Chapter 7 Socio-Economic Conditions

For MDOT to develop the Travel Demand Forecast Model (the model) for the Jackson MPO roadway network, which estimates traffic volumes and travel behavior in the area, an analysis of the 2018 land use and socio-economic conditions, as well as a 2050 projection for these characteristics, was used. The 2050 socio-economic estimates were presented in the form of projections that describe the extent and location of growth likely to occur within Jackson County. The projections also help to predict potential travel problems, which are important when considering priorities for transportation facility improvements.

Data on population, number of occupied housing units, and retail/non-retail employment for the base year 2018 and the horizon year 2050 have been distributed to the 534 Traffic Analysis Zones (TAZs) that comprise the model area. TAZs are geographic areas (polygons) that divide a planning region into similar areas of land use and travel activity and act as a simplification of origin and destination points within the community. TAZs are different in each community and can change in size over time. They are established to obtain a meaningful representation of traffic behavior. A map of Jackson's TAZ's is on the following page.

The base year socio-economic (SE) data was obtained based on information from the 2018 American Community Survey (ACS) 5-Year Estimate and from the MDOT employment list which contains the number of employees, the sector, and the geolocation of businesses residing within the Jackson MPO. This "master list" of data is purchased by MDOT from two database sources: InfoGroup (a InfoUSA Company) and Hoovers (a Dunn-Bradstreet Company).

The SE data forecast for the model was obtained considering the recently released 2020 Census data and the Regional Economic Models, Incorporated, or REMI model as well as MDOT projections. Growth assumptions were also based on the TAZ's potential for increased development, availability of vacant land, current zoning regulations, and recent developments in the area that would encourage additional growth.

Socio-economic information for the base year and future years, including future year growth factors by TAZ, was provided to each governmental jurisdiction through memorandums, spreadsheets, and area-specific maps of the socio-economic data by analysis year for comment and review. After the review, the socio-economic data was adjusted where needed, sent for the approval of the JACTS Technical and Policy Committees, and included in the model to develop base year and future year travel patterns.

Traffic Analysis Zones (TAZs) 286 287 **Traffic Analysis Zones** 291 292 Urban Area Boundary Census 2020 Tompkins Township Springport Township **Rives Township** Henrietta Township Miles Waterloo Township Blackman Township 403 Sandstone Township Parma Township Leoni Township Grass Lake Township City of Jackson 621 622 Concord Township **Spring Arbor Township** 683 Summit Township Napoleon Township 638 639 Norvell Township Pulaski Township Hanover Township Liberty Township Columbia Township 227

Figure 7-1: Traffic Analysis Zones - Jackson County

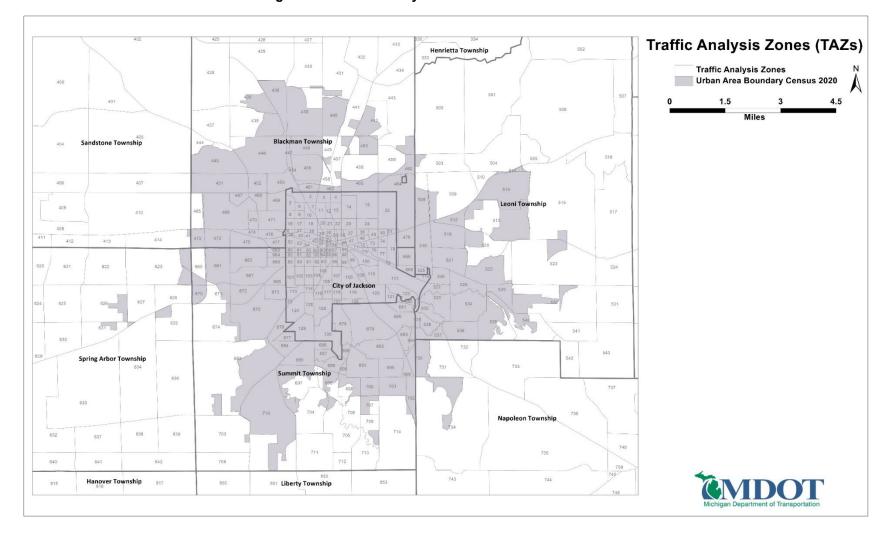


Figure 7-2: Traffic Analysis Zones – Jackson Urban Area

Population

The base year population for the plan was based on previous trends as depicted by the 2018 ACS Estimate. The population projection for 2050 considered the 2020 Census, the REMI forecast data, MDOT SE data projections, and inputs from the local community. The population projections were developed for all jurisdictions within the County and then broken down to the TAZ level.

Table 7-1: 2018 & 2050 Population Estimates and 2020 Census Population by Local Unit of Government

Local Government	2018	2020 Census	2050	% Change (2018-50)
Blackman Township	23,559	25,568	28,406	14.4%
Columbia Township ^a	7,427	7,393	7,872	6.0%
Concord Township ^a	2,556	2,755	2,833	10.8%
Grass Lake Township ^a	5,740	6,069	6,762	17.8%
Hanover Township ^a	3,791	3,662	3,824	0.9%
Henrietta Township	4,746	4,673	4,968	4.7%
City of Jackson	32,900	31,383	28,143	-14.5%
Leoni Township	13,700	13,847	14,217	3.8%
Liberty Township	2,971	3,059	3,336	12.3%
Napoleon Township	6,731	6,788	7,066	5.0%
Norvell Township	2,933	2,800	2,794	-4.7%
Parma Township b	3,259	3,205	3,417	4.8%
Pulaski Township	2,123	1,883	1,811	-14.7%
Rives Township	4,634	4,750	4,873	5.2%
Sandstone Township	3,436	3,390	3,685	7.2%
Spring Arbor Township	8,169	8,530	9,062	10.9%
Springport Township a	2,166	2,142	2,062	-4.8%
Summit Township	22,814	22,920	24,454	7.2%
Tompkins Township	2,715	2,618	2,680	-1.3%
Waterloo Township	2,943	2,931	2,916	-0.9%
Jackson County	159,313	160,366	163,802	2.8%

a Township population includes village residents.

The approved data estimated for the 2018 base year for Jackson County indicated a population of 159,313, which is 0.66% smaller than the 2020 Census total population of 160,366 recently released. Based on the estimates provided by MDOT, the Jackson County population is projected to continue to grow and reach a total of 163,802, which would represent an increase of 2.14% from the 2020 Census data.

Occupied Housing Units

Occupied housing unit numbers for the base year are based on the 2018 ACS estimate while the forecast numbers are based on REMI and MDOT projections as well as local agencies' comments and knowledge of recent developments in the area. Because of the high correlation between occupied housing units and population, the occupied housing

b Parma Village residents included in the Parma Township Total

unit projections are also used to estimate where increases or decreases in the population may potentially occur inside of the model area.

Table 7-2: 2018 & 2050 Occupied Housing Units by Local Unit of Government

Local Government	2018	2020 Census	2050	% Change (2018-50)
Blackman Township	8,098	8,675	9,653	19.2%
Columbia Township a	3,018	3,191	3,585	18.8%
Concord Township a	958	1,062	1,104	15.2%
Grass Lake Township a	2,254	2,355	2,744	21.7%
Hanover Township a	1,448	1,425	1,490	2.9%
Henrietta Township	1,835	1,900	2,025	10.4%
City of Jackson	12,817	12,751	12,859	0.3%
Leoni Township	5,816	5,649	5,748	-1.2%
Liberty Township	1,202	1,236	1,383	15.1%
Napoleon Township	2,788	2,805	2,851	2.3%
Norvell Township	1,253	1,232	1,261	0.6%
Parma Township b	1,244	1,204	1,235	-0.7%
Pulaski Township	784	736	722	-7.9%
Rives Township	1,669	1,720	1,764	5.7%
Sandstone Township	1,269	1,297	1,464	15.4%
Spring Arbor Township	2,675	2,862	3,110	16.3%
Springport Township a	855	801	802	-6.2%
Summit Township	9,243	9,464	9,877	6.9%
Tompkins Township	1,127	1,025	1,137	0.9%
Waterloo Township	1,158	1,177	1,180	1.9%
Jackson County	61,511	62,567	65,994	7.0%

a Township population includes village residents

The U.S. average household size has been steadily declining since 1970 when the number of persons per household was 3.14, falling to 2.76 in 1980, 2.63 in 1990, 2.59 in 2000, and 2.53 in 2018. The rate of decline is expected to continue over the next 30 years but at a slower rate. In Jackson County, the average household size reflected the national decline until 2010, falling from 3.23 in 1970 to 2.62 in 1990 and continuing to decline to 2.55 persons per household in 2000 and 2.48 persons per household in 2010. However, based on the 2020 Census this number was reverted to 2.56 persons per household, which is just 1% smaller than the 2.59 estimated by the approved 2018 population and occupied housing unit numbers. The average household size in Jackson County is projected to align with the national trends and see a slight decrease to approximately 2.48 persons per household by the year 2050. Michigan is expected to see an increase in employment over the next 30 years which will encourage more people to remain or move to Michigan. Jackson County is expected to see an increase in population as a result of the positive economic changes which also create a demand for housing.

b Parma Village residents included in the Parma Township Total

The 2018 model base year data estimates that there were 61,511 occupied housing units within the study area, which is above the 2010 number of 60,771 occupied housing units and below the 2020 Census number of 62,567 occupied housing units. By the year 2050, the projections estimate a total of 65,994 occupied housing units in Jackson County, which is an increase of 5.5% when compared to the 2020 Census numbers. The projected growth in occupied housing units was allocated to the TAZs by examining local land use plans and discussions with city, village, and township officials regarding current residential development trends. The trends indicate moderate growth in the urban and outlying townships.

Employment

Based on the MDOT employment list containing InfoGroup and Hoovers employment data, 2018 employment for Jackson County was approximately 74,311, with a breakdown of 63,398 in non-retail (manufacturing, service, government-related, and others) and 10,913 in retail jobs.

Table 7-3: 2018 & 2050 Employment Estimates by Local Unit of Government

			%	Non-	Non-	%			%
Local Government	Retail	Retail	Change	Retail	Retail	Change	Total	Total	Change
	2018	2050	(2018-50)	2018	2050	(2018-50)	2018	2050	(2018-50)
Blackman Township	4,461	4,485	0.5%	13,025	13,741	5.5%	17,486	18,227	4.2%
Columbia Township ^a	552	621	12.5%	2,255	2,524	11.9%	2,807	3,145	12.0%
Concord Township a	89	94	5.6%	849	923	8.7%	938	1,015	8.2%
Grass Lake Township ^a	186	186	0.0%	1,580	1,719	8.8%	1,766	1,905	7.9%
Hanover Township ^a	48	53	10.4%	696	765	9.9%	744	818	9.9%
Henrietta Township	68	69	1.5%	433	487	12.5%	501	556	11.0%
City of Jackson	3,335	3,513	5.3%	25,156	28,955	15.1%	28,491	32,468	14.0%
Leoni Township	729	762	4.5%	4,596	5,466	18.9%	5,325	6,229	17.0%
Liberty Township	66	67	1.5%	370	438	18.4%	436	505	15.8%
Napoleon Township	107	108	0.9%	1,516	1,656	9.2%	1,623	1,764	8.7%
Norvell Township	29	34	17.2%	207	247	19.3%	236	282	19.5%
Parma Township b	64	64	0.0%	508	596	17.3%	530	616	16.2%
Pulaski Township	9	9	0.0%	133	158	18.8%	142	167	17.6%
Rives Township	27	28	3.7%	462	556	20.3%	489	584	19.4%
Sandstone Township	79	80	1.3%	1,666	1,869	12.2%	1,745	1,949	11.7%
Spring Arbor Township	159	163	2.5%	1,888	2,043	8.2%	2,047	2,206	7.8%
Springport Township ^a	19	19	0.0%	433	459	6.0%	452	479	6.0%
Summit Township	796	852	7.0%	7,057	7,554	7.0%	7,853	8,406	7.0%
Tompkins Township	27	28	3.7%	174	223	28.2%	201	251	24.9%
Waterloo Township	63	65	3.2%	394	464	17.8%	457	528	15.5%
Jackson County	10,913	11,300	3.5%	63,398	70,843	11.7%	74,311	82,145	10.5%

a Township population includes village residents

b Parma Village residents included in the Parma Township

In the year 2050, the total labor force for the study area is projected to increase by 10.5% to a total of 82,145 workers, with 70,843 workers in non-retail and 11,300 in retail jobs. The study area employment by type was applied to the 534 TAZs based on assumptions of growth, stabilization, and current trends for each employment sector.

Employment forecasting is the mixing of objective and subjective data. Judgment is required in selecting the type of forecast to be implemented, determining the procedures for making the forecast, and developing a process for reviewing population growth and employment factors. The influx or loss of a new employer or industry can have a considerable impact on an area's development.

Although socio-economic projections can be a helpful tool in planning for future growth and development, projections can be modified as time progresses to reflect actual development impacts. The projections used in the Jackson 2050 LRTP, summarized in Table 7-4, will be re-evaluated periodically to address changes in the population, occupied housing units, and employment that may occur.

Table 7-4: 2018 & 2050 Jackson County Totals

Year	Total Population	Occupied Households	Retail	Employment Non-Retail	Total
2018	159,313	61,511	10,913	63,398	74,311
2050	163,802	65,994	11300	70,843	82,145