APPENDIX B: ENVIRONMENTAL JUSTICE ANALYSIS

Introduction

As part of MATPB's continuing efforts to comply with Title VI and address environmental justice, an analysis was conducted to evaluate the impacts of the Regional Transportation Plan (RTP) 2050 on minority populations, low-income households, and those households without access to an automobile. Special efforts were also made to ensure that minority and low-income populations were provided with an opportunity to participate in the planning process. These are documented in the MATPB's <u>Public Participation Plan</u>.

Title VI of the 1964 Civil Rights Act (42 U.S.C. 2000d-1) states that "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." To further amplify Title VI, President Clinton issued Executive Order 12898 in 1994, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. The purpose of the order is to make achieving environmental justice part of each Federal agency's mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of government programs, policies, and investments, such as transportation facilities, on minority and low-income populations. The goal is to ensure that the benefits and burdens of government actions and investments are fairly distributed, and that minority and low-income populations are not disproportionately affected in an adverse way. In 1997, the U.S. Department of Transportation (USDOT) issued an order to summarize and expand upon the requirements of Executive Order 12898 on Environmental Justice. The Order generally describes the process for incorporating environmental justice principles into all DOT existing programs, policies, and activities.

Title VI, Executive Order 12898, the USDOT order, and other <u>USDOT guidance</u> do not contain specific requirements in terms of evaluating the impacts of transportation plans and programs on environmental justice populations. For this RTP, a qualitative analysis has been conducted of the impacts of proposed transportation projects on areas with high concentrations of these populations. MATPB will continue efforts to develop analysis tools to better quantitatively assess the benefits and impacts of

Environmental Justice Population and Areas of Concentration within the Madison Metropolitan Planning Area

The 2010 minority population within the current Madison Area Metropolitan Planning Area was about 72,400 or around 16.6% of the total population of 435,400. This represented an increase of over 26,500 or 58% since 2000. African Americans accounted for 5.7% of the planning area population and Asians accounted for 5.2%. The 2010 Hispanic or Latino population was over 27,200 or around 6.3% of the planning area population. This represented an increase of around 13,500 or over 100% since 2000.

Figure B-1 shows the number and percentage of minority and Hispanic populations in the cities and villages within the planning area and in the Town of Madison in 2010 and the change from 2000. The larger cities (Madison, Fitchburg, Sun Prairie, Middleton) and Town of Madison have the highest percentages of minority and Hispanic populations, but most cities and villages have a minority population of close to 5% or more. The Hispanic population is more concentrated in the cities of Madison and Fitchburg, along with Town of Madison.

Figures B-2 and B-3 highlight areas within communities where there is a concentration of minority and Hispanic populations. These areas include the South side (Fish Hatchery Road, Badger Road, Southdale area in Town of Madison), Southwest side (Allied Drive, Park Ridge/Prairie Hills neighborhoods), Wexford Ridge neighborhood, Sheboygan Avenue, Northport Drive, and Eagle Heights on the UW campus. Figures B-4 and B-5 highlight areas where there has been an increase in these populations. The minority population increased the most in the east UW campus area where housing for students has been expanded, Fish

	2000					20	10	-	Change		
	Minority Population		Hispanic Population		Minority P	Minority Population		opulation	Minority Population	Hispanic Population	
Municipality	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Difference	Difference	
Madison, City	33,365	16.0%	8,512	4.1%	49,179	21.1%	15,948	6.8%	5.1%	2.7%	
Cottage Grove, Village	174	4.3%	73	1.8%	490	7.9%	185	3.0%	3.6%	1.2%	
Cross Plains, Village	37	1.2%	13	0.4%	103	2.9%	57	1.6%	1.7%	1.2%	
DeForest, Village	343	4.7%	161	2.2%	602	6.7%	325	3.6%	2.1%	1.5%	
Fitchburg, City	3,652	17.8%	1,329	6.5%	7,030	27.8%	4,341	17.2%	10.0%	10.7%	
Maple Bluff, Village	39	2.9%	9	0.7%	54	4.1%	19	1.4%	1.2%	0.8%	
McFarland, Village	179	2.8%	73	1.1%	435	5.6%	176	2.3%	2.8%	1.1%	
Middleton, City	1,249	7.9%	444	2.8%	2,251	12.9%	984	5.6%	5.0%	2.8%	
Monona, City	505	6.3%	256	3.2%	563	7.5%	232	3.1%	1.2%	-0.1%	
Oregon, Village	172	2.3%	50	0.7%	425	4.6%	204	2.2%	2.3%	1.5%	
Shorewood Hills, Village	139	8.0%	55	3.2%	137	8.8%	60	3.8%	0.7%	0.7%	
Stoughton, City	413	3.3%	153	1.2%	615	4.9%	230	1.8%	1.5%	0.6%	
Sun Prairie, City	1,492	7.3%	555	2.7%	4,275	14.6%	1,253	4.3%	7.2%	1.5%	
Verona, City	179	2.5%	50	0.7%	713	6.7%	258	2.4%	4.2%	1.7%	
Waunakee, Village	174	1.9%	86	1.0%	505	4.2%	269	2.2%	2.2%	1.3%	
Windsor, Town/Village	174	3.3%	61	1.2%	364	5.7%	129	2.0%	2.4%	0.9%	
Madison, Town	2,661	38.0%	1,455	20.8%	2,849	45.4%	1,760	28.0%	7.4%	7.3%	
Total	44,947	13.0%	13,335	3.9%	70,590	17.7%	26,430	6.6%	4.6%	2.8%	

Figure B-1 Minority Populations within the Madison Metropolitan Area

Source: Census

Hatchery Road, Allied Drive, Sheboygan Avenue, and the Southwest side. Outside of Madison, the Cities of Fitchburg and Sun Prairie saw the highest increases in minority population. The largest increase in the Hispanic population generally occurred east of Allied Drive in southwest Madison and south of Thurston Lane in north Fitchburg, as well as the area near Milwaukee Street/N. Thompson Drive on Madison's northeast side.

Figure B-6 on page A-38 shows the autoless households and households below the federal poverty level in cities and villages within the planning area and the Town of Madison in 2010-2014 and the change from 2000. The poverty level income for a family of four was \$36,450 in 2016. There were an estimated total of nearly 17,000 households in these communities or about 9.5% that were without an automobile according to 2010-2014 American Community Survey (ACS) data. About 78% of these households resided in the City of Madison. There were an estimated total of over 23,000 households or about 13.5% that were below the poverty level. About 76% of these households were in the City of Madison. Figures B-7 and B-8 highlights areas, primarily within Madison, with concentrations of autoless and very low income households. The largest concentrations are in the downtown area, though many of these are students who have parental financial support. Other areas include the south side, Allied Drive, north side, and Darbo-Worthington neighborhood south of E. Washington Ave.

Means of Transportation and Travel Time to Work for Environmental Justice Populations

Figures B-9 to B-11 on page A-38 show the means of transportation to work by race, ethnicity and income in relation to poverty level in the Madison Urban Area, based on estimates from 2010-2014 ACS data. The data show that minority, Hispanic, and low income persons use alternatives to driving alone at a much higher rate than non-Hispanic, white persons. Around 72% of white,













Figure B-6 Autoless Households and Households Below Poverty Level within the Madison Metropolitan Area

	2000		2000		2010-14		2010-14			Autoless	Households Below			
	Autole	ess Househ	olds	Households	Below Pov	very Level	Autol	ess Housel	nolds	Household	Households Below Povery Level*		Households	Povery Level*
Municipality	Number	Tot HHs	Percent	Number	Tot HHs	Percent	Number	Tot HHs	Percent	Number	Tot HHs	Percent	Change	Change
Madison, City	10,483	88,845	11.8%	12,269	89,267	13.7%	12,948	103,169	12.6%	17,910	103,169	17.4%	0.8%	3.6%
Cottage Grove, Village	20	1,416	1.4%	45	1,414	3.2%	31	2,268	1.4%	169	2,268	7.5%	0.0%	4.3%
Cross Plains, Village	36	1,203	3.0%	26	1,215	2.1%	64	1,486	4.3%	69	1,486	4.6%	1.3%	2.5%
DeForest, Village	78	2,651	2.9%	111	2,647	4.2%	107	3,505	3.1%	127	3,505	3.6%	0.1%	-0.6%
Fitchburg, City	433	8,370	5.2%	457	8,137	5.6%	676	10,407	6.5%	1,319	10,407	12.7%	1.3%	7.1%
Maple Bluff, Village	7	541	1.3%	10	550	1.8%	3	581	0.5%	8	581	1.4%	-0.8%	-0.4%
McFarland, Village	66	2,439	2.7%	60	2,455	2.4%	117	3,260	3.6%	114	3,260	3.5%	0.9%	1.1%
Middleton, City	396	7,042	5.6%	335	6,936	4.8%	456	8,549	5.3%	502	8,549	5.9%	-0.3%	1.0%
Monona, City	287	3,789	7.6%	179	3,769	4.7%	275	3,972	6.9%	455	3,972	11.5%	-0.7%	6.7%
Oregon, Village	125	2,814	4.4%	111	2,847	3.9%	171	3,779	4.5%	190	3,779	5.0%	0.1%	1.1%
Shorewood Hills, Village	8	649	1.2%	16	624	2.6%	3	657	0.5%	24	657	3.7%	-0.8%	1.1%
Stoughton, City	221	4,772	4.6%	259	4,742	5.5%	318	5,269	6.0%	459	5,269	8.7%	1.4%	3.2%
Sun Prairie, City	331	7,794	4.2%	382	7,792	4.9%	458	12,029	3.8%	922	12,029	7.7%	-0.4%	2.8%
Verona, City	139	2,576	5.4%	107	2,548	4.2%	284	4,800	5.9%	235	4,800	4.9%	0.5%	0.7%
Waunakee, Village	181	3,202	5.7%	71	3,216	2.2%	205	4,530	4.5%	184	4,530	4.1%	-1.1%	1.9%
Windsor, Town/Village	58	1,902	3.0%	18	1,923	0.9%	152	2,546	6.0%	127	2,546	5.0%	2.9%	4.1%
Madison, Town	390	3,220	12.1%	602	3,230	18.6%	358	3,108	11.5%	756	3,108	24.3%	-0.6%	5.7%
Total	13,259	143,225	9.3%	15,058	143,312	10.5%	16,626	173,915	9.6%	23,570	173,915	13.6%	-	-

Source: Census

Figure B-9

Means of Transportation to Work by Race, Urban Area, 2010-2014*

	White		African A	merican	Asian		Other Race or 2+ Races	
Mode of Transportation	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Drive Alone	141,649	72.4%	5,901	59.3%	7,134	58.9%	5,847	60.2%
Carpooled	14,992	7.7%	1,292	13.0%	1,322	10.9%	1,579	16.3%
Public Transportation	9,563	4.9%	1,408	14.2%	2,143	17.7%	874	9.0%
Walked	12,130	6.2%	743	7.5%	892	7.4%	860	8.9%
Bicycle, Taxicab, Motorcycle, or Other	8,847	4.5%	378	3.8%	301	2.5%	400	4.1%
Worked at Home	8,581	4.4%	224	2.3%	318	2.6%	147	1.5%
Total	195,762	-	9,946	-	12,110	-	9707	-

Source: 2010-2014. For workers 16 years and older.

Figure B-10 Means of Transportation to Work by Ethnicity, Urban Area, 2010-2014*

	White, Nor	n Hispanic	Hispanic or Latino		
Mode of Transportation	Number	Percent	Number	Percent	
Drive Alone	136,242	72.4%	8,736	65.1%	
Carpooled	13,967	7.4%	2,432	18.1%	
Public Transportation	9,061	4.8%	1,004	7.5%	
Walked	11,713	6.2%	747	5.6%	
Bicycle, Taxicab, Motorcycle, or Other	8,647	4.6%	324	2.4%	
Worked at Home	8,491	4.5%	178	1.3%	
Total	188,121	-	13,421	-	

Source: 2010-2014. For workers 16 years and older.

Figure B-11

Means of Transportation to Work by Poverty Status, Urban Area, 2010-2014*

	Below 100%	Poverty Level	Below 150%	Poverty Level	At or Above 150)% Poverty Level
Mode of Transportation	Number	Percent	Number	Percent	Number	Percent
Drive Alone	9,741	44.4%	17,068	48.5%	143,129	75.5%
Carpooled	1,959	8.9%	3,644	10.4%	15,506	8.2%
Public Transportation	3,012	13.7%	4,746	13.5%	9,065	4.8%
Walked	4,621	21.1%	6,001	17.1%	6,844	3.6%
Bicycle, Taxicab, Motorcycle, or Other	1,990	9.1%	2,751	7.8%	6,908	3.6%
Worked at Home	622	2.8%	968	2.8%	8,042	4.2%
Total	21,945	-	35,178	-	189,494	-

Source: 2010-2014. For workers 16 years and older.

non-Hispanic persons drove alone to work compared to just 59% of minority, 65% of Hispanic, and 48% of low-income persons (i.e., workers with income below 150% of the federal poverty level). For minorities and Hispanic persons, the most common alternative transportation modes were carpooling (13% and 18% respectively) and transit (14% and 7.5%). For low-income workers, the most common alternative mode was walking (17%) with transit and carpooling both around 13.5% and 10.5%, respectively.

The Metro Transit on-board survey conducted in 2015 showed that minorities make longer transit trips and transfer more often. This is largely due to their residence and destination locations outside the downtown/UW campus area where most service is oriented. More recent data is unavailable, but according to 2000 Census data minority and Hispanic persons had somewhat longer overall travel times to work (regardless of mode) than white, non-Hispanic persons. Around 19.5% of minority persons and 18% of Hispanic persons had travel times of 30 minutes or greater compared to 16% of white, non-Hispanic persons. Around 55% of minorities had travel times of less than 20 minutes compared to 57% of white, non-Hispanic persons. The higher overall travel times for minorities can be partially attributed to their far greater use of car/vanpools and transit. Average travel times for those modes are longer than for those driving alone, as one would expect.

Roadway and Bicycle/Pedestrian Project Analysis

A qualitative transportation project analysis was conducted comparing the location of planned projects in relation to areas with concentrations of environmental justice (EJ) populations. Figures B-12 to B-14 overlay the recommended major capacity expansion roadway and transit improvements and studies, roadway preservation and TSM/safety projects, and priority bicycle facility projects on maps highlighting EJ population indicator areas with high concentrations of one or more of EJ population groups (minority and Hispanic populations, population below the poverty level, and households with no vehicle available).

Roadway Projects & Studies

Roadway capacity expansion projects improve auto mobility for persons residing in or traveling to areas in the general vicinity of the roadway, but can have negative impacts on persons residing adjacent or in close proximity to the roadway. Roadway preservation, TSM (e.g., intersection improvement), or safety projects are generally considered to have a positive impact on the adjacent properties, particularly when they include pedestrian/bicycle facilities and streetscape improvements. Some negative impacts may occur during construction of the project (e.g., noise, dust, etc.), however the potential benefits of the project (e.g., improved safety and traffic flow, smoother pavement, improved pedestrian and bicycle facilities, streetscape amenities) are assumed to outweigh the negative impacts. Bicycle facilities also have a positive impact on the adjacent neighborhood area by improving non-motorized accessibility.

As shown in Figure B-12, all of the recommended local arterial capacity expansion projects in the planning area are located on the urban periphery in developing or planned development areas, most notably the east and west sides. There are no EJ areas in the vicinity of these projects. The closest project to an EJ area is the Commercial Avenue (CTH T) (N. Thompson Dr. to Lien Road) project near the Ridgewood neighborhood, however converting that roadway to an urban 4-lane divided cross-section will not negatively impact the nearby neighborhood. In fact, it will have positive impacts through addition of pedestrian/bicycle facilities, street lights, street trees, and other typical components of an urban street project.

The recommended major state roadway capacity expansion projects include the programmed reconstruction and expansion of Verona Road (US 18/151), which is Phase 2 of the larger Verona Road and West Beltline project. Phase 1, which was recently completed, included reconstruction of the Verona Road/Beltline interchange to a single-point design, expansion of the Beltline to 6 lanes west to Whitney Way, and expansion of Verona Road south of the interchange to 8 lanes with a new-grade-separated crossing of Verona Road with the Summit Road jug handle. While the project has some negative impacts to the adjacent Allied Drive – Dunn's Marsh neighborhood, multiple improvements were incorporated into the project to increase neighborhood motorized and non-motorized access, including the new grade-separated crossing at Summit Road, the design of the



connection to the jug handle to the east frontage road, the construction of a new pedestrian/bicycle underpass just south of the Beltline interchange, a new Carling Drive connection, and other pedestrian/bicycle facilities. Phase 2 of the project includes expansion of Verona Road from Raymond Road to McKee Road (CTH PD) with new interchanges at Williamsburg Way and McKee Road. This will ultimately result in higher traffic volumes in the corridor, but to the extent the Verona Road improvements improve traffic flow and reduce crashes, air quality in the area could be improved to some degree.

Other programmed capacity projects include the Interstate 39/90 expansion project, which is mostly outside the planning area and is addressing inter-regional traffic, and a short rural section of WIS 19 between River Road and the Interstate that is being expanded in conjunction with a bridge replacement. Neither project affects EJ areas. The only state highway planned capacity project in the plan at this time includes the Beltline/Interstate interchange project, which includes the conversion of US 12/18 to a freeway and a new interchange at CTH AB. There does not appear to be any adverse impacts to EJ areas from the project, but a more detailed analsis will be conducted as part of the EIS for the project.

It is anticipated that additional capacity expansion projects will come out of ongoing studies of three state highway corridors and recommended future studies of two of these corridors. The three ongoing studies include Stoughton Road/US 51 (Terminal Drive to WIS 19), Beltline (US 12/14/18/151) (US 14 to CTH N), and US 51 (McFarland to Stoughton). Future studies are recommended for the Interstate 39/90/94 and WIS 19/WIS 113/CTH M ("N. Mendota Parkway") corridors. Depending upon the improvements recommended, projects coming out of these studies could result in impacts to some EJ areas, particularly in the Beltline and Stoughton Road corridors. Impacts to EJ areas will be evaluated as part of detailed analyses conducted as part of these major studies.

Figure B-13 shows the location of programmed and planned roadway preservation, TSM, and safety projects in relation to areas with concentrations of EJ populations. There are a significant number of anticipated reconstruction projects and other projects located in or near EJ areas that will benefit them. These include the following:

- N. Blair Street (Johnson St. to E. Washington Ave.
- Bird Street (W. Main to Linnerud Dr.) in Sun Prairie
- E. Wilson Street/Williamson Street (Franklin St. to Blount St.)
- S. Park Street (US 151) (W. Washington Ave. to Badger Rd.)
- S. Gammon Road (Mineral Point Rd. to Beltline (US 12/14))
- W. Washington Avenue (Regent St. to Bedford St.)
- N. Fish Hatchery Road (S. Park St. to Wingra Dr.)
- North Shore Drive/Proudfit Street (John Nolen Dr. to W. Washington Ave.)
- Regent Street (Highland Ave. to Park St.)
- E. Johnson Street (Baldwin St. to First St.)
- N. Midvale Boulevard (University Ave. to Regent St.)
- Milwaukee Street (E. Washington Ave. to Schenk St.)
- Siggelkow Road (Catalina Pkwy. to CTH AB)
- Cottage Grove Road (CTH BB) (N. Main St. to Sandpiper Trail) in Cottage Grove

Most of these projects will incorporate significant pedestrian/bicycle and streetscape improvements, and some will also include safety improvements.

Bicycle/Pedestrian Projects

Bicycle/pedestrian facilities benefit areas in which they are located or those nearby by improving non-motorized accessibility



and strengthening the social fabric of the neighborhoods. Many minority and low-income neighborhoods are served, directly or indirectly, with high-quality regional shared-use paths and on-street bicycle facilities. However, the neighborhoods often lack a connected local street network and in many cases, the neighborhoods are isolated from others and the rest of the community because of barriers like the Beltline Highway and high volume arterials like Northport Road and E. Washington Ave.

Figure B-14 shows the programmed and planned priority on-street facility needs and recommended off-street bicycle/ pedestrian facility projects in relation to areas with high concentrations of EJ population groups.

Neighborhoods along the Madison-Fitchburg border are currently served by the Southwest Path and new Cannonball Path, both along former rail corridors with Beltline Highway crossings separated from traffic. These neighborhoods will be even better served with the following planned facilities: extension of the Cannonball path to the Wingra path; improved bicycle facilities along South Park Street; Beltline Highway street crossing at Perry Street; shared-use path along the Beltline Highway connecting the Southwest path with west Madison; and new and/or improved on-street bicycle facilities on McKee Road, Midvale Boulevard, and Whitney Way.

Low-income and minority neighborhoods in northeast Madison are served by a network of primarily on-street facilities – bike lanes on Milwaukee Street, Thompson Drive, and East Washington Avenue. However, a low-stress network consisting of low-speed streets and shared-use paths is lacking. The planned Goodman Path in the rail corridor paralleling E Washington Ave./ US 151 and shared-use path along STH-30 and I-94 will improve bicycle travel for these neighborhoods. New and improved crossings of the I-39/90/94 will improve safety and allow access between existing and developing neighborhoods.

North Madison neighborhoods have historically had limited access to bicycle facilities. New bike lanes on Sherman Avenue, Northport Drive, and other smaller improvements have improved access in the last few years. The long-planned "Sherman Flyer" shared-use path along the rail corridor will dramatically improve access, as well as the planned completion of bicycle facilities along the East Johnson Street/Packers Avenue Corridor.

Figure 5-11 on page 5-23 shows regional pedestrian network needs, categorized as Tier 1 (highest priority) and Tier 2. Sidewalk needs – missing sidewalk along arterial and collector streets in urban areas where pedestrians would use it – are scattered throughout the region. Some of these missing sidewalk segments are in low-income and minority neighborhoods, though many are not.

In southwest Madison, Hammersley Road is a notable gap in the pedestrian network between the Southwest Path and Brookwood Road/Rae Lane. Other examples of missing regional sidewalk connections in low-income and minority neighborhoods are Mendota Avenue in Middleton, Gammon Road near Old Sauk Road, Atlas Avenue, Commercial Avenue, Wright Street, Packers Avenue, and Troy Drive west of the railroad crossing. Additionally, missing sidewalk in commercial areas – wherever they are – are important from an equity standpoint because low-income people are likely work or shop there. Most large retail areas generally have sidewalks, although many are auto-oriented and difficult to reach from residential neighborhoods.

Public Transit Analysis

Current Transit Service

The Metro Transit all-day service area encompasses almost all of the areas with concentrations of EJ population groups. The one exception is some areas in Sun Prairie, which are served by the city's shared-ride taxi system, but do not have access to affordable transit service to/from the Madison area. The main challenge for bus riders in the Madison area EJ areas is relatively long travel times and sometimes low frequency and limited service. This stems in large part due to the fact that many of the EJ areas are located in the periphery of the urban area.



lsochrone maps can be used to approximate how far a person can travel using public transit (or other modes) in a given amount of time. This analysis is useful because it shows a person's freedom of travel — in other words, whether they are isolated within their neighborhood or whether they have reasonable access to jobs, retail, services, and other opportunities that Madison has to offer. Figures B-15 to B-19 are a series of lsochrone maps produced to illustrate (a) areas accessible within a 30-minute bus ride from selected EJ areas in the weekday morning peak and midday periods; (b) areas accessible within a 45-minute bus ride from major employment centers in the weekday afternoon peak and midday periods; and (c) areas accessible within a 15-minute bus ride from a full service grocery store.

Figures B-15 and 16 highlight the limited portions of the Madison area that are accessible to EJ neighborhoods within a 30-minute bus ride, making it difficult reach cross-town destinations via transit (e.g., Allied neighborhood to the job center on the north side). Figures B-17 and 18 show that the 45-minute transit accessibility to peripheral job centers is generally limited to one side of the urban area (east, west, south). Again, cross-town trips are outside this time threshold. A comparison of Figure B-19 to the selected EJ areas shown in Figure B-15 shows that most EJ areas are within a 15-minute bus ride of at least one full service grocery store. An exception is the Owl Creek neighborhood. However, that store may not meet residents' needs due to cost and other factors. The maps illustrate some of the challenges for the transit dependent in meeting their daily needs, despite the fact the Madison area has an excellent transit system for an urban area of Madison's size.

As part of its Title VI compliance monitoring, Metro Transit updated its Title VI Program document in 2014. A fixed-route service standards and policies analysis was conducted to ensure that the level of service and location of routes, age/quality of vehicles assigned to routes, and stop and other facilities are being provided in a non-discriminatory manner. The analysis compared the level of service for areas or routes used by minority concentrations to adopted service standards and the quality of service for these areas compared to non-minority areas/routes. The analysis concluded that service and facility quality for areas/routes with concentrations of minority and limited English proficient populations compared very favorably with non-minority areas and there were no disparate impacts on the basis of race, color, or national origin. Metro's Title VI policy calls for an equity analysis for any major service change, which focuses on any adverse effects to minority and low-income riders.

Planned Regional Transit Network and Service

The planned bus rapid transit (BRT) system will eventually span the majority of the service area. As illustrated in Figure B-12, the BRT system will directly serve the north Madison, south Madison, and north Fitchburg EJ areas, as well as low-income and minority populations along East Washington Avenue. Further, most neighborhoods will benefit from the BRT system because they will be able to use local routes to connect to the system, reducing their travel times, particularly for cross-town trips. The recent onboard transit survey showed that low-income and minority bus riders often make long trips, particularly outside the morning and afternoon peak commute periods, and often transfer. The BRT system will reduce travel times and transfers for these long trips.

As shown in Figure Figure 5-5 on page 5-13, the planned expansion of the frequent service improvements are primarily in downtown Madison and close-in neighborhoods. These improvements will serve low-income and zero-car households in central Madison. Although most of these corridors are in neighborhoods heavily populated with University of Wisconsin students, they are nonetheless highly dependent on public transportation. Planned improvements in off-peak frequency in southwest Madison, south Madison, and east Madison from what is now hourly service will directly benefit low-income neighborhoods.

New all-day service in peripheral neighborhoods will mostly serve as-of-yet undeveloped and developing neighborhoods. However, some benefits will be felt by low-income and minority neighborhoods. Improving service on Route 31 and providing local service on Monona Drive will improve access in southeast Madison, Monona, and McFarland. All-day service to central Fitchburg will allow residents throughout the city as well as others to reach the city center near Lacy Road and Fish Hatchery Road. All-day service in Sun Prairie, with quality connections at East Towne, will serve minority concentrations in the City of Sun











Prairie. The all-day service to peripheral neighborhoods will allow lower income households that are more transit dependent to be able to live in these areas, some of which will be more affordable than many closer in neighborhoods.

Regional express service between Madison and its suburban neighbors will primarily serve individuals with mid-level incomes who work conventional work hours in central Madison. However, the service will also potentially serve lower income workers and people who live in Madison and commute to employment areas in the suburbs.

Overall, the public transit recommendations will not only expand the coverage of public transit, but it will reduce travel times for people using the bus. As illustrated by Figures 5-3 and 5-4, the improvements will vastly increase access to jobs via transit for residents of the region. As noted in the financial analysis in Chapter 6, however, additional funding – mostly likely through a new dedicated funding source such as an RTA with ability to levy a sales tax – will be required to implement most of these recommendations, including the full planned BRT system.

Conclusion

One of the seven RTP goals is improving equity for users of the transportation system. Accomplishing this goal requires providing convenient, affordable transportation options and making sure that the benefits of RTP investments are fairly distributed and do not disproportionately impact minority and low-income populations in a negative way. This EJ analysis has demonstrated that this is case for the RTP. Implementation of the RTP recommendations will provide more convenient and safe transportation options for people. In addition, there are numerous planned roadway preservation, transit, and bicycle/ pedestrian facilities and services that will directly benefit neighborhoods with a concentration of EJ population groups. The needs of these neighborhoods have been considered in developing the RTP recommendations.

It should be noted that the EJ analysis conducted for the RTP is just a small part of ongoing efforts by the MPO, WisDOT, and local units of government to comply with Title VI and address environmental justice. More in-depth EJ analyses are being or will be conducted as part of ongoing and planned corridor studies (e.g., Stoughton Road/US 51 and the Beltline). The MPO includes environmental justice as one of the criteria in selecting projects for funding with program funds the MPO controls. The MPO also conducts an EJ analysis of the five-year Transportation Improvement Program (TIP) each year as part of the annual update. Also, implementing agencies conduct EJ analyses as individual projects move forward through the environmental analysis and design stages.