Appendix B

Demographic Trends Update, Regional Travel Patterns, and Short Trips Analysis

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This update of demographic trends & regional travel analysis report for the Duluth-Superior metropolitan area was prepared by AECOM for the Metropolitan Interstate Council (MIC)

Summary of Findings

The Duluth-Superior Metropolitan Interstate Council (MIC) is a federally designated MPO (Metropolitan Planning Organization). The MIC is a bi-state MPO comprised of four cities, six townships and one county in Minnesota, and one city, two villages, three towns, and one county in Wisconsin, comprising a total MIC area of 641 square miles. As part of the development of the MIC's 2050 long range transportation plan, a thorough review of demographic trends and regional travel patterns was completed to understand the existing conditions and current transportation needs in the MIC area. The results of the demographic trends and regional travel patterns influence the long-range transportation plan through identifying stakeholders, identifying transportation project opportunities, transportation project development, and project scoring.

An update to the demographic trends was completed utilizing the most recent available 2020 US Census and ACS (American community survey) 2021 data. There have been few changes to the population and demographics within the MIC area for many decades. In fact, regional population has been stable since at least 1980. Still, after reviewing the 2020 Census and 2021 ACS data there are some fluctuations in population that tell a story. The overall MIC area population from 2015 – 2020 decreased, however more recent 2021 data shows an increase in population between 2020 and 2021, leading to an overall rise in regional population from 2015 – 2021. Anecdotal evidence suggests that this population increase could be due to remote workers moving away from larger cities and/or retirees moving into the region.

In addition to the population shift, the MIC area is becoming more diverse with 10% of the population identifying as racially diverse, 2% identifying as ethnically diverse, and 10% of the population identifying as speaking English less than very well. Income percentages remain consistent at 5.7% of families living below the poverty level within the MIC area.

To better understand transportation needs, a review of existing regional travel patterns was conducted using the Census Bureau's Longitudinal Employment-Household Dynamics (LEHD) data and Replica, a data mobility model. Commuter patterns to the MIC area, within the MIC area, and out of the MIC area were compared to 2015. The results showed significantly more commuters traveling to the MIC area from elsewhere or traveling outside the MIC area from within the MIC area. These results indicate more commutes are being made to and from the MIC area. There are also a larger number of commutes at a distance of 25 miles or greater. It is reasonable to assume at least a portion of these commutes represent remote workers who aren't making daily commutes in and out of the MIC area, but who are commuting further on fewer occasions.

Finally, Replica was used to assess short trip patterns within the MIC area. Most short trips start and end in five key areas or zones including Downtown Duluth, Downtown Superior, University of Minnesota-Duluth, West Duluth, and the Miller Hill mall commercial area. Understanding travel patterns in these zones can be helpful in encouraging future projects that would help bring the MIC area's long range transportation vision to life.

Demographic Trends Update

An assessment of the current and future transportation needs in the Duluth-Superior metropolitan area begins with a look at the existing demographics. The size, makeup, and characteristics of the population exhibit a wide range of demands throughout the transportation system. Together, these characteristics influence travel patterns and preferences. An update to the demographic trends was completed utilizing the most recent available 2020 US Census and ACS (American Community Survey) 2021 data.

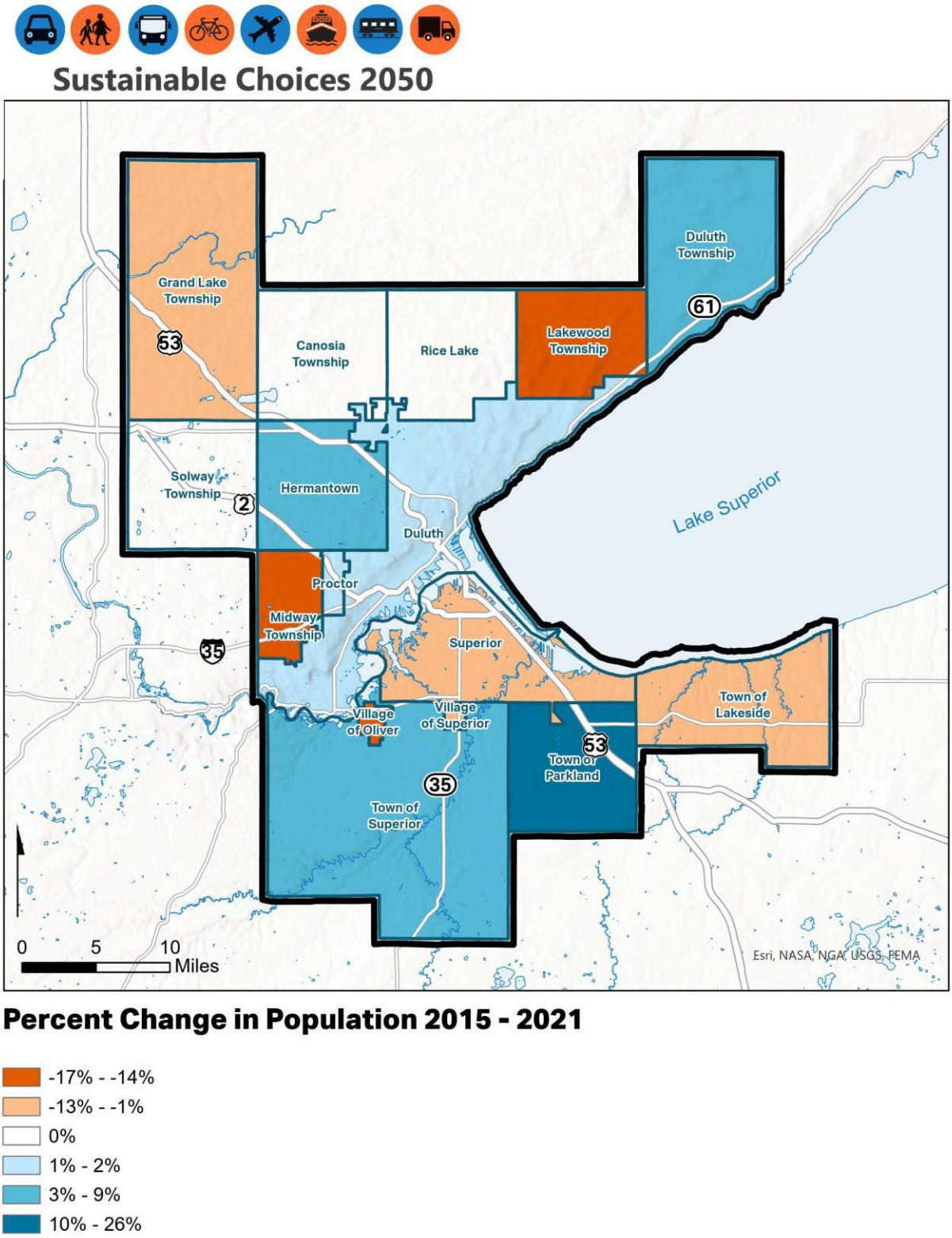
Population Trends

While the 2020 Census data shows an overall decrease in population in the MIC area, anecdotal evidence supports that there may be a slight influx in population since 2020 from other cities due in part to the COVID-19 pandemic and the rise of remote work[1]. Despite the potential COVID-19 migration, the population changes remain small and relatively stable. In addition to the anecdotal evidence, American Community Survey (ACS) 2021 shows an increase to the population, up 1,586 from 2020 and up 816 from 2015.

Much of the growth continues to occur outside of Superior, which has continued to lose population between 2015 and 2020. The growth is concentrated on the Minnesota side of the harbor with the Wisconsin side losing population overall between 2015 and 2020 (although the 2021 data show a slight increase over 2015). The areas of growth are varied, with the Township of Superior, Township of Duluth and Township of Parkland seeing the highest increases in population between 2015 and 2020, and the Cities of Duluth and Hermantown and the Town of Parkland showing the greatest growth when accounting for the 2021 population change.

[1] 'The Places Most Affected by Remote Workers' Moves Around the Country'. Emily Badger, Robert Gebeloff and Josh Katz. The New York Times. June 17, 2023.

Figure 1: Change in population by Municipality



Source: American Community Survey 2015, 2021 Table B01003

Table 1. Historic Population Trends

	2000	2010	2015	2020	2015-2020	2021	2015-2021
1 United States	281,421,9	308,745,5	316,515,0	331,449,2	14,934,260		
2 Minnesota	4,919,479	5,303,925	5,419,171	5,706,494	287,323		
3 Wisconsin	5,363,675	5,686,986	5,742,117	5,893,718	151,601		
7 St. Louis County,	200,528	200,226	200,506	200,231	(275)		
8 Douglas County, Wisconsin	43,287	44,159	43,799	44,295	496		
9 MIC (MN)	113,033	115,242	115,719	115,316	(403)	116,352	633
10 *Duluth city*	*86,918*	*86,265*	*86,178*	*85,852*	(326)	*86,711*	533
11 *Hermantown city*	*7,448*	*9,414*	*9,627*	*9,577*	(50)	*10,128*	501
12 *Proctor city*	*2,852*	*3,057*	*3,060*	*3,039*	(21)	*3,113*	53
13 *Rice Lake city*	*4,139*	*4,095*	*4,119*	*4,136*	17	*4,114*	(5)
14 *Grand Lake*	*2,621*	*2,779*	*2,789*	*2,793*	4	*2,728*	(61)
15 *Lakewood*	*2,013*	*2,190*	*2,449*	*2,177*	(272)	*2,117*	(332)
16 *Canosia township*	*1,998*	*2,158*	*2,213*	*2,328*	115	*2,210*	(3)
17 *Solway township*	*1,842*	*1,944*	*1,919*	*1,995*	76	*1,924*	5
18 *Duluth township*	*1,723*	*1,941*	*1,872*	*2,061*	189	*2,040*	168
19 *Midway township*	*1,479*	*1,399*	*1,493*	*1,358*	(135)	*1,267*	(226)
20 MIC (WI)	32,133	32,386	31,822	31,455	(367)	32,005	183
21 *Superior city*	*27,368*	*27,244*	*26,817*	*26,260*	(557)	*26,601*	(216)
22 *Superior town*	*2,058*	*2,166*	*2,035*	*2,103*	68	*2,167*	132
23 *Parkland town*	*1,240*	*1,220*	*1,330*	*1,553*	223	*1,670*	340
24 *Lakeside town*	*609*	*693*	*581*	*552*	(29)	*57*	(7)
25 *Superior village*	*500*	*664*	*700*	*709*	9	*69*	(4)
26 *Oliver village*	*358*	*399*	*359*	*278*	(81)	*29*	(62)
27 Total MIC	145,166	147,628	147,541	146,771	(770)	148,357	816

Source: Census 2000, 2010, 2020 Table DP1, American Community Survey 2015 Table B01003

Population Projections (2050)

The historical population trends, as displayed in table 1 above, serve as the basis for developing the population projections that were used to model future year conditions for the LRTP scenarios. According to the 2020 US Census the population of the MIC is 146,771, a more recent population estimate from the American Community Survey five-year estimates is 148,357. Table 2 below shows a project population of 152,587 in the MIC, an increase of 2.8% from the 2021 ACS population. The biggest increases in projected population are in the Cities of Proctor, Hermantown and Superior.

Table 2. Projected 2050 Population

		2020 US Census Population	2021 ACS Population	2050 Projected Population	Change 2021-2050	Percent Change 2021-2050
9	MIC (MN)	115,31	116,352	120,053	3,701	3.1
10	*Duluth city*	*85,852*	*86,711*	*89,126*	*2,415*	*2.7*
11	*Hermantown city*	*9,577*	*10,128*	*10,672*	*544*	*5.3*
12	*Proctor city*	*3,039*	*3,113*	*3,400*	*287*	*9.2*
13	*Rice Lake city*	*4,136*	*4,114*	*4,119*	-	-
14	*Grand Lake*	*2,793*	*2,728*	*2,789*	-	-
15	*Lakewood*	*2,177*	*2,117*	*2,449*	-	-
16	*Canosia township*	*2,328*	*2,210*	*2,213*	-	-
17	*Solway township*	*1,995*	*1,924*	*1,919*	-	-
18	*Duluth township*	*2,061*	*2,040*	*1,872*	-	-
19	*Midway township*	*1,358*	*1,267*	*1,493*	-	-
20	MIC (WI)	31,455	32,005	32,534	529	1.6
21	*Superior city*	*26,260*	*26,601*	*27,529*	*928*	*3.4*
22	*Superior town*	*2,103*	*2,167*	*2,035*	-	-
23	*Parkland town*	*1,553*	*1,670*	*1,330*	-	-
24	*Lakeside town*	*552*	*57*	*58*	-	-
25	*Superior village*	*709*	*69*	*70*	-	-
26	*Oliver village*	*278*	*29*	*35*	-	-
27	Total MIC	146,77	148,357	152,587	4,230	2.8

Source: Census 2020 Table DP1, American Community Survey 2021 Table B01003, MIC Travel Model

Population Characteristics

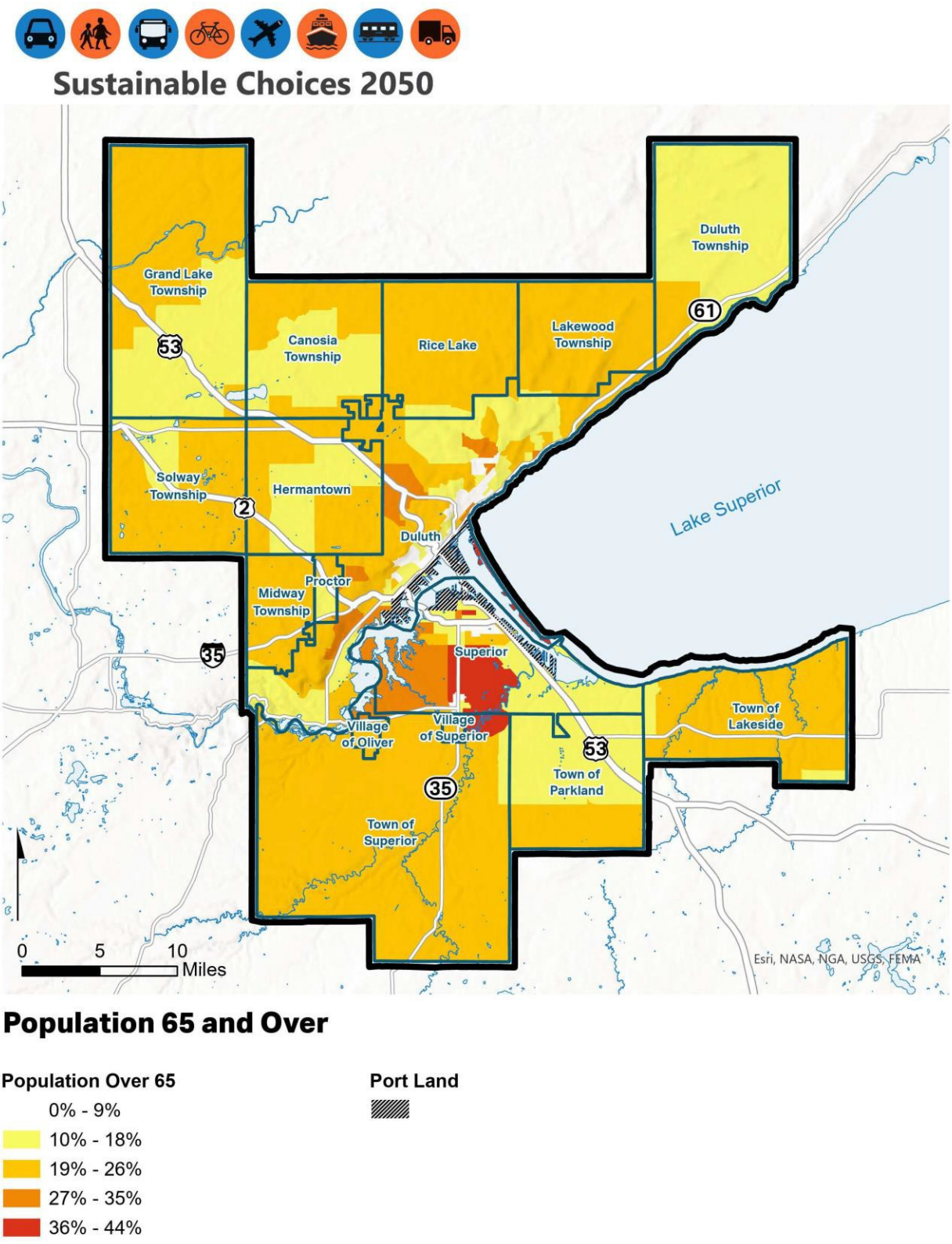
Age

The Duluth-Superior MIC's population continues to follow nationwide trends, with the proportion of older individuals increasing as the baby boomer generation ages. As shown in Figure 1, the area with higher concentrations of populations above 65 include the City of Duluth and the City of Superior.

A variation between the Duluth-Superior region and the nation is the number of young people (18 and younger). The MIC area has fewer persons in this age group compared to the nation, Minnesota, and Wisconsin. However, due to presence of the the University of Minnesota-Duluth and the University of Wisconsin-Superior, there is a large population of 18-24 year olds.

Both younger and older populations represent unique transportation needs and preferences. Young people tend to prefer walking, biking, transit and other modes of transportation and travel by car less. The aging population will also continue to increase the demand for more accessible transportation options in the MIC area.

Figure 2: Age Distribution 2021



Source: American Community Survey 2021Table B01001

Table 3. Population Aged 18 and Under and 65 and Over (2020)

Geography	Total:	Under 18 years	%	Over 65 years	%
United States	326,569,	73,296,73	22.4	52,362,8	16.0
Minnesota	5,600,16	1,299,284	23.2	887,576	15.8
Wisconsin	5,806,97	1,274,321	21.9	982,799	16.9
St. Louis	199,499	37,883	19.0	38,652	19.4
Douglas County,	43,497	8,587	19.7	8,079	18.6
MIC (MN)	**115,316**	**22,084**	**19.2**	**18,536**	**16.1**
Duluth city	85,852	15,381	17.9	13,412	15.6
Hermantown	9,577	2,543	26.6	1,493	15.6
Proctor city	3,039	68	22.5	676	22.2
Rice Lake city	4,136	69	16.9	815	19.7
Grand Lake	2,793	60	21.7	380	13.6
Lakewood	2,177	49	22.8	382	17.5
Canosia	2,328	51	22.3	385	16.5
Solway	1,995	44	22.5	369	18.5
Duluth	2,061	48	23.4	377	18.3
Midway	1,358	22	16.6	247	18.2
MIC (WI)	**31,455**	**6,297**	**20.0**	**5,160**	**16.4**
Superior city	26,260	5,305	20.2	4,133	15.7
Superior town	2,103	32	15.2	504	24.0
Parkland town	1,553	37	24.4	221	14.2
Lakeside town	552	10	18.8	88	15.9
Superior village	709	14	20.6	154	21.7
Oliver village	278	43	15.5	60	21.6
Total MIC	**146,771**	**28,381**	**19.3**	**23,696**	**16.1**

Source: 2020 Census Table S0101

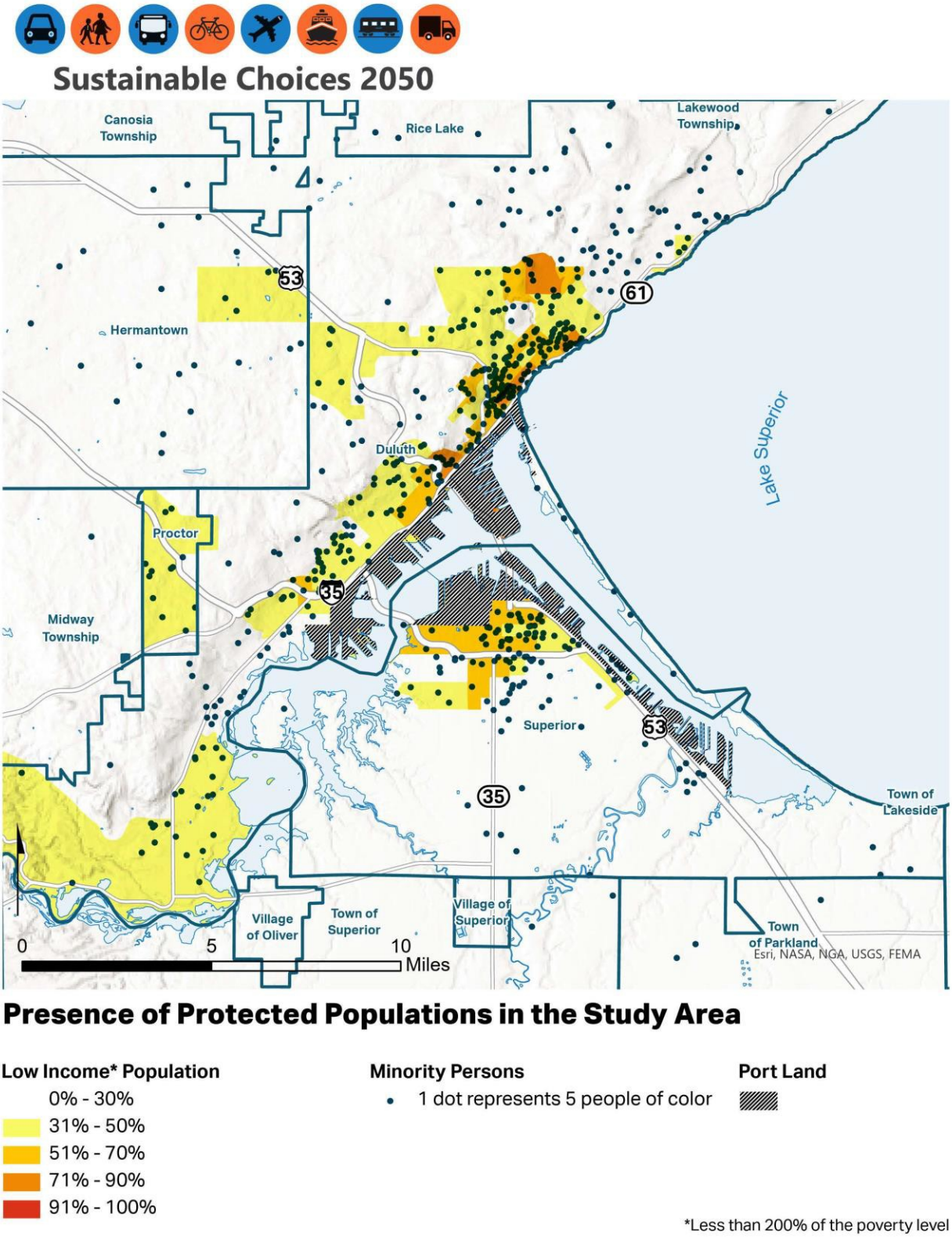
Populations of Special Transportation Concern

In addition to younger and older people, some additional populations in the MIC area exhibit particular needs in terms of the region's transportation system, including persons with disabilities, communities with environmental justice concerns including low income persons and those who are racially and ethnically diverse. Communities with environmental justice concerns are those that have been historically underserved or adversely impacted by transportation policy and system development. Environmental justice populations have unique transportation needs and preferences that must be understood when planning for public transportation projects.

Communities of environmental justice concerns are statistically more likely to have limited or no access to a vehicle and be dependent on public transit. They may also be more likely to walk or bike to destinations. People with limited proficiency in English may have difficulties attaining drivers' licenses or navigating transit systems. Finally, all persons with ambulatory difficulties face additional transportation barriers. These populations in the MIC area were identified using the 2020 Census and American Community Survey (2021) for population race, ethnic origin, poverty, income, ambulatory difficulties, persons speaking English less than 'very well', and vehicle access.

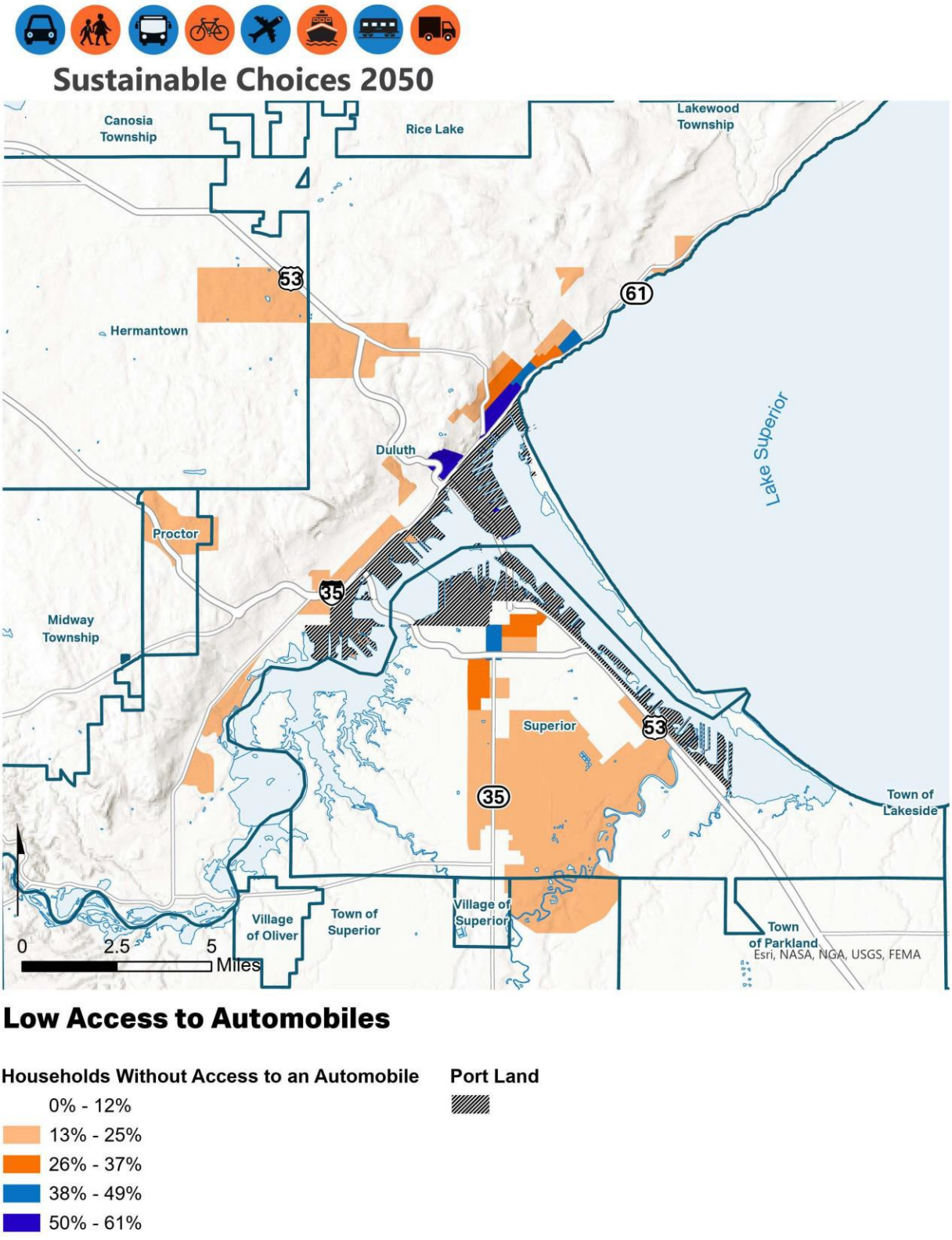
Tables 3 - 8 and Figures 3 - 5 describe the presence, magnitude, and home locations of these populations in the MIC area. Low-income populations, as defined by the United States Environmental Protection Agency (EPA), are those living with income less than 200% of the poverty level and make~~s~~ up nearly 20% of the population in the MIC area. There is also a significant population without access to a vehicle within the MIC area. Finally, diversity of race and ethnicity in the region is on the rise.

Figure 3: Minority and Low-Income Populations



Source: ACS 2021 Various Tables

Figure 4: Automobile Access



Source: ACS 2021 Table B25044

Race and Hispanic Origin

While gradual, the MIC area is trending more racially and ethnically diverse. Even since 2015, the population has become more diverse. In 2015 individuals identifying as 'white alone' made up 92% of the MIC area's population and in 2020 this population is down to 90.7%, with two or more races making up 4% of the total population. Hispanic or Latino individuals account for 2% of the MIC area's population, consistent with 2015. Additionally, the proportion of the population who report low proficiency with English has also grown in the region. In 2015, 9% of the MIC area's population spoke English less than 'very well', in 2020 that has increased to 10%. While these numbers aren't as high as other metropolitan areas in the nation, they make up an important and growing population within the MIC area with unique transportation needs.

Table 4. Population Race (2020)

	Geography	Total:	White	Black or African American	American Indian & Alaska Native	Asian	Native Hawaiian &Pacific Islander	Some other race	Two or more races:	% Minority Excluding White Alone
1	United States	333,287,562	202,889,017	40,603,656	3,205,331	19,696,980	665,807	24,444,482	41,782,289	39.12%
2	Minnesota	5,717,184	4,415,751	398,326	54,420	295,892	2,821	167,186	382,788	22.76%
3	Wisconsin	5,892,539	4,737,427	352,022	44,394	173,310	2,732	115,296	467,358	19.60%
7	St. Louis County, MN	199,532	179,813	3,431	3,604	1,578	0	956	10,150	9.88%
8	Douglas County, WI	43,497	40,071	546	798	543	0	239	1,300	7.88%
9	**MIC (MN)**	**115,316**	**104,366**	**2,344**	**1,758**	**1,384**	**39**	**540**	**4,885**	**9.50%**
10	Duluth city	85,852	76,475	2,057	1,462	1,193	30	488	4,147	10.92%
11	Hermantown city	9,577	8,786	233	92	60	9	30	367	8.26%
12	Proctor city	3,039	2,849	2	59	93	0	0	36	6.25%
13	Rice Lake city	4,136	3,999	0	22	6	0	22	87	3.31%
14	Grand Lake township	2,793	2,616	40	24	16	0	0	97	6.34%
15	Lakewood township	2,177	2,105	1	20	10	0	0	41	3.31%
16	Canosia township	2,328	2,328	0	0	0	0	0	0	0.00%
17	Solway township	1,995	1,924	0	56	0	0	0	15	3.56%
18	Duluth township	2,061	1,979	11	0	6	0	0	65	3.98%
19	Midway township	1,358	1,305	0	23	0	0	0	30	3.90%
20	**MIC (WI)**	**31,455**	**28,840**	**450**	**567**	**519**	**0**	**55**	**1,024**	**8.31%**
21	Superior city	26,260	23,775	447	519	507	0	50	962	9.46%
22	Superior town	2,103	2,076	0	7	5	0	0	15	1.28%
23	Parkland town	1,553	1,493	0	35	3	0	0	22	3.86%
24	Lakeside town	552	549	0	0	0	0	2	1	0.54%
25	Superior village	709	678	3	4	0	0	3	21	4.37%
26	Oliver village	278	269	0	2	4	0	0	3	3.24%
27	**Total MIC**	**146,771**	**133,206**	**2,794**	**2,325**	**1,903**	**39**	**595**	**5,909**	**9.24%**

Source: American Community Survey 2021 Table P9

Table 5. Population Hispanic Ethnicity (2020)

Geography	Total (2020)	Hispanic or Latino (2020)	%
United States	333,287,562	63,553,639	19%
Minnesota	5,717,184	333,830	6%
Wisconsin	5,892,539	447,022	8%
St. Louis County, MN	199,532	3,906	2%
Douglas County, WI	43,497	730	2%
MIC (MN)	**115,316**	**2,736**	**2%**
Duluth city	85,852	2,206	3%
Hermantown city	9,577	191	2%
Proctor city	3,039	145	5%
Rice Lake city	4,136	22	1%
Grand Lake township	2,793	24	1%
Lakewood township	2,177	92	4%
Canosia township	2,328	17	1%
Solway township	1,995	35	2%
Duluth township	2,061	4	0%
Midway township	1,358	-	0%
MIC (WI)	**31,455**	**577**	**2%**
Superior city	26,260	543	2%
Superior town	2,103	-	0%
Parkland town	1,553	19	1%
Lakeside town	552	4	1%
Superior village	709	10	1%
Oliver village	278	1	0%
Total MIC	**146,771**	**3,313**	***2%***

Source: American Community Survey 2021Table P9

Table 6. Population speaking English less than 'very well'

Geography	Total:	Speak English less than "very	Speak Spanish:	Speak other Indo-Europea	Speak Asian and Pacific	Speak other languages
United States	306,919,	66,093,0	40,537,3	11,270,6	10,800,4	3,484,63
Minnesota	5,249,06	622,132	203,634	104,185	179,091	135,222
Wisconsin	5,475,90	475,226	254,258	102,875	94,786	23,307
St. Louis County, MN	189,486	6,586	2,070	1,863	1,014	1,639
Douglas County, WI	41,410	1,143	304	318	398	123
MIC (MN)	**108,972**	**976**	**1,619**	**1,453**	**632**	**809**
Duluth city	81,122	870	1,368	1,219	608	685
Hermantown city	8,952	18	110	94	-	24
Proctor city	2,901	45	7	61	13	12
Rice Lake city	3,971	-	49	15	2	49
Grand Lake township	2,614	12	30	15	-	6
Lakewood township	2,027	9	20	10	4	4
Canosia township	2,204	11	11	14	-	-
Solway township	1,915	3	10	3	-	2
Duluth township	1,961	4	5	17	5	14
Midway township	1,305	4	9	5	-	13
MIC (WI)	**29,928**	**457**	**230**	**258**	**386**	**96**
Superior city	24,938	434	217	225	376	78
Superior town	2,043	11	7	10	5	-
Parkland town	1,489	5	4	16	3	18
Lakeside town	521	-	2	2	-	-
Superior village	680	3	-	3	-	-
Oliver village	257	4	-	2	2	-
Total MIC	**138,900**	**1,433**	**1,849**	**1,711**	**1,018**	**905**

Source: American Community Survey 2021 Table S1601

Poverty and Income

The MIC area has seen little change in poverty for the last several decades. The proportion of families living in poverty is less than the national average. However, any family living in poverty faces additional challenges including those related to transportation. Table 6 below shows the number and percentage of families living in poverty by municipality within the MIC area in comparison to the United States and Minnesota and Wisconsin. The threshold for poverty varies based on family size with $13,171 at the low end (family of one person) and $53,905 at the high end (families of nine or more persons). In the MIC area, families living below 200% of the poverty level are considered 'low income.'

Table 7 shows household income within the MIC area by municipality in comparison to the United States and Minnesota and Wisconsin. Despite the MIC area having fewer families living below the poverty level, the median household income for low-income households is less, on average, than the United States and Minnesota and Wisconsin.

Table 7. Poverty by Families

Geography	All Families	Percent Below Poverty Level:	Families of 3 or 4 People	Percent Below Poverty Level:	All Families with Income Below 200% of the Poverty Level	Percent Below 200% of the Poverty Level
United States	79,849,830	9.1%	32,207,636	9.5%	18,793,647	23.5%
Minnesota	1,404,798	5.6%	536,202	5.5%	230,260	16.4%
Wisconsin	1,479,364	6.8%	541,985	7.5%	287,447	19.4%
St. Louis County, MN	48,309	6.9%	16,350	7.5%	9,254	19.2%
Douglas County, WI	11,423	7.8%	739	12.6%	2,380	20.8%
MIC (MN)	**25,951**	**5.7%**	**9,506**	**4.9%**	**4,488**	**17.3%**
Duluth city	17,944	7.2%	6,465	6.1%	3,566	19.9%
Hermantown city	2,414	3.4%	1,088	5.6%	256	10.6%
Proctor city	756	0.9%	300	0.0%	126	16.7%
Rice Lake city	1,199	2.3%	377	0.0%	197	16.4%
Grand Lake township	752	3.9%	318	2.5%	51	6.8%
Lakewood township	677	1.5%	186	2.7%	70	10.3%
Canosia township	605	0.7%	250	0.0%	95	15.7%
Solway township	618	0.5%	216	0.0%	66	10.7%
Duluth township	615	1.1%	188	0.0%	47	7.6%
Midway township	371	1.6%	118	0.0%	14	3.8%
MIC (WI)	**7,905**	**8.8%**	**2,895**	**7.0%**	**1,814**	**22.9%**
Superior city	6,315	10.4%	2,306	8.7%	1,625	25.7%
Superior town	697	1.9%	271	0.0%	90	12.9%
Parkland town	442	1.4%	155	1.9%	52	11.8%
Lakeside town	169	5.3%	44	0.0%	13	7.7%
Superior village	190	2.6%	89	0.0%	19	10.0%
Oliver village	92	5.4%	30	0.0%	15	16.3%
Total MIC	**33,856**	**6.4%**	**12,401**	**5.4%**	**6,302**	**18.6%**

Source: American Community Survey 2021 Table S1901

Table 8. Household Income

Geography	Total households:	Less than $10,000	$10,000 to $14,999	$15,000 to $24,999	$25,000 to $34,999	$35,000 to $49,999	$50,000 to $74,999	$75,000 to $99,999	$100,000 to $149,999	Median income (dollars)
United States	122,354,219	5.8%	4.1%	8.5%	8.6%	12.0%	17.2%	12.8%	15.6%	64,994.00
Minnesota	2,207,988	4.1%	3.4%	7.0%	7.5%	11.5%	17.4%	14.1%	18.3%	73,382.00
Wisconsin	2,377,935	4.6%	4.1%	8.6%	9.0%	13.0%	18.9%	14.1%	16.3%	63,293.00
St. Louis County,	86,229	6.8%	4.5%	9.9%	9.8%	13.3%	18.5%	12.5%	15.9%	57,480.00
Douglas County,	18,994	5.2%	5.5%	9.9%	10.8%	13.2%	18.1%	14.3%	15.9%	56,855.00
MIC (MN)	**48,035**	**6.4%**	**4.2%**	**9.6%**	**9.7%**	**12.5%**	**18.3%**	**12.5%**	**16.0%**	
Duluth city	36,526	7.5%	4.8%	10.8%	10.1%	13.5%	19.0%	11.3%	13.7%	54,084.00
Hermantown city	3,546	3.0%	0.8%	8.4%	13.3%	9.8%	13.7%	12.5%	17.9%	80,500.00
Proctor city	1,222	2.5%	5.2%	8.1%	12.0%	10.4%	16.6%	12.4%	25.4%	61,176.00
Rice Lake city	1,814	5.8%	2.4%	4.5%	5.7%	10.0%	16.9%	17.2%	25.9%	78,795.00
Grand Lake	1,026	3.1%	4.0%	3.6%	4.1%	5.8%	11.2%	19.8%	27.3%	98,583.00
Lakewood	832	1.6%	2.6%	4.1%	3.1%	9.5%	15.7%	23.8%	24.0%	90,692.00
Canosia township	866	0.0%	1.5%	2.9%	6.7%	5.9%	27.1%	18.8%	28.9%	81,806.00
Solway township	804	2.6%	1.0%	4.4%	7.1%	15.2%	13.1%	19.8%	28.4%	85,625.00
Duluth township	812	0.2%	2.3%	4.4%	7.0%	7.6%	17.1%	14.4%	21.3%	91,875.00
Midway township	587	1.2%	0.7%	4.4%	5.5%	9.5%	24.5%	20.4%	22.1%	78,083.00
MIC (WI)	**13,904**	**5.3%**	**6.2%**	**10.8%**	**11.7%**	**13.1%**	**17.7%**	**13.3%**	**14.9%**	
Superior city	11,726	5.4%	7.0%	12.0%	12.7%	13.8%	16.7%	13.0%	13.8%	48,830.00
Superior town	907	4.0%	1.7%	5.1%	6.4%	6.6%	18.2%	16.8%	21.3%	88,309.00
Parkland town	587	4.6%	1.2%	1.0%	6.5%	11.1%	27.1%	11.1%	28.1%	73,988.00
Lakeside town	252	11.5%	0.0%	8.3%	1.6%	9.5%	27.0%	18.7%	15.9%	67,500.00
Superior village	293	3.4%	5.1%	3.4%	7.2%	12.6%	26.3%	16.7%	15.7%	68,162.00
Oliver village	139	3.6%	1.4%	3.6%	16.5%	15.8%	28.8%	12.2%	11.5%	54,464.00
Total MIC	**61,939**	**6.1%**	**4.6%**	**9.9%**	**10.2%**	**12.7%**	**18.2%**	**12.7%**	**15.8%**	

Source: American Community Survey 2021 Table S1901

Ambulatory Difficulty

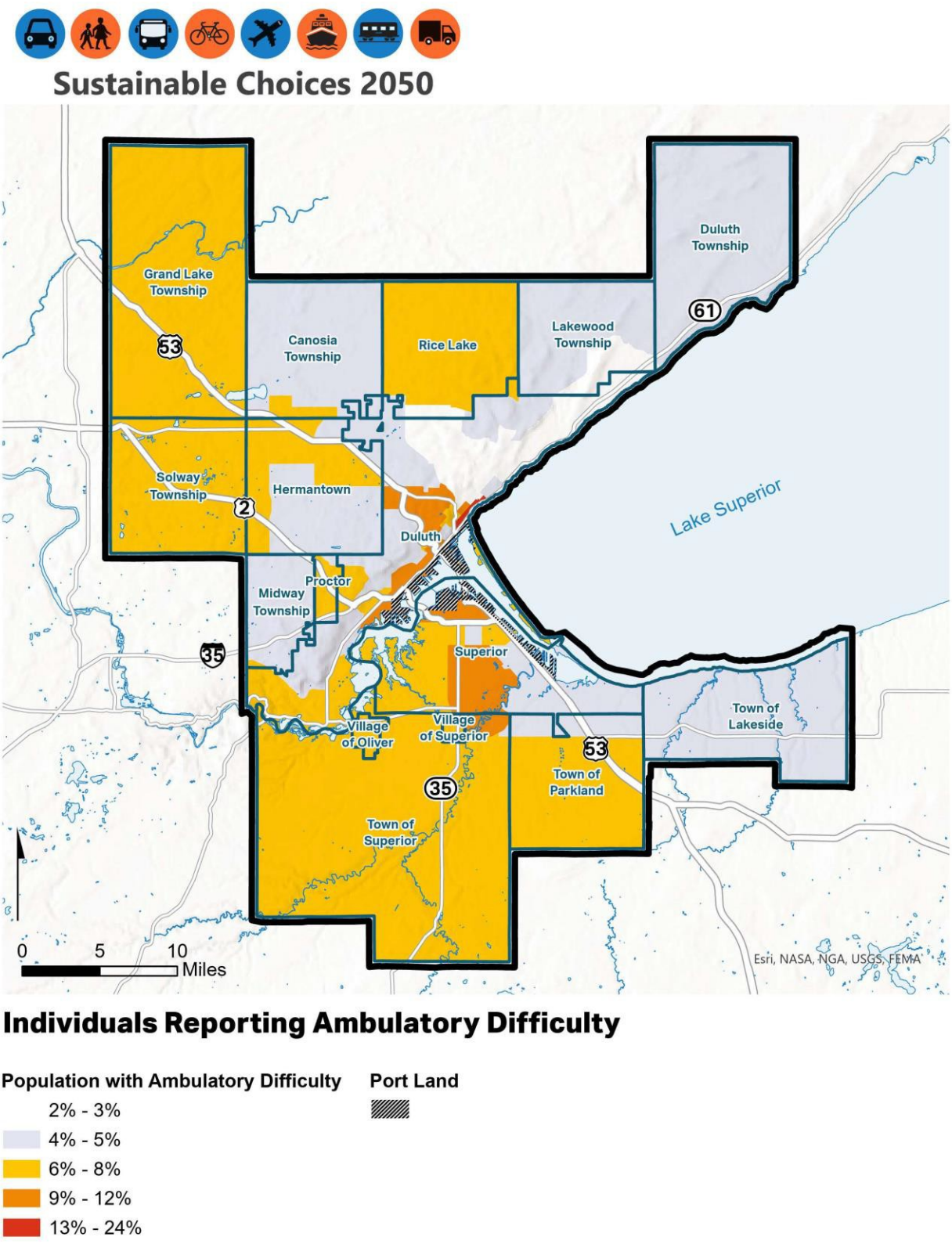
The census defines an ambulatory difficulty as those who have 'serious difficulty walking or climbing stairs'. Since 2015, the proportion of the MIC population reporting an ambulatory difficulty has decreased from 7% to 5.6%. Despite this reduction, this population's mobility needs are vital to consider when making transportation planning decisions.

Table 9. Population with ambulatory difficulty

Geography	Total civilian noninstitutionalized population	With an ambulatory difficulty:	Population under 18 years	Population 18 to 34 years	Population 35to 64 years	Population 65 to 74 years	Population 75 years and over
United States	321,525,041	20,630,366	318,839	947,468	8,369,44	4,453,604	6,541,012
Minnesota	5.541.421	260.240	4.608	12.175	98.594	53.588	91.275
Wisconsin	5,735,703	319,970	4,673	14,877	127,307	68,291	104,822
St. Louis County, MN	196,204	11,879	165	652	5,114	1,999	3,949
Douglas County, WI	42,921	2,571	5	115	1,166	644	641
MIC (MN)	**112.785**	**6.113**	**87**	**478**	**2.572**	**917**	**2.059**
Duluth city	84,257	4,382	41	227	2,008	679	1,427
Hermantown city	8,931	564	-	200	117	48	199
Proctor city	2,907	252	35	11	99	37	70
Rice Lake city	4,124	283	-	-	85	29	169
Grand Lake township	2,665	83	-	10	45	4	24
Lakewood township	2,177	133	-	5	36	51	41
Canosia township	2,325	133	4	-	95	8	26
Solway township	1,984	146	7	16	34	37	52
Duluth township	2,057	64	-	4	28	14	18
Midway township	1,358	73	-	5	25	10	33
MIC (WI)	**30.993**	**1.925**	**4**	**89**	**871**	**508**	**453**
Superior city	25.821	1.662	4	89	759	432	378
Superior town	2,103	72	-	-	18	37	17
Parkland town	1,550	83	-	-	37	18	28
Lakeside town	552	44	-	-	26	5	13
Superior village	689	49	-	-	28	13	8
Oliver village	278	15	-	-	3	3	9
Total MIC	**143,778**	**8,038**	**91**	**567**	**3,443**	**1,425**	**2,512**

Source: American Community Survey 2021 Table S1810

Figure 5: Ambulatory Difficulty



Source: ACS 2021 Table S1810

Regional Travel Patterns

The Census Bureau's Longitudinal Employment-Household Dynamics (LEHD) data is one of the most comprehensive datasets available regarding employment and worker flow. The data is drawn from state unemployment insurance (UI) earnings records that provide a link between home location and job location. In some cases, the UI records may link employees to a payroll location they do not actually commute to. Additionally, more employees are working remotely and not commuting than ever before. For these reasons, the data may overrepresent how many employees are commuting outside of the MIC area. Finally, it should be noted that work trips account for only a portion of the overall travel in the region.

We know that since the 2020 COVID-19 pandemic, the 2020 census data shows a slight increase in the total MIC area population. This population increase could represent an influx of remote workers from larger cities like Minneapolis. The LEHD data supports this by showing an increase in the number of employees living within the MIC area with work addresses outside of the MIC area and the number of employees traveling more than 25 miles since 2015.

Table 10. MIC Employment

	Employed in the MIC Area	Employed and Living in the MIC Area	Employed in the MIC Area but Living Outside	Living in the MIC Area but Employed Outside
2015	87,360	56,203	31,157	14,764
2016	88,112	55,456	32,656	14,620
2017	88,671	55,085	33,586	15,890
2018	87,582	52,891	34,691	15,977
2019	90,915	54,770	36,145	15,334
2020	84,482	50,354	34,128	14,542
2021	82,817	48,672	34,145	15,159
Change 2015-2021	(4,543)	(7,531)	2,988	385

Source: On the Map 2021

Table 11. MIC Travel Distance to Jobs

	Total Jobs	Jobs less than 10 miles	10 to 24 Miles	25 to 50 Miles	Greater than 50 Miles
2015	70,076	71.7%	11.5%	1.3%	15.3%
2021	63,831	68.8%	11.7%	1.5%	18.0%

Source: On the Map 2021

Short Trip Analysis

Using Replica, a data mobility model generated from multiple sources, the project team looked at origins and destinations for all short automobile trips within the MIC area by Traffic Analysis Zone (TAZ), a Census geography used for transportation planning. Short trips were defined as trips one mile or less and trips three miles or less. One-mile and three-mile trips were used as they represent opportunities for trips that could potentially be pedestrian and bicycle trips. The results of the one-mile and three-mile trips were very similar, with concentration of origin and destination of both trip types in five key zones within the MIC area. The zones include downtown Duluth, downtown Superior, University of Minnesota-Duluth campus, West Duluth, and the Miller Hill Mall commercial area.

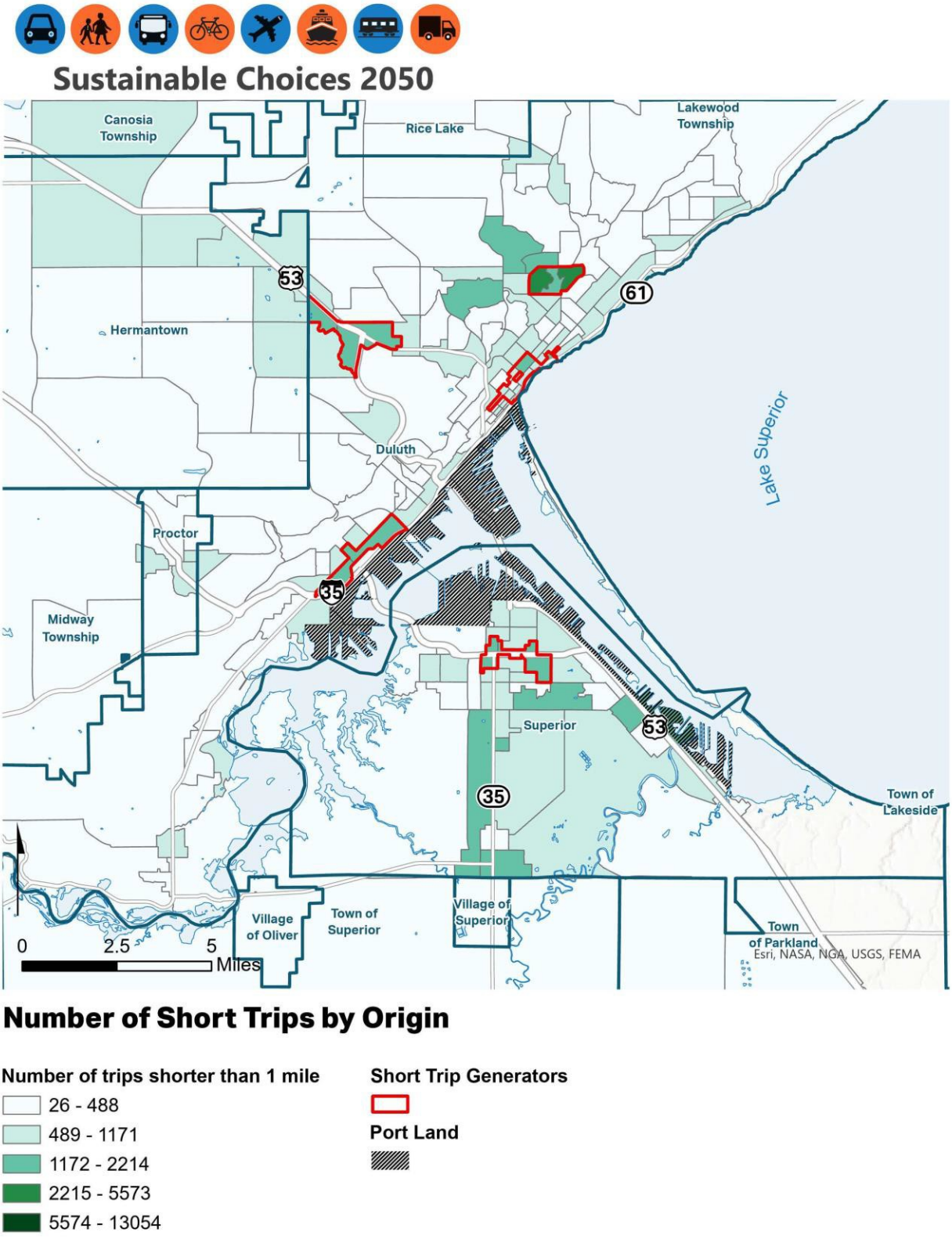
Characteristics of the zones were considered to understand why short trips were concentrated in these areas. The commonality amongst four of the five zones is the presence of dense commercial activity. The fifth zone, University of Minnesota-Duluth area, is an outlier in that it doesn't have much commercial land use. Still, it can be assumed the university is a generator on its own, with a high number of visitors, students, faculty, and staff that live in proximity to the university.

The areas of concentrated short trips are areas of opportunity for future bicycle or pedestrian trips. To support short car trips being replaced with walking or biking trips, an analysis was completed to understand how the zones perform in terms of safety, transit access, and more.

Zones that are well served by transit but have a significant number of bicycle and pedestrian crashes represent an opportunity for safety improvements and the addition of dedicated bicycle and pedestrian infrastructure. Finally, the short trip zones are in areas of populations with special transportation concern, i.e. low income, racially diverse, and those with ambulatory difficulties.

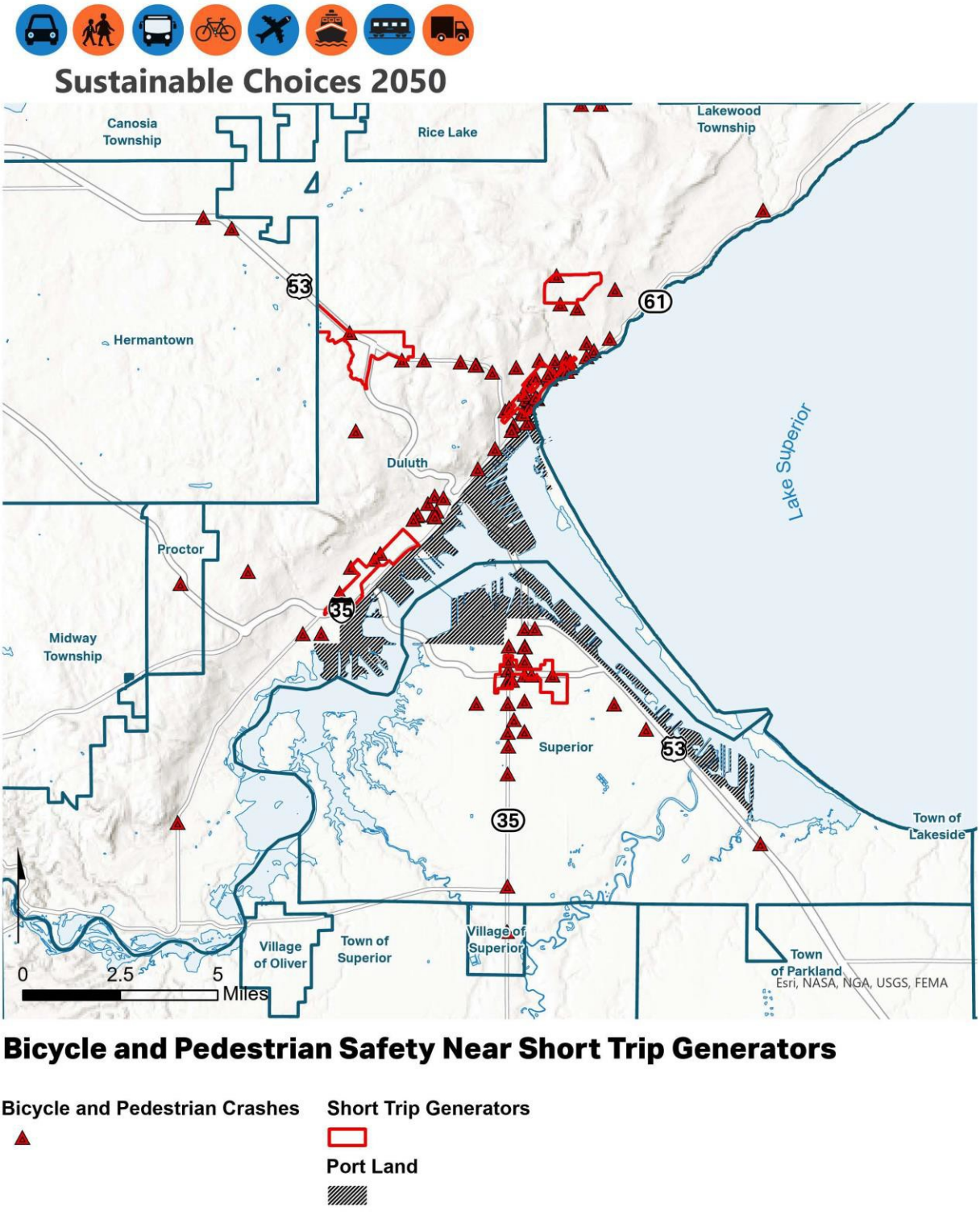
These represent key zones within the MIC area for bicycle and pedestrian infrastructure and safety improvements for a multitude of reasons. Many short trips are currently made in these zones and more bike/ped infrastructure could help support more sustainable short trips being made. These zones also represent a high population of those with special transportation consideration, which could rely on biking and walking more than other populations in the MIC area.

Figure 6: Short Trip Generators



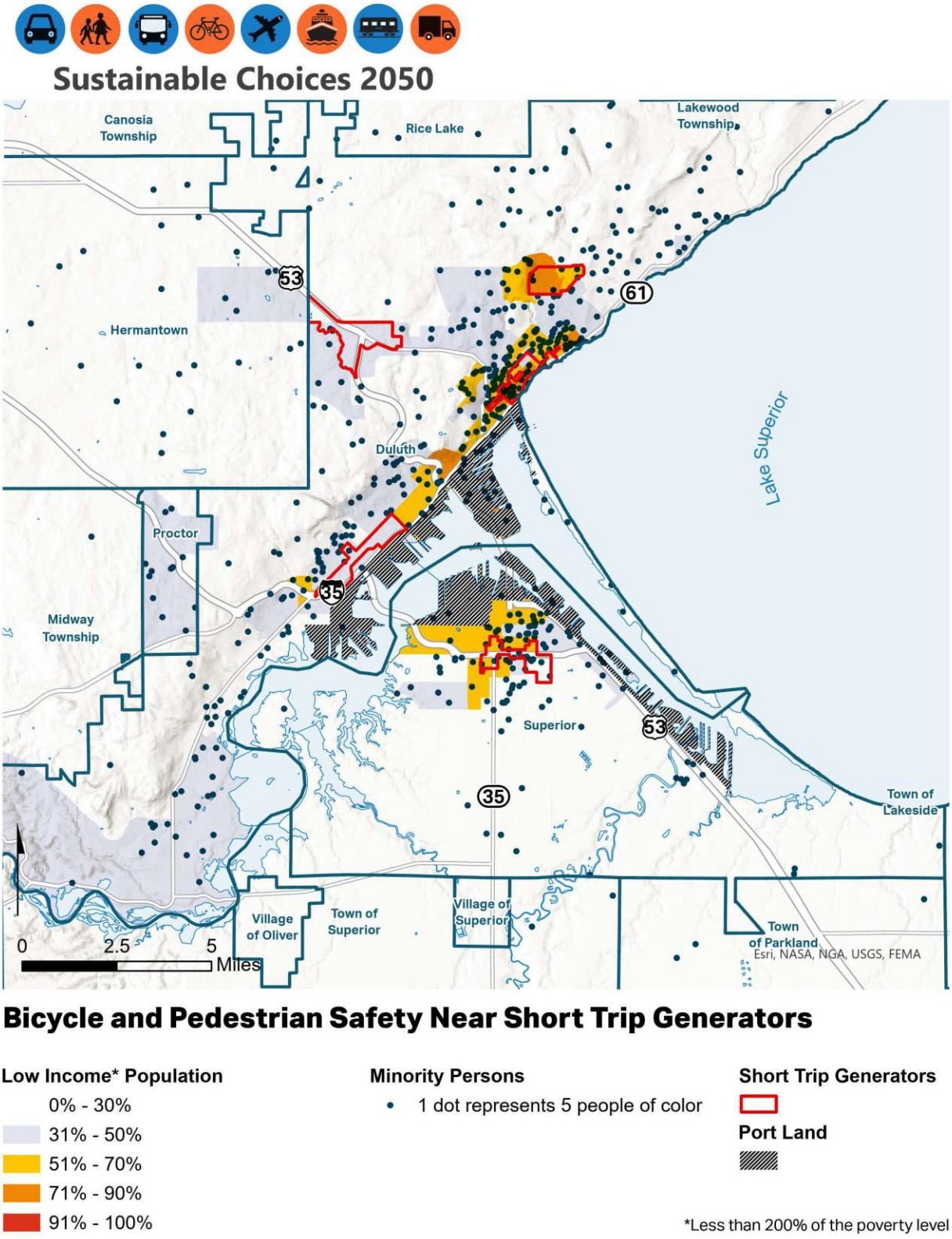
Source: Replica

Figure 7: Bicycle and Pedestrian Crashes 2017-2021



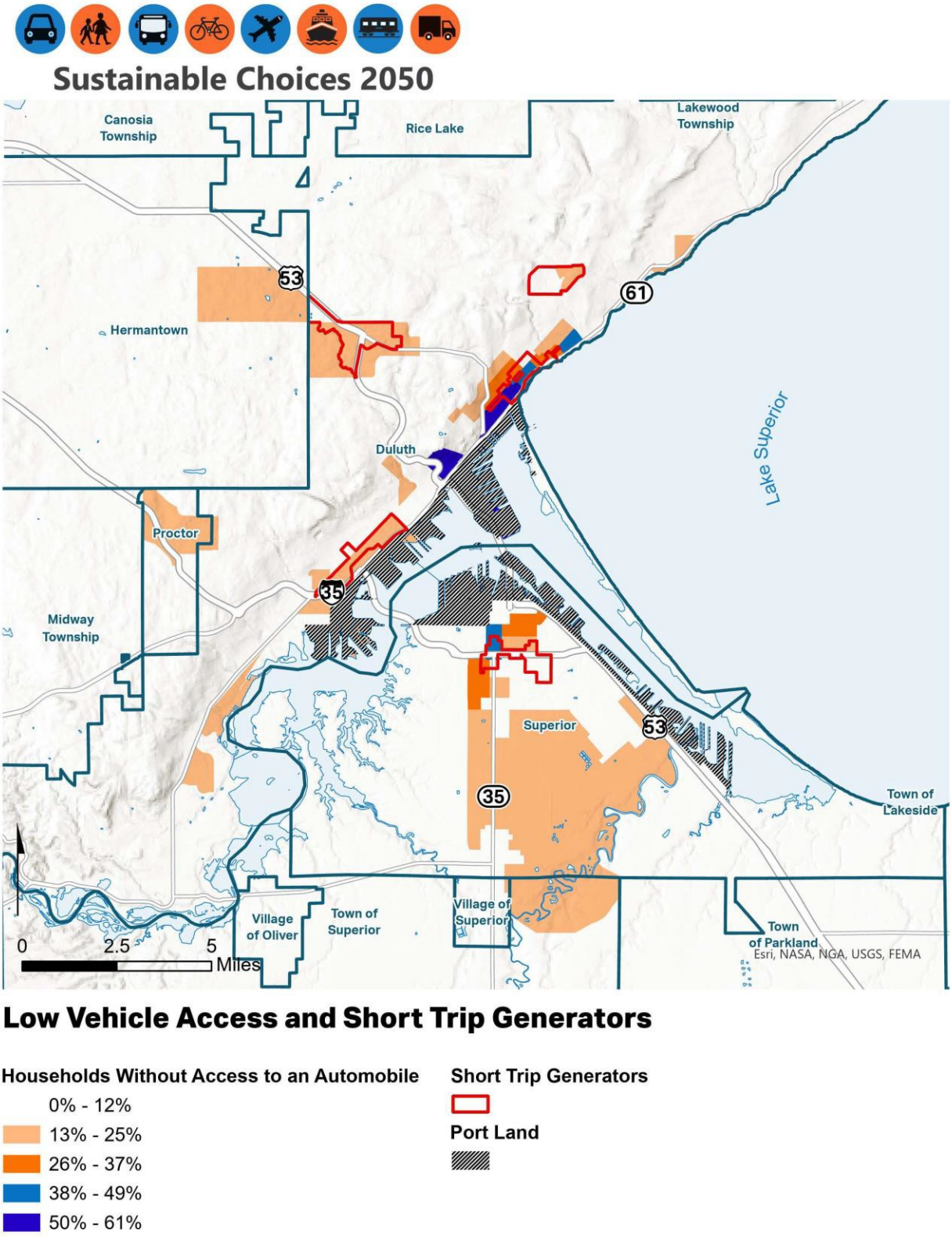
Source: MnDOT, WisDOT 2017-2021

Figure 8: Populations of Special Transportation Concern and Short Trip Generators



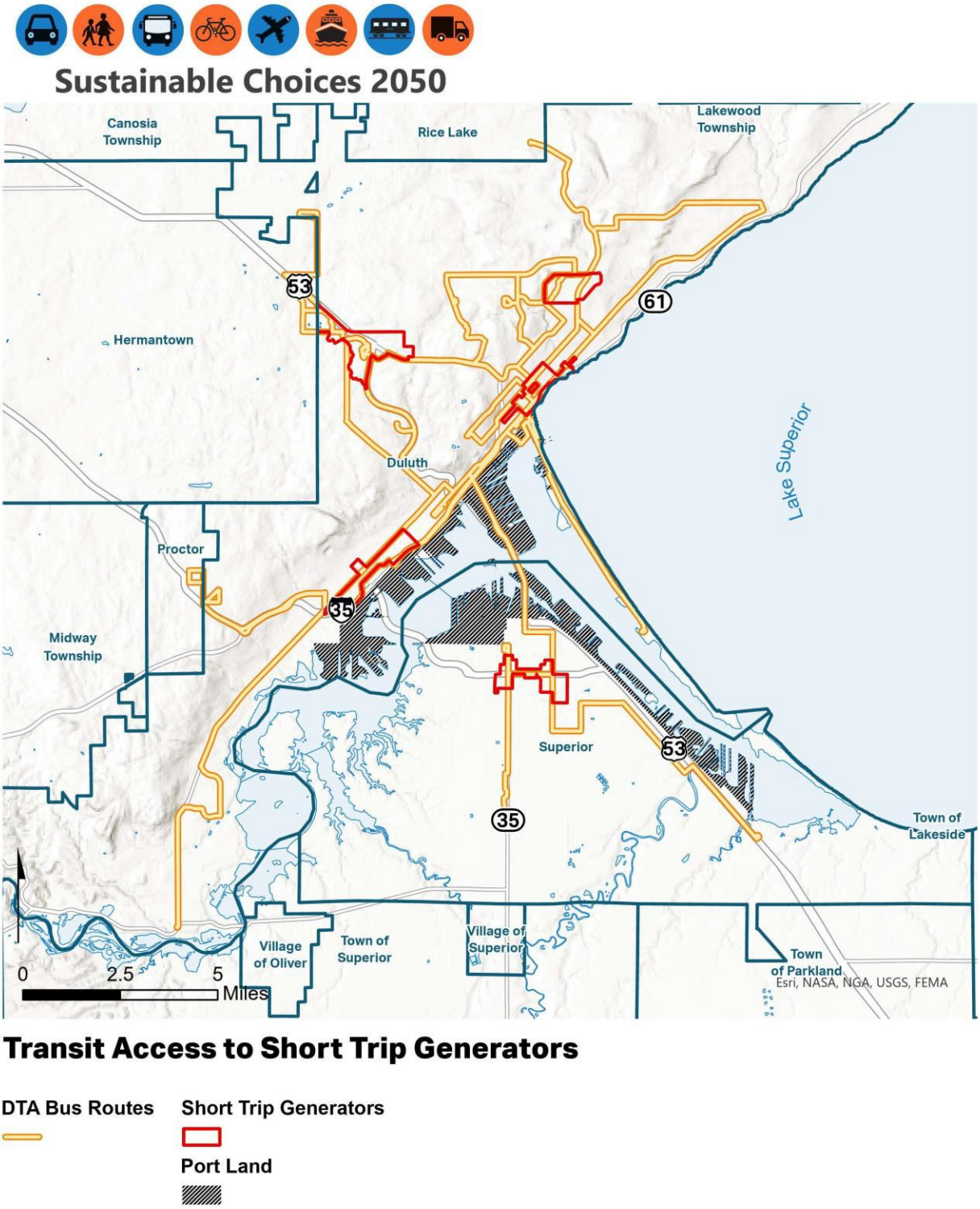
Source: ACS 2021

Figure 9: Vehicle Access and Short Trip Generators



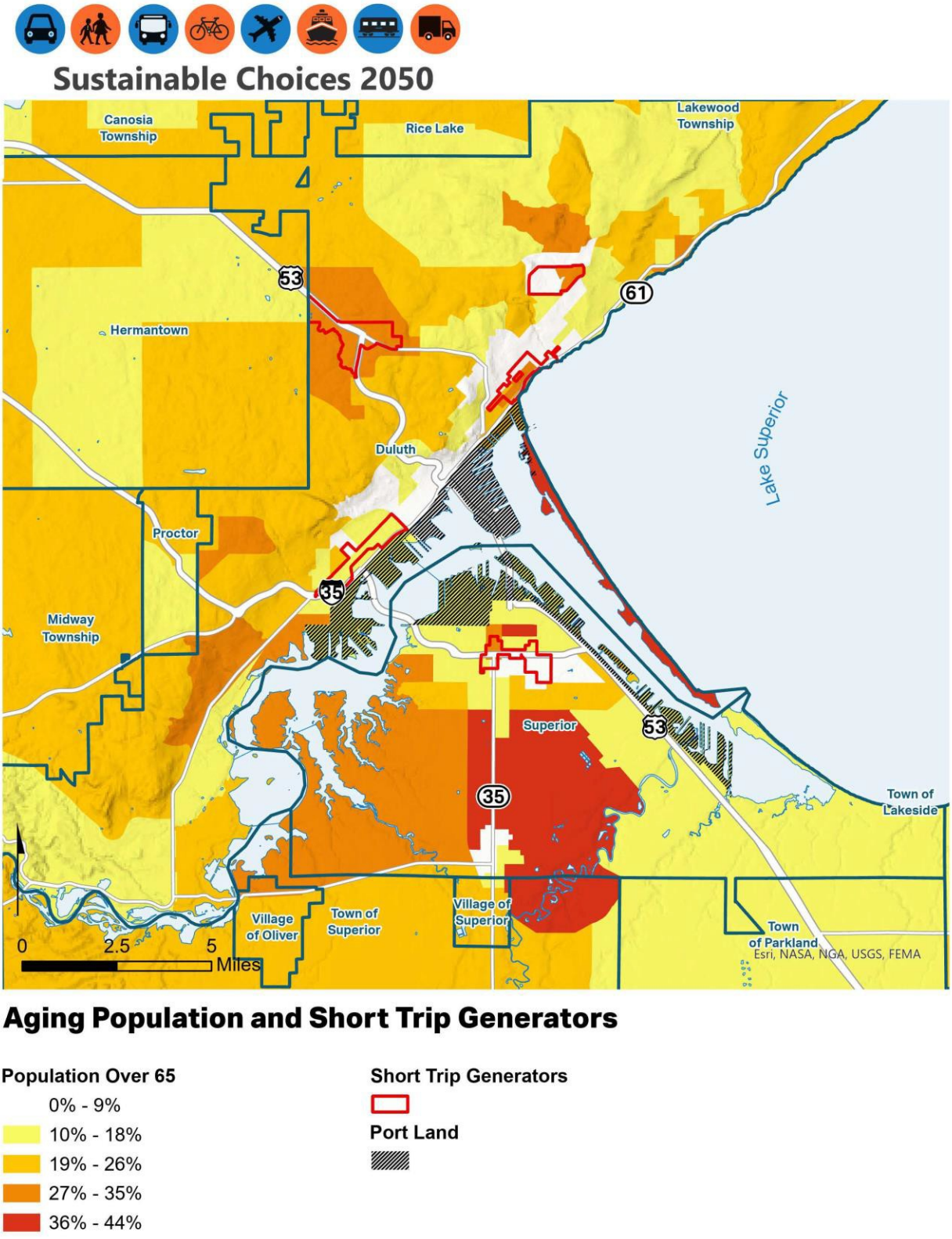
Source: ACS 2021

Figure 10: Bus Routes and Short Trip Generators



Source: DTA 2022

Figure 11: Aging Populations and Short Trip Generators



Source: ACS 2021