



# THE DRAFT PLAN

for Regional Land Use and Transportation in Southeastern Wisconsin

## SUMMARY BOOKLET

A publication of the **Southeastern Wisconsin Regional Planning Commission**

**Spring 2016**

Following the substantial input provided by the public and Advisory Committees in Fall 2015 on the detailed alternative plans, Commission staff developed the VISION 2050 Draft Plan. The Draft Plan represents the culmination of the VISION 2050 process, making recommendations to our communities and the State regarding the shaping and guiding of land use development and transportation investment.

### **A PIVOTAL POINT IN REGIONAL DEVELOPMENT:**

A major shift is occurring in Southeastern Wisconsin's development and growth. In order to grow jobs in the Region in the coming decades, the Region will need to attract new residents for the first time in decades, putting Southeastern Wisconsin in direct competition with other metro areas. If the Region does not compete strongly to attract needed workers, economic growth cannot be expected to occur.

**A PLAN TO SUSTAINABLY DEVELOP OUR REGION:** The Draft Plan proposes developing the Region and encouraging growth in a sustainable and cost-effective manner. It proposes preserving the Region's most productive farmland and primary environmental corridors, which encompass the best remaining features of the Region's natural landscape, while encouraging more compact development, ranging from high-density transit-oriented development to traditional neighborhoods with homes within walking distance of parks, schools, and businesses. To support this growth and enhance the attractiveness and accessibility of the Region, the Draft Plan also proposes significantly improving and expanding public transit, including adding rapid transit and commuter rail, and improving and expanding local and express transit services. It proposes a well-connected bicycle and pedestrian network that improves access to activity centers, neighborhoods, and other destinations. It proposes strategies to efficiently use the capacity of existing streets and highways and incorporating "complete streets" roadway design concepts to provide safe and convenient travel for all. The Draft Plan also proposes maintaining existing major streets in good condition, strategically adding capacity on highly congested roadways, and addressing key issues related to moving goods into and through the Region.

**FUNDING THE DRAFT PLAN:** The transportation investments included in the Draft Plan would require more to be spent on the transportation system in the future, particularly on building and operating a competitive and advanced transit system. The proposed transit system would attract new Federal funding to the Region, but would require approximately \$120 million each year in additional local and/or State funding for transit. Until additional public investment is provided, the public transit element of the Draft Plan is unattainable. The plan recognized by the Federal Government is required to be funded with expected revenues, and therefore the "Federally Recognized Transportation Plan" would include a reduction in public transit rather than the significant improvement and expansion proposed in the Draft Plan. The Draft Plan identifies ways to address the funding gap.

**WHY THE DRAFT PLAN PROPOSES ADDITIONAL SPENDING:** The improved transportation system and associated compact development pattern in the Draft Plan would 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, and reducing their reliance on other social services; and reducing residents' out-of-pocket transportation expenses and local government costs for other infrastructure and other services.

### WHAT'S INSIDE

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This booklet highlights key recommendations associated with the Draft Plan's two components: land use and transportation; and the elements that make up the transportation component, including public transit, bicycle and pedestrian infrastructure, and arterial streets and highways. Also included in this booklet is a more detailed discussion of the amount of public funds needed to implement the Draft Plan; the amount of funding expected to be available; the portion of the Draft Plan that can be funded using these expected sources; and possible ways to generate the funds needed to implement the Draft Plan.

### TELL US WHAT YOU THINK!

Feedback on the Draft Plan and the Federally Recognized Transportation Plan can be provided at the public workshops being held in each county this spring, online at [www.VISION2050sewis.org/draftplan](http://www.VISION2050sewis.org/draftplan), by e-mailing [VISION2050@SEWRPC.org](mailto:VISION2050@SEWRPC.org), by calling Commission staff at (262) 547-6721, or by sending mail to the address on the back of this booklet **by May 6, 2016**. Public feedback will help the Advisory Committees guiding VISION 2050 (see the back page of this booklet) determine what changes should be made before the Draft Plan becomes VISION 2050.

## LAND USE

The Region of 2050 will be different than the Region of today. It is expected there will be about 369,000 additional residents and about 229,000 additional jobs. In contrast with past decades, the Region will need to attract new residents to grow the number of jobs, putting Southeastern Wisconsin in direct competition with other regions. The Draft Plan proposes a compact development pattern that will preserve our natural and agricultural resources and make the Region competitive by supporting active lifestyles, high-quality public transit, and a variety of housing options.

### Key Recommendations

#### ► Preserve the Region's most productive agricultural land

Each county in the Region, except Milwaukee County, has adopted a farmland preservation plan that identifies areas to preserve in agricultural use. The Draft Plan proposes preserving these areas, and additional agricultural lands in the Region that have the highest quality soils (Class I and Class II soils) for agricultural use.

#### ► Protect 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. The Draft Plan proposes preserving primary environmental corridors, which encompass about 18 percent of the Region, in natural, open uses.

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

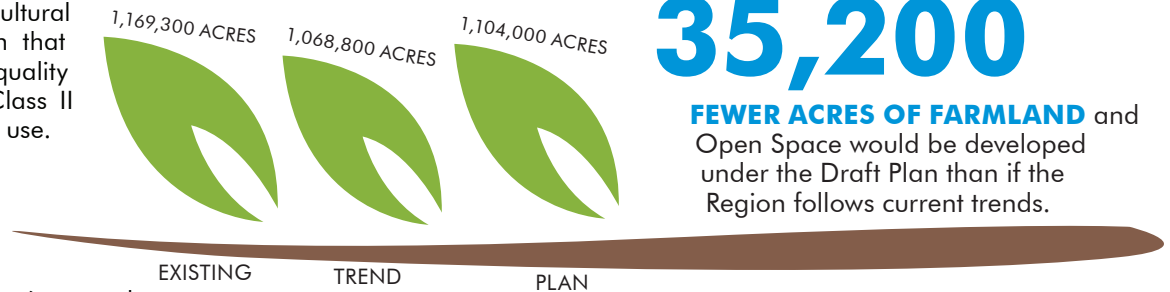
Groundwater is the source of water for agriculture in the Region, and for nearly 40 percent of the Region's population. Preserving the Region's primary environmental corridors and prime farmland will preserve substantial areas in the Region with the highest recharge potential.

#### ► 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.

#### ► Encourage and accommodate economic growth

Encourage economic growth through the continued development and redevelopment of the over 60 existing and developing major economic activity centers in the Region.



#### ► 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) that can be provided with urban infrastructure and services at lower public cost than single-family homes on larger lots, and that tend to be more affordable to a wider range of households. 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.

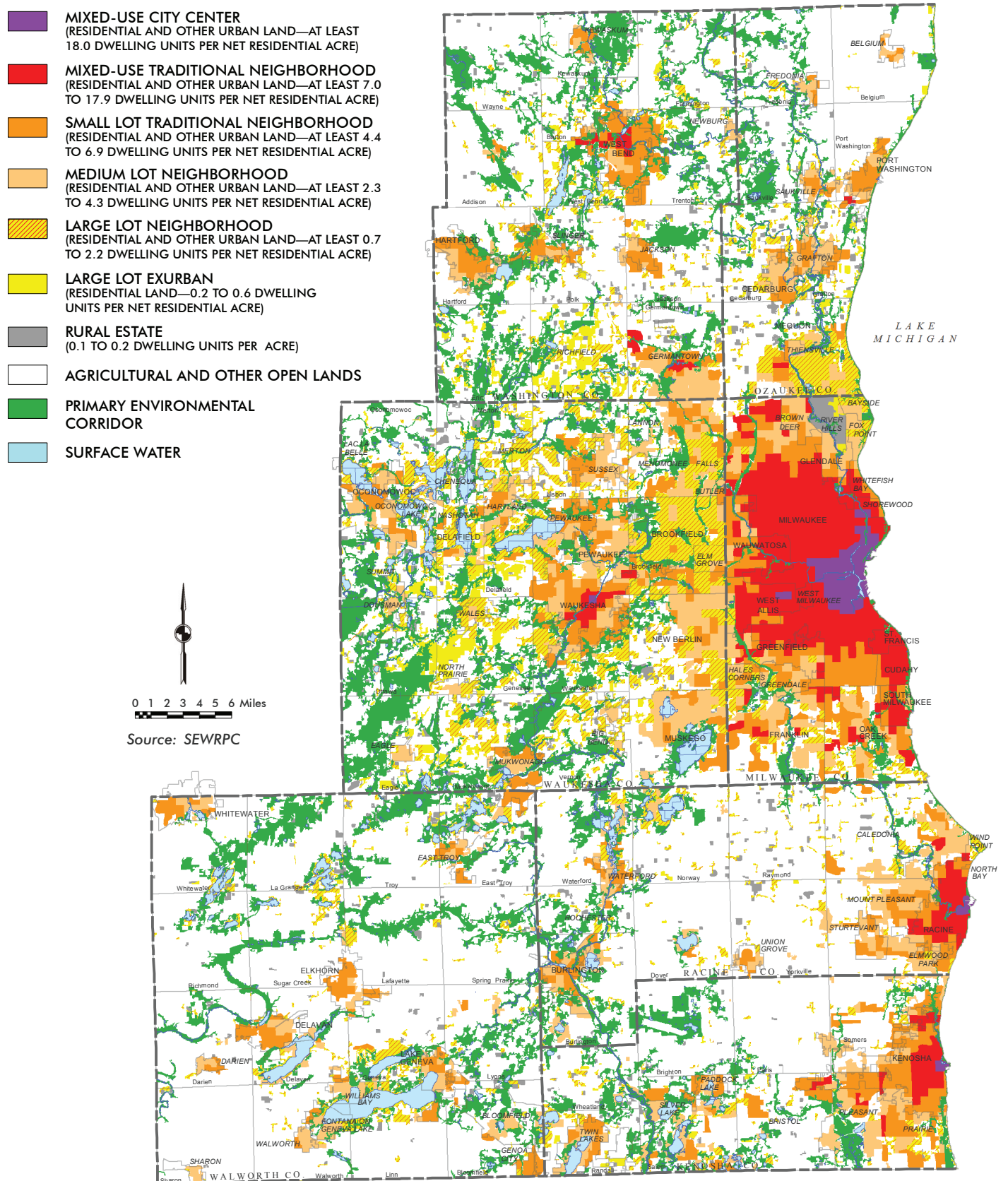
#### What is TOD?

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.

## POPULATION, HOUSEHOLDS, AND EMPLOYMENT

County	Population				Households				Employment			
	Existing (2010)		Plan (2050)		Existing (2010)		Plan (2050)		Existing (2010)		Plan (2050)	
	Number	% of Region	Number	% of Region	Number	% of Region	Number	% of Region	Number	% of Region	Number	% of Region
Kenosha	166,400	8.2	238,000	10.0	62,600	7.8	95,400	9.7	74,900	6.4	101,300	7.2
Milwaukee	947,700	46.9	1,011,900	42.4	383,600	47.9	424,700	43.0	575,400	48.9	627,700	44.7
Ozaukee	86,400	4.3	109,100	4.6	34,200	4.3	44,500	4.5	52,500	4.5	69,300	4.9
Racine	195,400	9.7	227,700	9.5	75,700	9.5	93,800	9.5	88,300	7.5	112,300	8.0
Walworth	102,200	5.1	140,600	5.9	39,700	5.0	58,900	6.0	52,700	4.5	69,300	4.9
Washington	131,900	6.5	180,500	7.6	51,600	6.4	74,300	7.5	63,900	5.4	87,400	6.2
Waukesha	389,900	19.3	481,400	20.1	152,700	19.1	195,900	19.8	268,900	22.9	338,400	24.1
Region	2,019,900	100.0	2,389,200	100.0	800,100	100.0	987,500	100.0	1,176,600	100.0	1,405,700	100.0

## DRAFT VISION 2050 LAND USE DEVELOPMENT PATTERN





# PUBLIC TRANSIT

The Draft Plan proposes significant improvement to and expansion of public transit in Southeastern Wisconsin, including eight rapid transit lines, two 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 proposed 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 with access to jobs, education, and other daily needs.

## Key Recommendations

### ► Develop a rapid transit network

Construct and operate eight rapid transit corridors (either bus rapid transit or streetcar extensions operating as light rail), with dedicated transit lanes, transit signal priority or preemption, and service every 15 minutes or better all day. Stations should be spaced every one-half to one mile and include off-board fare payment, real-time information screens, and raised platforms. Rapid transit services provide travel times similar to the travel time of an automobile on a parallel street or highway facility during rush hour.

### ► Develop commuter rail corridors and improve and expand commuter bus services

Construct and operate two commuter rail corridors 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.

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

Operate additional and improve existing express bus services, with stops 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.



Bus Rapid Transit in Cleveland  
Source: Greater Cleveland RTA



Light Rail in Minneapolis  
Source: Flickr user Michael Hicks



Commuter Rail in Austin  
Source: SEWRPC Staff

### ► 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.

### ► 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 speed and frequency on existing services. Construct and operate two new intercity rail lines, one connecting Milwaukee to Minneapolis and St. Paul via Madison, and another connecting Milwaukee to Green Bay via the Fox Valley.

### ► 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. Construct and maintain sidewalks and crosswalks, and enhance job access programs to assist low-income individuals in accessing jobs at suburban employment centers.



## DRAFT VISION 2050 PUBLIC TRANSIT SYSTEM

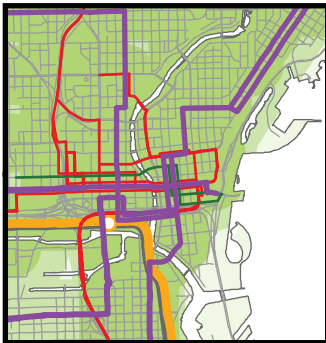
### TRANSIT SERVICES

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

### LOCAL TRANSIT SERVICE AREA AND PEAK FREQUENCY

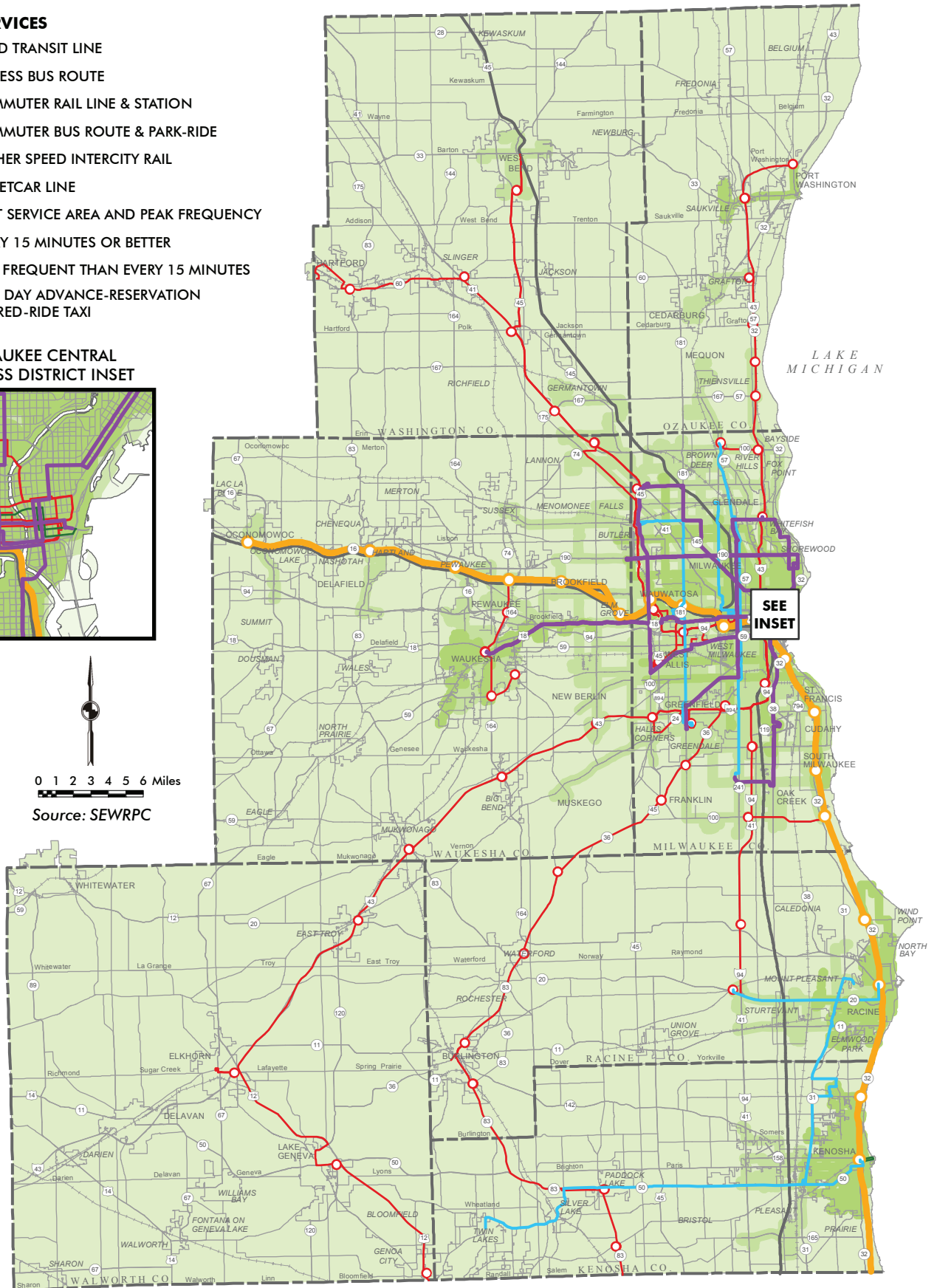
- EVERY 15 MINUTES OR BETTER
- LESS FREQUENT THAN EVERY 15 MINUTES
- ONE DAY ADVANCE-RESERVATION  
SHARED-RIDE TAXI

### MILWAUKEE CENTRAL BUSINESS DISTRICT INSET



0 1 2 3 4 5 6 Miles

Source: SEWRPC



## 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, the bicycle and pedestrian facilities element of the Draft Plan proposes a well-connected bicycle and pedestrian network that improves access to activity centers, neighborhoods, and other destinations in the Region.

### 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 major street network of about 3,300 miles is resurfaced and reconstructed. The Draft Plan considers providing one type of bicycle facility to be sufficient to accommodate bicycles on a street. In other words, if a separate path is provided adjacent to a street, another type of bicycle facility would not be needed.

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

Within the most urban parts of the Region, provide 359 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 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 major street, a parallel local road could be optimized for bicycle traffic (known as a neighborhood greenway or bike boulevard).

The number of roadway miles with a high level of comfort for people on bikes would be **ABOUT** **40% HIGHER** under the Draft Plan than the Trend.

#### ► 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 to improve bicycle connectivity in the Region.

#### ► Expand bike share program implementation

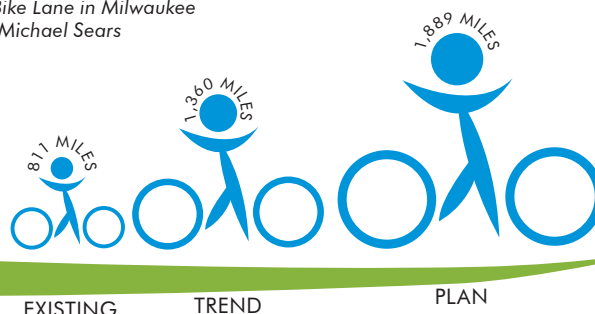
Expand bike share programs to provide residents and visitors with options to use bicycles for short trips within mixed-use urban areas. Bike share has been shown to be effective at providing a travel option for short trips. It can also function as a feeder service to transit systems, which often encourages 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. Maximize pedestrian safety at street crossings by improving the timing of walk signal phases; constructing pedestrian median islands in wide, heavily traveled, or



Raised Bike Lane in Milwaukee  
Source: Michael Sears



otherwise hazardous roadways; and constructing curb extensions (“bulb-outs”) that narrow the crossing distance for pedestrians at intersections. All pedestrian facilities should be designed and constructed in accordance with the Federal Americans with Disabilities Act (ADA) and its implementing regulations.



Protected Bike Lane Utilizing Bollards in Chicago  
Source: People for Bikes



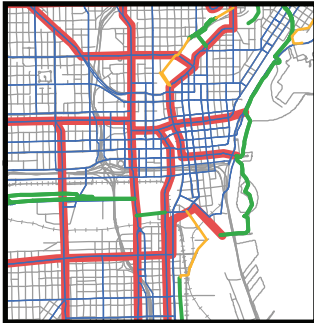
## DRAFT VISION 2050 BICYCLE NETWORK

### BICYCLE FACILITIES

- OFF-STREET BICYCLE PATH
- ARTERIAL STREET OR HIGHWAY WITH BICYCLE ACCOMMODATION (IF FEASIBLE)
- NONARTERIAL STREET CONNECTION TO OFF-STREET BICYCLE NETWORK
- POTENTIAL CORRIDOR FOR ENHANCED BICYCLE FACILITY<sup>a</sup>

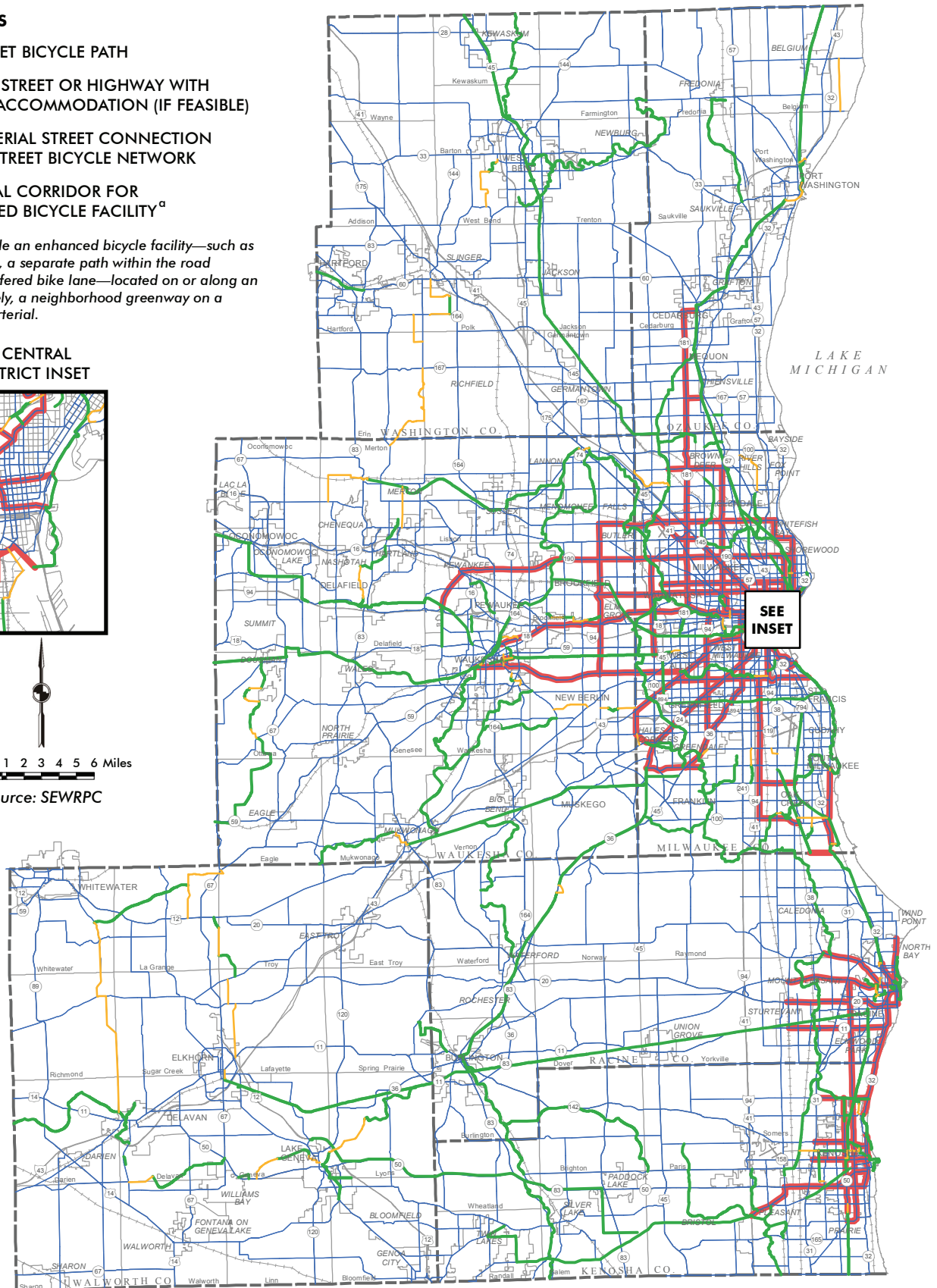
<sup>a</sup> Corridor would include an enhanced bicycle facility—such as a protected bike lane, a separate path within the road right-of-way, or a buffered bike lane—located on or along an arterial or, alternatively, a neighborhood greenway on a nearby parallel nonarterial.

### MILWAUKEE CENTRAL BUSINESS DISTRICT INSET



0 1 2 3 4 5 6 Miles

Source: SEWRPC





# TRANSPORTATION SYSTEMS MANAGEMENT

Transportation Systems Management (TSM) involves managing and operating existing transportation facilities to maximize their capacity, build a safer and more efficient transportation system, and reduce the need for widening roadways or building new roadways to address congestion.

## Key Recommendations

### ► Improve and expand freeway traffic management

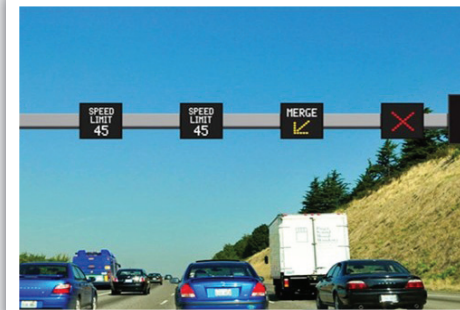
Expand and enhance measures that are already in place in some parts of the Region, such as traffic detectors, which measure the speed, volume, and density of freeway traffic to provide the estimated travel times displayed on variable message signs and assist in incident management, and freeway on-ramp meters, which control the rate of vehicles entering freeways. Consider implementing measures that are not currently in use, or not widely used, such as



Variable Message Sign  
Source: Wisconsin Department of Transportation

### ► 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.



Lane Use Control  
Source: Parsons Brinckerhoff



Part Time Shoulder Use by Buses  
Source: Minnesota Department of Transportation

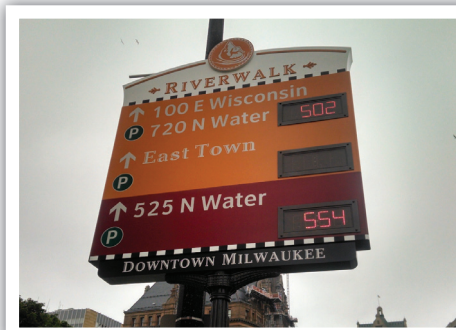


Bike Lane Striping through an Intersection  
Source: Flickr User Sawyer Pangborn

ramp meter control strategies that adjust the rate that vehicles enter the freeway based on traffic, lane use control to assist with incident management, active speed limit control in response to incidents, part-time shoulder use allowing vehicles to use the shoulder lane during rush hour, and dynamic truck restrictions. These freeway traffic management strategies improve the operational control, advisory information, and incident management on the regional freeway system.

### ► 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 located at one-half mile or less spacing. 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.



Parking Guidance Sign  
Source: City of Milwaukee

### ► 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.

Travel Demand Management (TDM) involves using a series of strategies to encourage the use of alternative methods or times of travel to reduce traffic congestion and emissions from cars.

## Key Recommendations

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

Continue and enhance the preferential treatment for transit vehicles, vanpools, and carpools by 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 element of the Draft Plan.

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

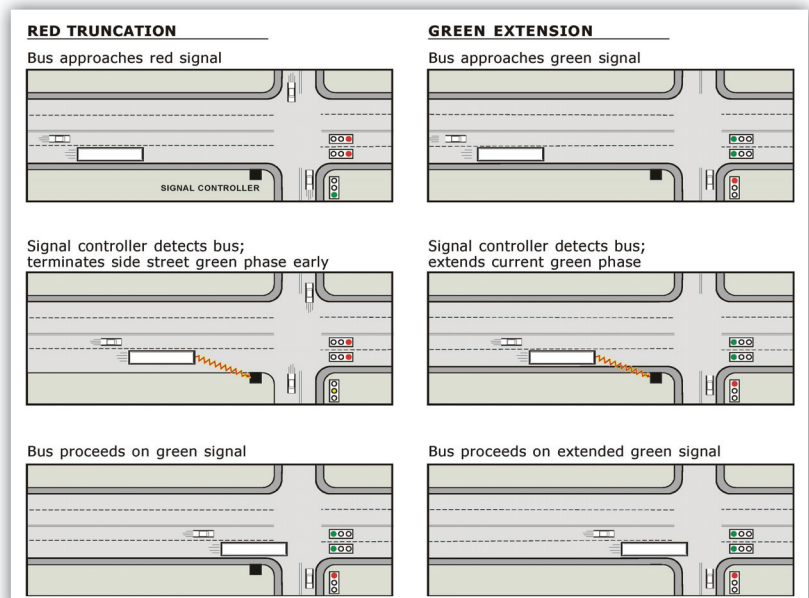
Promote carpooling and the resultant more efficient use of the Region's transportation system by expanding the network of park-ride lots.

### ► Implement personal vehicle pricing

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 the costs of county and local roads to increases in motor fuel taxes and consideration of a VMT fee, tolling, and/or congestion pricing to supplement or replace the motor fuel tax system, would have the users of county and local roads pay 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. Another strategy to encourage alternative modes of travel is allowing cash-out of employer-paid parking, which encourages employers currently providing free/subsidized parking to charge their employees the market value of parking. Employers could offset the additional cost of parking through cash payment or salary increases to employees, which would encourage employees to use transit, rideshare, walk, or bike to work, and "pocket" the cash payment or salary increase.

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

Implement a region-wide program to aggressively 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.



Transit Signal Priority for Buses or Trains  
Source: Transit Cooperative Research Partnership



Tolling with Pricing Based on the Level of Congestion  
Source: Minnesota Department of Transportation



Car Sharing Vehicle  
Source: City of Milwaukee



## ARTERIAL STREETS & HIGHWAYS

The Draft Plan development process considered arterial street and highway capacity expansion only after solutions such as expanded public transit, bicycle and pedestrian facilities, planning neighborhoods to reduce the need for automobile travel, and other strategies were considered to address congestion. The Draft Plan proposes 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 street and highway system is designed to address forecast year 2050 congestion, resulting in overall traffic congestion, travel time delay, and average automobile trip times to be slightly reduced when compared to current levels. In addition, implementing the proposed arterial street and highway improvements would improve overall safety and maintain the condition of the pavement and bridges along the planned arterial system.

### Key Recommendations

#### ► Preserve the Region's arterial street and highway system

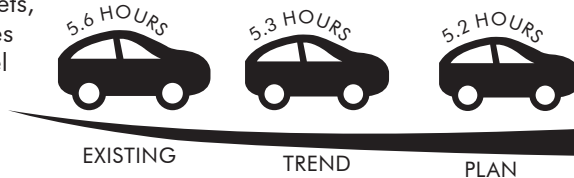
Maintain the Region's major streets and highways—including pavement, bridges, and all other infrastructure in the roadway right-of-way—in a state of good repair to provide for safe and efficient travel. As they carry a higher level of people and goods each day, preserving the condition of the arterial 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.

#### What is Highway Modernization?

Modernization refers to upgrading a roadway to current design standards to increase safety and improve the roadway's efficiency. This can involve addressing outdated designs, such as freeway left side entrance/exit ramps, inadequate spacing between interchanges, and scissor ramps along frontage roads.

#### ► 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 the roadway right-of-way. Complete streets concepts should be considered as part of the construction and reconstruction of streets, and add bike lanes or widened travel shoulders during restriping where sufficient street width already exists.



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

Widen approximately 284 route-miles to provide additional through traffic lanes, representing about 8 percent of the total arterial street and highway system mileage in the Draft Plan, including 111 miles of existing freeways. These proposed widenings are shown as blue lines on the map to the right. In addition, construct 73 route-miles of new arterial facilities, representing about 2 percent of the total arterial street and highway system mileage in the Draft Plan. Of the total of about 357 route-miles of planned arterial capacity expansion, about 80 route-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 proposed to address the congestion that may not be alleviated by proposed land use, systems management, demand management, bicycle and pedestrian facilities, and public transit measures included in the Draft Plan.

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 HOURS** per weekday of extreme and severe congestion would occur on the Region's freeways under the Plan compared to Existing.

#### ► 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.



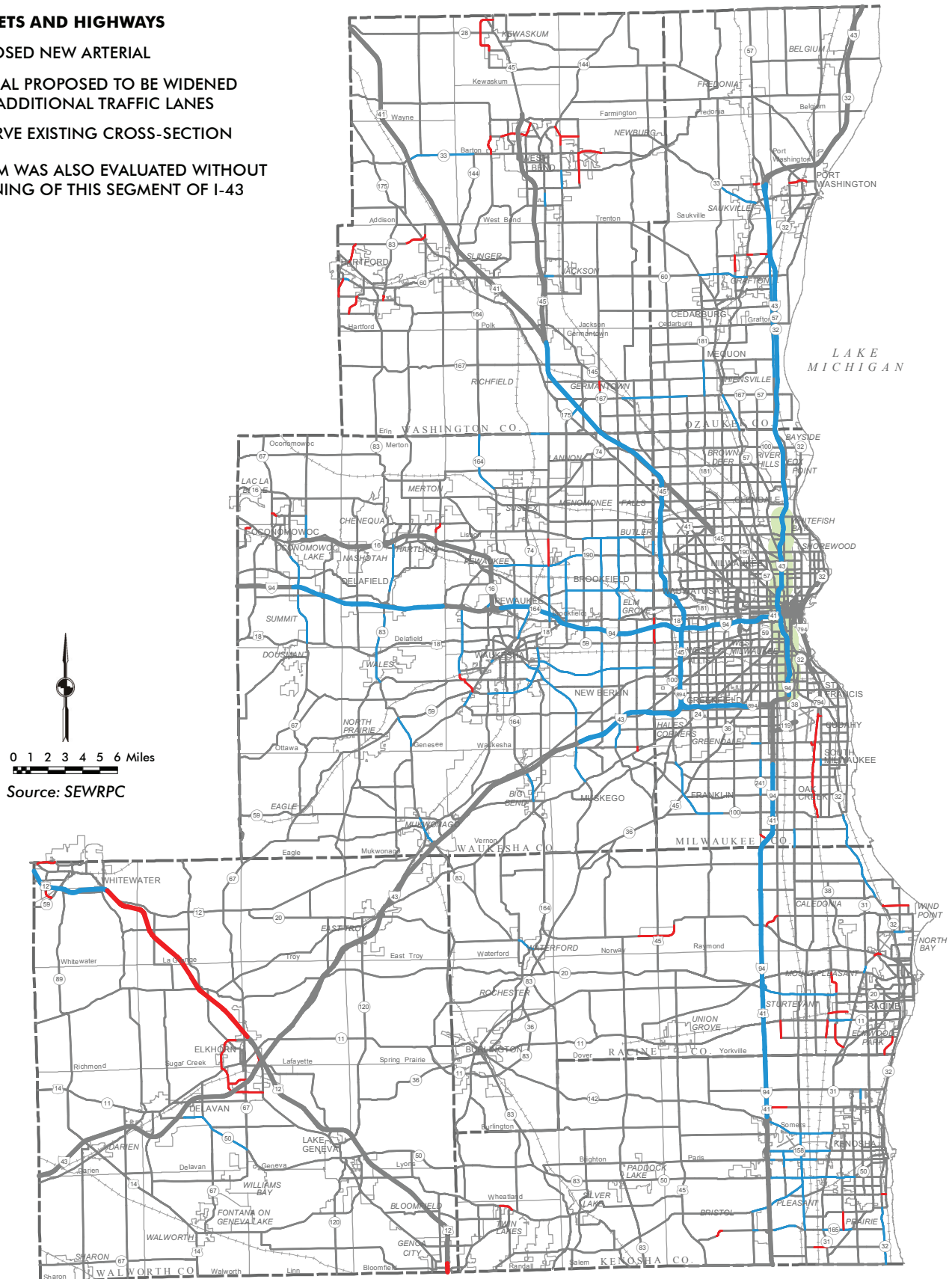
Freeway Example in Milwaukee  
Source: SEWRPC staff



## DRAFT VISION 2050 ARTERIAL STREET & HIGHWAY SYSTEM

### ARTERIAL STREETS AND HIGHWAYS

- PROPOSED NEW ARTERIAL
- ARTERIAL PROPOSED TO BE WIDENED WITH ADDITIONAL TRAFFIC LANES
- PRESERVE EXISTING CROSS-SECTION
- SYSTEM WAS ALSO EVALUATED WITHOUT WIDENING OF THIS SEGMENT OF I-43



The Draft Plan includes providing an additional lane in each direction on I-43 between Silver Spring Drive and Howard Avenue. The Advisory Committees guiding VISION 2050, particularly representatives from the City of Milwaukee, requested a specific analysis of the benefits and impacts of not widening this segment of I-43. The Advisory Committees will consider this analysis, along with feedback received on the Draft Plan, as they determine whether or not to include the widening of this segment of I-43 in the final plan for VISION 2050. Possible recommendations could include either recommending widening this segment of I-43, not widening the segment, or not making any recommendation regarding whether or not to widen this segment. Regardless of the option chosen, the decision regarding widening would be made at the conclusion of preliminary engineering for the segment to be conducted by the Wisconsin Department of Transportation, and VISION 2050 would be amended if the decision is different than what is recommended in VISION 2050.

- Reconstructing I-43 with four lanes in each direction is expected to cost about 17 percent more than reconstructing the freeway to modern standards with three lanes in each direction.
- The additional lane in each direction would provide a 33 percent increase in traffic carrying capacity that would be expected to reduce the hours of stop-and-go traffic congestion on an average weekday in 2050 from two to one. The average rush hour travel time over this segment would be 18 minutes in 2050 with the additional travel lane, or 22 minutes in 2050 without the additional travel lane (free-flow travel time is 13 minutes).
- Not widening I-43 would result in additional vehicles on nearby streets, with most major streets between 35th Street and Lake Michigan experiencing a 5 to 15 percent increase in traffic.
- Providing an additional lane in each direction would improve traffic safety, as congestion-related crashes would be reduced and traffic would be diverted from other streets to the freeway (a safer facility).
- Reconstructing I-43 with additional traffic lanes would not be expected to require any acquisition of additional right-of-way, and therefore no acquisition of homes or businesses, or impacts on environmental corridors or natural resources areas would be expected.
- Reconstructing this segment of I-43 with additional lanes would increase impervious area by 30 acres, leading to a potential increase in road salt use during winter and a potential increase in storm water runoff, negatively impacting water quality in the Kinnickinnic, Menomonee, and Milwaukee watersheds. The 30 acres represents less than a 0.1 percent increase in the impervious area in the three watersheds.
- Unique among segments of the regional freeway system, much of this part of I-43 travels through densely populated residential neighborhoods. Seventy-four percent of the approximately 74,000 people living within one-half mile of this freeway are minorities (compared to the 54 percent of Milwaukee County residents who are minorities), and about 32 percent of the approximately 14,700 families living within one-half mile of this freeway live in poverty (compared to the 16 percent of families in Milwaukee County who live in poverty). While analyses indicate that the residents of these neighborhoods would benefit from the improved accessibility and traffic safety associated with its widening, these populations would also experience the impacts of being located adjacent to a heavily traveled freeway.



The Draft Plan proposes a multi-modal freight transportation system designed to provide for the efficient and safe movement of materials and goods to, from, and through Southeastern Wisconsin, which is essential for maintaining and growing Southeastern Wisconsin's manufacturers and economy. In 2012, approximately 117 million tons of domestic and international cargo valued at about \$186 billion (2012 dollars) 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.



A Truck-Rail Intermodal Facility  
Source: Canadian Pacific Railway

### ► Accommodate oversize/overweight 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 document and analyze past OSOW truck shipments in the Region, use that information to assist in identifying a regional OSOW truck route network, and then determine the infrastructure changes that need to be 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 Service and Empire Builder intercity passenger trains. It would also be a stop for commuter rail service under the Draft Plan 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 State and CP should work together to obtain funding to construct the Muskego Yard bypass to 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 freight network—arterial streets and highways 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 the Draft Plan to address higher levels of congestion and the presence of bottlenecks on the regional highway freight network.



An Oversize/Overweight Shipment  
Source: Port of Milwaukee

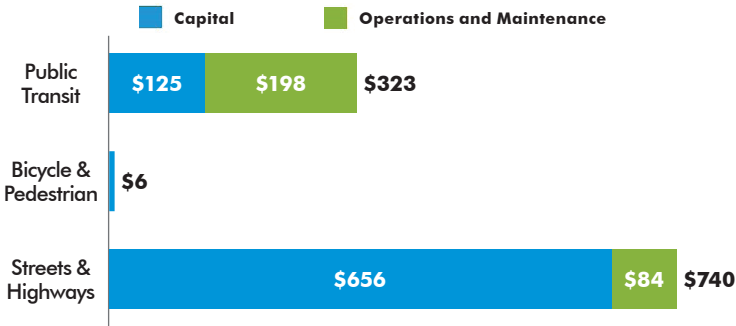


FUNDING THE DRAFT PLAN

Cost to Implement the Draft Plan

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

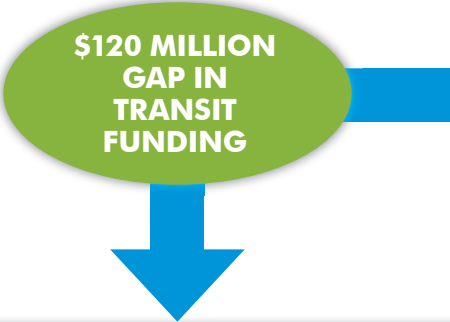
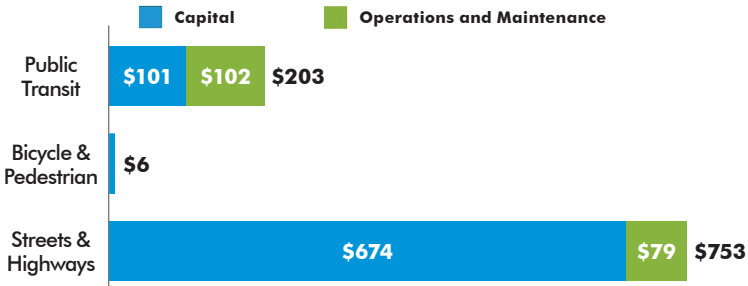
AVERAGE ANNUAL TRANSPORTATION SYSTEM INVESTMENT LEVELS REQUIRED FOR THE DRAFT PLAN (IN MILLIONS OF 2015\$)



Revenues from Existing Sources

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

AVERAGE ANNUAL FUNDING AVAILABLE FOR THE DRAFT PLAN (IN MILLIONS OF 2015\$)



A Transit Funding Gap

Comparing the expected costs and revenues for the different modes of the Draft Plan indicates that there should be enough revenue available to fund the arterial street and highway, and bicycle and pedestrian elements, but that there is a \$120 million gap between costs and revenues for the public transit element. The Federal regulations guiding the regional planning process require that the Region’s transportation plan be “fiscally constrained” and only include projects that can be funded with existing and expected funds. Therefore, only this funded portion of the Draft Plan is considered the regional transportation plan by the Federal Government and is titled the Federally Recognized Transportation Plan (F RTP) for VISION 2050. The F RTP has been determined to include all of the transportation elements of the Draft Plan except for the public transit element, which cannot be implemented within expected funds due to a gap in funding. Therefore, transit service under the F RTP would be expected to decline rather than significantly improve as proposed under the Draft Plan, with the exception of the East West BRT project being studied by Milwaukee County and the initial Milwaukee Streetcar lines, both of which have secured funding or have identified reasonably expected sources of funding. This transit system, which is shown on the facing page, is consistent with the trends of declining transit service levels over the last 15 years, which were a result of transit funding levels during that period of time. Because the Federal regulations guiding this analysis of the projected costs and expected revenues require that the Commission staff assume that expected revenues maintain the restrictions placed on them by current laws, Commission staff cannot assume that funding for the arterial streets and highways element can be flexed to transit projects, as that is not permitted at this time by the State Legislature.

It should be noted that the conclusion that there are enough funds to construct, operate, and maintain the arterial streets and highways element is based on funding provided from all levels of government in recent years, which has included higher than normal levels of borrowing by the State as revenues from motor fuel taxes have not kept pace with inflation. Should the State determine that it is unable to continue bonding at this higher level and choose to not raise additional taxes to fund transportation (additional taxes were proposed by the Wisconsin Commission on Transportation Finance and Policy and the Wisconsin Department of Transportation Secretary in the 2015-2017 State budget), a funding gap would likely be identified for the arterial streets and highways element.

Unless the Region is able to implement a new source of funding for transit (see the following page), the transit system in 2050 will have less transit service 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, and the future declines that would be required due to limited funding would result in fewer commuter bus routes, fewer local bus routes, and a reduction in service frequency on the remaining local bus routes.

## PUBLIC TRANSIT ELEMENT OF THE FEDERALLY RECOGNIZED TRANSPORTATION PLAN

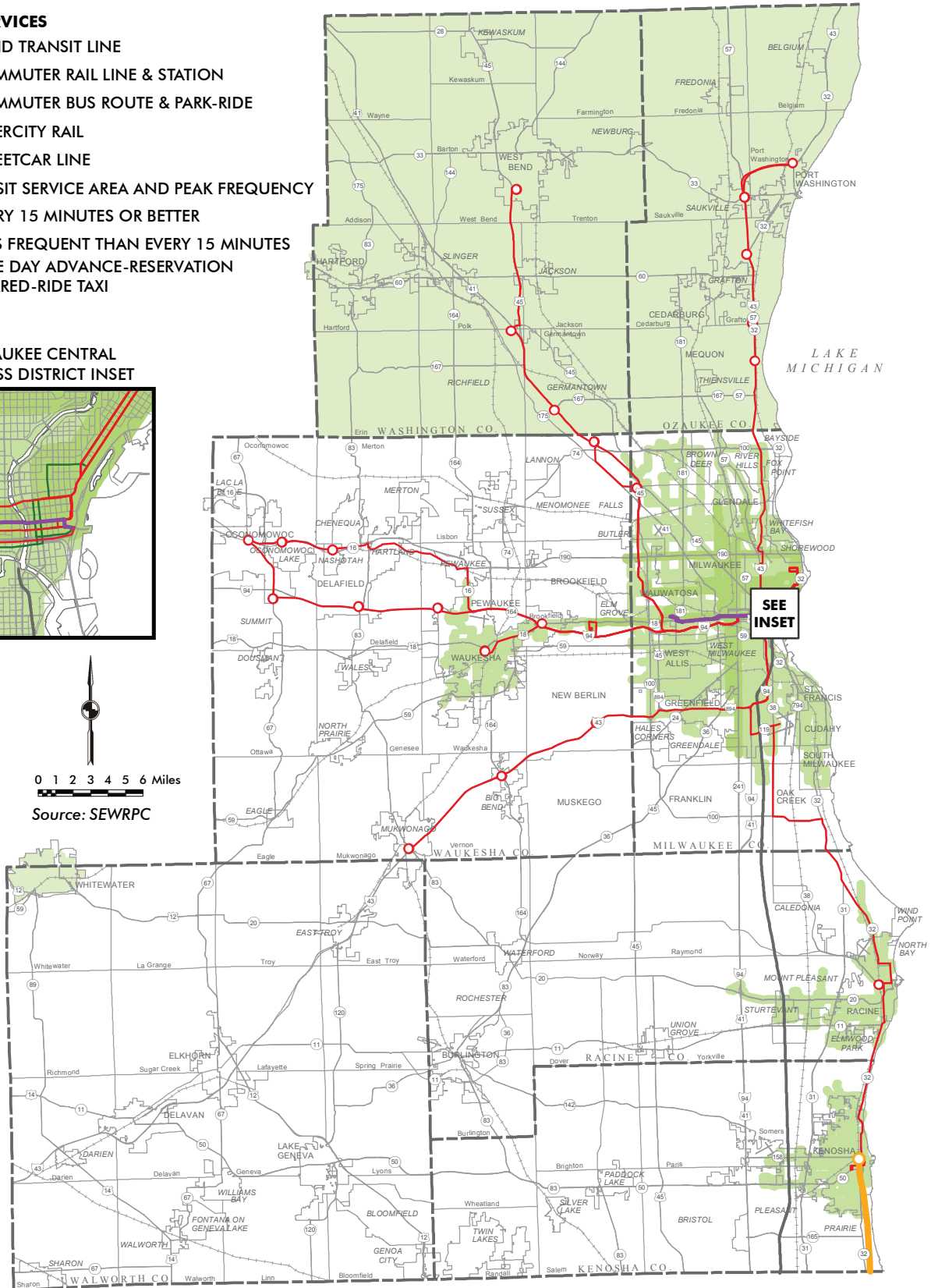
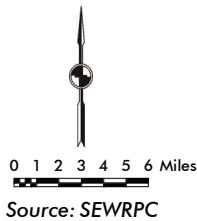
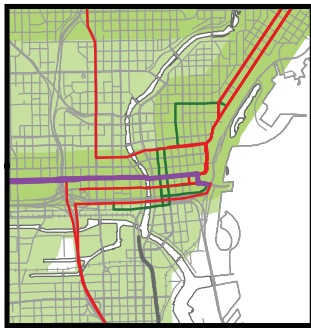
### TRANSIT SERVICES

- 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



## FUNDING THE DRAFT PLAN

In order for the Region's public transit system in 2050 to look like the system proposed by the Draft Plan (see page 5), rather than the system included in the Federally Recognized Transportation Plan (see page 15), a new funding source or combination of new funding sources will need to be identified to construct, operate, and maintain the system. The chart below shows different taxes or fees that could be considered—along with increasing State operating assistance for transit—to fund this investment in the Region's public transit system. They are calculated on a region-wide basis, but it may be more reasonable for only certain parts of the Region to be taxed or for the amount of the tax to vary by county or community, as the level of transit service proposed for each county or community varies widely. All of these funding sources (except an increase in the vehicle registration fee) would require the approval of the Governor and State Legislature.

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

<b>0.1% Sales Tax</b>	<b>\$25 - \$30 Million Annually</b>	Would involve an increase in existing sales tax rates, with the revenues dedicated to public transit.
<b>\$1 Vehicle Registration Fee</b>	<b>\$1.5 - \$1.8 Million Annually</b>	Would involve an increase in the existing vehicle registration fee, with the revenues dedicated to public transit.
<b>\$0.01 per Gallon Motor Fuel Tax</b>	<b>\$7 - \$9 Million Annually</b>	Would involve an increase in the existing motor fuel tax, with the revenues dedicated to public transit.
<b>\$0.01 per Vehicle Mile of Travel</b>	<b>\$70 - 80 Million Annually</b>	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.
<b>\$0.01 per \$1,000 of Valuation Property Tax</b>	<b>\$1.7 Million Annually</b>	Would involve an increase in the existing property tax rate, with the revenues dedicated to public transit.
<b>\$1 Vehicle Rental Fee</b>	<b>\$0.4 - \$0.6 Million Annually</b>	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.
<b>1.0% Hotel Room Tax</b>	<b>\$1.5 - 2.0 Million Annually</b>	Would involve increases to existing tax rates on short-term lodging (hotels, motels, etc.), with the revenues dedicated to public transit.
<b>Flex Federal Highway Funding to Transit</b>	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 for capital costs.	
<b>State Transit Capital Assistance Program</b>	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.	
<b>Capital Cost Value Capture</b>	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 property tax TIF, sales tax TIF, development fees, and real estate transfer fee.	

Nearly every other region in the Country with a similar number of residents Southeastern Wisconsin has some sort of tax or fee dedicated specifically to fund that region's transit system. The largest transit system in Southeastern Wisconsin, the Milwaukee County Transit System, provides twice as much service as the next largest transit system in the Country without dedicated funding for transit. As a result of the lack of local, dedicated funding, public transit in the Region is uniquely dependent on Federal and State sources compared to other large metropolitan areas in the Nation. Attaining the public transit element of the Draft Plan would likely require that a dedicated funding source for transit be identified and enacted by the State Legislature.



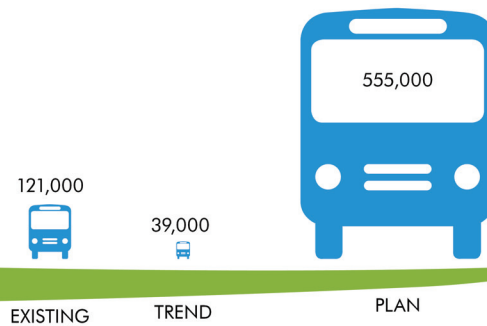
## BENEFITS OF THE DRAFT PLAN

The expansion of public transit proposed as part of the Draft Plan would have significant costs to the Region's taxpayers, and is not proposed without consideration of the increased tax revenue that would be required to build and operate that investment. However, the significant improvement and expansion of public transit would provide the Region's residents, businesses, and visitors with significant benefits, and is essential for Southeastern Wisconsin's future. The graphics and discussion below compare the Draft Plan to what would be expected to occur if the Region follows current trends, or "The Trend". The Trend transit system would be roughly similar to the transit system included in the Federally Recognized Transportation Plan.

### Maximizing Access to High-Quality Transit

Access to transit service provides choices to residents of the Region by providing an alternative to driving. Studies have shown that transit service lowers employee turnover rates for businesses, provides significant congestion relief in mid- to large-sized metropolitan 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 the Draft Plan than under the Trend. "Excellent" transit service means an area is typically within walking distance of at least one rapid transit station and multiple frequent local or express bus routes and "Very Good" transit service means an area is typically within walking distance of either one rapid transit station or multiple frequent local or express bus routes.

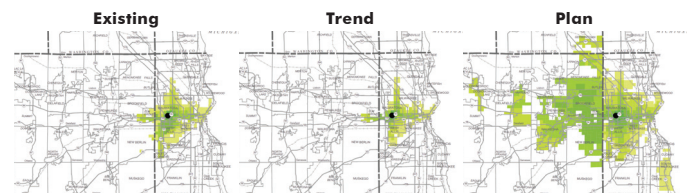
**14** **TIMES MORE RESIDENTS** would be within walking distance of excellent or very good transit service with the Draft Plan than with the Trend.



### Improving Transit Travel Times to Major Destinations

The improvements in the Region's transit system included in the Draft Plan have a significant impact on travel time via transit, as can be seen in the figures to the right, which show travel time to the Milwaukee Regional Medical Center (with the lightest areas having access within 60 minutes via transit and the darkest areas having access within 20 minutes via transit). The Draft Plan increases accessibility and decreases travel times via transit for other regional destinations (including Downtown Milwaukee and General Mitchell International Airport) and major activity centers (such as major retail centers, major parks, public technical colleges and universities, health care facilities, and grocery stores).

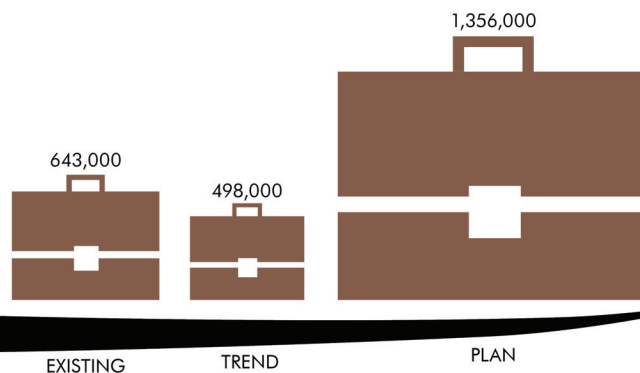
#### PEAK TRAVEL TIME TO THE MILWAUKEE REGIONAL MEDICAL CENTER VIA TRANSIT



### Providing Access to Opportunity

For the 1 in 10 households in the Region without access to a car, transit is vital to providing access to jobs, healthcare, education, and other daily needs. 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. Increasing the number of jobs accessible via transit could also reduce the use of government social services, decreasing the costs associated with supporting those services.

**ALMOST 3** **TIMES MORE RESIDENTS** would be within 30 minutes of 10,000 or more jobs via transit with the Draft Plan than with the Trend.



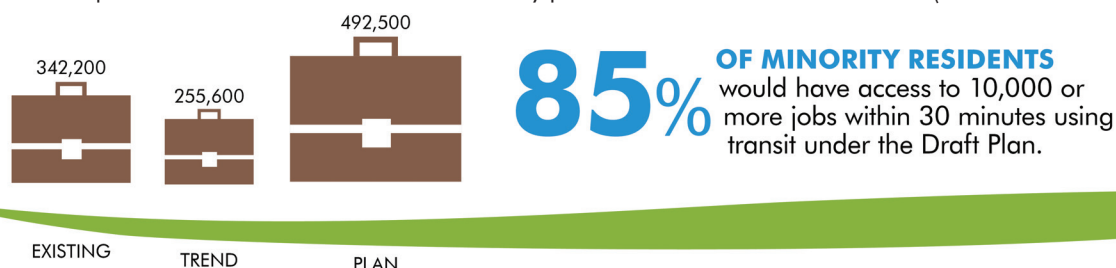
### Helping Employers Fill Jobs

In addition to providing access to daily needs for households without a car, a robust transit system can provide employers with access to a larger labor force, increasing the number of available candidates for job openings.

## BENEFITS OF THE DRAFT PLAN

### 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 transit system included in the Federally Recognized Transportation Plan would decrease how many jobs would be accessible via transit (similar to the Trend discussed below).



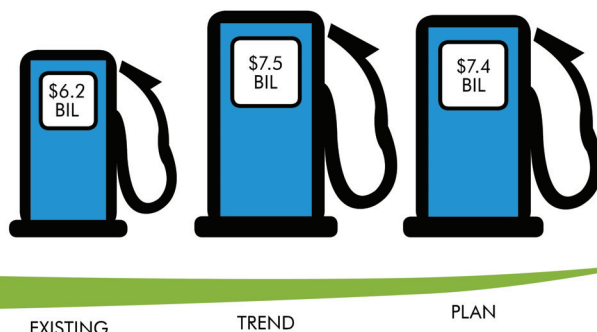
### Reducing Residents' Out-of-Pocket Transportation Costs

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 public transit system proposed by the Draft Plan would make it more likely that residents of the Region could reduce the number of cars in their household while maintaining their mobility. This reduction in average transportation expenditures by the Region's residents would result in 8 percent more households having combined transportation and housing expenditures of less than 45 percent of the areawide median income, increasing the affordability of the Region.

Under the Draft Plan, annual out-of-pocket transportation costs for the Region's residents would be

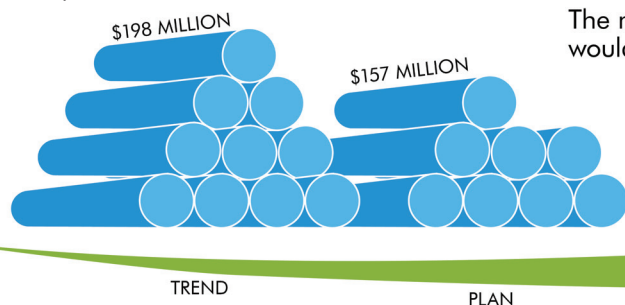
**\$144 MILLION LESS**

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



### 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 proposing more compact development and the supporting transit system, the Draft Plan will result in infrastructure being constructed in a more efficient and cost effective manner than it would be if we continue with current trends. In addition to the construction costs associated with infrastructure for new development, significant research has been done nationally on the costs to municipalities to maintain the public infrastructure associated with serving homes and businesses once it is built. Often, local governments are left with the long-term maintenance and replacement costs associated with this infrastructure, and national data indicate that the per capita cost of maintaining roads, water mains, and sewer pipes, and providing fire protection, school transportation, and solid waste collection all decrease as density increases.



The more compact development pattern in the Draft Plan would result in

**\$41 MILLION LESS ANNUALLY**

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

### Reducing the Burden of Parking Costs

Parking, and in particular parking garages, can be a significant part of the cost of a development, with each garage space costing an average of \$20,000 to \$25,000 to build. Providing fast and frequent transit service has been shown to decrease the demand for parking, allowing communities to reduce or eliminate parking requirements, developers to build fewer spaces, and commercial and residential tenants to pay less. Fast, frequent transit service also reduces the need for multi-car garages to be built for single-family homes, allowing for more green space and larger yards without increasing lot size.

## Increasing Regional Competitiveness

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. Although transit alone does not turn a struggling metro area into a successful one, it is one of the amenities expected of an economically-competitive city.

## Maximizing the Capacity of Existing Roadways

The public transit system proposed in the Draft Plan expands the traffic carrying capacity in the Region's heavily traveled corridors and densely developed activity centers, helping to mitigate congestion in crowded corridors by permitting significantly more people to travel through the corridor at the same time when compared to use by only automobiles.

## Increasing Economic Resiliency

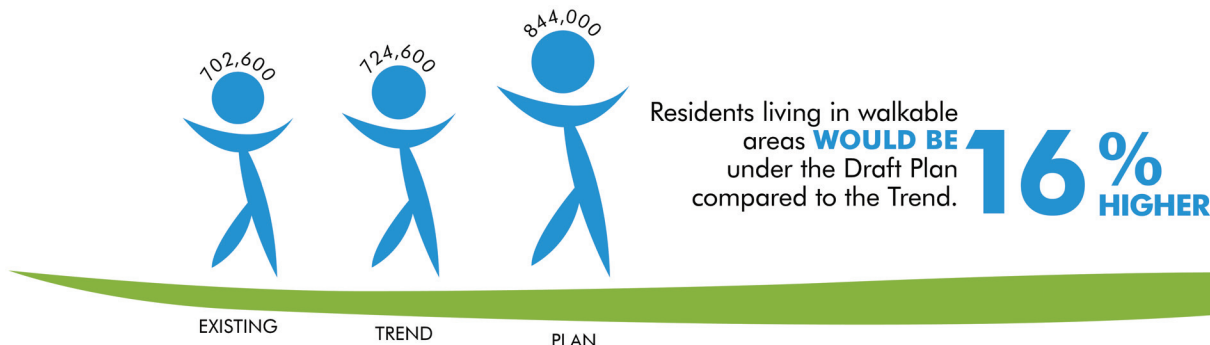
An expansive transit system can provide economic resiliency. Should the Region experience greater economic success than currently predicted, the increase in congestion caused by a growing workforce could have significant negative impacts without a reliable alternative to driving. Similarly, should fuel prices rise dramatically before alternative methods of powering cars and trucks are more mainstream, the negative impacts on the Region's residents and its economy would be significant without a robust transit system to provide an alternative to driving.

## Enabling Aging in Place

There will be a significant increase in the proportion of the Region's population aged 75 and older in the near future. The region-wide transit system proposed in the Draft Plan (including shared-ride taxi service in rural parts of the Region) would assist residents across Southeastern Wisconsin in aging in place, without needing to move from their homes as their ability to drive declines.

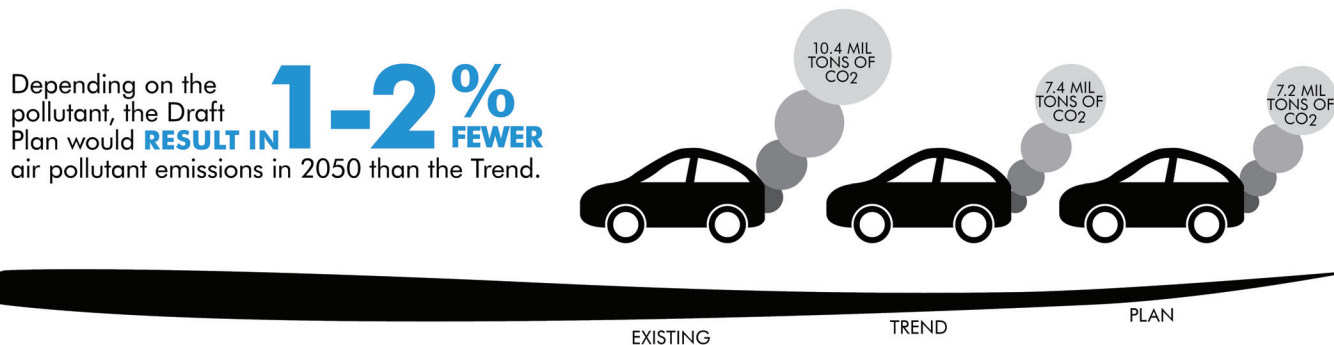
## Creating Walkable Neighborhoods

Fixed-guideway transit investment (such as rapid transit or commuter rail) can guide development by focusing jobs and housing around its stations. Through transit-oriented development, the public transit element supports the creation of more compact, walkable neighborhoods—a focal point of the land use component—encouraging active transportation and improving public health.



## Minimizing Greenhouse Gas Emissions

Although the effect is expected to be somewhat limited, carbon emissions from transportation are expected to be slightly less under the Draft Plan than the Trend, due to the proposed transit system attracting travelers out of their cars and the proposed compact land development pattern reducing the distance between destinations. Regardless of whether or not the Draft Plan is implemented, transportation air pollutant emissions are projected to significantly decline by 2050 due to Federal fuel and vehicle fuel economy standards and improved vehicle emissions controls, even with forecast increases in regional travel and traffic. These emissions controls and improved fuel economy standards will result in a 20 to 30 percent decrease in carbon dioxide, methane, and ammonia, and a 70 to 90 percent decrease in all other transportation-related air pollutants. Partially due to the transit-oriented development included in the Draft Plan, multifamily housing would increase, resulting in CO<sub>2</sub> emissions from new homes being reduced by 9 percent compared to the Trend.





## Watch for Updates



*One Region, Focusing on Our Future*

VISION 2050 is SEWRPC's land use and transportation planning effort for Southeastern Wisconsin.

Learn about VISION 2050 at [www.vision2050sewis.org](http://www.vision2050sewis.org).

Follow us on Twitter at [@vision2050sewis](https://twitter.com/vision2050sewis).

The Southeastern Wisconsin Regional Planning Commission is the official advisory areawide planning agency for land use and infrastructure for the seven counties in the Region.

More information can be found at [sewrpc.org](http://sewrpc.org).

Please contact us at [vision2050@sewrpc.org](mailto:vision2050@sewrpc.org).

## Tell Us What You Think!

Public comment on the Draft Plan is the focus of the fifth round of VISION 2050 public workshops (April and May 2016). Commission staff will be gathering feedback on the Draft Plan through these public workshops, additional workshops with each of the Commission's eight partner groups, and through a website dedicated to exploring the Draft Plan until May 6, 2016. Public comment is also welcome on the Federally Recognized Transportation Plan (F RTP) and a demonstration of air quality conformity of the F RTP and the 2015-2018 regional transportation improvement program (TIP).



## Next Steps

Staff work on VISION 2050 is being guided by two of the Commission's Advisory Committees: the Advisory Committee on Regional Land Use Planning and the Advisory Committee on Regional Transportation System Planning. Information on the oversight provided by the two Committees can be found on the Commission website at [sewrpc.org](http://sewrpc.org). Input on the Draft Plan will be considered as the Commission staff works with these Advisory Committees as well as our Task Forces to complete VISION 2050. Following the completion of VISION 2050, Commission staff will work with residents, businesses, and Federal, State, and local governments to implement VISION 2050.

**SCAN the code**  
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and sign up for our  
E-newsletter!



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