

Minutes of the Fifteenth Joint Meeting of the

**ADVISORY COMMITTEES ON REGIONAL LAND USE PLANNING
AND REGIONAL TRANSPORTATION SYSTEM PLANNING**

DATE: March 30, 2016
TIME: 9:30 a.m.
PLACE: West Allis City Hall
7525 W. Greenfield Avenue
West Allis, Wisconsin

Members Present

Committee on Regional Land Use Planning

Julie A. Anderson..... Director of Public Works and Development Services, Racine County
Chair
Jennifer Andrews Director of Community Development, City of Waukesha
John Budzinski..... Secretary’s Director, Southeast Region,
Wisconsin Department of Natural Resources
Harlan E. Clinkenbeard..... City Planner, City of Pewaukee
Michael P. Cotter Director, Walworth County
Land Use and Resource Management Department
Brian Dranzik.....Commissioner, Southeastern Wisconsin Regional Planning Commission;
Director of Transportation, Department of Transportation, Milwaukee County
Daniel F. Ertl.....Director of Community Development, City of Brookfield
Jeffery B. Labahn..... Director, Community Development and Inspections, City of Kenosha
Andrew Levy (alternate for Sheri Schmit)..... Urban and Regional Planner – Freight Transportation,
Southeast Region, Wisconsin Department of Transportation
Mark Piotrowicz.....City Planner/Operations Manager, City of West Bend
Doug Seymour Director of Community Development, City of Oak Creek
Debora Sielski..... Deputy Planning and Parks Administrator,
Manager of Planning Division, Washington County
Todd StuebeDirector of Community Development, City of Glendale
Jim Tarantino (alternate for Teig Whaley-Smith)..... Economic Development Director,
Milwaukee County
Randy L. Tetzlaff Director of Planning and Development, City of Port Washington
Brenda Wood (alternate for Robert J. Bauman).....Senior Legislative Coordinator, City of Milwaukee

Committee on Regional Transportation System Planning

Brian Dranzik.....Commissioner, Southeastern Wisconsin Regional Planning Commission;
Chair Director of Transportation, Department of Transportation, Milwaukee County
Fred Abadi Director of Public Works, City of Waukesha
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

Peter Daniels (alternate for Michael Lewis) Principal Design Engineer, City of West Allis

Gary Evans..... Highway Engineering Division Manager,
Waukesha County Department of Public Works

Michael Friedlander (alternate for Gail Good) Bureau of Air Management,
Wisconsin Department of Natural Resources

Thomas Grisa.....Director, Department of Public Works, City of Brookfield

Nik Kovac Alderman, City of Milwaukee

Andrew Levy (alternate for Sheri Schmit)..... Urban and Regional Planner – Freight Transportation,
Southeast Region, Wisconsin Department of Transportation

Dwight E. McComb Planning and Environmental Manager/Team Leader,
Federal Highway Administration, U.S. Department of Transportation

Kimberly Montgomery (alternate for Jennifer Gonda)..... Mayor’s Legislative Liaison,
City of Milwaukee

William D. Sasse..... Director of Engineering, Village of Mount Pleasant

Brian Udovich.....Highway Operations Manager, Jefferson County

Bill Wehrley (alternate for William Porter)..... City Engineer, City of Wauwatosa

David Windsor (alternate for Jeff Polenske).....Project Engineer,
Department of Public Works, City of Milwaukee

Dennis Yaccarinio..... Senior Budget and Policy Manager, Budget and Management Division,
Department of Administration, City of Milwaukee

Guests and Staff Present

Mary Florenza..... Transportation Planner/Systems Planning & Performance Team,
Federal Highway Administration, U.S. Department of Transportation

Michael G. Hahn..... Deputy Director, SEWRPC

Ryan W. Hoel..... Principal Engineer, SEWRPC

Eric D. Lynde.....Principal Transportation Planner/Engineer, SEWRPC

Benjamin R. McKayPrincipal Planner, SEWRPC

Kevin J. Muhs Principal Transportation Planner, SEWRPC

Ben Rohr Planning Intern, City of West Allis

Sean Ryan Reporter, Milwaukee Business Journal

Jennifer Sarnecki..... Urban and Regional Planning Supervisor,
Southeast Region, Wisconsin Department of Transportation

David A. Schilling Chief Land Use Planner, SEWRPC

Tamara SzudyPrincipal Planner, City of Wauwatosa

Kenneth R. Yunker Executive Director, SEWRPC

CALL TO ORDER

Ms. Anderson called the joint meeting of the Advisory Committees on Regional Land Use Planning and Regional Transportation System Planning to order at 9:35 a.m., welcoming those in attendance. Ms. Anderson stated that roll call would be accomplished through circulation of a sign-in sheet.

REVIEW AND APPROVAL OF MINUTES OF THE JOINT MEETING OF THE ADVISORY COMMITTEES ON REGIONAL LAND USE PLANNING AND REGIONAL TRANSPORTATION SYSTEM PLANNING HELD ON JANUARY 27, 2016

Ms. Anderson asked if there were any questions or comments on the January 27, 2016, meeting minutes. There were none. On a motion by Mr. Clinkenbeard seconded by Mr. Seymour, the January 27, 2016, meeting minutes were approved unanimously.

DISCUSSION OF SCHEDULE AND LOCATION OF FUTURE JOINT ADVISORY COMMITTEE MEETINGS

Mr. Yunker noted that members of the Committees were provided with a tentative schedule for future meetings in their meeting packets. He noted that there are three future meetings on the schedule. The Preliminary Recommended Plan (“Draft Plan”) will be discussed at today’s meeting, including a discussion of the detailed evaluation of the Draft Plan and a discussion of the financial analysis of the expected plan costs and revenues. Mr. Yunker stated that the fifth and final round of VISION 2050 workshops will be held in late April and early May to present the Draft Plan and its evaluation. He noted that the Joint Committee Meeting scheduled for April 27th would likely be unnecessary, and that Commission staff will send an email to notify members of the Committees if the meeting is canceled. Mr. Yunker then noted that feedback from the workshops would likely be presented at the meeting tentatively scheduled for May 18th and the Final Plan would likely be presented to the Committees for their consideration at the meeting tentatively scheduled for June 8th.

REVIEW AND CONSIDERATION OF THE PRELIMINARY DRAFTS OF VOLUME II, CHAPTER IV AND APPENDICES H AND I OF SEWRPC PLANNING REPORT NO. 55, *VISION 2050: A REGIONAL LAND USE AND TRANSPORTATION SYSTEM PLAN FOR SOUTHEASTERN WISCONSIN*

Ms. Anderson noted that members of the Committees received copies of the preliminary drafts of Volume II, Chapter IV, “Preliminary Recommended Year 2050 Regional Land Use and Transportation System Plan,” Appendix H, “Complete Results of the Preliminary Recommended Plan Evaluation,” and Appendix I, “Evaluation of Potential Benefits and Impacts of Reconstructing with Widening or Not Widening IH 43 between Howard Avenue and Silver Spring Drive” of the VISION 2050 report (available on the [SEWRPC website](#)). Ms. Anderson then asked Mr. Yunker to introduce the agenda item.

Mr. Yunker noted that the main concepts of the Draft Plan were presented to the Committee at the last meeting, and that the Draft Plan being considered today is based on guidance received from the last meeting. He stated that the Draft Plan presents a long-term vision for the Region’s future. He explained the land use and transportation system recommendations are intended to be accomplished incrementally over the next 35 years. Mr. Yunker then noted that the VISION 2050 planning process began with developing population and employment projections that show the Region will be different in 35 years than it is today.

Mr. Yunker stated that the next 35 years may be expected to be very different from the past 30 years in terms of increasing jobs within metropolitan areas. In the previous 30 years, the existing population provided the potential to grow labor force sufficient for a more than doubling of jobs. This was a result of the baby boom generation coming of age, as the baby boom generation was twice as big as the previous generation. In addition, this was a period when women entered the labor force in increasing numbers.

The next 35 years will not have the same potential to grow labor force from within the existing population. The generations that follow the baby boom generation are not larger than the baby boom generation, and women now participate in the labor force in nearly the same proportion as men. As a result, jobs will only grow in the metropolitan Milwaukee area if the area can attract and in-migrate population and labor force. Every metropolitan area in the United States will be in the same position, and there may be expected to be intense competition to attract population and labor force. It may be expected that employers will choose to locate in those metropolitan areas that have the labor force. Mr. Yunker stated that the Committees have guided the development of a Draft Plan that will make the Region competitive with other metropolitan areas. Mr. Yunker added that the Region has a diverse population with a wide-range of needs, and it will be important that the Advisory Committees come together to develop a Draft Plan that respects and meets those needs.

Mr. Yunker then asked Mr. Muhs and Mr. Lynde of the Commission staff to review a summary PowerPoint presentation of the Draft Plan chapter and its evaluation that was distributed at the meeting (available on the [SEWRPC website](#)). The following comments and discussion points were made:

1. Mr. Grisa referred to page IV-21 of the Draft Plan chapter and asked if bus bulbs would result in buses stopping in traffic lanes and inhibiting right turns. Mr. Muhs responded that bus bulbs are typically installed past traffic signals in dense urban areas where traffic moves slowly. Mr. Yunker stated that staff would add additional text describing areas where bus bulbs are appropriate.

[Secretary's Note: The following text was added to page IV-21 of the Draft Plan:

“Bus bulbs are most appropriate on already crowded urban streets, as the bus stopping in a traffic lane may be expected to introduce some delay for other vehicles and may be unsafe on roadways with high-speed, free-flowing traffic.”]

2. Mr. Grisa referred to Table IV-13 and asked for clarification regarding the average annual capital costs associated with the “Other” category under the Arterial Street and Highway System. Mr. Yunker responded that “Other” refers to the costs of resurfacing and reconstruction of all surface arterials, including the costs associated with bicycle and pedestrian, TSM, and TDM elements of the Draft Plan, and interim freeway resurfacing. Mr. Yunker stated that staff will revise the table to clarify. Mr. Clinkenbeard suggested adding more explanation to the text regarding State, county, and local funding for street and highway projects. Mr. Yunker responded that staff will clarify the funding breakdown for street and highway projects in the table (see Attachment 1). Mr. Yunker added that a funding gap and potential funding sources have been identified for the proposed public transit element presented in the Draft Plan. He noted that in some cases State legislation would be required to implement the funding mechanism.
3. Mr. Grisa referred to page IV-72 of the Draft Plan chapter and suggested that, like a sales tax, the other potential funding sources to address the public transit funding gap could be levied only in the more urban areas of the Region that would be served by a majority of the proposed transit improvements and expansion, and counties and municipalities may be able to partially eliminate the use of property tax revenues to fund transit. Mr. Lynde agreed, and indicated this text would be added to the discussion of other potential revenue sources.

4. Mr. Grisa noted that many of the potential revenue sources identified to address the funding gap for public transit listed in Table IV-22 are in use. Mr. Lynde noted potential revenue to address the funding gap for public transit from these sources would mostly involve increases in existing taxes and fees or dedicating a portion of existing taxes and fees to fund public transit. Mr. Grisa stated that there may be less resistance to modifying an existing tax or fee as opposed to creating a new tax or fee. Mr. Yunker noted that the Draft Plan does not recommend a particular source or sources, but rather it identifies a funding gap for transit and identifies potential alternative funding sources that could be considered to address the gap.
5. Mr. Kovac referred to Table H-15 and asked why fewer minority and low-income residents would have access to 10,000 to 49,999 jobs under the Draft Plan compared to existing conditions, even with greatly expanded public transit service under the Draft Plan. Mr. Muhs responded that the increase in public transit service would result in a significant number of minority and low-income residents with existing access to 10,000 to 49,999 jobs by transit to have access to significantly more jobs by transit under the Draft Plan, and so the number of residents in the higher job ranges went up substantially. Mr. Kovac suggested revising the table to show the cumulative number of minority and low-income residents with access to 10,000 or more jobs.

[Secretary's Note: The revised version of Table H-15 is presented in Attachment 2. Similar tables presented in Appendix H have also been revised.]

6. Mr. Grisa asked about the first two bullets on page 17 of the summary PowerPoint handout, noting that the first bullet states that the Draft Plan would require greater public investment than the Trend and the second bullet states that the Draft Plan would result in lower costs to municipalities and developers to construct public infrastructure and provide public services. Mr. Yunker responded that the first bullet refers to the cost of the proposed regional transportation system under the Draft Plan, including the public transit, bicycle and pedestrian, and arterial street and highway elements. The second bullet refers to the estimated cost of extending and maintaining public infrastructure to new residential development, including sewer, water, and local roads. Mr. Yunker noted that the costs referred to under the second bullet relate to the density of new residential development and are primarily based on typical density, or lot size, of proposed residential uses. Mr. Ertl commented that costs related to new development can be very complex. Secondary costs, such as those to public schools, could be impacted by increased residential density, particularly by providing more affordable homes on smaller lots. Mr. Kovac noted that increased residential density in areas outside of the City of Milwaukee could more equitably distribute costs of services in the Region.
7. Ms. Wood referred to evaluation criterion 2.2.1, Households with Affordable Housing + Transportation Costs, and noted that areawide median household income is used as the basis for measuring affordability. She stated that the analysis would have different results if a lower household income was used as the basis for measuring affordability. Mr. Lynde responded that staff received similar comments about the criterion under the alternatives evaluation, and acknowledged that the median household income varied from county-to-county. He indicated staff would attempt to improve the analysis to reflect this variation in county-by-county household incomes.

[Secretary's Note: Following the meeting, staff revisited the H+T analysis for the Draft Plan, but the criterion uses existing data by travel analysis zone (TAZ)

provided by the Center for Neighborhood Technology (CNT) as a baseline, which were developed using a proprietary formula that includes areawide median income. For the Draft Plan evaluation, these existing H+T scores by TAZ vary based on expected changes to future household density and private transportation costs. Therefore, the analysis does not allow Commission staff to modify the areawide household income used in each TAZ. Staff will, however, attempt to improve the way in which this analysis is presented in the future, and include an acknowledgment that median household incomes vary between areas of the Region. It should be noted that Milwaukee, Walworth, Kenosha, and Racine Counties have county median household incomes lower than the regional median household income. It should also be noted that the purpose of the H+T analysis is not to compare the relative incomes of areas of the Region, but to compare how changes in density and the availability of alternative modes of transportation can impact the affordability of an area when a household's transportation costs are considered in addition to the cost of housing.]

8. Mr. Yunker referred to the next steps in the planning processes on page 19 of the summary PowerPoint. He noted that the fifth and final round of VISION 2050 workshops will be held in late April and early May. The fifth round of workshops will include one workshop in each County and eight workshops hosted by the VISION 2050 partner community organizations. Commission staff will also hold workshops with any interested group or party by request. Mr. Yunker then stated that staff will prepare a Draft Plan summary booklet, similar to the booklet prepared for the VISION 2050 alternatives. Mr. Clinkenbeard stated that it is important to discuss the obstacles to implementing the plan. Mr. Yunker responded that the summary booklet will include an introduction that explains the need to update the regional plan and why the Draft Plan proposes additional spending. The booklet will also summarize the Draft Plan elements, funding gaps and potential sources of revenue, and benefits of implementing the Draft Plan recommendations.

Ms. Anderson asked if there were any further questions or comments on the Draft Plan or its evaluation. There were none. Ms. Anderson asked for a motion to approve Commission staff presenting the Draft Plan and its evaluation for public comment. Mr. Clinkenbeard moved and Mr. Labahn seconded the motion. The motion was approved unanimously.

PUBLIC COMMENTS

Ms. Anderson asked if there were any public comments. There were none.

ADJOURNMENT

Ms. Anderson thanked everyone for attending and announced the meeting adjourned at 11:30 a.m.

Respectfully submitted,

Benjamin R. McKay
Recording Secretary

Attachment 1

Table 4.13 (revised)
Average Annual Costs and Revenues Associated with the Preliminary Recommended
Transportation System in 2015 Constant Dollars: 2016 - 2050

Cost or Revenue Item	2050 Plan
Transportation System Cost (average annual 2016-2050 expressed as millions of dollars)^a	
Arterial Street and Highway System	
Capital	
Freeway Reconstruction	\$281
Surface Arterial Reconstruction/Resurfacing and Freeway Resurfacing ^b	381
Subtotal	\$662
Operating	84
Subtotal	\$746
Transit System	
Capital	\$125
Operating ^c	\$198
Subtotal	\$323
Total	\$1,069
Transportation System Revenues (average annual 2016-2050 expressed as millions of dollars)^a	
Highway Capital	
Freeway Reconstruction (Federal/State)	\$275
Surface Arterial Reconstruction/Resurfacing and Freeway Resurfacing	
Federal/State	338
Local	67
Subtotal	\$680
Highway Operating	
State	\$41
Local	38
Subtotal	\$759
Transit Capital	
Federal	\$98
Local	3
Subtotal	\$101
Transit Operating	
Federal	\$5
State	76
Local	21
Subtotal	\$102
Subtotal	\$203
Total	\$962

^a The estimated arterial street and highway system and transit system costs include all capital costs and operating and maintenance costs. The estimated costs include the necessary costs to preserve the existing transportation system such as arterial street resurfacing and reconstruction and transit system bus replacement, and the estimated costs of the transportation system improvement and expansion recommended under the Preliminary Plan. The freeway system capital costs include the estimated cost to resurface the existing freeway system, as needed, and the estimated cost to rebuild those segments of the existing freeway system, which can be expected to be completed by the year 2050 and within the reasonably expected revenues available to modern design standards, estimated at \$8.4 billion or \$240 million per year; the estimated incremental cost to rebuild 116 miles of the freeway system with additional lanes at \$961 million or \$27 million per year; the estimated cost of two new freeway interchanges at \$73 million; and the estimated cost of the extension of the USH 12 freeway from Elkhorn to Whitewater at \$438 million. Surface arterial capital costs include the costs of the estimated necessary resurfacing and reconstruction of the 3,137 miles of surface arterials that will require preservation of capacity over the plan design period, the estimated costs of reconstruction and widening with additional traffic lanes of about 176 miles of surface arterials, and the estimated costs of new construction of 65 miles of surface arterials. The estimated costs of resurfacing and reconstruction are based on the estimated lifecycle of existing surface arterials, and includes reconstruction of about 50 percent of surface arterials with approximately 40 percent resurfaced once, and two resurfacings on about 50 percent of surface arterials. Unit costs for surface arterial resurfacing, reconstruction, widening, and new construction vary by cross-section from \$0.4 to \$13.4 million per mile (rural or urban, divided or undivided, and number of traffic lanes) and are based upon actual project costs over the past several years. The estimated capital cost of surface arterials is \$348 million per year, including \$296 million for preservation (resurfacing and reconstruction) and \$52 million for new arterials and arterials reconstructed with additional traffic lanes. Transit system capital costs include preservation of the existing transit system, including bus replacement on a 12-year schedule and replacement of fixed facilities, and costs of system improvement and expansion including needed additional buses and facility expansion.

Highway system operating (and maintenance) costs are based on estimated actual state and local highway system operating costs and verified by application of estimated unit lane-mile costs. Planned highway system operating costs are increased from estimated existing costs based on the proposed increase in the Preliminary Plan in arterial highway system lane-miles. Transit system operating (and maintenance) costs are based on existing estimated actual costs and unit costs based on service vehicle-miles and vehicle-hours.

Highway Federal, State, and local capital and operating revenues are based on estimated Federal, State, and local expenditures over the last several years. Transit Federal capital and operating revenues are based on historic expenditures over the last several years, and assessment of available Federal formula and program funds. State transit revenues are based on the State maintaining estimated year 2015 funding levels through the year 2050 with inflation at 1.7 percent.

^b Also includes the costs associated with the bicycle and pedestrian, TSM, and TDM elements of the Preliminary Plan.

^c Net operating cost (total operating costs less fare-box revenue). Like all amounts in this table, transit system operating costs represent the average annual costs for the transit system during the period of the Plan (2015-2050). Because the transit system changes in size (and therefore cost) significantly over the life of the plan, the amounts in this table do not represent the operating costs of the full transit system in the year 2050.

Source: SEWRPC

Attachment 1 (continued)

Table 4.14 (revised)
Average Annual Costs and Revenues Associated with the Preliminary Recommended Transportation System Based on Year of Expenditure: 2016 - 2050

Cost or Revenue Item	2050 Plan
Transportation System Cost (average annual 2016-2050 expressed as millions of dollars)^a	
Arterial Street and Highway System	
Capital	
Freeway Reconstruction	\$428
Surface Arterial Reconstruction/Resurfacing and Freeway Resurfacing ^b	590
Subtotal	\$1,018
Operating	130
Subtotal	\$1,148
Transit System	
Capital	\$197
Operating^c	\$273
Subtotal	\$470
Total	\$1,618
Transportation System Revenues (average annual 2016-2050 expressed as millions of dollars)^a	
Highway Capital	
Freeway Reconstruction (Federal/State)	\$417
Surface Arterial Reconstruction/Resurfacing and Freeway Resurfacing	
Federal/State	520
Local	92
Subtotal	\$1,029
Highway Operating	
State	\$60
Local	55
Subtotal	\$1,144
Transit Capital	
Federal	\$137
Local	5
Subtotal	\$142
Transit Operating	
Federal	\$5
State	107
Local	28
Subtotal	\$140
Subtotal	\$282
Total	\$1,462

^a The estimated arterial street and highway system and transit system costs include all capital costs and operating and maintenance costs. The estimated costs include the necessary costs to preserve the existing transportation system such as arterial street resurfacing and reconstruction and transit system bus replacement, and the estimated costs of the transportation system improvement and expansion recommended under the Preliminary Plan. The freeway system capital costs include the estimated cost to rebuild those segments of the existing freeway system, which can be expected to be completed by the year 2050 and within the reasonably expected revenues available to modern design standards, the estimated incremental cost to rebuild 116 miles of the freeway system with additional lanes, the estimated cost of two new freeway interchanges, and the estimated cost of the extension of the USH 12 freeway from Elkhorn to Whitewater. Surface arterial capital costs include the costs of the estimated necessary resurfacing and reconstruction of the 3,137 miles of surface arterials that will require preservation of capacity over the plan design period, the estimated costs of reconstruction and widening with additional traffic lanes of about 176 miles of surface arterials, and the estimated costs of new construction of 65 miles of surface arterials. The capital cost of the Preliminary Plan is based on equal annual expenditures of funds, in constant dollars, over the 35-year period. The operating costs for both the arterial street and highway system and transit system are based on equally increasing annual costs, in constant dollars, over the 35-year period. The conversion of year 2015 constant dollar cost to year of expenditure cost is based upon a price inflation of 2.3 percent.

Highway Federal, State, and local capital and operating revenues are based on estimated Federal, State, and local expenditures over the last several years. Transit Federal capital and operating revenues are based on historic expenditures over the last several years, and assessment of available Federal formula and program funds. State transit revenues are based on the State maintaining estimated year 2014 funding levels through the year 2050 with inflation at 1.7 percent.

^b Also includes the costs associated with the bicycle and pedestrian, TSM, and TDM elements of the Preliminary Plan.

^c Net operating cost (total operating costs less fare-box revenue).

Source: SEWRPC

Attachment 1 (continued)

Table 4.20 (revised)
Average Annual Costs and Revenues Associated with the Federally Recognized
Transportation Plan in 2015 Constant Dollars: 2016 - 2050

Cost or Revenue Item	2050 Plan
Transportation System Cost (average annual 2016-2050 expressed as millions of dollars)^a	
Arterial Street and Highway System	
Capital	
Freeway Reconstruction	\$281
Surface Arterial Reconstruction/Resurfacing and Freeway Resurfacing ^b	381
Subtotal	\$662
Operating	84
Subtotal	\$746
Transit System	
Capital	\$26
Operating^c	\$129
Subtotal	\$155
Total	\$901
Transportation System Revenues (average annual 2016-2050 expressed as millions of dollars)^a	
Highway Capital	
Freeway Reconstruction (Federal/State)	\$275
Surface Arterial Reconstruction/Resurfacing and Freeway Resurfacing	
Federal/State	338
Local	67
Subtotal	\$680
Highway Operating	
State	\$41
Local	38
Subtotal	\$759
Transit Capital	
Federal	\$16
Local	9
Subtotal	\$25
Transit Operating	
Federal	\$24
State	76
Local	29
Subtotal	\$129
Subtotal	\$154
Total	\$913

^a The estimated arterial street and highway system and transit system costs include all capital costs and operating and maintenance costs. The estimated costs include the necessary costs to preserve the existing transportation system such as arterial street resurfacing and reconstruction and transit system bus replacement, and the estimated costs of the transportation system improvement and expansion recommended under the Preliminary Plan. The freeway system capital costs include the estimated cost to resurface the existing freeway system, as needed, and the estimated cost to rebuild those segments of the existing freeway system, which can be expected to be completed by the year 2050 and within the reasonably expected revenues available to modern design standards, estimated at \$8.4 billion or \$240 million per year; the estimated incremental cost to rebuild 116 miles of the freeway system with additional lanes at \$961 million or \$27 million per year; the estimated cost of two new freeway interchanges at \$73 million; and the estimated cost of the extension of the USH 12 freeway from Elkhorn to Whitewater at \$438 million. Surface arterial capital costs include the costs of the estimated necessary resurfacing and reconstruction of the 3,137 miles of surface arterials that will require preservation of capacity over the plan design period, the estimated costs of reconstruction and widening with additional traffic lanes of about 176 miles of surface arterials, and the estimated costs of new construction of 65 miles of surface arterials. The estimated costs of resurfacing and reconstruction are based on the estimated lifecycle of existing surface arterials, and includes reconstruction of about 50 percent of surface arterials with approximately 40 percent resurfaced once, and two resurfacings on about 50 percent of surface arterials. Unit costs for surface arterial resurfacing, reconstruction, widening, and new construction vary by cross-section from \$0.4 to \$13.4 million per mile (rural or urban, divided or undivided, and number of traffic lanes) and are based upon actual project costs over the past several years. The estimated capital cost of surface arterials is \$348 million per year, including \$296 million for preservation (resurfacing and reconstruction) and \$52 million for new arterials and arterials reconstructed with additional traffic lanes. Transit system capital costs include preservation of the existing transit system, including bus replacement on a 15-year schedule and replacement of fixed facilities, and costs associated with the initial phases of the Milwaukee Streetcar and Milwaukee County's BRT line between downtown Milwaukee and the Milwaukee Regional Medical Center, including needed additional vehicles and facilities.

Highway system operating (and maintenance) costs are based on estimated actual state and local highway system operating costs and verified by application of estimated unit lane-mile costs. Planned highway system operating costs are increased from estimated existing costs based on the proposed increase in the Preliminary Plan in arterial highway system lane-miles. Transit system operating (and maintenance) costs are based on existing estimated actual costs and unit costs based on service vehicle-miles and vehicle-hours. Planned transit system operating costs have been decreased from existing system operating costs based on the requisite decrease in transit service vehicle-miles and vehicle-hours to match reasonably expected revenues available.

Highway Federal, State, and local capital and operating revenues are based on estimated Federal, State, and local expenditures over the last several years. Transit Federal capital and operating revenues are based on historic expenditures over the last several years, and assessment of available Federal formula and program funds. State transit revenues are based on the State maintaining estimated year 2015 funding levels through the year 2050 with inflation at 1.7 percent.

^b Also includes the costs associated with the bicycle and pedestrian, TSM, and TDM elements of the Preliminary Plan.

^c Net operating cost (total operating costs less fare-box revenue).

Source: SEWRPC

Attachment 1 (continued)

Table 4.21 (revised)
Average Annual Costs and Revenues Associated with the Federally Recognized
Transportation Plan Based on Year of Expenditure: 2016 - 2050

Cost or Revenue Item	2050 Plan
Transportation System Cost (average annual 2016-2050 expressed as millions of dollars)^a	
Arterial Street and Highway System	
Capital	
Freeway Reconstruction	\$428
Surface Arterial Reconstruction/Resurfacing and Freeway Resurfacing ^b	590
Subtotal	\$1,018
Operating	130
Subtotal	\$1,148
Transit System	
Capital	\$37
Operating^c	\$167
Subtotal	\$204
Total	\$1,352
Transportation System Revenues (average annual 2016-2050 expressed as millions of dollars)^a	
Highway Capital	
Freeway Reconstruction (Federal/State)	\$417
Surface Arterial Reconstruction/Resurfacing and Freeway Resurfacing	
Federal/State	520
Local	92
Subtotal	\$1,029
Highway Operating	
State	\$60
Local	55
Subtotal	\$1,144
Transit Capital	
Federal	\$18
Local	19
Subtotal	\$37
Transit Operating	
Federal	\$29
State	107
Local	31
Subtotal	\$167
Subtotal	\$204
Total	\$1,348

^a The estimated arterial street and highway system and transit system costs include all capital costs and operating and maintenance costs. The estimated costs include the necessary costs to preserve the existing transportation system such as arterial street resurfacing and reconstruction and transit system bus replacement, and the estimated costs of the transportation system improvement and expansion recommended under the Preliminary Plan. The freeway system capital costs include the estimated cost to rebuild those segments of the existing freeway system, which can be expected to be completed by the year 2050 and within the reasonably expected revenues available to modern design standards, the estimated incremental cost to rebuild 116 miles of the freeway system with additional lanes, the estimated cost of two new freeway interchanges, and the estimated cost of the extension of the USH 12 freeway from Elkhorn to Whitewater. Surface arterial capital costs include the costs of the estimated necessary resurfacing and reconstruction of the 3,137 miles of surface arterials that will require preservation of capacity over the plan design period, the estimated costs of reconstruction and widening with additional traffic lanes of about 176 miles of surface arterials, and the estimated costs of new construction of 65 miles of surface arterials. The capital cost of the Preliminary is based on equal annual expenditures of funds, in constant dollars, over the 35-year period. The operating costs for both the arterial street and highway system and transit system are based on equally increasing annual costs, in constant dollars, over the 35-year period. The conversion of year 2015 constant dollar cost to year of expenditure cost is based upon a price inflation of 2.3 percent.

Highway Federal, State, and local capital and operating revenues are based on estimated Federal, State, and local expenditures over the last several years. Transit Federal capital and operating revenues are based on historic expenditures over the last several years, and assessment of available Federal formula and program funds. State transit revenues are based on the State maintaining estimated year 2014 funding levels through the year 2050 with inflation at 1.7 percent.

^b Also includes the costs associated with the bicycle and pedestrian, TSM, and TDM elements of the Preliminary Plan.

^c Net operating cost (total operating costs less fare-box revenue).

Source: SEWRPC

Attachment 2

Table H-15 (REVISED)
Access to Jobs within 30 Minutes by Transit

Minority Population^a							
Plan	100,000 or More Jobs		50,000 or More Jobs		10,000 or More Jobs		Total Minority Population
	People	Percent	People	Percent	People	Percent	
Existing – 2010	18,900	3.2	87,300	15.0	342,200	58.7	582,900
Trend – 2050	11,700	2.0	47,600	8.2	255,600	43.8	582,900
Plan – 2050	98,700	16.9	240,400	41.2	492,500	84.5	582,900

Families in Poverty^a							
Plan	100,000 or More Jobs		50,000 or More Jobs		10,000 or More Jobs		Total Families in Poverty
	Families	Percent	Families	Percent	Families	Percent	
Existing - 2010	1,700	3.3	7,900	15.1	29,300	56.0	52,300
Trend – 2050	1,000	1.9	4,200	8.0	22,000	42.1	52,300
Plan – 2050	8,900	17.0	21,300	40.7	42,000	80.3	52,300

Families with Incomes Less Than Twice the Poverty Level^a							
Plan	100,000 or More Jobs		50,000 or More Jobs		10,000 or More Jobs		Total Families with Incomes Less than Twice the Poverty Level
	Families	Percent	Families	Percent	Families	Percent	
Existing – 2010	2,600	2.1	12,900	10.7	58,100	48.0	121,000
Trend – 2050	1,400	1.2	6,800	5.6	43,200	35.7	121,000
Plan – 2050	16,100	13.3	41,400	34.2	89,300	73.8	121,000

People with Disabilities^a							
Plan	100,000 or More Jobs		50,000 or More Jobs		10,000 or More Jobs		Total Population with Disabilities
	People	Percent	People	Percent	People	Percent	
Existing – 2010	4,300	1.9	15,600	7.1	80,700	36.6	220,600
Trend – 2050	2,700	1.2	10,300	4.7	59,600	27.0	220,600
Plan – 2050	26,000	11.8	63,900	29.0	144,800	65.6	220,600

^a Total population and minority population based on 2010 U.S. Census and the total families, families in poverty, families with incomes less than twice the poverty level, and people with disabilities are based on the 2008-2012 American Community Survey.

Source: U.S. Bureau of Census, U.S. Census and American Community Survey; SEWRPC