transit agency is not required to achieve VISION 2050.



Bus Rapid Transit in Cleveland
Credit: Greater Cleveland RTA



Light Rail in Minneapolis
Credit: Flickr user Michael Hicks



Commuter Rail in Austin
Credit: SEWRPC Staff

KEY RECOMMENDATIONS

► Develop a rapid transit network

Construct and operate eight rapid transit lines (either as bus rapid transit or light rail), to provide travel times similar to driving a car on a parallel street or highway facility during rush hour. Competitive travel times are accomplished by providing rapid transit lines with exclusive lanes, transit signal priority or preemption, and stations spaced every one-half to one mile. Stations should include off-board fare payment, real-time information screens, and raised platforms, and service should be provided every 15 minutes or better all day.

85% of workshop attendees in fall 2015 **SUPPORTED** including an **EXPANSIVE RAPID TRANSIT SYSTEM** (between 5 and 10 corridors) in VISION 2050.









► Develop commuter rail lines and improve and expand commuter bus services




Construct and operate four commuter rail lines and significantly improve and expand commuter bus services. Provide frequent service every 15 minutes during rush hour in both directions and every 30 to 60 minutes in both directions at other times. Extend commuter bus services to new areas, and run existing services in both directions throughout the day. Generally locate stops or stations at least two miles apart to provide travel times that are time-competitive with cars over longer travel distances. Where possible, commuter bus services should operate in the shoulder of a freeway segment during rush hour, allowing transit riders to bypass congestion.

VISION 2050 PUBLIC TRANSIT SYSTEM

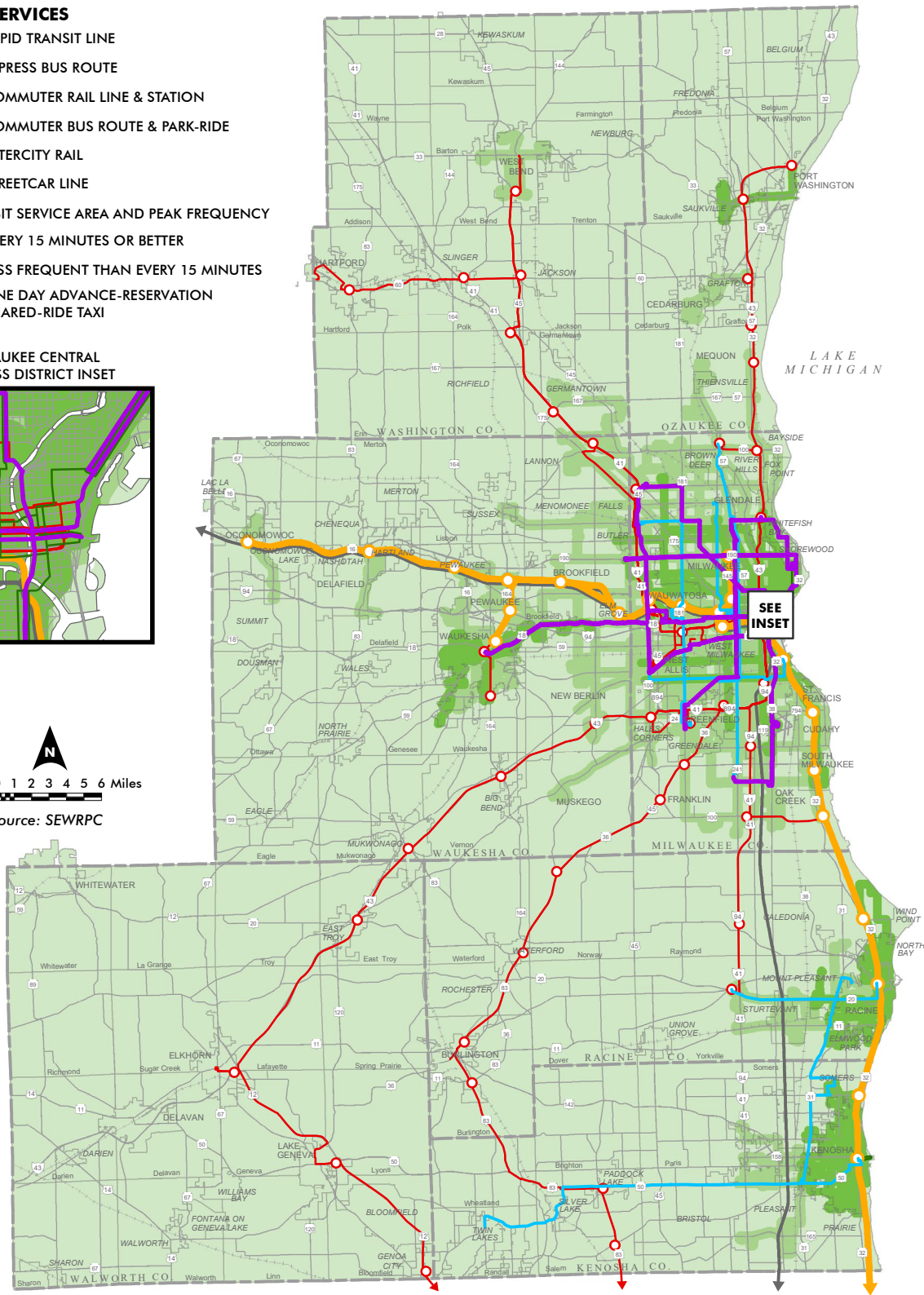
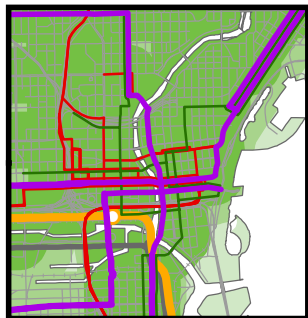
TRANSIT SERVICES

-  RAPID TRANSIT LINE
-  EXPRESS BUS ROUTE
-  COMMUTER RAIL LINE & STATION
-  COMMUTER BUS ROUTE & PARK-RIDE
-  INTERCITY RAIL
-  STREETCAR LINE

LOCAL TRANSIT SERVICE AREA AND PEAK FREQUENCY

-  EVERY 15 MINUTES OR BETTER
-  LESS FREQUENT THAN EVERY 15 MINUTES
-  ONE DAY ADVANCE-RESERVATION SHARED-RIDE TAXI

MILWAUKEE CENTRAL BUSINESS DISTRICT INSET



47%

of residents rated the **Region's existing public transit system** as **"BELOW AVERAGE"** or **"POOR,"** a significantly higher percentage than bike and pedestrian facilities, local roads, or highways.

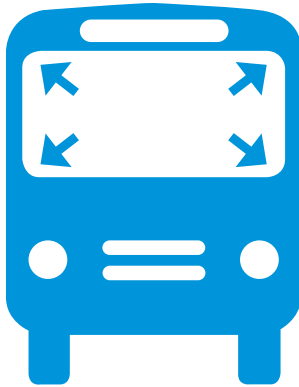
(telephone survey result)

► **Improve existing express bus service and add service in new corridors**

Improve existing and operate additional, express bus services. Stops should be spaced at least one-half mile apart to provide better travel times than local bus routes. Provide service at least every 15 minutes during the entire day within Milwaukee County, and every 15 minutes during rush hour and every 30 minutes at other times in Kenosha and Racine Counties.

► **Increase the frequency and expand the service area of local transit**

Improve the frequency and expand the service area of local bus services, extend accessible shared-ride taxi service to any areas of the Region without local bus service, and continue to provide paratransit service in areas served by local bus service.



63%

of residents believe that **public transit services** should be **"IMPROVED AND EXPANDED,"** with at least 55% of residents in each county supporting improving and expanding public transit.

No other mode received as much support for expansion.

(telephone survey result)

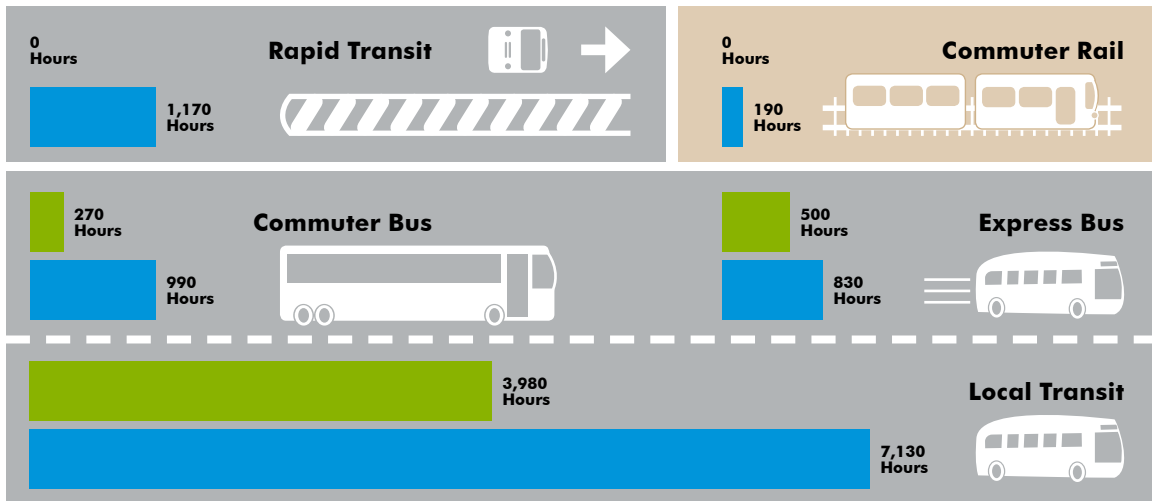
VEHICLE-HOURS OF TRANSIT SERVICE (AVERAGE WEEKDAY)



EXISTING (2015)



VISION 2050



► **Improve intercity transit services and expand the destinations served**

As recommended in the State's long-range transportation plan, expand the number of intercity bus and rail services and increase the speed and frequency of existing intercity rail services.

► **Implement "transit-first" designs on urban streets**

During the reconstruction of an urban street, local governments should include transit-first features on the roadway when it carries rapid, express, or major local transit routes. Features could include transit signal priority systems, dedicated lanes for transit, and "bus bulbs" at significant transit stops.

► **Enhance stops, stations, and park-ride facilities with state-of-the-art amenities**

Improve information on bus stop signs and poles, provide shelters at more stops, construct and maintain accessible paths to and from all stops, and add real-time information screens, radiant heating, and raised platforms for boarding.

► **Implement programs to improve access to suburban employment centers**

Implement vanpool programs, utilize transportation network companies such as Uber or Lyft, or utilize taxis to address the "last mile" of a transit trip. Improve access to jobs at suburban employment centers by providing an accessible sidewalk network between bus stops and businesses, and enhancing job access programs that assist low-income individuals.

86% of workshop attendees in Fall 2015 said it was **"VERY IMPORTANT"** for residents to be able to reach jobs by public transit.

(compared to 13% "Somewhat Important" and 1% "Not Important")

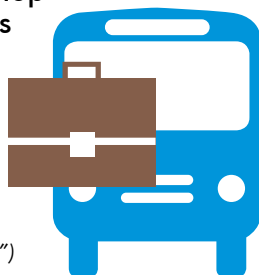


Illustration of a Bus Bulb (in Yellow)
Credit: NACTO

ADDITIONAL RECOMMENDATIONS

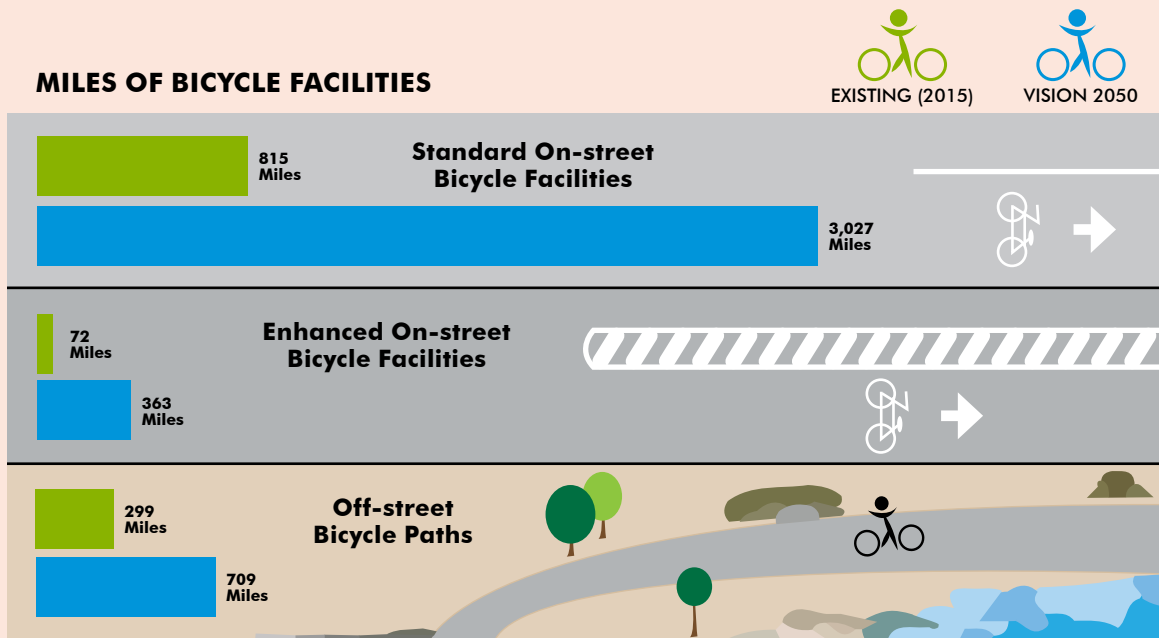
- Accommodate bicycles on all fixed-route transit vehicles
- Provide information to promote transit use, including real-time and trip planning information
- Implement a universal fare system and free transfers across all transit operators
- Consider implementation of proof-of-payment on heavily-used transit services
- Promote and expand transit pricing programs, such as university and commuter value passes
- Expand "guaranteed ride home" programs



Biking on the Interurban Trail in Ozaukee County
Credit: Wisconsin Bike Federation

BICYCLE & PEDESTRIAN

Providing high-quality infrastructure to support biking and walking is an important component of improving quality of life and achieving healthy, vibrant communities. Encouraging residents to incorporate active travel into their daily routine can improve their health and reduce their healthcare costs. Recognizing the benefits of encouraging active transportation, VISION 2050 recommends a well-connected bicycle and pedestrian network that improves access to activity centers, neighborhoods, and other destinations in the Region. This includes providing on-street bicycle facilities (such as bike lanes or paved shoulders), enhanced bicycle facilities (such as protected bike lanes or a separate path within a road’s right-of-way), off-street bicycle paths, and accessible pedestrian facilities.



ACTIVE TRANSPORTATION AND PUBLIC HEALTH

Encouraging active transportation—bicycling, walking, and even using public transit—can significantly improve residents’ health and can actually save them money by reducing how much is spent on healthcare.

There are two critical aspects of VISION 2050 that impact public health: connectivity and access. First, VISION 2050 would provide well-connected infrastructure—bike lanes, off-street paths, and sidewalks—that makes it easier to bike, walk, and use transit.

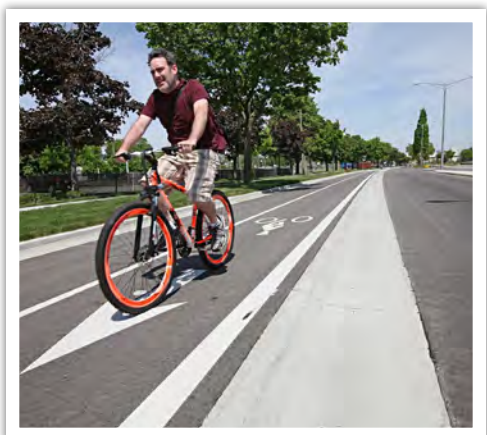
Second, it would provide a mix of uses within short distances, translating into better biking and walking access. Access here refers to the ability to reach various destinations and amenities such as schools, parks, retail services, and employment. When you increase the number of destinations one can access by a short walk, bike ride, or transit trip, you increase the likelihood that people will incorporate active travel modes into their daily routine, thereby increasing their physical activity.



Protected Bike Lane with Bollards in Chicago
 Credit: People for Bikes



Buffered Bike Lane in Kansas City
 Credit: Bike Walk KC



Raised Bike Lane in Milwaukee
 Credit: Michael Sears

KEY RECOMMENDATIONS

► **Expand the on-street bicycle network as streets are resurfaced and reconstructed**

Add bike lanes, paved shoulders, widened outside travel lanes, or enhanced bicycle facilities, if feasible, as the existing surface arterial street network of about 3,300 miles is resurfaced and reconstructed. VISION 2050 considers providing one type of bicycle facility to be sufficient to accommodate bicycles on a given surface arterial street. In other words, if a separate path is provided adjacent to a surface arterial street, another type of bicycle facility would not be needed. Local nonarterial streets, because of low traffic volumes and speeds, should be capable of accommodating bicycle travel with no special accommodation for bicycle travel.

► **Implement enhanced bicycle facilities in key regional corridors**





Within the most urban parts of the Region, provide 363 miles of enhanced bicycle facilities that connect multiple communities, serve important regional destinations, and link segments of the off-street bicycle path system. Enhanced bicycle facilities—such as protected, buffered, and raised bike lanes and separate paths within a road’s right-of-way—are bicycle facilities on or along an arterial that go beyond the standard bike lane to improve safety, define bicycle space on roadways, and provide clear corridors for bicycle usage. Alternatively, if an enhanced bicycle facility is not feasible on a surface arterial street, a parallel local road could be optimized for bicycle traffic (known as a neighborhood greenway or bike boulevard).

WHAT ARE ENHANCED BICYCLE FACILITIES?

Enhanced bicycle facilities go beyond basic on-street bicycle accommodations (e.g., standard bike lanes). They provide a comfort level similar to off-street paths, but are on the street. The most common types are protected bike lanes (also called cycle tracks or separated bike lanes), which include physical separation between bicyclists and vehicles. They can also include buffered bike lanes, raised bike lanes, or a separate path within a road’s right-of-way.

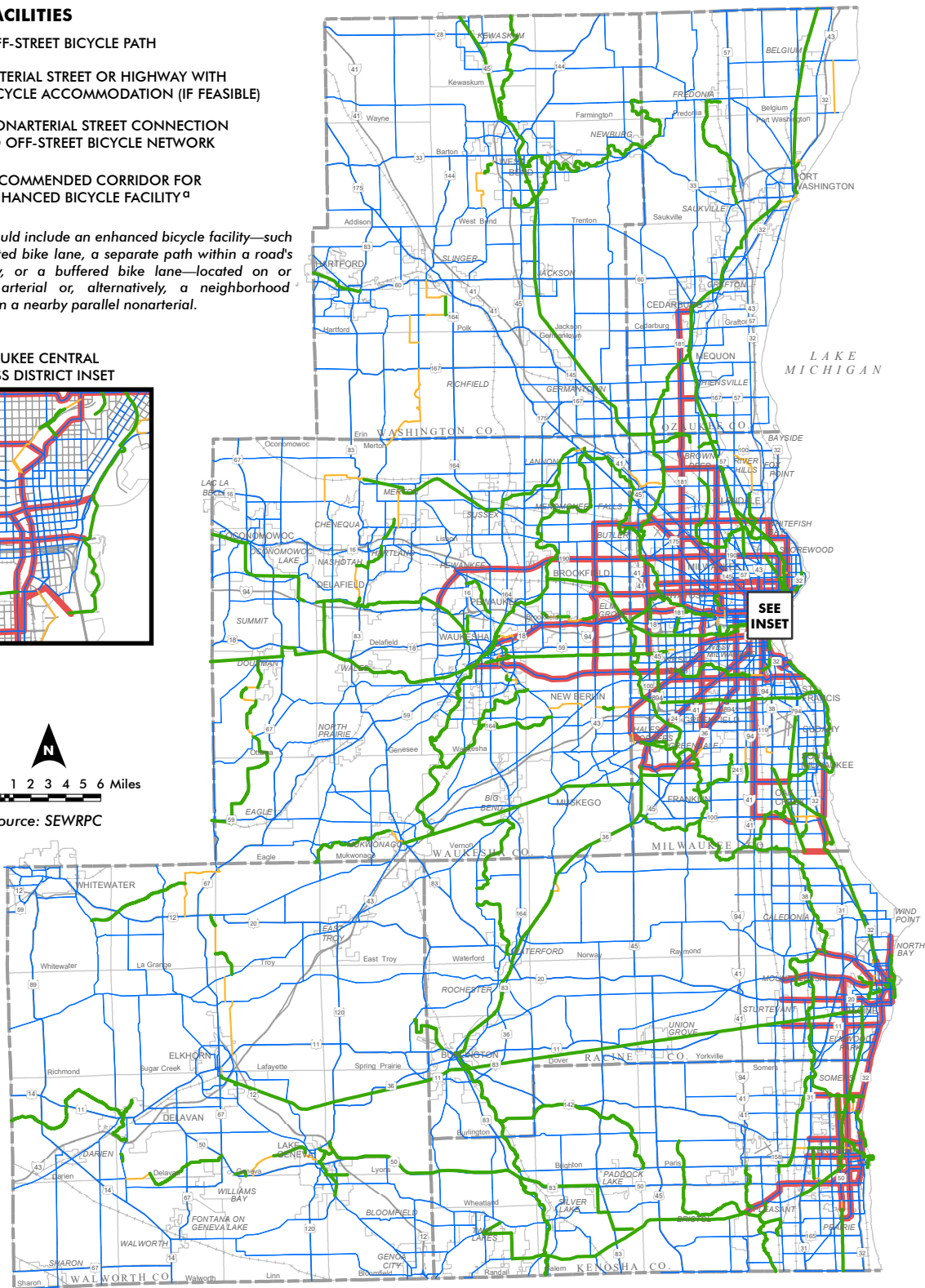
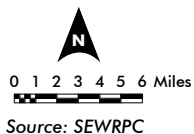
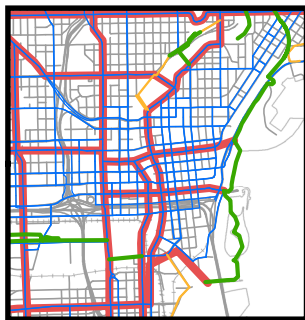
VISION 2050 BICYCLE NETWORK

BICYCLE FACILITIES

-  OFF-STREET BICYCLE PATH
-  ARTERIAL STREET OR HIGHWAY WITH BICYCLE ACCOMMODATION (IF FEASIBLE)
-  NONARTERIAL STREET CONNECTION TO OFF-STREET BICYCLE NETWORK
-  RECOMMENDED CORRIDOR FOR ENHANCED BICYCLE FACILITY^a

^a Corridor would include an enhanced bicycle facility—such as a protected bike lane, a separate path within a road's right-of-way, or a buffered bike lane—located on or along an arterial or, alternatively, a neighborhood greenway on a nearby parallel nonarterial.

MILWAUKEE CENTRAL BUSINESS DISTRICT INSET





Neighborhood Greenway in Tucson
Credit: NACTO



Hank Aaron State Trail
Credit: Wisconsin Bike Federation



Bike Share Station
Credit: Bublr Bikes



62%

of workshop attendees in fall 2015 said it was **“VERY IMPORTANT”** to provide bicycle facilities in the Region.

(compared to 31% “Somewhat Important” and 7% “Not Important”)

WHAT IS AN ENHANCED BICYCLE FACILITY CORRIDOR?

Each enhanced bicycle facility corridor would be within about two blocks in either direction of a surface arterial street. Within the corridor, an enhanced facility would either be on or along the surface arterial street or it would be done through a neighborhood greenway (“bike boulevard”) on a parallel nonarterial. A neighborhood greenway is a low-speed nonarterial street optimized for bicycle traffic.

- ▶ **Expand the off-street bicycle path system to provide a well-connected regional network**
Construct off-street bicycle paths between the cities and villages within the Region with a population of 5,000 or more. These paths would primarily be located in natural resource and utility corridors. Achieving the 709-mile off-street path system would improve bicycle connectivity in the Region by addressing gaps in the bicycle network. In some cases, on-street bicycle connections would be necessary to connect segments of the path system.
- ▶ **Expand bike share program implementation**
Expand bike share programs to provide residents and visitors with options to use bicycles for short trips within mixed-use urban areas. Bike share has been shown to be effective at providing a travel option for short trips and for reducing trips by automobile. It can also function as a feeder service to transit systems, which often encourages increased travel using both of these modes.

► **Provide pedestrian facilities that facilitate safe, efficient, and accessible pedestrian travel**

Construct and maintain accessible sidewalks along streets and highways in areas of existing or planned urban development. Address gaps in the pedestrian network through neighborhood connections to regional off-street bicycle paths, transit, and major destinations. Design and construct sidewalks using widths and clearances appropriate for the levels of pedestrian and vehicular traffic in a given area. Provide terraces or buffered areas, where feasible, between sidewalks and streets for enhancing the pedestrian environment. Maximize pedestrian safety at street crossings by:

- Improving the timing of walk signal phases
- Constructing pedestrian median islands in wide, heavily traveled, or otherwise hazardous roadways
- Constructing curb extensions (“bulb-outs”) that narrow the crossing distance for pedestrians at intersections
- Implementing speed humps, raised crosswalks, and raised intersections to slow traffic and increase the visibility of pedestrians

VISION 2050 emphasizes that all pedestrian facilities be designed and constructed in accordance with the Federal Americans with Disabilities Act (ADA) and its implementing regulations. The ADA requires all pedestrian facilities that access public and commercial buildings and services to accommodate people with disabilities.

► **Prepare local community bicycle and pedestrian plans**

Local units of government should prepare community bicycle and pedestrian plans to supplement the regional plan. The local plans should facilitate bicycle and pedestrian travel within neighborhoods and convenient travel between residential areas and nearby shopping centers, schools, parks, and transit stops. Communities should also consider preparing pedestrian safety action plans and developing Safe Routes to School programs.



Pedestrian Median Island
Credit: NACTO



Accessible Building Access
Credit: SEWRPC



Safe Routes to School
Credit: Wisconsin Bike Federation

To 84th St VIA

 94	 59 Greenfield Ave
23 MIN	18 MIN



AHEAD



A hybrid variable/static travel time sign in New Berlin
Credit: SEWRPC

TRANSPORTATION SYSTEMS MANAGEMENT

Transportation systems management (TSM) involves managing and operating existing transportation facilities to maximize their capacity, building a safer and more efficient transportation system, and reducing the need for widening roadways or building new roadways to address congestion. VISION 2050 makes a number of TSM recommendations so that the Region's existing streets and highways are used as efficiently as possible.

KEY RECOMMENDATIONS

► Improve and expand freeway traffic management

Implement measures to improve the operational control, incident management, and advisory information on the regional freeway system. Some measures are already in place in some parts of the Region, and should be expanded and enhanced. Certain measures are not currently in use, or are not widely used, and should be considered for future implementation. The State Traffic Operations Center (STOC) in Milwaukee is essential to implementing freeway traffic management measures.

Operational control measures improve freeway operation during peak periods and incidents, by monitoring operating conditions and controlling traffic on and entering the freeway. Measures to expand and enhance include traffic detectors and freeway on-ramp meters. Measures to also consider include strategies that adjust the rate vehicles enter the freeway, lane use control to assist with incident management, active speed limit control in response to incidents, part-time shoulder use during rush hour, and lane restrictions for trucks during rush hour.

Incident management measures detect, confirm, and remove as quickly as possible incidents on freeways, and on freeway shoulders, including crashes, debris, and stopped vehicles. Examples include freeway service patrols, closed-circuit television cameras, freeway location reference markers, crash investigation sites, ramp closure devices, and alternate route designations.

Advisory information measures, described more on the next page, provide real-time information on current travel conditions to motorists.



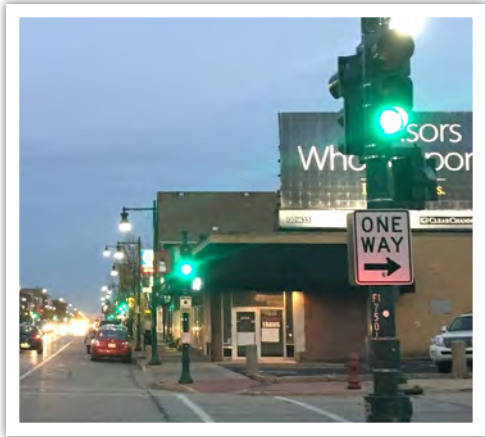
Lane Use Control

Credit: WSP/Parsons Brinckerhoff



Part-Time Shoulder Use by Buses

Credit: Minnesota Department of Transportation



Traffic Signal Coordination
Credit: SEWRPC



Bike Lane Striping Through an Intersection
Credit: Flickr User Sawyer Pangborn



Parking Guidance Sign
Credit: City of Milwaukee

► Enhance advisory information

Expand and enhance advisory measures that provide real-time information on current travel conditions to motorists. These measures include variable message signs (such as hybrid variable/static travel time signs), the WisDOT traveler information website (www.511WI.gov), and partnerships to enable the exchange of traffic information and data that can be accessed via computers, mobile devices, and in-car navigation systems.

► Improve and expand coordinated traffic signal systems

Improve existing coordinated traffic signal systems and expand such systems to all streets that are not currently coordinated and have traffic signals spaced every one-half mile or less. Coordinated traffic signal systems provide efficient progression of traffic along streets and highways, allowing motorists to travel through multiple signalized intersections without stopping. Approximately 1,200 of the 1,700 traffic signals in the Region are currently part of a coordinated signal system. Commission staff should work with State and local governments to document existing and planned arterial signals and develop recommendations for improving and expanding coordinated signal systems.

► Improve arterial street and highway traffic flow at intersections

Implement intersection improvements to increase travel efficiency and improve safety on streets by adding two- or four-way stop control, roundabouts, or signalization; improving signal timing at individual signalized intersections; adding right-and/or left-turn lanes; adding bike lane pavement markings through intersections; or adding leading pedestrian intervals at signalized intersections.

► Implement parking management and guidance systems in major activity centers

Reduce the congestion caused by drivers circling for parking in downtowns and other major activity centers by implementing or expanding parking management and guidance systems. These systems are currently in Downtown Milwaukee and at Bayshore Town Center in Glendale, and use digital signs to direct drivers to available parking spots.

► **Implement demand-responsive pricing for parking in major activity centers**

Improve parking availability and reduce traffic congestion in downtowns and other major activity centers by adjusting the price for on-street parking, parking lots, and parking garages throughout the day based on the parking demand in the area. If implemented correctly, at least one parking space on each block would be available at all times, allowing those who are willing to pay for premium parking spaces to do so, while parking rates on streets further from a destination are reduced. Motorists could access pricing information online and through smartphone apps, allowing them to find parking easier and faster.

ADDITIONAL RECOMMENDATIONS

- Expand curb-lane parking restrictions as needed
- Develop and adopt access management standards
- Expand the use of emergency vehicle preemption
- Review and update regional transportation operations plan

TRAVEL DEMAND MANAGEMENT

Travel demand management (TDM) involves using a series of strategies to encourage the use of alternative methods or times of travel, with the goal of reducing traffic congestion and vehicle emissions. VISION 2050 recommends that the State, local units of government, and private businesses pursue the following TDM strategies to encourage the use of alternative travel times or travel modes.

KEY RECOMMENDATIONS

► **Enhance the preferential treatment for high-occupancy vehicles**

Continue and enhance the preferential treatment for high-occupancy vehicles (HOVs): transit vehicles, vanpools, and carpools. This involves providing queue bypass lanes for vanpools, carpools, and buses at metered freeway on-ramps, and providing preferential carpool and vanpool parking at businesses and destinations. Additional measures include transit signal priority systems and reserved bus lanes along congested surface arterial streets and highways, which are discussed in the *Public Transit* section.

► **Expand the network of park-ride lots**

Promote carpooling and the resultant more efficient use of the Region's transportation system by expanding the network of park-ride lots.



Park-Ride Lot Served by Public Transit
Credit: SEWRPC

75%

OR MORE of the cost of most county and local road projects is **funded through local property taxes**, rather than the gas tax.



Tolls with Pricing Based on Congestion Level
Credit: Minnesota Department of Transportation

- ▶ **Price personal vehicle travel at its true cost**
Increase the percentage of the costs of construction, maintenance, and operation of street and highway facilities and parking facilities borne by the users of those facilities, by implementing road user fees, cash-out of employer-paid parking, and parking pricing.

Much of the costs of constructing and maintaining county and local roads in the Region are paid through property taxes. Shifting these costs to increases in motor fuel taxes and considering a vehicle-miles traveled (VMT) fee, tolling, and/or congestion pricing to supplement or replace the motor fuel tax system, would result in users of county and local roads paying the costs, rather than property tax payers.

User fees can also encourage the use of alternative modes of travel, lessening the number of vehicles, and potentially the amount of congestion, on the arterial street and highway network.

WHAT ARE SOME USER FEE OPTIONS?

Current user fees primarily include Federal and State motor fuel taxes and vehicle registration fees. Some alternative user fees that should be considered—to either supplement or replace the motor fuel tax system—include:

- **VMT fee:** a road pricing measure that imposes a fee on a motorist based on the total distance they drive over a specified period of time. This strategy provides a more equitable means of paying for the costs of the transportation system as motorists would pay for their actual use, rather than paying based on the amount of fuel purchased. A distance-based fee would encourage residents to drive less, potentially reducing total VMT, traffic volumes, and congestion.
- **Tolling:** requires a motorist to pay a fee to use a particular highway facility. Requiring motorists to pay for the facilities they use would provide additional funds to cover the costs of those facilities, and may result in residents choosing alternative modes of transportation. However, Federal law currently prohibits implementing tolls on Federal-aid highways.
- **Congestion pricing:** a user fee for an express lane or highway facility that adjusts based on the time of day and level of congestion. Applying economic supply-and-demand methodology, the fee increases during times of high traffic volume and congestion, and decreases during times of low traffic volume and no congestion. In addition to producing revenue, effective express lane pricing efficiently moves vehicles through a congested corridor and effective highway facility pricing encourages travelers to shift to alternative modes of transportation or to seek alternative routes or times for their travel.

Cash-out of employer-paid parking is a way the cost of parking facilities can be borne by their users. It involves employers charging their employees the market value of parking—rather than subsidizing the costs of parking facilities by providing free parking. Employees then have a choice to park at work, or to accept a cash payment or salary increase and give up the parking space. Parking cash-out encourages employees not to drive alone to work, because they could “pocket” the cash payment or salary increase.

► **Promote demand management, car sharing, and live near your work programs**

Implement a Region-wide program to promote transit use, bicycle use, ridesharing, pedestrian travel, telecommuting, compressed work weeks, and work-shift rescheduling, through education, marketing, and promotions aimed at encouraging alternatives to driving alone.

Also, expand car sharing services to reduce private vehicle ownership and support live near your work programs that provide down payment assistance, location efficient mortgages, and rent subsidies for people who buy or rent a home near their employer.

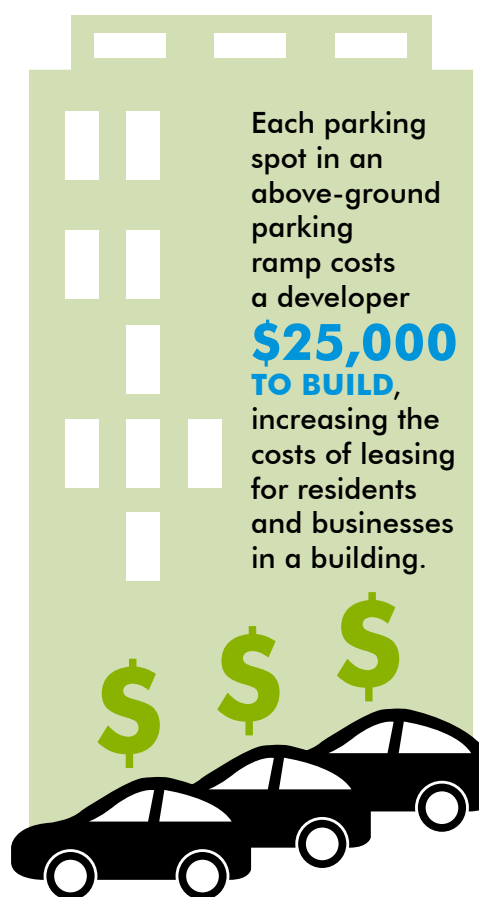
► **Facilitate transit, bicycle, and pedestrian movement in local land use plans and zoning**

Facilitate transit, bicycle, and pedestrian movement as part of preparing and implementing detailed, site-specific neighborhood and major activity center land use plans. This includes encouraging development of mixed-use and higher-density neighborhoods with employment, shopping, parks, and other entertainment options nearby to facilitate biking and walking and reduce the need for residents to own or use a car.

Parking facilities can consume large amounts of land that could otherwise be developed, and can increase the costs of a development in mixed-use and high-density developments. VISION 2050 recommends local governments in urban areas consider removing minimum parking requirements from their zoning ordinances, instead allowing developers and businesses (i.e., the market) to determine the appropriate amount of parking required for an area.



Car Sharing Vehicle
Credit: City of Milwaukee



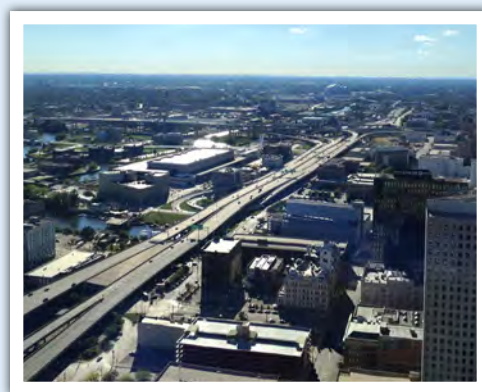
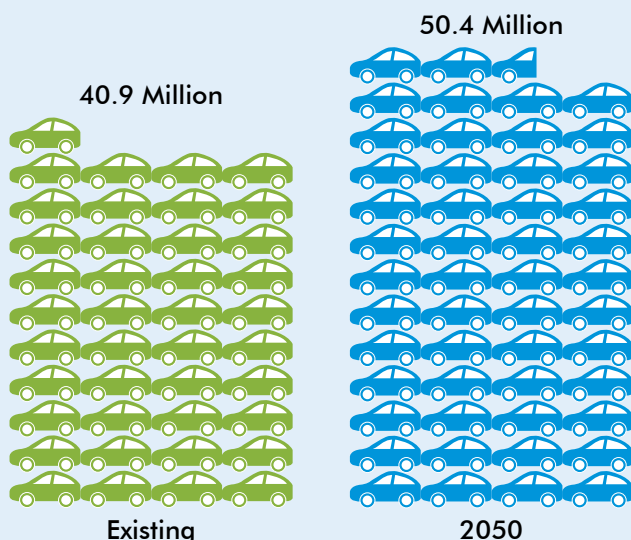


An urban arterial street accommodating multiple travel modes in Racine
Credit: SEWRPC

ARTERIAL STREETS & HIGHWAYS

The VISION 2050 development process considered arterial street and highway capacity expansion only after solutions such as expanded public transit, bicycle and pedestrian facilities, more efficient land use, and other strategies were considered to address congestion. VISION 2050 recommends an arterial street and highway system designed to serve the expected increase in vehicle-miles of travel in the Region of 23 percent by the year 2050, with an 8 percent increase in arterial system lane-miles over the next 34 years. The year 2050 arterial system is designed to address forecast year 2050 congestion, resulting in slightly reduced overall traffic congestion, travel time delay, and average automobile trip times when compared to current levels. In addition, implementing the recommended arterial improvements would improve overall safety and maintain the condition of the pavement and bridges along the planned arterial system.

VEHICLE-MILES OF TRAVEL (AVERAGE WEEKDAY)



Freeway (I-794) in Milwaukee
Credit: SEWRPC

WHAT ARE ARTERIAL STREETS AND HIGHWAYS?

Arterial streets and highways are streets and highways that primarily provide mobility, as opposed to access to adjacent homes and businesses. They serve the through movement of traffic and provide transportation service between major subareas of an urban area or through the area. Arterial streets and highways include freeways, which have controlled access and grade-separated interchanges, and surface arterials, which have at-grade intersections and may have driveways along them.



Surface Arterial (STH 32) in Kenosha
Credit: SEWRPC

PRESERVE VS. IMPROVE VS. EXPAND

- **Preserve:** refers to maintaining the existing capacity of the through traffic lanes of a roadway when it is reconstructed
- **Improve:** means to “widen,” or add capacity to the through traffic lanes of an existing roadway when it is reconstructed
- **Expand:** refers to constructing a new roadway

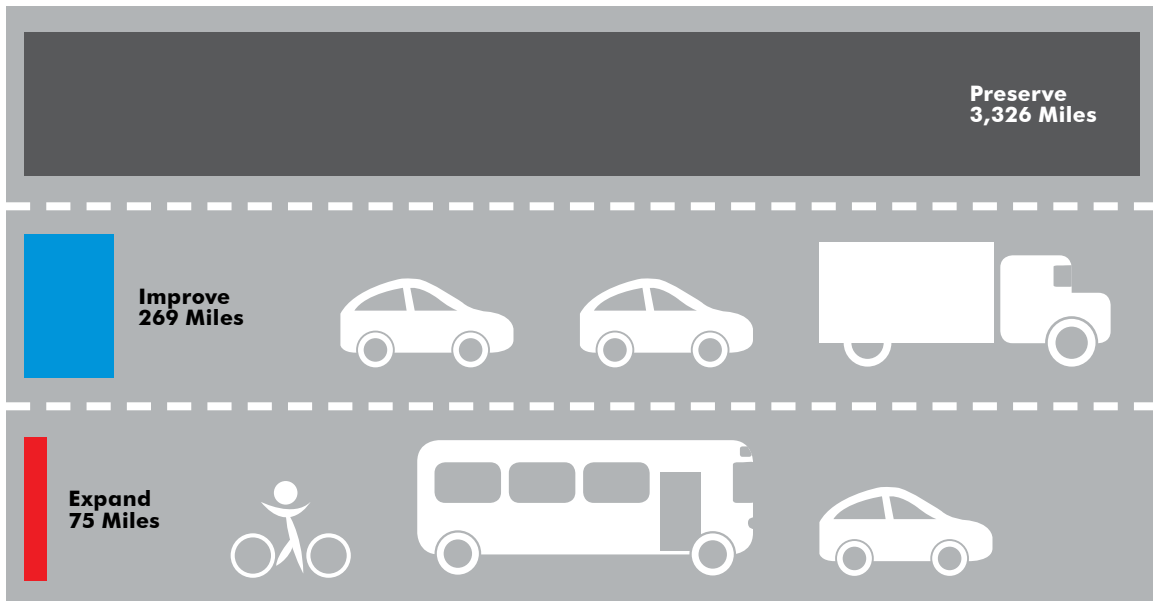
KEY RECOMMENDATIONS

► **Keep the Region’s arterial street and highway system in a state of good repair**

Maintain the Region’s arterial streets and highways—including pavement, bridges, and all other infrastructure in the roadway right-of-way—in a state of good repair to provide for safe and efficient travel. As they carry a higher level of people and goods each day, preserving the condition of arterial streets and highways is important to achieving a high standard of living for the Region’s residents and for giving the Region a competitive edge in terms of retaining and attracting businesses. This is done through routine maintenance, periodic rehabilitation, and reconstruction of roadways, bridges, and other highway infrastructure.

Sound asset management practices are necessary to effectively utilize limited funding resources. When WisDOT prepares its Federally required asset management plan for the pavement and bridges of roadways on the National Highway System (NHS) in the State, the plan should also include the state trunk highways not on the NHS. Local governments in the Region should also develop and implement asset management plans for the arterial and nonarterial roadways under their jurisdiction.

3,670 MILES OF ARTERIAL STREETS AND HIGHWAYS UNDER VISION 2050



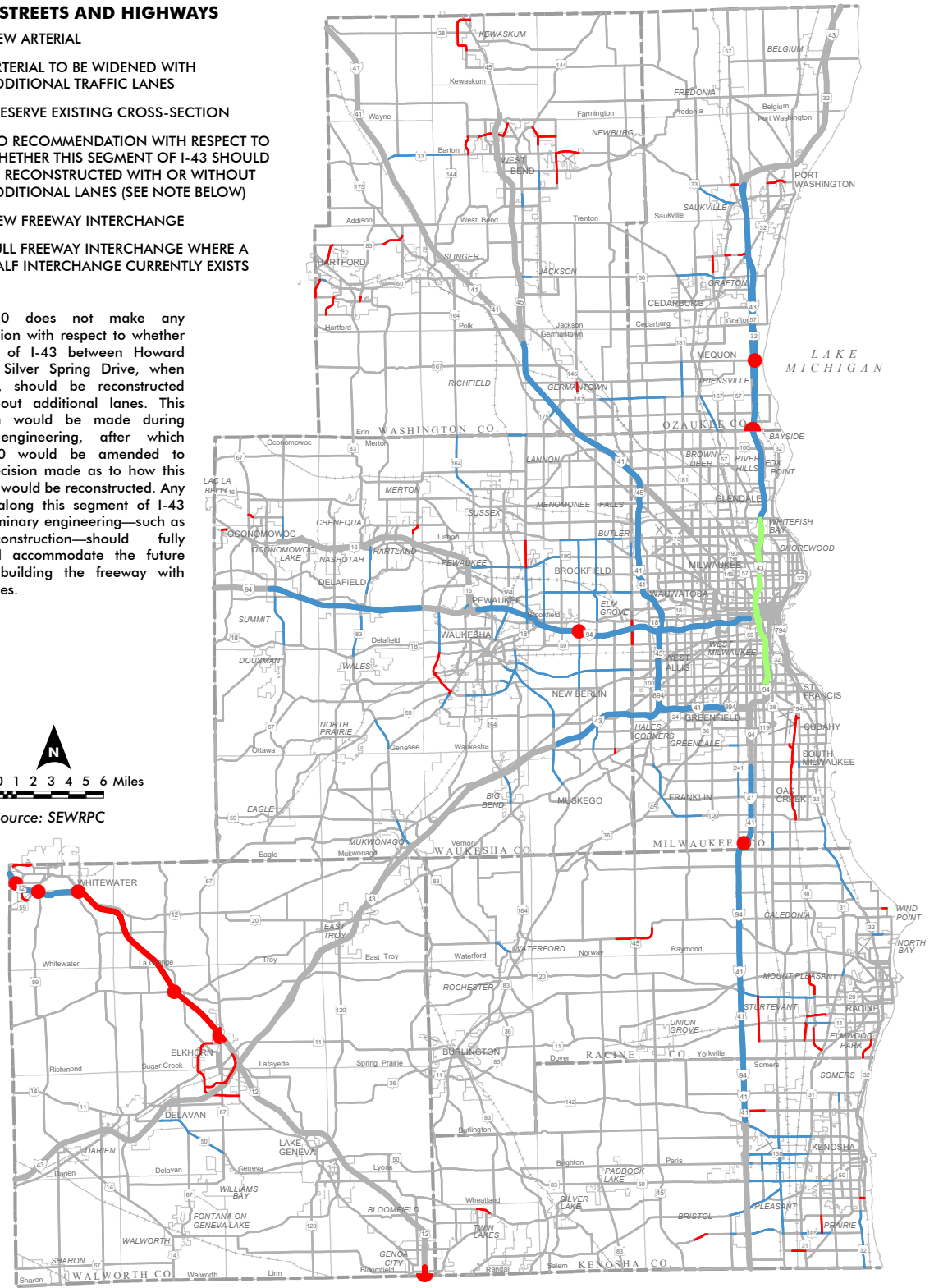
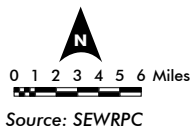
VISION 2050 ARTERIAL STREET & HIGHWAY SYSTEM

ARTERIAL STREETS AND HIGHWAYS

- NEW ARTERIAL
- ARTERIAL TO BE WIDENED WITH ADDITIONAL TRAFFIC LANES
- PRESERVE EXISTING CROSS-SECTION
- NO RECOMMENDATION WITH RESPECT TO WHETHER THIS SEGMENT OF I-43 SHOULD BE RECONSTRUCTED WITH OR WITHOUT ADDITIONAL LANES (SEE NOTE BELOW)
- NEW FREEWAY INTERCHANGE
- ◐ FULL FREEWAY INTERCHANGE WHERE A HALF INTERCHANGE CURRENTLY EXISTS

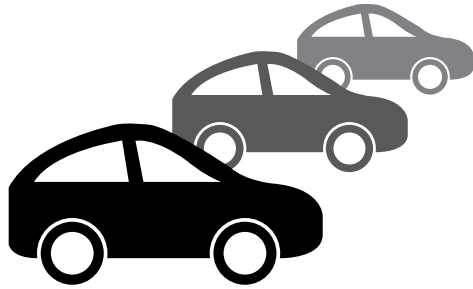
NOTE:

VISION 2050 does not make any recommendation with respect to whether the segment of I-43 between Howard Avenue and Silver Spring Drive, when reconstructed, should be reconstructed with or without additional lanes. This determination would be made during preliminary engineering, after which VISION 2050 would be amended to reflect the decision made as to how this segment I-43 should be reconstructed. Any construction along this segment of I-43 prior to preliminary engineering—such as bridge reconstruction—should fully preserve and accommodate the future option of rebuilding the freeway with additional lanes.





Complete Street in Charlotte
 Credit: North Carolina Department of Transportation



46%

of workshop attendees in fall 2015 said it was **"VERY IMPORTANT"** to address congestion on the Region's freeways.

(compared to 34% "Somewhat Important" and 20% "Not Important")

► **Incorporate "complete streets" concepts for arterial streets and highways**

Complete streets is a roadway design concept related to providing for the safe and convenient travel of all roadway users (of all ages and abilities) traveling by various modes (walking, biking, transit, or automobile) within a road's right-of-way. Complete streets concepts should be considered as part of the construction and reconstruction of streets, and bike lanes or widened travel shoulders should be added during restriping where sufficient street width already exists.

► **Expand arterial capacity to address residual congestion**

Widen approximately 269 route-miles to provide additional through traffic lanes, representing about 7 percent of the total arterial street and highway system mileage in VISION 2050, including 101 miles of existing freeways. These recommended widenings are shown as blue lines on the map. In addition, construct 75 miles of new arterial facilities, representing about 2 percent of the total arterial system mileage, which are shown as red lines on the map. Of the total of about 344 route-miles of planned arterial capacity expansion, about 77 miles, or 22 percent, are part of a committed project—currently underway or recommended as part of a completed or nearly completed preliminary engineering study. These highway improvements are recommended to address the congestion that may not be alleviated by the land use, TSM, TDM, bicycle and pedestrian, and public transit measures included in VISION 2050.

Each arterial street and highway project will undergo preliminary engineering by the project sponsor prior to construction. Preliminary engineering will consider alternatives, including options with and without additional lanes, and VISION 2050 will be amended if necessary to reflect the conclusion of the preliminary engineering process.

ABOUT 7% FEWER MILES of the Region's arterial street and highway network would experience congestion during rush hour under VISION 2050 compared to today.



EXISTING

VISION 2050

► **Avoid, minimize, or mitigate environmental impacts of arterial capacity expansion**

Arterial street and highway capacity expansion has been developed through the VISION 2050 planning process to avoid, if at all possible, impacts to environmentally sensitive resources. However, in instances where impacts to these areas are unavoidable, these impacts should be minimized or mitigated to preserve the Region's natural resource areas.

► **Address safety needs on the arterial street and highway network**

Minimize traffic crashes, particularly crashes involving fatalities and serious injuries, on the arterial street and highway system. Also minimize bicycle and pedestrian-related crashes, reduce conflicts between automobiles and public transit vehicles, and reduce vehicle traffic conflicts. Ways to reduce conflicts include freeway modernization, mitigating freeway congestion to reduce rear-end crashes, implementing alternative intersection types, and managing access along arterials. VISION 2050 also recommends that the Commission, working with WisDOT and local governments, develop a Regional Safety Implementation Plan (RSIP). The RSIP would identify and prioritize arterial intersections and corridors with severe crash rates, and identify measures to reduce the number and severity of crashes.

► **Address security needs related to the arterial street and highway system**

State and local governments in the Region should continue to work with the Federal government and the Commission to address the security needs related to the arterial street and highway system. Related security efforts, in which the Commission plays a supporting role, involve preventing and responding to attacks affecting the arterial system. They include conducting periodic vulnerability assessments and monitoring and strengthening vulnerable infrastructure; developing and maintaining county and local government all hazards mitigation plans; maintaining a resilient regional arterial network that provides alternative routes during disruptions; increasing transportation system resiliency to flooding; and updating and implementing evacuation route policies.



Wetland in Northwestern Walworth County
Credit: SEWRPC

FREEWAY MODERNIZATION

Modernization refers to upgrading a roadway to current design standards to increase safety and improve the roadway's efficiency.

The Region's freeway system was originally built in the 1950s, 1960s, and 1970s and has many deficiencies in design—left-hand exits and entrances, lack of shoulders, service interchanges spaced too close to freeway-to-freeway interchanges, and multipoint exits.

As the freeway system is reconstructed segment-by-segment, it should be "modernized" to address these existing design deficiencies.



Loading a shipment onto a vessel in the Port of Milwaukee
Credit: SEWRPC

FREIGHT TRANSPORTATION

VISION 2050 recommends a multimodal freight transportation system designed to provide for the efficient and safe movement of materials and goods to, from, and within Southeastern Wisconsin, which is essential for maintaining and growing Southeastern Wisconsin's manufacturers and economy. In 2015, nearly 140 million tons of domestic and international cargo valued at more than \$200 billion were shipped to, from, and within the Milwaukee-Racine-Waukesha Combined Statistical Area.

KEY RECOMMENDATIONS

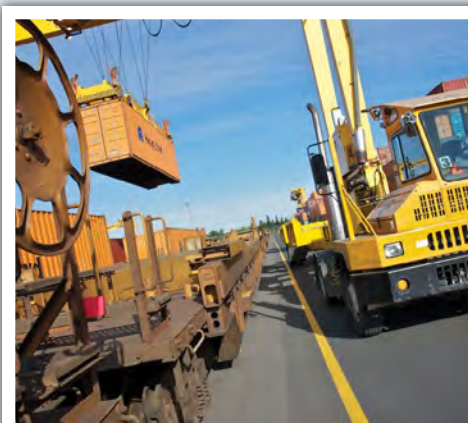
► Pursue development of a new truck-rail intermodal facility in or near Southeastern Wisconsin

Currently, the truck-rail intermodal facilities—where freight shipments are interchanged between trucks and freight trains—closest to Southeastern Wisconsin are located in the Chicago area, where intermodal shipments sometimes experience significant congestion-related delays. To increase efficiency and lower shipping costs for the Region's businesses, the construction and operation of a new truck-rail intermodal facility in or near Southeastern Wisconsin should be pursued.

► Accommodate oversize/overweight (OSOW) shipments to, from, and within Southeastern Wisconsin

The accommodation of oversize/overweight (OSOW) truck shipments on the Region's arterial street and highway network should be improved to allow high-value goods—including exports of locally manufactured products to other countries—to be efficiently shipped to and from the Region. Unusually large or heavy goods shipped within or through the Region require that specific OSOW truck routes be used, and, depending on the size of the shipment, may require the relocation of overhead poles and wires in certain circumstances.

State and local governments should work with Commission staff and local manufacturers, shippers, and utilities to improve the accommodation of OSOW shipments on the Region's arterial network. Specific recommended actions include documenting and analyzing past OSOW truck shipments in the Region, using that information to assist in identifying a regional OSOW truck route network, and determining the infrastructure changes that need to be



A Truck-Rail Intermodal Facility
Credit: Canadian Pacific Railway



An Oversize/Overweight Shipment
Credit: Port of Milwaukee



The Muskego Yard in Milwaukee's Menomonee Valley
 Credit: SEWRPC

made (such as improving roadway curvature, reconstructing bridges with low clearance, or modifying roadway medians or low-hanging utility wires) to improve these routes for OSOW shipments.

► **Construct the Muskego Yard bypass**

Canadian Pacific Railway (CP) freight trains traveling through downtown Milwaukee currently pass through the Milwaukee Intermodal Station (MIS). MIS is a stop for Amtrak's Hiawatha and Empire Builder intercity passenger trains. It would also be a stop for commuter rail service under VISION 2050 and for expanded intercity passenger rail service under the State's long-range rail plan.

Upgrading track and signaling through CP's Muskego Yard, which passes through the Menomonee Valley south of MIS, would allow freight trains to bypass the station and Downtown Milwaukee. The City and County of Milwaukee, the Commission, and the State should work with CP to construct the Muskego Yard bypass, which would improve safety, reduce delays to freight trains traveling through Milwaukee, and accommodate additional commuter rail and intercity passenger rail service.

► **Accommodate truck traffic on the regional highway freight network**




Freight shipments in Southeastern Wisconsin—including shipments involving ships, airplanes, and trains—rely heavily on trucks using the Region's arterial street and highway system. In particular, the movement of freight depends in large part on trucks using the regional highway freight network—arterials in the Region intended to carry a higher percentage of truck traffic. It is important to implement the capacity expansion improvements included in the arterial streets and highways element of VISION 2050 to address higher levels of congestion and the presence of bottlenecks on the regional highway freight network.

ADDITIONAL RECOMMENDATIONS

- **Develop truck size and weight regulations in Wisconsin consistent with neighboring states**
- **Address the potential need for truck drivers in Southeastern Wisconsin**
- **Address safety needs related to freight transportation**
- **Address security needs related to freight transportation**
- **Support efforts in areas outside the Region that improve freight movement to and from the Region**

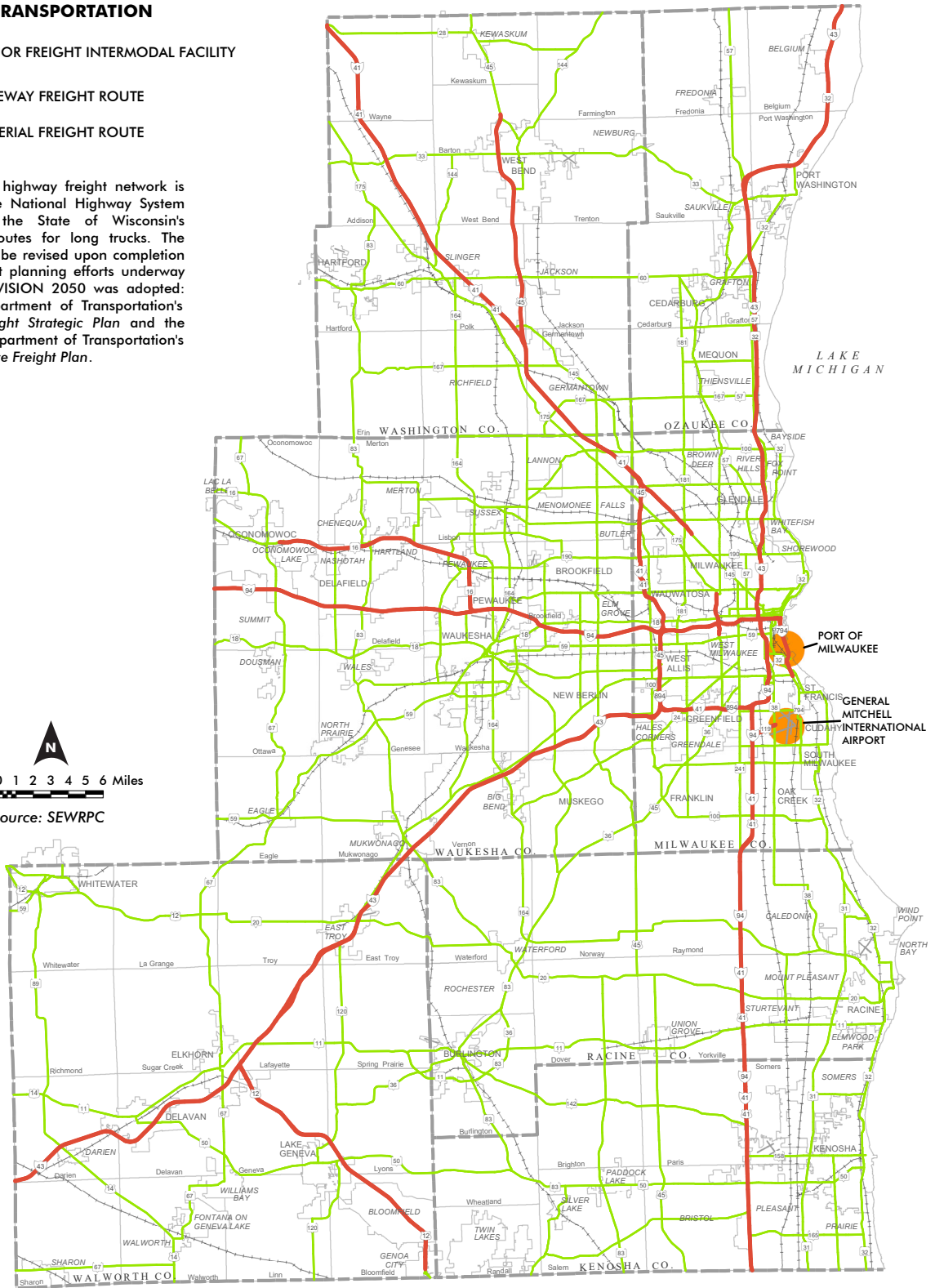
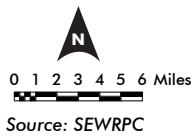
REGIONAL HIGHWAY FREIGHT NETWORK (2016)

FREIGHT TRANSPORTATION

-  MAJOR FREIGHT INTERMODAL FACILITY
-  FREEWAY FREIGHT ROUTE
-  ARTERIAL FREIGHT ROUTE

NOTE:

The regional highway freight network is based on the National Highway System (NHS) and the State of Wisconsin's designated routes for long trucks. The network may be revised upon completion of two freight planning efforts underway at the time VISION 2050 was adopted: the U.S. Department of Transportation's *National Freight Strategic Plan* and the Wisconsin Department of Transportation's *Wisconsin State Freight Plan*.





Train tracks awaiting passenger rail service in Racine
Credit: Hugh J. Fuller, WSP/Parsons Brinckerhoff

FUNDING VISION 2050

VISION 2050 makes strong recommendations for improving and expanding the Region's transportation system, with a particular emphasis on a significant expansion of public transit service in the Region. The ability to implement these recommendations requires adequate funding. Based on Commission staff estimates, which consider funding provided from all levels of government in recent years, the amount of funding required to support the plan's transportation infrastructure and services is more than the amount of funding expected to be available in the future. In other words, **existing funding sources are not adequate to construct, operate, and maintain the entire VISION 2050 transportation system.**

Currently, the gap between funding and costs—identified in the funding comparison below—solely affects the public transit element. Because of this gap, **the transit system recommended under VISION 2050 will not occur without additional funding.** Current estimates indicate there should be enough revenue to fund the arterial street and highway and bicycle and pedestrian elements.

However, **more funding may also be needed to implement the arterial street and highway element.** This is because motor fuel taxes have not kept pace with inflation and the State has been borrowing for highway projects at higher-than-normal levels. Should the State choose to not continue borrowing at these higher levels, and not generate additional revenue to fund transportation, a funding gap would likely be identified for the arterial street and highway element in the near future.

HOW DOES THE PLAN REFLECT THE FUNDING GAP?

Staff prepared a financial analysis guided by Federal regulations that require the Region's transportation plan to be "fiscally constrained." This means only projects that can be funded with existing and expected funds can be included in the plan. The financial analysis must also assume that current legal restrictions on revenues are continued. For example, staff cannot assume that funding for highway projects can be flexed to transit projects, as that is not currently permitted by the State Legislature. To address the Federal requirements, staff identified the funded portion of the VISION 2050 transportation system, which is referred to as the Fiscally Constrained Transportation Plan (FCTP).

Due to an identified gap in funding, illustrated on the following page, the public transit element cannot be implemented within expected funds. Therefore, the FCTP includes all VISION 2050 transportation elements except for public transit. Transit service under the FCTP, discussed and illustrated on page 49, would actually be expected to decline rather than significantly increase as recommended under VISION 2050.

If there are notable future changes to funding for any of the transportation elements, the FCTP would be amended. For example, should a gap be identified for the arterial street and highway element, the FCTP would be modified to remove projects from the streets and highways element as necessary. Similarly, if additional transit funding is provided, projects would be added to the public transit element of the FCTP.

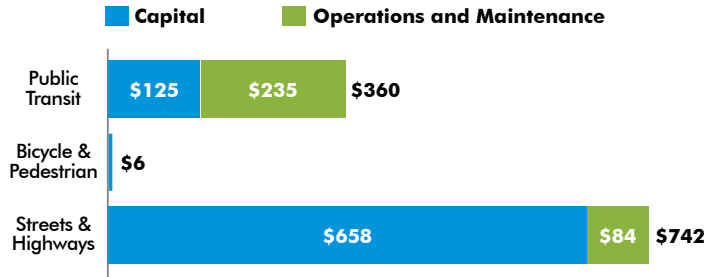
This section covers:

- The amount of funding that would be required to implement VISION 2050
- The consequences of not fully funding VISION 2050
- Potential funding sources that could be explored to address the funding gap
- Some of the many benefits that the Region and its residents would experience if VISION 2050 is fully funded

Cost to Implement VISION 2050

Constructing, maintaining, and operating the public transit system, bicycle and pedestrian network, and arterial street and highway system included in VISION 2050 will cost an average of \$1.07 billion (in 2015 constant dollars) each year between now and 2050.

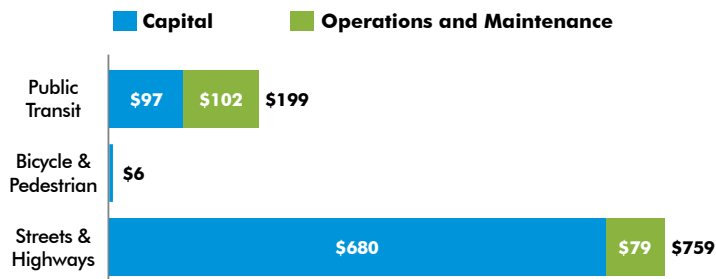
AVERAGE ANNUAL TRANSPORTATION SYSTEM INVESTMENT REQUIRED FOR VISION 2050 (IN MILLIONS OF 2015\$)



Revenues from Existing Sources

Federal, State, and local governments all contribute to the funding of the Region’s transportation system, and that is expected to continue in the future. Based on existing Federal Transit Administration funding programs, the construction and operation of the recommended public transit element is expected to generate an additional \$63 million (in 2015 constant dollars) for the Region on average each year between now and 2050.

AVERAGE ANNUAL FUNDING AVAILABLE FOR VISION 2050 (IN MILLIONS OF 2015\$)








**\$161
MILLION GAP
FOR TRANSIT**




Unless the Region is able to identify a new source of funding for transit, there will be less transit service in 2050 than is currently provided in the Region. The Region's existing transit service has already declined about 25 percent from the amount provided in the year 2000. The map below illustrates what the transit system could look like in 2050 after decades of further decline.

PUBLIC TRANSIT SYSTEM IN 2050 WITHOUT NEW FUNDING

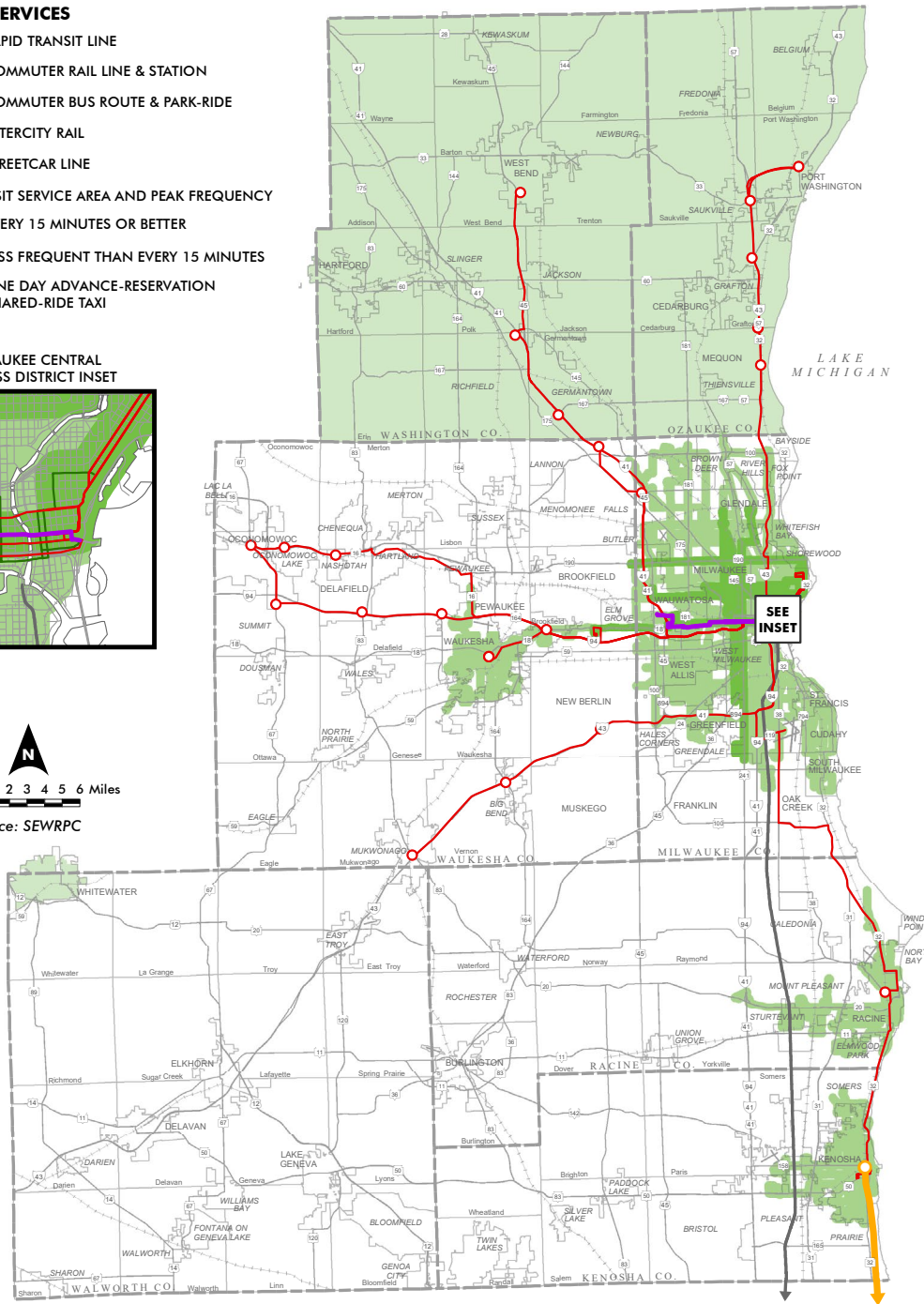
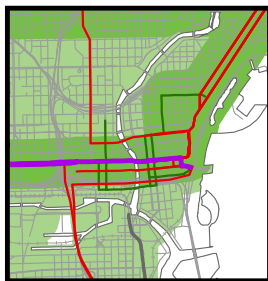
TRANSIT SERVICES

-  RAPID TRANSIT LINE
-  COMMUTER RAIL LINE & STATION
-  COMMUTER BUS ROUTE & PARK-RIDE
-  INTERCITY RAIL
-  STREETCAR LINE

LOCAL TRANSIT SERVICE AREA AND PEAK FREQUENCY

-  EVERY 15 MINUTES OR BETTER
-  LESS FREQUENT THAN EVERY 15 MINUTES
-  ONE DAY ADVANCE-RESERVATION SHARED-RIDE TAXI

MILWAUKEE CENTRAL BUSINESS DISTRICT INSET



The Milwaukee County Transit System provides



Public transit in our Region is uniquely funded compared to large metro areas across the Nation: it is largely dependent on Federal and State sources, with little ability to increase revenue locally as it competes with other public services for limited property tax dollars. **Nearly every other comparably sized region in the Country has a tax or fee dedicated specifically to funding that region’s transit system.**

In order for the Region’s public transit system to look like the system recommended by VISION 2050 (see page 21)—rather than the system on page 49—a new funding source or combination of new funding sources will need to be identified to build and operate the system. **The following page presents a number of different taxes or fees that could be considered—along with increasing State operating assistance for transit—to fund the recommended public transit investments.** Many were proposed by the Wisconsin Commission on Transportation Finance and Policy (created by the Governor in the 2011-2013 State budget) and by the WisDOT Secretary in the 2015-2017 State budget.

WHERE WOULD NEW REVENUES BE GENERATED?

The approximate revenues generated by each tax/fee (presented on the following page) are estimated on a Region-wide basis. This is not intended to suggest any new taxes or fees should be levied uniformly across the Region. It may be more reasonable that a particular tax or fee only be levied in certain parts of the Region, or to vary the tax/fee level by county or community, given that the level of transit service recommended under VISION 2050 varies widely depending on the county or community. While service would be extended to many currently unserved areas, and VISION 2050 recommends providing shared-ride taxi service throughout the Region, much of the transit service would be concentrated in the urbanized parts of the Region (i.e., the Milwaukee, Waukesha, Racine, and Kenosha areas). Therefore, it may make sense to only implement a new tax or fee in these areas, or to have the new tax or fee be higher in these areas than in other parts of the Region.

Important notes about the potential revenue sources and estimates on the following page:

- The levels shown for each tax/fee are on a “per unit” basis (e.g., each 0.1% sales tax would generate about \$25-30 million annually)
 - o The actual level(s) needed would depend on the amount of transit service to be funded, which taxes/fees would be levied, and where the taxes/fees would be levied
- Almost all of these funding sources would require approval of the Governor and State Legislature
 - o The only exception would be an increase in the vehicle registration fee

POTENTIAL REVENUE SOURCES TO ADDRESS THE TRANSIT FUNDING GAP (2015\$)

0.1% Sales Tax	\$25 - \$30 Million Annually	Would involve an increase in existing sales tax rates, with the revenues dedicated to public transit.
\$1 Vehicle Registration Fee	\$1.5 - \$1.8 Million Annually	Would involve an increase in the existing vehicle registration fee, with the revenues dedicated to public transit.
\$0.01 per Gallon Motor Fuel Tax	\$7 - \$9 Million Annually	Would involve an increase in the existing motor fuel tax, with the revenues dedicated to public transit.
\$0.01 per Vehicle Mile of Travel	\$70 - 80 Million Annually	Would involve charging a fee to owners of passenger vehicles and light trucks based on the total distance they drive during a year. Assumes the fee would not be charged on the first 3,000 miles and would be capped at 20,000 miles.
\$0.01 per \$1,000 of Valuation Property Tax	\$1.7 Million Annually	Would involve an increase in the existing property tax rate, with the revenues dedicated to public transit.
\$1 Vehicle Rental Fee	\$0.4 - \$0.6 Million Annually	Would involve charging an additional fee for renting a vehicle. State legislation previously allowed a vehicle rental fee of up to \$18 per rental for KRM commuter rail costs, but it was repealed.
1.0% Hotel Room Tax	\$1.5 - 2.0 Million Annually	Would involve increases to existing tax rates on short-term lodging (hotels, motels, etc.), with the revenues dedicated to public transit.
Flex Federal Highway Funding to Transit	Some Surface Transportation Program (STP), National Highway Performance Program (NHPP), and/or Congestion Mitigation and Air Quality Improvement Program (CMAQ) funding could be flexed to transit, with State approval. It should be noted there are Federal limitations on the use of Federal highway funds. For example, STP and NHPP funding can only be used to construct transportation infrastructure, not to operate services.	
State Transit Capital Assistance Program	A transit capital program previously created by the State would have provided up to \$100 million in grant funding for Southeastern Wisconsin, but the program was repealed. The Wisconsin Transportation Finance and Policy Commission and the WisDOT Secretary also both recently proposed a transit capital program, which would have provided \$15 million annually.	
Capital Cost Value Capture	Would attempt to recover some or all of the value that a fixed-guideway station or other related infrastructure would generate for the private landowners in the station area. Examples include tax increment (TIF), districts financing, development fees, and real estate transfer fees.	

BENEFITS OF VISION 2050

VISION 2050 recognizes that recommending increasing taxes or fees to invest in transportation infrastructure and services places an additional burden on the Region’s residents and businesses, and would not recommend it unless there were significant benefits to the Region’s residents. The following pages illustrate some of the many benefits through quantitative comparisons to existing conditions and/or the Trend—an approximation of what would occur if current trends continue. The Trend transit system would be roughly similar to the transit system included in the Fiscally Constrained Transportation Plan.



Maximizing Access to High-Quality Transit

Access to transit service provides choices to residents by providing an alternative to driving. Studies have shown that transit service lowers employee turnover rates for businesses, provides significant congestion relief in larger metro areas, and significantly lowers costs associated with transportation for those who use transit instead of owning a car. Significantly more residents would have access to excellent or very good transit service under VISION 2050 than under the Trend, meaning that residents are within walking distance of either one rapid transit station or multiple frequent local or express bus routes.

14 TIMES MORE RESIDENTS

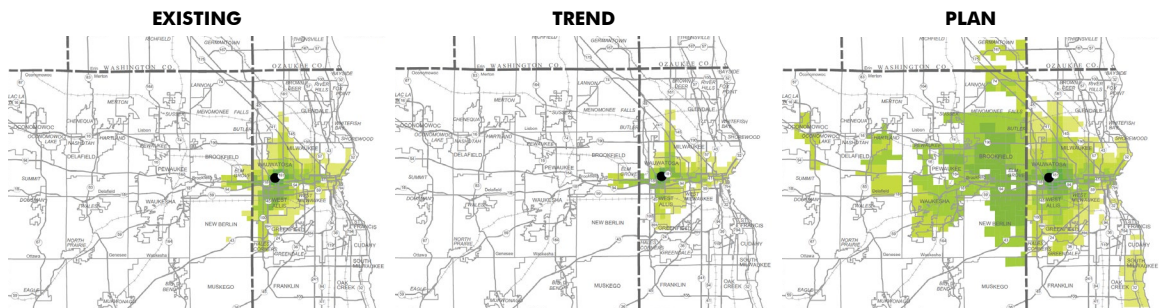
would be within walking distance of excellent or very good transit service with VISION 2050 than with the Trend.



Improving Transit Travel Times to Major Destinations

The improvements to the Region’s transit system recommended under VISION 2050 would have a significant impact on travel time via transit. The figure to the right illustrates travel time improvements to a major, centrally located destination in the Region: the Milwaukee Regional Medical Center. The lightest green areas have access within 60 minutes via transit and the darkest green areas have access within 20 minutes.

PEAK TRAVEL TIME VIA TRANSIT TO MILWAUKEE REGIONAL MEDICAL CENTER



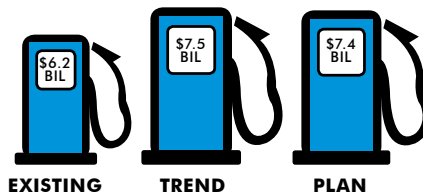
Reducing Residents' Out-of-Pocket Transportation Costs

Replacing a car with transit use would save an average Southeastern Wisconsin household about \$4,500 per year—money that could be saved or might be spent on goods that have a greater impact on the local economy than the expenses associated with a car. By providing many more services that are time-competitive with travel by car, the VISION 2050 public transit system would allow more residents to reduce the number of cars in their household while maintaining their mobility.

Under VISION 2050, annual **out-of-pocket transportation costs** for the Region's residents would be

ABOUT **\$144 MILLION LESS**

than the Trend due to destinations and homes being closer together, and more people using alternative methods of transportation rather than cars.

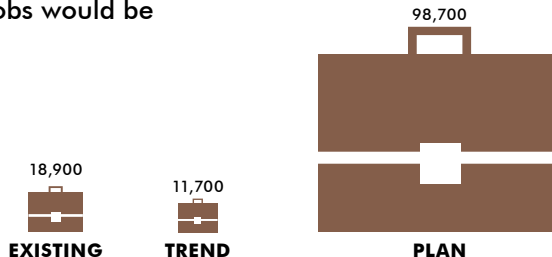


Creating a More Equitable Region

Although most minority residents travel by car, minority residents use public transit at a higher proportion relative to other modes of travel than white residents. Similarly, individuals from low-income families use transit at a higher rate than individuals from higher-income families. For these individuals it is essential to reach jobs using public transit, and the VISION 2050 transit system would significantly increase how many jobs would be accessible via transit.

8 TIMES MORE MINORITY RESIDENTS

would have **access to 100,000+ jobs within 30 minutes using transit** under the VISION 2050 transit system versus the Trend's transit system.



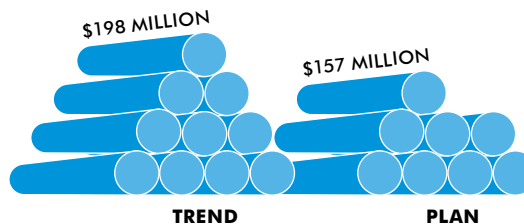
Increasing the Efficiency of Public Services

Density, building type, and location affect the cost of extending supportive infrastructure to new development, including sewer, water, and local roads. By recommending more compact development and the supporting transit system, VISION 2050 will result in infrastructure being constructed in a more efficient and cost-effective manner than under the Trend. In addition, national research shows local governments are often left with the long-term maintenance and replacement costs associated with this infrastructure, and as density increases the per capita costs to maintain each infrastructure element and provide essential services—such as fire protection, school transportation, and solid waste collection—all decrease.

The more compact development pattern in VISION 2050 would result in

ABOUT **\$41 MILLION LESS ANNUALLY**

being spent on **building sewer systems, water mains, and local roads to serve new development** when compared to the Trend.





Redevelopment of a former brownfield site in Kenosha
Credit: SEWRPC



WHAT'S NEXT FOR VISION 2050

The Regional Planning Commission is an advisory agency, which means implementing the VISION 2050 recommendations for land use and transportation depends on the actions of local, county, areawide, State, and Federal government agencies. Some aspects also depend on cooperation from many private interests, such as businesses, developers, builders, and conservation groups.

ENDORSE

The first step in implementing VISION 2050 was the adoption of the plan by the Regional Planning Commission, which occurred on July 28, 2016. The next step involves endorsement by the agencies and levels of government that would be responsible for implementing the plan's various recommendations.

Endorsement and Integration

The Commission's adoption starts a formal process, where the Commission sends a certified copy of the adopted plan to all of the Region's local legislative bodies and to all concerned local, areawide, State, and Federal agencies. The Commission's request of these bodies is simple: **endorse VISION 2050 as a useful guide to the sound development of the Region and integrate its findings and recommendations into their planning, regulatory, and other activities related to land use and transportation.**

Depending on the agency and level of government, this endorsement and integration may be done in different ways. The Commission staff is available and willing to work with any agency or local government as they determine how to proceed.

REFINE

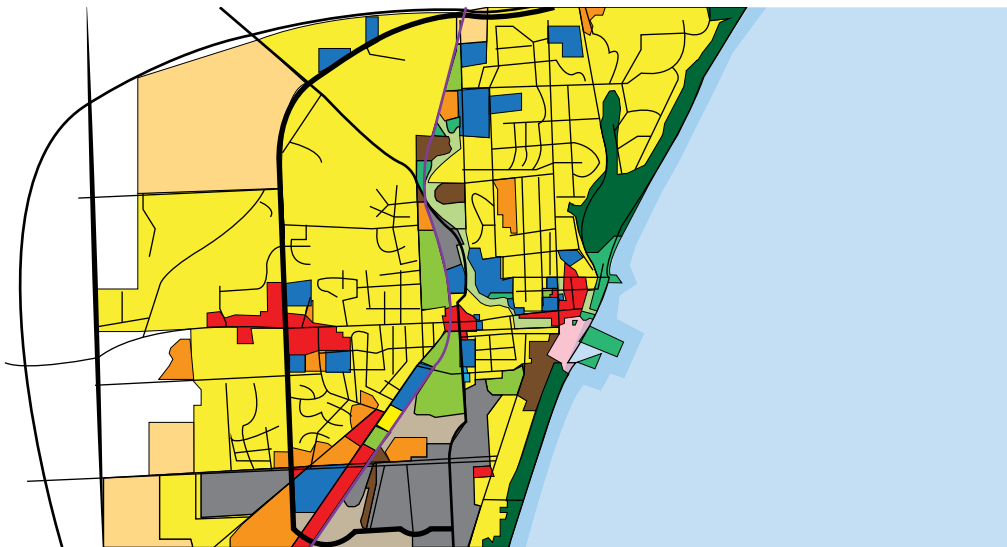
As an advisory and regional plan, VISION 2050 should be viewed as a framework for more detailed county and local planning. It is also subject to adjustment as statewide plans are prepared, national policies and programs are created or changed, and other relevant planning efforts are conducted. During this refinement process, coordination among the various involved entities is critical.

The Commission's request during this stage is also simple: **work with Commission staff as plans are prepared that refine VISION 2050, and transmit any relevant plans to the Commission so staff can consider their integration into the adopted regional plan.**

Comprehensive Plans

The VISION 2050 land use component includes allocations of population and employment with associated land uses to urban and rural areas, and recommended density ranges by land use category. **This provides an overall land use planning framework for the Region that needs to be refined through county and community comprehensive plans**, which are effectively required for counties, cities, villages, and towns in Wisconsin by the State comprehensive planning law. Comprehensive plans may vary in format and detail, but generally do the following:

- Identify the boundaries of urban service areas, which include public sanitary sewer service and typically public water supply service, local parks, schools, and shopping areas
- Identify residential neighborhoods and other land uses and recommend overall densities for residential neighborhoods within the broader VISION 2050 land use categories (State comprehensive planning law requires local zoning and land division ordinances to be consistent with the community's comprehensive plan)
- Identify environmentally significant lands and, as appropriate, farmland preservation areas to be preserved consistent with VISION 2050 recommendations
- Incorporate more detailed neighborhood planning



Transit Development Plans

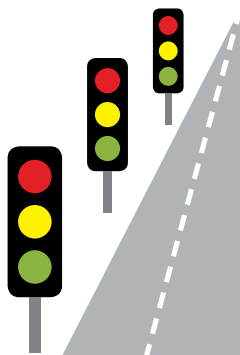
For the regional plan, the Commission staff cannot feasibly analyze everything that goes into precisely planning individual transit services. To refine and detail VISION 2050's transit recommendations, each public transit operator is encouraged to work with the Commission to prepare transit development plans (TDPs). These short-range plans typically have a five-year horizon and provide the basis for day-to-day decision-making on initiating new transit services and modifying existing services. They also provide the basis for agencies to program transit projects in their budgets.

In addition to the TDPs, VISION 2050 recommends that Commission staff work with transit operators and human services organizations to periodically update plans to coordinate public transit and human services transportation for each county.

Arterial Street and Highway Planning

To refine and detail VISION 2050's arterial recommendations, county and local public works agencies may undertake detailed implementation planning, such as working with the Commission to update county jurisdictional highway system plans or conducting preliminary engineering studies. These efforts can serve as a basis for amending VISION 2050. Additional future planning efforts that would detail the regional plan's arterial recommendations include:

- Asset management planning by State and local governments ensures that limited funding resources are used effectively by planning rehabilitation and reconstruction of roadway features consistent with their life cycle
- A Regional Safety Implementation Plan, to be prepared by the Commission working with WisDOT and local governments, will identify and prioritize arterial intersections and corridors with the most severe crash rates and corrective measures to reduce the number and severity of crashes
- A Commission study of transportation facilities located in low-lying areas susceptible to flooding will identify potential improvements and adjacent roadway facilities that could serve as alternative routes when flooding occurs
- A Commission bicycle study will assess arterials that should be prioritized for bicycle accommodation, considering factors such as traffic volume, speed, and congestion



Transportation Systems Management Planning

One TSM recommendation is for Commission staff to work with State and local governments to document traffic signals on the arterial network and develop recommendations (including prioritization) for improving and expanding coordinated signal systems. Related to that recommendation, coordinated traffic signal plans should be prepared along surface arterial routes with signals spaced every one-half mile or less, and agencies should coordinate efforts so that motorists do not experience unnecessary stops or delays due to changes in individual traffic signal jurisdiction authority.

IMPLEMENT

While endorsing the plan and refining its recommendations are important steps, this last step is critical to achieving the plan's many benefits. Implementation is complex and relies on the coordinated actions of many different entities. The key players involved, and the measures that can be used, are described below. Tracking implementation of VISION 2050 recommendations, monitoring the forecasts that underlie VISION 2050, and evaluating the performance of the regional transportation system will also be an important aspect of the Commission's work going forward.

Land Use Plan Implementation Measures

Key Players: local, county, areawide, State, and Federal agencies

While comprehensive plans provide needed refinement of VISION 2050, implementation of VISION 2050 also relies on a series of land use measures:

- Local-level regulatory measures, such as zoning, land division, and official mapping ordinances
- State- and Federal-level regulatory measures, such as State-local floodplain and shoreland regulations and the Federal wetland regulatory program
- Non-regulatory implementation measures (carried out by government agencies and non-governmental organizations), such as park and open space acquisition or purchase of conservation easements, purchase and transfer of development rights, municipal boundary agreements, capital improvement programming, and brownfield redevelopment



Transportation Plan Implementation Measures

The actions and entities responsible for implementing the transportation component vary by plan element, with more detailed planning required prior to the programming of certain elements, particularly for public transit, TSM, and arterial streets and highways. For most recommendations, the Regional Planning Commission will play a supporting role in implementation.

Public Transit

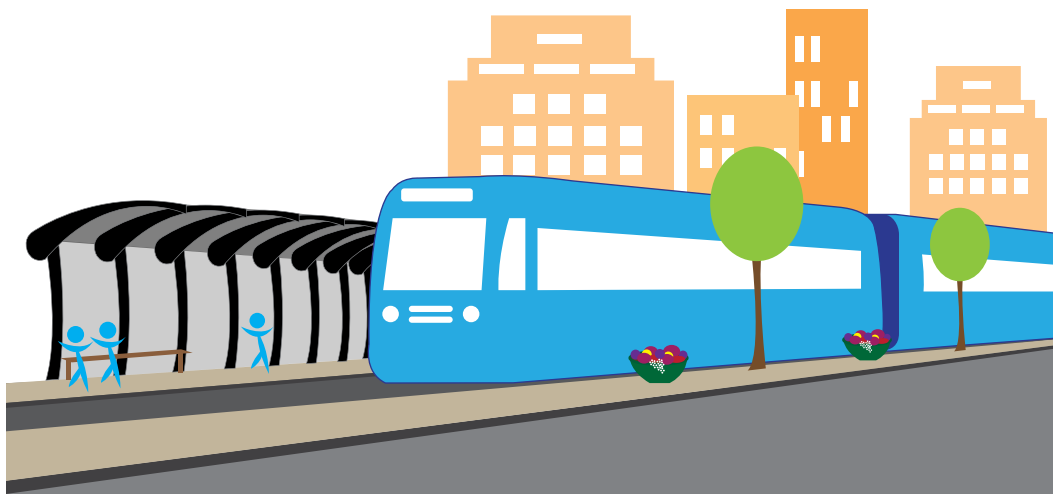
Key Players: local and county governments, transit operators, WisDOT, and the Wisconsin State Legislature

The Region's public transit operators are responsible for implementing the vast majority of the recommended transit improvement and expansion. However, the following actions are needed by the Wisconsin State Legislature:

- Pass enabling legislation allowing local dedicated transit funding
- Renew adequate annual State financial assistance for transit
- Consider allowing creation of a regional transit authority (RTA) with the ability to collect dedicated funding, and build and operate the recommended transit system

In addition to the transit operators and State Legislature, other entities are important to implementation:

- Local and county governments would be responsible for implementing transit-first designs on streets and would work with transit operators to implement programs to improve access to suburban employment centers
- WisDOT would be a primary entity responsible for implementing intercity transit improvements, enhancing and expanding park-ride facilities, implementing commuter rail, and promoting transit use



Bicycle and Pedestrian

Key Players: local and county governments, WisDOT, WDNR, and private entities



The level and unit of government responsible for constructing and maintaining each surface arterial street or highway is also responsible for constructing and maintaining the bicycle or pedestrian facility along that arterial. Each implementing agency should evaluate each recommended bicycle accommodation in more detail as part of the engineering for a surface arterial project, and should evaluate the feasibility of an alternative route if the accommodation is found not to be feasible.

Off-street bicycle facilities should be constructed and maintained according to the jurisdiction identified under VISION 2050. The Commission will, by request, review and update the jurisdictional responsibility of particular off-street bicycle facilities.

Transportation Systems Management

Key Players: local and county governments, WisDOT, and private entities

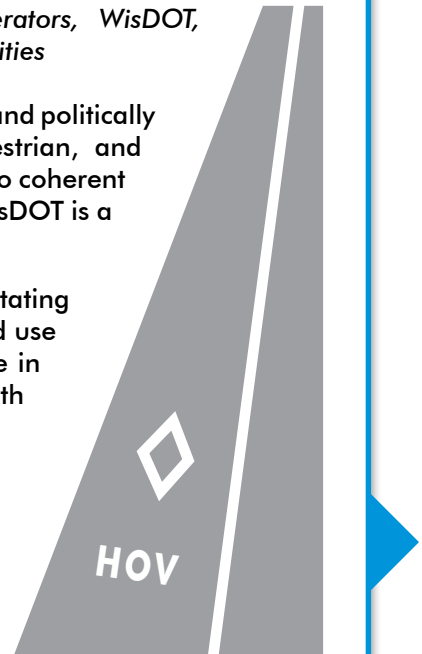
Implementing the TSM recommendations will require the cooperation and coordination of multiple public and private entities. WisDOT is the primary agency responsible for implementing the recommended freeway traffic management strategies and is responsible (along with local and county governments) for implementing almost all surface arterial traffic management strategies. The main exception would be demand-responsive parking pricing, which would involve a coordinated effort in major activity centers by local and county governments and private entities.

Travel Demand Management

Key Players: local and county governments, transit operators, WisDOT, the Wisconsin State Legislature, and private entities

For TDM measures to be effective, they should be technically and politically feasible; integrated with public transit, bicycle and pedestrian, and arterial street and highway improvements; and combined into coherent packages so that a variety of measures are implemented. WisDOT is a primary entity responsible for almost all measures, except:

- Local and county governments are responsible for facilitating transit, bicycle, and pedestrian movement in local land use plans and zoning and would also have a primary role in enhancing HOV preferential treatment and working with WisDOT to expand park-ride lots
- Private entities and WisDOT would be responsible for implementing personal vehicle pricing, depending on the measure, with some measures requiring enabling legislation by the State Legislature



Arterial Streets and Highways

Key Players: local and county governments, WisDOT, and the Wisconsin State Legislature



Implementing each arterial street and highway recommendation—such as maintaining, improving, and expanding arterials, as recommended—is the responsibility of local governments, county governments, or WisDOT, depending on each arterial’s jurisdiction. VISION 2050 identifies future jurisdiction,

and the Commission, at the request of a given county, will work with the jurisdictional highway planning committee for that county to reevaluate any planned jurisdictional transfers.

Each recommended arterial improvement, expansion, and preservation project would need to undergo preliminary engineering and environmental studies by the responsible State, county, or local government prior to implementation. The final decision as to whether and how to implement a planned project will be made by the responsible unit of government at the conclusion of preliminary engineering.

Freight Transportation

Key Players: local and county governments, WisDOT, the Wisconsin State Legislature, and private entities

WisDOT is a primary entity responsible for implementing all freight recommendations, with local and county governments also having a direct role in implementing most of the recommendations. Private entities (e.g., railroads, trucking companies) have a direct role in pursuing a new truck-rail intermodal facility, constructing the Muskego Yard Bypass, and addressing the potential need for truck drivers.

The Commission serves on the advisory committee guiding WisDOT’s State Freight Plan and a workgroup created by WisDOT to identify and work to preserve oversize/overweight (OSOW) corridors. These efforts may produce additional elements that would be appropriate to include in the regional freight transportation element.

HOW CAN YOU HELP IMPLEMENT VISION 2050?

If you are a concerned citizen interested in seeing VISION 2050 recommendations implemented, we encourage you to get involved by contacting your local elected officials and letting them know you support the plan. If you want to learn more about VISION 2050, or are interested in inviting us to present to a group you are involved with, we welcome the opportunity.

Southeastern Wisconsin Regional Planning Commission
 W239 N1812 Rockwood Drive, P.O. Box 1607, Waukesha, WI 53187-1607
 Phone: (262) 547-6721 | Fax: (262) 547-1103 | E-mail: sewrpc@sewrpc.org

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

<p>Kenosha County Michael J. Skalitzky Adelene Greene, Secretary Robert W. Pitts</p>	<p>Milwaukee County Brian R. Dranzik Theodore Lipscomb, Sr. William R. Drew, Treasurer</p>	<p>Ozaukee County Jennifer K. Rothstein Gustav W. Wirth, Jr. Thomas H. Buestrin</p>
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Regional Land Use Planning Advisory Committee

Julie A. Anderson, Chair	Director of Public Works and Development Services, Racine County
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Harlan Clinkenbeard	City Planner, City of Pewaukee
Michael P. Cotter	Director, Land Use and Resource Management Department, Walworth County
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Charles Erickson	Community Development Manager, City of Greenfield
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Debra Jensen	Planning Services Supervisor, Milwaukee Metropolitan Sewerage District
Vanessa Koster	Planning Manager, Department of City Development, City of Milwaukee
Jeffrey B. Labahn	Director, Community Development and Inspections, City of Kenosha
Patricia T. Najera	City Plan Commissioner, City of Milwaukee
Mark Piotrowicz	City Planner/Operations Manager, City of West Bend
Brandi Richter	District Conservationist, Kenosha-Racine-Milwaukee-Walworth-Waukesha Counties, U.S. Natural Resources Conservation Service
Matthew Sadowski	Assistant Director and Principal Planner, Department of City Development, City of Racine
Steven J. Schaer	Manager of Planning and Zoning, City of West Allis
Sheri Schmit	Deputy Director, Southeast Region, Wisconsin Department of Transportation
Douglas Seymour	Director of Community Development, City of Oak Creek
Debora Sielski	Deputy Planning and Parks Administrator; Manager of Planning Division, Washington County
Andrew T. Struck	Director, Planning and Parks Department, Ozaukee County
Todd Stuebe	Director of Community Development, City of Glendale
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Teig Whaley-Smith	Director, Department of Administrative Services, Milwaukee County

Regional Transportation System Planning Advisory Committee

Brian R. Dranzik, Chair	Commissioner, Southeastern Wisconsin Regional Planning Commission; Director, Department of Transportation, Milwaukee County
Fred Abadi	Director of Public Works, City of Waukesha
Julie A. Anderson	Director of Public Works and Development Services, Racine County
Shelly Billingsley	Director of Public Works/City Engineer, City of Kenosha
Daniel Boehm	Managing Director, Milwaukee County Transit System
Scott Brandmeier	Director of Public Works/Village Engineer, Village of Fox Point
Donna Brown-Martin	Director, Bureau of Planning and Economic Development, Division of Transportation Investment Management, Wisconsin Department of Transportation
John Budzinski	Secretary's Director, Southeast Region, Wisconsin Department of Natural Resources
Allison M. Bussler	Director of Public Works, Waukesha County
David Cox	Village Administrator, Village of Hartland
Jon Edgren	Director of Public Works/Highway Commissioner, Ozaukee County
Gary Evans	Highway Engineering Division Manager, Department of Public Works, Waukesha County
Jennifer Gonda	Legislative Liaison Director, City of Milwaukee
Gail Good	Director, Air Management Program, Wisconsin Department of Natural Resources
Thomas M. Grisa	Director, Department of Public Works, City of Brookfield
Robert A. Kaplan	Acting Regional Administrator, Region V, U.S. Environmental Protection Agency
Ghassan A. Korban	Commissioner of Public Works, City of Milwaukee
Nik Kovac	Alderman, City of Milwaukee
Michael G. Lewis	City Engineer/Director of Public Works, City of West Allis
Max Marechal	City Engineer, City of West Bend
Michael Mayo, Sr.	7th District Supervisor, Milwaukee County
Dwight E. McComb	Planning and Environmental Manager/Team Leader, Federal Highway Administration, U.S. Department of Transportation
R. Stewart McKenzie	Community Planner, Federal Transit Administration, Region V, U.S. Department of Transportation
Eric A. Nitschke, PE	Director of Central Services, Public Works Department, Walworth County
Jeffrey S. Polenske	City Engineer, City of Milwaukee
William Porter	Director of Public Works, City of Wauwatosa
William D. Sasse	Director of Engineering, Village of Mount Pleasant
Scott M. Schmidt	Highway Commissioner, Washington County
Sheri Schmit	Deputy Director, Southeast Region, Wisconsin Department of Transportation
Gary A. Sipsma	Director of Highways/Highway Commissioner, Kenosha County
Andrea Weddle-Henning	Transportation Engineering Manager, Department of Transportation, Milwaukee County
Dennis Yaccarino	Senior Budget and Policy Manager, Budget and Management Division, Department of Administration, City of Milwaukee
Mark H. Yehlen	Commissioner of Public Works, City of Racine
Willie Wade	Liaison to Environmental Justice Task Force; Vice President, Employ Milwaukee
Brian Udovich	Liaison to Jefferson County; Highway Operations Manager, Highway Department, Jefferson County

Special acknowledgment is due the individuals who served as alternates for Committee members or as previous members of the Committees during the course of preparing VISION 2050.

Environmental Justice Task Force

In addition to the 21-member Commission and the Commission’s Advisory Committees on Regional Land Use Planning and Regional Transportation System Planning, the Commission’s Environmental Justice Task Force (below) monitored work on VISION 2050 to ensure that Federal environmental justice and related requirements were met.

Adelene Greene, Chair	Commissioner, Southeastern Wisconsin Regional Planning Commission; Director of Workforce Development, Kenosha County
Tyrone P. Dumas, Vice-Chair	Educational Consultant, SOS Center Garden of Hope After School Program, Milwaukee
Yolanda Adams	President and CEO, Urban League of Racine and Kenosha
Huda Alkaff	Founder & Director, Wisconsin Green Muslims
Ella Dunbar	Program Services Manager, Social Development Commission, Milwaukee
N. Lynnette McNeely	Legal Redress Chair, Waukesha County NAACP
Guadalupe “Wally” Rendon	President, Hispanic Business and Professionals Association of Racine
Jackie Schellinger	Indian Community Representative, Retired Judge
Theresa Schuerman	Walworth County Bilingual Migrant Worker Outreach
May yer Thao	Director, Hmong Chamber of Commerce
Willie Wade	Vice President, Employ Milwaukee
Wallace White	Principal/CEO, W2EXCEL, LLC

Special acknowledgment is due the following individuals who served as previous members of the Task Force during the course of the VISION 2050 planning process: Ness Flores, Attorney, Flores & Reyes Law Offices; Nancy Holmlund, Past President, Racine Interfaith Coalition; and Jedd Lapid, Regional Chief Development Officer, American Red Cross of Eastern Wisconsin.

County Jurisdictional Highway Planning Committees

Each of the seven County Jurisdictional Highway Planning Committees provided input during the plan development process, specifically considering and approving the functional improvement recommendations for the arterial street and highway system. Collectively, these committees include representatives from all seven counties and 148 cities, villages, and towns in the Region.

Task Forces on Key Issues

Staff also developed and convened “task forces” that met during the process to examine specific issues related to land use and transportation. Issues included the transportation needs of business, industry, workforce development, and higher education; the environment, including natural resources; freight movement; human services transportation needs; land use, including farming, builder, realtor, and environmental interests; non-motorized transportation, including bicycle and pedestrian facilities; public transit; transportation systems management; and women’s land use and transportation issues.

Southeastern Wisconsin Regional Planning Commission Staff

Kenneth R. Yunker, PE	Executive Director
Michael G. Hahn, PE, PH	Deputy Director
Stephen P. Adams	Public Involvement and Outreach Manager
Nancy M. Anderson, AICP	Chief Community Assistance Planner
Laura K. Herrick, PE, CFM	Chief Environmental Engineer
Christopher T. Hiebert, PE	Chief Transportation Engineer
Elizabeth A. Larsen, SPHR	Assistant Director-Administration
Rob W. Merry, PLS, PS	Chief Surveyor
David A. Schilling	Chief Land Use Planner
Dr. Thomas M. Slawski	Chief Biologist

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