Prepared for:

Great Falls MPO

GREAT FALLS AREA LONG RANGE 2024 TRANSPORTATION PLAN

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Socioeconomics and Land Use

1.0 INTRODUCTION

Population and economic growth in the Great Falls region have remained moderate and consistent for the past few decades. In recent years, Great Falls has experienced a rebound with upward growth trends due, in part, to a population influx that occurred during and after the COVID-19 pandemic. Economic indicators suggest that Great Falls is thriving in areas such as employment, market support, and affordable housing, providing an incentive for people to relocate to the area. As Great Falls and Cascade County continue to grow and change, it is important to understand population and economic trends to properly accommodate and prepare for the area's current and future transportation needs. In combination with population and employment growth, changes in land use and socioeconomic trends can help inform transportation-related decisions, as these characteristics can have important influences on how residents move throughout the community. This memorandum evaluates baseline socioeconomic conditions and defines future growth projections to aid in determining transportation needs to accommodate existing and future users of the transportation system.

A review of population demographics was conducted to gain an understanding of historical and current trends in population, age, employment, and other socioeconomic conditions. Understanding the composition of the population is necessary, as the data may influence the types of transportation improvements that are identified. For example, an aging population may indicate a need for transit services and/or non-motorized infrastructure improvements, whereas the presence of a disadvantaged or underserved population may warrant other considerations to make the transportation system more equitable.

Existing land uses and potential land use changes have a direct influence on the transportation network and its use. For this reason, it is important to review community development patterns to help understand where community conditions may be favorable for new residential and commercial growth. By using population, employment, and other socioeconomic trends as aids, the future transportation needs can be holistically evaluated.

A travel demand model of the transportation system for Cascade County was built by the Montana Department of Transportation (MDT). Information from the analysis provided in this memo was used to update the allocations of future residential and employment growth. The changes to the system that are projected to occur by the year 2045 were incorporated into the model to forecast future transportation conditions.

1.1. STUDY AREA

The study area boundary for the 2023 *Great Falls Area Long Range Transportation Plan* (LRTP) coincides with the boundary used in preceding plan updates. The boundary includes all lands within the City of Great Falls, Malmstrom Air Force Base (AFB), the unincorporated communities of Black Eagle and Gibson Flats, and adjacent lands in Cascade County where suburban development has occurred or may occur in the future. The LRTP boundary is shown in **Figure 1** and will be used for all aspects of the LRTP planning process. All major employers and developed residential land uses are included within the boundary as well as those areas likely to be developed in the next 20 years.



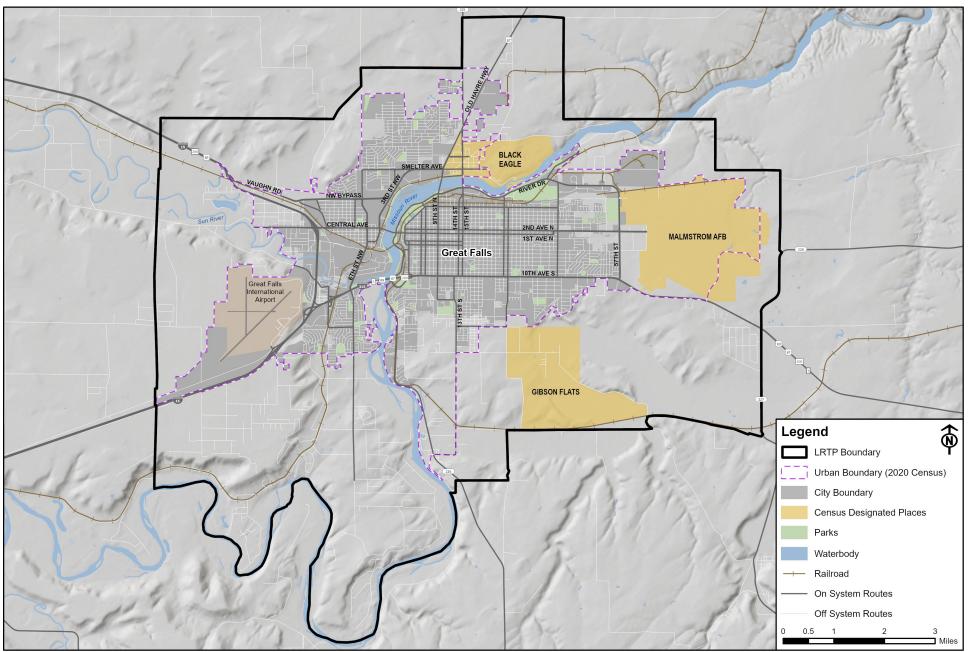


Figure 1: Study Area



2.0 POPULATION AND DEMOGRAPHIC TRENDS

Understanding population characteristics and growth trends within the study area is crucial for the long range planning process. To properly accommodate and address transportation needs of current and future residents, it is important to recognize both the number of people living in and around the study area as well as their key demographic characteristics. This will help assure all transportation users have access to appropriate, desirable, and efficient transportation facilities.

2.1. HISTORIC POPULATION TRENDS

Table 1 shows the total populations for Cascade County, the City of Great Falls, and the various Census Designated Places (CDP) from decennial censuses over the 1970 to 2020 period. CDPs are delineated by the Census Bureau to provide data for settled concentrations of population that are identifiable by name but are not legally incorporated. Population data is available for Malmstrom AFB over the 1970-2010 period. The Black Eagle CDP was initially created for the 2000 Census and the Gibson Flats CDP was created for the 2010 Census. Accordingly, data for earlier censuses is not available for these subareas of Cascade County. **Table 1** also shows the overall percent change in residents since 1970. Population data for the State of Montana and the United States (US) provide benchmarks to help compare local population growth trends.

Area	1970	1980	1990	2000	2010	2020	Change (1970-2020)
	81,804	80,696	77,691	80,357	81,327	84,414	, , , , , , , , , , , , , , , , , , ,
Cascade County	01,004			,	,	,	2,610
Net Change (%)		-1.4%	-3.7%	3.4%	1.2%	3.8%	3.2%
City of Great Falls	60,091	56,725	55,097	56,690	58,505	60,442	351
Net Change (%)		-5.6%	-2.9%	2.9%	3.2%	3.3%	0.6%
Malmstrom AFB CDP	8,374	6,675	5,938	4,544	3,472	4,131	-4,243
Net Change (%)		-20.3%	-11.0%	-23.5%	-23.6%	19.0%	-50.7%
Black Eagle CDP	(a)	(a)	(a)	914	904	949	35 ^(b)
Net Change (%)					-1.1%	5.0%	3.8%
Gibson Flats CDP	(a)	(a)	(a)	(a)	199	203	4 ^(b)
Net Change (%)						2.0%	2.0%
State of Montana	694,409	786,690	799,065	902,195	989,415	1,084,225	389,816
Net Change (%)		13.3%	1.6%	12.9%	9.7%	9.6%	56.1%
United States	203,392,031	226,545,805	248,709,873	281,421,906	308,745,538	331,449,281	128,057,250
Net Change (%)		11.4%	9.8%	13.2%	9.7%	7.4%	63.0%

Table 1: Historic Decennial Census Population Data (1970 - 2020)

Source: US Bureau of the Census, Census of the Population

^(a) No data available

^(b) Change provided for available range of dataset



Table 1 shows the total population of Cascade County decreased over the 1970 to 1990 period but has increased steadily over the past 30 years. The City of Great Falls experienced a similar trend, with the most recent census recording the highest population since incorporation. The population of Malmstrom AFB decreased sharply every decade from 1970 to 2010. Between the 2010 and 2020 censuses, the Malmstrom AFB population increased slightly, but remains approximately half that of the 1970 population. The population of the Black Eagle CDP increased by 35 residents since the first census count, while the population of the Gibson Flats CDP has remained at approximately 200 residents since it was designated as a CDP. Fluctuations in population are heavily influenced by natural resource availability and military activity in the area.

Both the State of Montana and the US showed population increases during each decade between 1970 and 2020. Overall, the population of the US and Montana increased by 63 percent and 56 percent, respectively, over the 1970-2020 period. During the same period, the total population of the county increased by approximately 3.2 percent and the population of the city showed an overall increase of 0.6 percent. Over the past three decades, 1990 to 2020, the county's population increased by 8.7 percent and the city's population grew by 9.7 percent.

Table 2 presents historical compound annual growth rates (CAGR) for the populations of Cascade County, the City of Great Falls, and other local geographies and compares them with the growth rates for Montana and the US over the same time periods. The population losses seen in Cascade County and the City of Great Falls during the 1970s and 1980s, coupled with the slow growth over the last 20 years, have resulted in long term growth rates of near zero. However, positive rates of annual population growth have been recorded for both the county and city in the last 10 to 30 years, although these annual growth rates are well below those for the state and nation.

2.2. GEOGRAPHIC MOBILITY

The American Community Survey (ACS), conducted by the US Census Bureau, publishes detailed estimates on the US population's geographic mobility each year. Mobility measures key migration patterns including how many people moved to new homes in the past year, and from where. **Table 3** presents inbound geographic mobility patterns for Cascade County and the City of Great Falls based on ACS Profile Report for the 2017-2021 period. The ACS data are period estimates, meaning they represent population and housing characteristics over a specific data collection period. Accordingly, the total populations shown may differ from those recorded during the 2020 Census.

Table 2: Historic Population Compound Average Growth Rates (1970 - 2020)

Area	Last 5 Decades (1970 – 2020)	Last 3 Decades (2000 – 2020)	Last Decade (2010 – 2020)
Cascade County	0.06%	0.25%	0.37%
City of Great Falls	0.01%	0.32%	0.33%
Malmstrom AFB CDP	-1.40%	-0.48%	1.75%
Black Eagle CDP	(a)	0.19%	0.49%
Gibson Flats CDP	(a)	(a)	0.20%
State of Montana	0.90%	0.92%	0.92%
United States	0.98%	0.82%	0.71%

Source: US Bureau of the Census, Census of the Population ^(a) No data available

Table 3: Inbound Geographic Mobility (2017 - 2021)

		<u>'</u>			
	Cascad	le County	Great Falls		
Migration Patterns (Inbound)	%	Number	%	Number	
Total Population (Over Age 1)		82,739		59,541	
Moved to Area	17.9%	14,810	18.9%	11,253	
From Same County	9.9%	8,194	11.2%	6,692	
From Different County within Montana	3.1%	2,543	3.2%	1,928	
From Different State	4.5%	3,733	4.2%	2,482	
From Abroad	0.4%	365	0.3%	181	

Source: ACS Report, 2017-2021 (5-year estimates)



The geographic mobility data suggest that approximately 18 to 19 percent of the residents in Cascade County and Great Falls changed their place of residence between 2017 and 2021. The majority of the moves were made by residents already living within Cascade County (10 to 11 percent). Approximately 3 percent of moves originated from a different Montana county, and approximately 4 percent of moves originated outside the state. A small percentage of individuals are estimated to have moved from outside the country, accounting for approximately 180 residents in the city and 365 residents in the county over the 2017 to 2021 period. Note, **Table 3** does not portray the number of residents that moved away from the city and county. Outbound statistics for the 2017-2021 ACS are not currently available.

2.3. RACE AND ETHNICITY

Table 4 depicts race and ethnicity characteristics in Cascade County, the City of Great Falls, and the local geographies based on the 2020 decennial census. Similar statistics are provided for the State of Montana and the United States for comparison purposes. The populations of Cascade County, the City of Great Falls, and Gibson Flats CDP are predominately white with percentages of minority populations generally similar to those for the State of Montana. The racial and ethnic compositions of the Malmstrom AFB and Black Eagle CDPs are more diverse that those of the county and city. The Malmstrom AFB CDP has a higher concentration of Black or African American, Asian, and Hispanic or Latino residents compared to the broader county and city geographies. The Black Eagle CDP has a higher proportion of American Indian and Alaska Native residents than any of the other geographies.

The Little Shell Tribe of Chippewa Indians of Montana has been state recognized in Montana for several years. On December 20, 2019, the National Defense Authorization Act was signed into law and granted the Tribe Federal recognition. The Tribe has many members across the state as well as a Tribal Council in the City of Great Falls but does not have a designated reservation in Montana. However, the Little Shell Tribe owns land northwest of the City of Great Falls centered on Hill 57 which will be used to create a food sovereignty program to confront food shortages that the tribal community has faced.

Area	Cascade County	City of Great Falls	Malmstrom AFB CDP	Black Eagle CDP	Gibson Flats CDP	State of Montana	United States
White	81.5%	80.6%	59.7%	77.6%	88.7%	83.1%	57.8%
Black or African American	1.3%	1.1%	8.1%	0.3%		0.5%	12.1%
American Indian and Alaska Native	4.4%	5.3%	0.6%	8.7%	1.5%	6.0%	0.7%
Asian	1.1%	1.1%	3.7%	0.2%		0.7%	5.9%
Native Hawaiian and Other Pacific Islander	0.1%	0.1%	0.4%	0.2%		0.1%	0.2%
Some Other Race	0.5%	0.5%	1.1%	0.3%	1.0%	0.4%	0.5%
Two or More Races	6.3%	6.7%	7.7%	9.6%	4.4%	5.0%	4.1%
Hispanic or Latino (of any race)	4.8%	4.5%	18.7%	3.1%	4.4%	4.2%	18.7%
Total Population	84,414	60,442	4,131	949	203	1,084,225	331,449,281

Table 4: Population Race and Ethnicity Characteristics (2020)

Source: US Bureau of the Census, Census of the Population





2.4. AGE AND SEX DISTRIBUTION

Table 5 depicts the age composition for Cascade County, the City of Great Falls, local geographies, as well as the state and nation based on the 2017-2021 ACS. The data show that the age distributions of the county and city's populations are similar to that of the state and nation. In contrast, the Malmstrom AFB CDP population is notably younger while the Black Eagle and Gibson Flats CDPs skew older than the broader geographies. While the median age of the nation, state, county, and city is around 38 to 40 years old, the median ages for the Malmstrom AFB, Black Eagle, and Gibson Flats CDPs are 22.6, 45.2, and 70.9, respectively. Malmstrom AFB CDP has the highest percentage of working-age population (20 to 64 years) and no residents over the age of 65. Conversely, the Gibson Flats CDP only has residents over the age of 65. The Black Eagle CDP has the second lowest percentage of residents under the age of 20 compared to all other geographies, after Gibson Flats. The county, city, state, and nation all have similar proportions of children and young adult residents (under 20 years), which averages around 24 percent.

Area	Median	Total	Under 20 Years		20 to 64 Y	ears	65 Years and Over		
Aled	Age	Population	Number	%	Number	%	Number	%	
Cascade County	38.0	84,178	20,830	24.7%	47,754	56.7%	15,594	18.5%	
City of Great Falls	39.0	60,381	14,268	23.6%	34,470	57.1%	11,643	19.3%	
Malmstrom AFB CDP	22.6	4,098	1,577	38.5%	2,521	61.5%	-	0.0%	
Black Eagle CDP	45.2	752.0	122	16.2%	461	61.3%	169	22.5%	
Gibson Flats CDP	70.9	98	-	0.0%	-	0.0%	98	100.0%	
State of Montana	40.0	1,077,978	259,711	24.1%	615,813	57.1%	202,454	18.8%	
United States	38.4	329,725,481	82,998,739	25.2%	193,838,121	58.8%	52,888,621	16.0%	

Table 5: Age Distribution (2017 - 2021)

Source: ACS Report, 2017-2021 (5-year estimates)

As shown in **Table 6**, all geographies except the CDPs have male-to-female ratios of approximately 1.0, indicating that there is an equal distribution of men to women in these locations. All of the CDPs have a higher percentage of males than females, with male-to-female ratios of 1.1, 1.3, and 1.5, in the Malmstrom AFB, Black Eagle, and Gibson Flats CDPs, respectively.

Table 6: Sex Distribution (2017 - 2021)

Area	Total	Male		Female	Male to	
Alea	Population	Number	%	Number	%	Female Ratio
Cascade County	84,178	42792	50.8%	41,386	49.2%	1.0
City of Great Falls	60,381	29,825	49.4%	30,556	50.6%	1.0
Malmstrom AFB CDP	4,098	2,099	51.2%	1,999	48.8%	1.1
Black Eagle CDP	752	421	56.0%	331	44.0%	1.3
Gibson Flats CDP	98	58	59.2%	40	40.8%	1.5
State of Montana	1,077,978	545,671	50.6%	532,307	49.4%	1.0
United States	329,725,481	163,206,615	49.5%	166,518,866	50.5%	1.0

Source: ACS Report, 2017-2021 (5-year estimates)



2.5. DISABILITY STATUS

Data for the local and national geographies were consulted to obtain information about the number of residents with disabilities, including hearing or vision difficulties, cognitive difficulties, and self-care or independent living difficulties. This information is important to review since segments of the population with disabilities may require special accommodations for transport or unique considerations in the design of transportation infrastructure.

As shown in **Table 7**, all geographies except the Malmstrom AFB and Gibson Flats CDPs have similar proportions of disabled individuals, ranging from approximately 12 to 15 percent. The Malmstrom AFB CDP has the lowest percentage of residents with disabilities (1.8 percent) while the Gibson Flats CDP has the highest percentage (85.7 percent). In alignment with the data presented previously in **Table 5**, the Malmstrom AFB CDP residents living with disabilities are all under the age of 64 and all of the residents in the Gibson Flats CDP with disabilities are over the age of 65. The Black Eagle CDP's residents with disabilities are all over the age of 18.

Table 7: Disability Status (2017 - 2021)

A	Civilian	# of Disabled	% of	Under 18 Years		18 to 64 Y	'ears	65 Years an	d Over
Area	Population	Individuals	Population	Number	%	Number	%	Number	%
Cascade County	80,819	11,680	14.5%	777	6.7%	5,821	49.8%	5,082	43.5%
City of Great Falls	58,621	9,021	15.4%	633	7.0%	4,691	52.0%	3,697	41.0%
Malmstrom AFB CDP	2,668	48	1.8%	13	27.1%	35	72.9%	-	0.0%
Black Eagle CDP	752	117	15.6%	-	0.0%	42	35.9%	75	64.1%
Gibson Flats CDP	98	84	85.7%	-	0.0%	-	0.0%	84	100.0%
State of Montana	1,063,595	146,768	13.8%	10,215	7.0%	70,623	48.1%	65,930	44.9%
United States	324,818,565	41,055,492	12.6%	3,270,678	8.0%	20,537,729	50.0%	17,247,085	42.0%

Source: ACS Report, 2017-2021 (5-year estimates)

2.6. COMMUTING AND TRAVEL CHARACTERISTICS

Estimates of the total share of workers who commute or work at home, the transportation modes used by commuters, vehicles available to workers, location of worker's jobs, and the mean travel times to work for commuters are presented in **Table 8** for workers in Cascade County, Great Falls, and local geographies, with statistics for the state and the nation provided for comparison. Data for the Gibson Flats CDP was unavailable for this analysis.

According to the ACS, residents in 96.7 percent or more of all occupied housing units in the City of Great Falls and other local geographies had access to one or more vehicles to commute to work or meet other personal needs. The majority of workers in the Great Falls area also worked within Cascade County. Less than four percent of workers in the local geographies had jobs outside the county or state. Of all workers in the Great Falls area, over 94 percent commuted to work.



Malmstrom AFB CDP had the highest proportion of workers who carpooled (16.5 percent) and walked to work (11 percent). For all other local geographies, including Great Falls, approximately 80 percent of workers drove alone, 9 percent carpooled, and less than 1 percent used public transportation, a bicycle, or another means of commuting. The Black Eagle CDP had the second highest proportion of commuters who walked to work (8.9 percent), followed by the county as a whole (2.7 percent). The data presented in **Table 8** suggests public transportation options are more limited for Montana residents as compared to elsewhere in the United States. However, residents may live closer to their destinations, as the percentage of Montana commuters who walk to work is generally higher than that of the United States.

Commute times for workers in the local geographies are much lower than those of the state and nation. The aggregate commute times for county and city residents are two to three minutes longer than those of residents in the smaller CDPs. Commute time data aligns with place of work suggesting data, that residents work within Cascade Countv and generally live close to their place of work.

Subject	Cascade County	City of Great Falls	Malmstrom AFB CDP	Black Eagle CDP	State of Montana	United States
Number of Workers 16+ Years	39,957	29,017	2,204	302	518,868	155,284,955
Commuted to Work	94.3%	94.6%	96.2%	100.0%	90.7%	90.4%
Worked at Home	5.7%	5.4%	3.9%	-	9.4%	9.7%
Vehicle Availability (by Occupied Housi	ng Units)					
No Vehicle Available	2.8%	3.3%	2.1%	-	2.2%	4.2%
1 Vehicle Available	18.9%	21.8%	14.2%	24.2%	16.0%	20.2%
2 Vehicles Available	40.7%	41.1%	65.0%	53.6%	37.8%	40.3%
3 Vehicles Available	37.5%	33.9%	18.8%	22.2%	44.0%	35.3%
Place of Work						
Worked in County of Residence	96.7%	97.3%	99.2%	96.4%	91.3%	73.6%
Worked Outside County of Residence	2.2%	1.9%	-	3.6%	7.1%	23.0%
Worked Outside State of Residence	1.1%	0.7%	0.8%	-	1.5%	3.5%
Commuting Transportation Mode						
Drove alone, car, truck, van	79.8%	81.1%	67.6%	81.8%	74.3%	73.2%
Carpooled	9.5%	9.1%	16.5%	9.3%	9.2%	8.6%
Public Transportation (excluding taxis)	0.8%	0.9%	0.6%	-	0.7%	4.2%
Walked	2.7%	1.8%	11.0%	8.9%	4.3%	2.5%
Bicycled	0.6%	0.7%	0.5%	-	1.1%	0.5%
Other means of commuting	0.9%	1.0%	-	-	1.1%	1.4%
Mean Travel Time to Work (minutes)	16.8	15.1	13.0	13.3	18.6	26.8

Table 8: Commuting Characteristics (2017 - 2021)

Source: ACS Report, 2017-2021 (5-year estimates)



3.0 HOUSING UNITS AND HOUSEHOLDS

The Census Bureau identifies a housing unit as a house, apartment, mobile home, group of rooms, or single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live and eat separately from any other persons in the building, and which have direct access from outside of the building or through a common hall. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements. The Census Bureau defines a household as all the persons who occupy a housing unit.

Table 9 lists the number of housing units that existed within Cascade County, the City of Great Falls, and local CDPs during past decennial censuses. Overall, the number of housing units in the county increased by 6,738 units (a 21% increase) since 1980 with moderate, steady increases in the number of housing units recorded each decade. This trend is similar for the City of Great Falls which showed an increase of 4,146 units (a 17% increase) between 1980 and 2010. After several decades of declining numbers of housing units, the Malmstrom AFB CDP experienced an increase in the overall number of units between 2010 and 2020, nevertheless resulting in a net decrease of 182 units since 1980. The Black Eagle and Gibson Flats CDPs experienced little change in the number of housing units over the past censuses when data has been collected.

The data in **Table 9** show that the population per housing unit decreased in Cascade County and the City of Great Falls over the 1980-2020 period with minimal change over the past decade. The smaller CDPs, however, all experienced increases in population but little increase or loss in housing units, resulting in overall increases in the population per housing unit over the 2010-2020 period.

Table 9: Number of Housing Units (1980 - 2020)

	Area	1980	1990	2000	2010	2020
	Population	80,696	77,691	80,357	81,327	84,414
Cascade	Housing Units	32,199	33,063	35,225	37,276	38,937
County	Net Change		864	2,162	2,051	1,661
	Population per Housing Unit	2.51	2.35	2.28	2.18	2.17
	Population	56,725	55,097	56,690	58,505	60,442
City of	Housing Units	24,056	24,152	25,243	26,854	28,202
Great Falls	Net Change		96	1,091	1,611	1,348
	Population per Housing Unit	2.36	2.28	2.25	2.18	2.14
	Population	6,675	5,938	4,544	3,472	4,131
Malmstrom	Housing Units	1,566	1,496	1,405	1,171	1,384
AFB CDP	Net Change		-70	-91	-234	213
	Population per Housing Unit	4.26	3.97	3.23	2.96	2.98
	Population	(a)	(a)	914	904	949
Black Eagle	Housing Units	(a)	(a)	458	474	481
CDP	Net Change				16	7
	Population per Housing Unit			1.99	1.91	1.97
	Population	(a)	(a)	(a)	199	203
Gibson	Housing Units	(a)	(a)	(a)	85	84
Flats CDP	Net Change					-1
	Population per Housing Unit				2.34	2.42

Source: US Bureau of the Census, Census of the Population ^(a) No data available



Because not all housing units are occupied, it is interesting to consider the number of residents per occupied housing unit. **Table 10** presents the occupancy status of the housing units counted in the 2020 census. The data show that about 90 percent of the housing units in Cascade County were occupied, with housing occupation ranging from a low of 83% in the Malmstrom AFB CDP and a high of 100% in the Gibson Flats CDP. The City of Great Falls has an occupancy status of 92.4 percent. Housing availability in the city is somewhat influenced by the availability of housing provided by Malmstrom AFB. The base provides housing for military families and unaccompanied personnel, in addition to temporary lodging for visitors. An *Economic Impact Analysis* for fiscal year 2009 identified that 44 percent of the military personnel lived on base, while the remaining 56 percent lived off base, which has a large impact on the city's housing market.

If only occupied housing units are considered, the resulting population per housing unit rate is 2.41 people per unit in the county and 2.32 in the city. The Malmstrom AFB CDP has the highest resulting population per housing unit at nearly 3.6 when only occupied housing units are considered.

	Total Housing	Occu	pied	Vac	ant	Population Per
Area	Units	Number	%	Number	%	Occupied Housing Unit
Cascade County	38,937	35,011	89.9%	3,926	10.1%	2.41
City of Great Falls	28,202	26,069	92.4%	2,133	7.6%	2.32
Malmstrom AFB CDP	1,384	1,154	83.4%	230	16.6%	3.58
Black Eagle CDP	481	433	90.0%	48	10.0%	2.19
Gibson Flats CDP	84	84	100.0%	-	0.0%	2.42

Table 10: Housing Occupancy Status (2020)

Source: US Bureau of the Census, Census of the Population



4.0 EMPLOYMENT AND INCOME TRENDS

Cascade County is Montana's fifth most populous county, while Great Falls, the county seat, is the state's third largest city. Great Falls accounts for about 72 percent of Cascade County's total population. The city is home to Malmstrom AFB and the Montana Air National Guard, which are driving forces in the regional economy. Great Falls is also home to the C. M. Russell Museum, Lewis & Clark Interpretive Center, Benefis Health System, Great Falls College Montana State University, and associated College of Technology. The county's employment base is generally more agriculturally based.

4.1. HISTORIC EMPLOYMENT IN CASCADE COUNTY

Employment by industry for Cascade County for milestone years between 1970 and 2021 is presented in **Table 11**. The most recently available data from the US Bureau of Economic Analysis (US BEA) show that total full and part-time employment in the county was 50,706 in 2021, 98 percent of which was non-farm related employment. Since 1970, total full and part-time employment in Cascade County has grown at a rate of approximately 0.60 percent per year.

The data in Table 11 show that between 1970 and 2021, the most notable net increases in employment occurred in the services industry, where the total number of jobs more than tripled. Other industry sectors showing sizable increases in employment since 1970 include: construction (net gain of 1,293 jobs); finance, insurance and real estate (net gain of 1,971 jobs); and state and local government (net gain of 730 jobs). Notable declines in employment were seen in the manufacturing, federal and civilian government, and military. Combined, the declines in these sectors resulted in nearly 4,400 fewer jobs in 2021 than in 1970.

Malmstrom AFB accounts for the majority of the military employees in Cascade County. Total full and part-time military employment in 1970 accounted for 15.5 percent of jobs in the County. Military employment in the county declined steadily

Table 11: Historic Employment Trend	s for Case	cade Cou	nty (1970	- 2021)	

Employment	1970	1980	1990	2000	2010	2021	Growth Rate (1970-2021)
Total Full/Part time Employment	37,297	42,836	43,160	47,944	49,971	50,706	0.60%
Farm Employment	1,328	1,039	1,036	1,209	1,114	1,105	-0.36%
Non-Farm Employment	35,969	41,797	42,124	46,735	48,857	49,601	0.63%
Employment by Industry							
Agricultural Services & Forestry	134	159	352	(a)	159	(a)	0.43%
Mining	55	60	66	(a)	130	(a)	2.17% ^(b)
Construction	2,114	2,211	1,837	2,654	3,240	3,407	0.94%
Manufacturing	2,920	1,659	1,244	1,425	1,082	1,315	-1.55%
Transportation & Public Utilities	2,216	2,193	2,165	2,052	1,575	1,992	-0.21%
Wholesale Trade	1,758	3,193	2,347	1,917	1,472	1,658	-0.11%
Retail Trade	6,266	7,697	8,571	10,048	6,113	6,000	-0.09%
Finance, Insurance & Real Estate	2,785	3,804	3,119	4,042	4,875	4,756	1.05%
Services	6,497	10,264	12,000	14,736	19,740	21,013	2.33%
Federal & Civilian Government	2,315	1,773	1,780	1,532	1,858	1,689	-0.62%
Military	5,785	4,989	4,726	3,881	3,583	3,619	-0.92%
State & Local Government	3,124	3,795	3,917	3,869	4,209	3,854	0.41%

Source: US Department of Commerce Bureau of Economic Analysis - Table CA25 and Table CA25N.

^(a) Not shown to avoid disclosure of confidential information, but the estimates for this item are included in the totals.

^(b) Change provided for available range of dataset

between 1970 and 2010, only recently experiencing an increase between 2010 and 2021. In fiscal year 2021, Malmstrom AFB created 1,328 indirect jobs and its economic impact on the local economy totaled approximately \$384 million.¹



4.2. EMPLOYMENT TRENDS BY INDUSTRY

Table 12 presents data from the 2017-2021 ACS profile on the estimated number of civilian employees (age 16 years and older) and the industries in which they are employed in Cascade County, the City of Great Falls, and the Malmstrom AFB and Black Eagle CDPs. Data for the Gibson Flats CDP is not reported since the ACS estimates that none of the Gibson Flats residents are in the civilian labor force. It is important to recognize that the employment numbers shown in **Table 12** are limited to civilian employment and therefore do not account for military employment. All ACS data are survey estimates with varying margins of error. Many of the employment numbers presented for the Malmstrom AFB and Black Eagle CDPs are considered "statistically suspect" due to their margins of error. The *Malmstrom AFB Commander's Data Card for Fiscal Year 2022*² states that total employment at the base was 4,017, composed of 3,324 military and 693 civilian personnel.

The employment by industry data from the 2017-2021 ACS for the various geographies of Cascade County support the information from the US BEA presented in Table 11. The majority of the employment in the County and City is associated with the services industry, followed by retail trade and construction industries. Residents in the Malmstrom AFB CDP are primarily employed in the services, public administration, and retail trade industries while Black Eagle CDP residents are primarily employed in the construction, manufacturing, and services industries. Data presented in the fiscal year 2023 budget³ for the City of Great Falls identifies the largest civilian employers (and number of employees) within the city:

- Benefis Heath Care Center (3,322)
- Great Falls Public Schools (1,963)
- Walmart (818)
- Great Falls Clinic (688)
- Pacific Hide & Fur Depot (500)
- City of Great Falls (487)
- Cascade County (450)
- US Government (350)

Industry	Cascade County		City of Fall		Malms AFB (Black Eagle CDP	
	Number	%	Number	%	Number	%	Number	%
Agriculture, forestry, fishing and hunting, and mining	1,406	3.7%	612	2.1%	6	0.8%	24	7.3%
Construction	3,035	7.9%	1,997	6.9%	11	1.4%	75	22.7%
Manufacturing	1,734	4.5%	1,277	4.4%	30	3.8%	47	14.2%
Wholesale trade	1,342	3.5%	1,068	3.7%	11	1.4%	0	0.0%
Retail trade	5,462	14.2%	4,205	14.6%	108	13.6%	21	6.3%
Transportation, warehousing, and utilities	2,123	5.5%	1,608	5.6%	38	4.8%	28	8.5%
Information	498	1.3%	332	1.1%	17	2.1%	0	0.0%
Finance, insurance, real estate, rental, and leasing	2,200	5.7%	1,792	6.2%	38	4.8%	16	4.8%
Professional, scientific, management, administrative, and waste management services	2,726	7.1%	2,189	7.6%	9	1.1%	0	0.0%
Educational services, health care, and social assistance	9,458	24.6%	7,289	25.2%	239	30.2%	42	12.7%
Arts, entertainment, recreation, accommodation, and food services	3,719	9.7%	3,107	10.8%	61	7.7%	42	12.7%
Other services, except public administration	2,105	5.5%	1,555	5.4%	23	2.9%	36	10.9%
Public administration	2,569	6.7%	1,864	6.5%	201	25.4%	0	0.0%
Total Employed Population 16 yrs and over	38,3	77	28,8	95	792	2	33 [,]	1

Source: ACS Report, 2017-2021 (5-year estimates)



4.3. CURRENT EMPLOYMENT STATISTICS

Unemployment rates for Cascade County and the State of Montana are represented in **Table 13** and are current as of December 2022. Similar data for the United States, current as of January 2023, are also presented. Unemployment information for the City of Great Falls is unavailable. The data show an unemployment rate for Cascade County (2.4 percent) lower than those for both the state and nation (2.9 and 3.4 percent, respectively). When compared to other counties in Montana, Cascade County ranks 31st in terms of unemployment rates, meaning 30 counties have lower unemployment rates.

Table 13: Employment Statistics (2022/2023)

Area	Total Labor Force	Employed	Unemployed	Unemployment Rate
Cascade County ^(a)	38,984	38,065	919	2.4%
State of Montana ^(a)	113,436	109,683	3,753	2.9%
United States ^(b)	165,832,000	160,138,000	5,694,000	3.4%

Sources: ^(a)MT Department of Labor and Industry, Research and Analysis Bureau – Labor Force Statistics, December 2022 (data is not seasonally adjusted) available at: <u>https://lmi.mt.gov/lausCntyLabForce;</u> <u>https://lmi.mt.gov/Employment/lausCntyrank</u>. Please note these Local Area Unemployment Statistics (LAUS) are variable and represent monthly and annual labor force estimates and unemployment rate statistics. ^(b)U.S. Department of Labor, Bureau of Labor and Statistics, January 2023 (data is seasonally adjusted), available at: <u>https://www.bls.gov/news.release/pdf/empsit.pdf</u>

4.4. INCOME LEVELS

Estimates of median household income and per capita income for Cascade County, the City of Great Falls, and other study area communities are summarized in **Table 14**. Within the study area, estimated median household incomes are lowest in the Black Eagle CDP (~\$51,400) and highest in the Malmstrom AFB CDP (~\$59,700). Median household incomes within Great Falls as a whole (~\$53,100) are lower than the county, state, and nation.

Within the study area, per capita incomes range from just over \$22,000 in the Malmstrom AFB CDP to nearly \$33,000 in the Gibson Flats CDP. Per capita incomes within the Great Falls area are lower than the county, state, and nation.

Estimates of per capita personal income for 2021 are available from the BEA for the nation, states, and counties. Personal income is the income received by all persons from all sources. Per capita personal income is calculated as the total personal income of the residents of an area divided by the population of the area. BEA data for 2021 shows the estimated per capita personal income for residents of Cascade County is about \$3,000 lower than that for all residents of the State of Montana and nearly \$10,000 lower than for the nation as a whole. Cascade County ranks 20th in terms of per capita personal income within the state.

Table 14: Income Levels (2017 - 2021)

Area	Median Household Income	Per Capita Income	2021 Per Capita Personal Income*
Cascade County	\$ 56,377	\$ 31,478	\$ 53,765
City of Great Falls	\$ 53,126	\$ 30,765	
Malmstrom AFB CDP	\$ 59,719	\$ 22,258	
Black Eagle CDP	\$ 51,406	\$ 26,182	
Gibson Flats CDP		\$ 32,905	
State of Montana	\$ 60,560	\$ 34,423	\$ 56,949
United States	\$ 69,021	\$ 37,638	\$ 64,143

Sources: ACS Report, 2017-2021 (5-year estimates) * BEA, Per Capita Personal Income by County (2021), available at:

https://www.bea.gov/sites/default/files/2022-11/lapi1122.pdf

-- Data unavailable



4.5. POVERTY STATUS

Table 15 presents poverty statistics for various geographies in Cascade County and the City of Great Falls as well as comparable statistics for the State of Montana and the nation. According to 2017-2021 ACS data, the number of county residents living below the poverty line (12.9 percent) was similar to levels for the State of Montana (12.5 percent) and the nation (12.6 percent) but lower than the level for the City of Great Falls (14.5 percent). Within the study area, the percentage of individuals living in poverty is lowest in the Malmstrom AFB CDP (5.2 percent), with Gibson Flats CDP (14.3 percent) and Black Eagle CDP (13.8 percent) also lower compared to the City of Great Falls. Consistent with the population distribution, the persons living in poverty within the Black Eagle and Malmstrom AFB CDPs are younger (under age 65) while those in poverty in Gibson Flats CDP are over the age of 65. In general, the county and city have more residents under the age of 18 years living in poverty than for both the state and nation. The poverty status for those over the age of 65 within both the county and city is similar to that of the nation, but higher than that of the state.

Table 15: Poverty Status (2017 - 2021)

Area	Persons Living in Poverty (%)*	Persons Under 18 in Poverty (%)	Persons over 65 in Poverty (%)
Cascade County	12.9	16.3	9.4
City of Great Falls	14.5	18.6	9.7
Malmstrom AFB CDP	5.2	6.0	
Black Eagle CDP	13.8	15.6	0.0
Gibson Flats CDP	14.3		14.3
State of Montana	12.5	15.2	8.7
United States	12.6	17.0	9.6

Source: ACS Report, 2017-2021 (5-year estimates)

* Indicates persons with a poverty ratio less than 1.0 (indicating income below federally defined poverty threshold).



5.0 LAND USE AND DEVELOPMENT

Land use plays a critical role in shaping transportation networks. Land use decisions affect the transportation system and can increase viable options for people to access work, recreation sites, goods, services, and other resources in the community. In turn, the existing and future transportation system may be impacted by the location, type, and design of land use developments through changes in travel demands, mode choices, and patterns. The following sections discuss the land use designations for the City of Great Falls and other areas of Cascade County within the LRTP boundary.

5.1. EXISTING LAND USE AND DEVELOPMENT

The City of Great Falls was built on a grid system of streets with a defined Central Business District surrounded by residential development. Commercial and industrial uses were typically concentrated in the Central Business District or along railroad lines or major roads and streets. The community has evolved over the years as population growth and new development has occurred. Commercial development is no longer focused on the downtown area and many retail functions have shifted to outlying shopping centers and commercial areas, like those along 10th Avenue South and 3rd Street Northwest. Today, downtown Great Falls is the governmental and financial center of the community and houses many professional offices and specialty retail stores.

Extensive residential uses are still seen in the areas around the central city. However, the residential development pattern has extended to the fringe areas surrounding the city and is characterized by low-density residential development on lots of one to ten acres. Multifamily residential development is widely scattered throughout the community. Most new housing development in the Great Falls area has occurred to the southwest, southeast, and north of the city.

The city's 2013 Growth Policy indicated that "increased reliance on trucking has allowed manufacturers and other types of industries to locate wherever land is available with good access, adequate utilities, and proper zoning."⁴ It is no longer necessary for industrial land uses to be located near railroad lines. As a result, few substantial concentrations of new industrial development occur within the city limits. However, concentrations do occur in the North Park industrial subdivision along River Drive in northeast Great Falls and along existing rail lines.

Figure 2 illustrates current land uses in the City of Great Falls. A breakdown of current land uses by type is also provided for reference in **Table 16**. Residential is the largest land use category in the city, with the majority being characterized as single family detached units. The City has several vacant and underutilized properties. Some lots are intentionally vacant to serve as buffers by adjacent property owners.

Table 16: Existing Land Uses (2022)

Classification	Uses	Acres	%
Residential	Single, multifamily, mobile home, retirement	4,616	39.4%
Institutional	Government, education, church, semi public	2,967	25.3%
Vacant	Commercial and residential	1,118	9.5%
Industrial	Light and heavy	1,074	9.2%
Commercial	Retail, shopping center, FIRE, Hotel/Motel, Commercial with residential, child care	1,032	8.8%
Open Land	Parks and agriculture	793	6.8%
Transportation	Public, private parking, ROW, RR and utilities	116	1.0%
Total		11,716	100%

Source: City of Great Falls, 2022



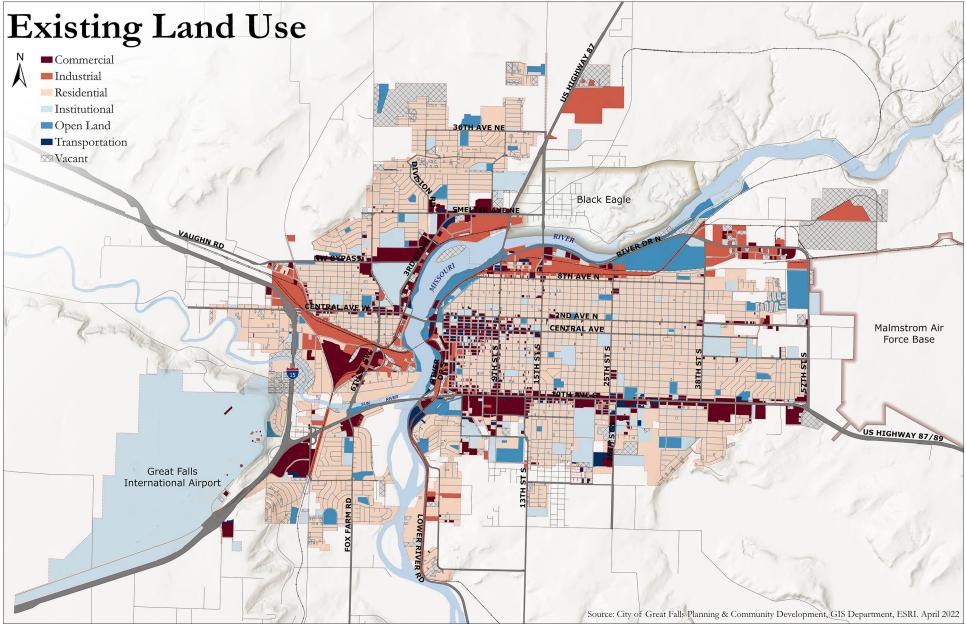


Figure 2: City of Great Falls Land Use Designations (2022)



5.2. RECENT DEVELOPMENT TRENDS AND FUTURE GROWTH AREAS

In 2021, the City of Great Falls undertook an effort to update its 2012 Growth Policy. The approval and adoption process has since been stalled due to the possibility of completing a full update in the near future. Still, the updated data from the document is relevant and should be taken into consideration. The policy describes Great Falls as having a dense central core with decreasing density in extended portions of the city. In the early years of the city's development, this suburban development pattern was typical. Cities were designed around the idea that cars would be the primary mode of transportation and that home should be separate from places of work and other activities. Over time, lot sizes have increased, and population and housing densities have decreased. This trend impacts the way residents and local service providers travel, resulting in longer trips accommodating fewer people. This development pattern encourages auto-centric travel, especially initially, before surrounding areas in suburban parts of the city develop to provide complementary retail, civic, and commercial land uses nearby. Over time, new development and enhanced connectivity can help create a balance with greater convenience and opportunities for mode choice.

A map showing how the land area of the City of Great Falls has expanded between 1970 and 2020 is presented in **Figure 3**. The incorporated area of the city increased by 6,353 acres, or 42 percent, over the 50-year time period and, in 2012, encompassed more than 23 square miles of land. As **Figure 3** shows, the city has grown around most of its periphery. Overall, annexations into the City of Great Falls in areas to the north of 36th Avenue NE, by the Benefis East Campus along 26th Street S, Fox Farm Road, the east end, and several other small locations. Newer annexations vary in residential density and some industrial and commercial annexations have occurred. Most of the newer commercial development has been a result of infill and redevelopment opportunities. Building permit records show that 430 residential units were built in the city and 480 residential units were permitted in Cascade County in the five-year period from 2016 to 2020. This trend indicates that a larger proportion of the area's residential development is occurring in the county, partially due to lack of available city lots with city services.

The following special area plans have been produced in Great Falls in recent years, which help identify development goals and objectives and contain detailed evaluations of growth and transportation needs in localized areas within the community.

- North Great Falls Sub-Area Transportation Study (2022)
- Downtown Access, Circulation, and Streetscape Plan (2013)
- Malmstrom AFB Joint Land Use Study (2012)
- Downtown Master Plan (2011)
- Great Falls South Arterial Alignment Study (2009)
- Conversion of Downtown One-Way Streets Back to Two-Way Streets (2007)
- Medical District Master Plan (2007)
- Missouri River Urban Corridor Master Plan (2004)



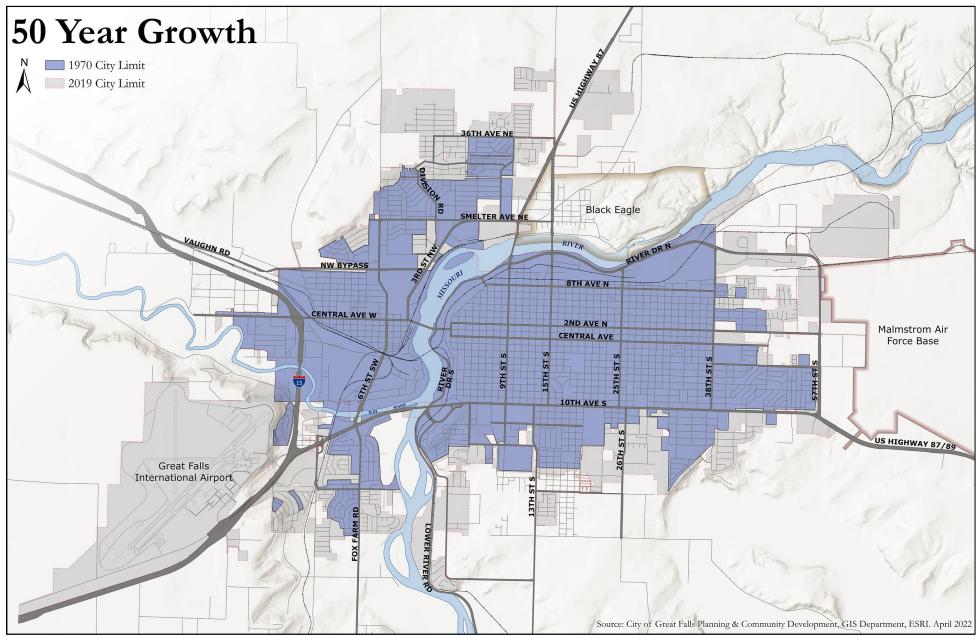


Figure 3: City Expansion (1970 – 2019)



As part of the effort to update the growth policy, potential growth areas within the community were identified. These growth areas are shown on **Figure 4**. The principal areas for new residential growth were envisioned along the southern edge of the city in the southwestern portion of the community. Residential growth was also anticipated along the northern perimeter of the city west of US Highway 87. Non-commercial development and industrial growth are envisioned around the airport, east of US Highway 87 and north of Black Eagle, and in the northeastern portion of the urban area near Malmstrom AFB. The downtown is especially ready to support increased vertical residential development, through the restoration and repurposing of lofts, upper floors and other opportunities.

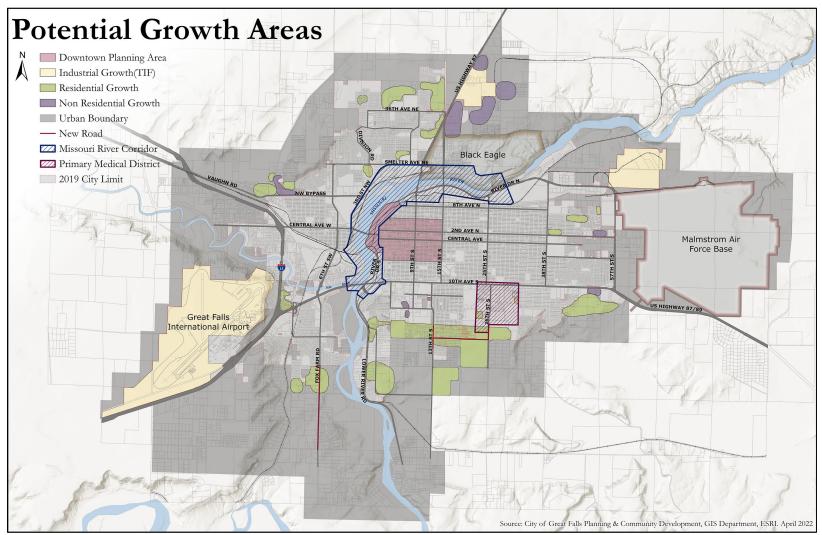


Figure 4: Potential Growth Areas (2022)



Figure 5 presents a map of the current zoning designations for the City of Great Falls and a portion of Cascade County within the LRTP boundary. Zoning is used by these jurisdictions to dictate land use planning by restricting the usage and development of a specific area. Consideration of zoning can be helpful when predicting future land uses and development patterns.

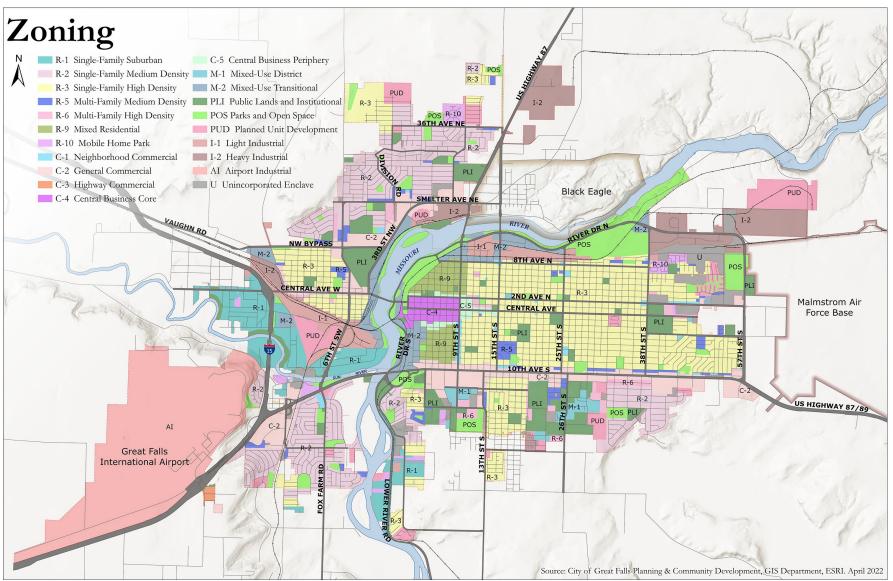


Figure 5: Zoning Designations (2022)



6.0 FUTURE PROJECTIONS

Projections are estimates of various characteristics at future dates. They illustrate reasonable estimates of future conditions based on assumptions about current or expected demographic and development trends. Population and employment projections, in the form of housing units and total jobs, are used to help predict future travel patterns and assess the performance of the transportation system.

6.1. POPULATION AND HOUSING PROJECTIONS

Population and housing totals are used to help determine where vehicle trips are originating within the study area. Residential growth is best represented by reporting the number of housing units.

6.1.1. Great Falls Area

Analysis provided in the growth policy update indicates Great Falls could potentially participate in the regional development of oil and gas, which would be positive for economic growth but could have detrimental effects on housing availability and affordability. Recent oil and gas "booms" have proven to be regional and national magnets for job seekers but have also resulted in substantial increases in housing costs and increased demands on services such as police, fire, hospitals, schools, and roads. In addition, a US Department of Defense proposal to upgrade missile defense systems, including those at Malmstrom Air Force Base, could create significant demand for temporary housing in the area. Based on a recent study commissioned by the Great Falls Development Authority, there is market demand for 4,500 housing units over the next ten years. The study recommended that higher density infill development be encouraged. The city predicts that the majority of Cascade County's residential growth will occur within Great Falls and the surrounding urbanized area.

6.1.2. Cascade County

Several sources of population projections for Cascade County were examined to help understand how the population is expected to grow within the county and general Great Falls area. These sources consisted of both published community planning documents and recognized sources for demographic projections. These projections are briefly discussed in the following paragraphs and are summarized in **Table 17**.

For baseline comparison purposes, the population estimates from the 2010 and 2020 **decennial censuses** are provided to demonstrate how the Cascade County population has changed historically. Over the 10-year period, the population has experienced an upward trend, with an annualized growth of 0.37 percent per year. Applying this growth factor over the 2020 to 2045 period suggests that the county may realize a net increase of over 8,000 new residents.

The **Cascade County Growth Policy**, completed in 2014, included projections of the county's population through the year 2060 using data available from Regional Economic Models, Inc. (eREMI) in 2013. The policy predicted the county would have 96,759 residents by 2045. When compared to the most recent census counts at that time (2010), the county was predicted to grow in population by 15,250 residents over the 35-year period. This growth would result in a 0.49 percent annual increase over 35 years. When comparing the 2020 population estimate from the growth policy to counts from the decennial census, the county population was overestimated by nearly 6,000 residents.

The **2018 Great Falls LRTP** estimated the county's future population based on the eREMI estimates available at the time. The 2038 population was estimated to be 96,327 residents, using a 0.61 percent annual growth rate over the 20-year planning horizon. Continuing this growth rate until 2045 would result in a population of 100,491 in the county.



The **Great Falls Growth Policy** relied on recent data released by eREMI to project population within the county. Based on available data at the time, the city anticipated that the positive population growth rate would continue in the near future and throughout the planning horizon. The data presented in the document predicts that the county's population will grow to approximately 86,500 by 2030, reflecting an increase of slightly less than 4,000 residents from 2020.

The Montana Department of Commerce Census & Economic Information Center (CEIC),⁵ updated county-level projections with the **eREMI** model in July 2019. The CEIC projections provide complete annual demographic forecasts through 2060 for the State of Montana and each county. The eREMI model predicts a future population of 87,015 for Cascade County in the year 2045. This estimate reflected an upward trend through 2040, then a downward trend continuing through 2045. Overall, this projection results in a 0.21 percent growth rate over the 2020 to 2045 period and a net increase of 4,385 residents.

On an annual basis, **Esri** provides current-year and five-year forecasts for demographic and socioeconomic characteristics leveraging data from the Census Bureau, Bureau of Labor Statistics, and BEA in addition to private data sources to develop models for their demographic forecasts. Data provided by Esri indicates that the 2022 population of Cascade County was 85,178 and is estimated to be 85,823 in five years (2027), which translates to an annual growth rate of 0.15 percent. Similarly, data for the 2021 to 2026 period indicated that the number of households would increase from 34,945 to 35,372, resulting in an annual increase of 0.2 percent.⁶

Woods & Poole Economics, Inc. (W&P) produces long-term economic and demographic projections for every county in the US. Using data from the US Department of Commerce and a base year of 2020, W&P projects Cascade County's population to be 83,885 by 2045. The projection predicts that the county's population will increase until about 2030, then will begin declining through 2045. The projection predicts an overall decrease of 443 people between 2020 and 2045, translating to an annual decrease of 0.02 percent over the 25-year period.

Source	2010	2015	2020	2022	2023	2027	2030	2038	2040	2045	CAGR*
US Census Bureau Decennial Census	81,327		84,414							92,654**	0.37%
Cascade County Growth Policy (eREMI, 2013)	81,509	85,673	90,176				96,502		96,172	96,759	0.49%
2018 Great Falls LRTP	81,327	83,079						96,327		100,491**	0.61%
Great Falls Growth Policy / eREMI Model (Updated in 2019)			82,630		83,383		86,513		87,537	87,015	0.21%
Esri Estimates (Base Year 2022)				85,178		85,823				88,186**	0.15%
W&P (Base Year 2020)			84,328		84,680		84,965		84,436	83,885	-0.02%

Table 17: Cascade County Population Projections

* CAGR calculated using 2010 population totals (or otherwise oldest total) and latest future population projections. **Estimated using CAGR applied to latest available population estimate.

6.2. EMPLOYMENT PROJECTIONS

Employment numbers are used to help determine where vehicle traffic is distributed within the roadway network. Places with high levels of employment tend to generate high levels of vehicle traffic from both an employee and customer standpoint.



6.2.1. Great Falls Area

The 2021 update to the *Great Falls Growth Policy* explains that since the city is the largest in the region, it serves as the area's primary financial, trade, health care and transportation center. Rural residents from surrounding communities travel to the city for goods and services, augmenting the area's economy which relies heavily on medical, military, agriculture, manufacturing, hydroelectric power and services. It is estimated that the local impact of the military in Great Falls represents over 40 percent of the city's economy. Recent and upcoming changes to the Great Falls economy and labor market include: the opening of the Great Falls AgriTech industrial park to serve food and agricultural processors; plans from the ADF group of Canada to build a steel fabrication and assembly plant to support the petroleum industry; a new project launched in 2021 by Calumet Montana Refining focusing on creating renewable fuel for the state; and the opening of the Touro Medical College Campus in 2023, which will all result in increased employment opportunities for the community. The growth policy expects that the city's current economic growth will hold steady for the near future.

6.2.2. Cascade County

Several sources of employment projections for Cascade County were examined to help understand potential growth within the county. These sources included historic data from the US BEA and Montana Department of Labor and Industry (MDLI) as well as projections from W&P and MDLI. **Table 19** presents available employment data for Cascade County over the 2010 to 2045 period.

Based on historic employment data from **US BEA**, an increase of 735 jobs occurred in the county over the 2010 to 2021 period, translating into a 0.13 percent annual growth rate over the same period. Between 2020 and 2021, however, employment increased by about 2.5 percent. As shown previously in **Table 11**, the US BEA reported a 0.6 percent growth rate over the 1970 to 2021 period.

Conversely, the historic estimates provided by **MDLI** indicate a downward trend, resulting in a net decrease of 659 jobs over the 11-year period. The decline was more rapid over the 2020 to 2021 period, resulting in a -0.25 percent growth rate compared to the -0.16 percent growth rate realized over the 2010 to 2021 period.

MDLI also provides 10-year projections for jobs within five Montana regions. Cascade County falls within the North Central Region, encompassing 10 Montana counties. The projections predict that the region's employment base will grow at an annual rate of 0.10 percent

between 2021 and 2031. While this projection is not specific to Cascade County, it gives an idea of how the state predicts employment will change in the general area over the next decade.

Future employment projections for Cascade County are also available from **W&P**. The current W&P projections predict that total employment in the county may reach 56,386 by 2045, representing an average annual increase of 0.57 percent over the 25-year period. Interestingly, W&P predicts that jobs will continue increasing over the entire 25-year period, but predicts that population will increase until 2030, then decrease over the next 15 years.

Table 18: Cascade County Employment Forecasts (2010 – 2045)

Source	2010	2020	2021	2030	2031	2040	2045	CAGR*
US BEA	49,971	49,473	50,706				52,347**	0.13%
MDLI (Cascade County)	38,471	37,907	37,812				36,413**	-0.16%
MDLI (North Central, Base Year 2021)			63,574		64,215		65,123**	0.10%
W&P (Base Year 2021)		48,887		53,775		55,693	56,386	0.57%

* CAGR calculated using 2010 employment totals (or otherwise oldest total) and latest future employment projections.

**Estimated using CAGR applied to latest available employment estimate.



7.0 PROJECTED GROWTH IN THE LRTP STUDY AREA

Modeling of future travel patterns out to the year 2045 planning horizon using MDT's travel demand model requires identification of future socioeconomic characteristics of each census block within the LRTP study area. The population, housing, and employment projections presented in the previous chapter were reviewed and considered to assist in predicting future growth within Cascade County and the Great Falls area. Through coordination with representatives of the City, County, and MDT, future population and employment growth rates were selected. Over multiple land use forecasting workshops, the group predicted where future housing units and employment centers would be located within the LRTP study area. The growth assignments were developed based on local knowledge of recent land use trends, land availability and development limitations, land use and zoning regulations, local growth policies, planned public improvements, and known development proposals. The following sections detail the selected future population and employment growth rates and land use allocations for the LRTP study area.

7.1. POPULATION AND HOUSING GROWTH

For purposes of the 2023 Great Falls Area LRTP, the growth rate derived from the past two censuses (0.37 percent) was selected as a starting point for the projected population in the county over the planning horizon. This growth rate was slightly higher than the growth rates predicted by the updated eREMI model and Esri but is considered conservative for this planning effort. At the initial land use forecasting workshop with City, County, and MDT staff, it was determined that growth resulting from planned developments would exceed the projected housing growth figure calculated using the 0.37 percent population growth rate. Accordingly, the population growth rate was increased to **0.44 percent** to capture both planned development and additional development that may occur over the 2045 planning horizon. Using this growth rate, it is predicted that the **population of Cascade County would be 94,127 in 2045**.

The share of the population living within the LRTP planning boundary was estimated using population data from the 2019 travel demand model. GIS analysis was used to identify the total population within all census blocks entirely within or crossed by the study area boundary. This analysis established the Great Falls study area population to be 71,913 in 2019, accounting for about 87 percent of the county's total population. To determine current data for the transportation plan, the 2019 population totals were increased to represent 2020 existing conditions using data from the 2020 census.

The 2020 conditions for the study area use the population total for Cascade County determined by the decennial census, which was factored down based upon the percentage of the county's total population within the Great Falls study area in the year 2019 (87 percent as mentioned previously). This percent distribution of the county's population within the study area was then carried forward for future projections, being held constant through the year 2045. **Table 18** shows the projected population of the study area through the year 2045, which is forecasted to be approximately 81,500 residents.

Housing units distribute people throughout the roadway network to their desired destinations. They represent the population and act as a hub for traffic within the network. Having a realistic value for number of people per housing unit helps distribute the traffic more accurately. However, it is often quite difficult to precisely represent the population through housing units. This is in part because the number of people per housing units varies based on location and can change at any time.



According to the 2020 Census, Cascade County had 84,414 residents distributed among 38,937 housing units, translating to approximately 2.17 people per household within the county. Based on GIS analysis of the 2019 travel demand model, approximately 85 percent of the housing units in the county were located within the Great Falls study area. Applying the proportions of the population and housing units in the study area with respect to the entire county (87 percent and 85 percent, respectively), to the county population and housing unit totals from the 2020 census yields a total of 73,096 people living in 32,960 housing units in the LRTP study area. This translates to an occupancy factor of 2.22 people per household within the study area.

The number of housing units within Cascade County and the study area by the year 2045 was again determined by dividing the total projected populations for these geographies by their respective occupancy factors. Under the selected growth scenario (0.44 percent), applying the 2020 occupancy rates to the projected 2045 population for Cascade County results in 43,417 housing units, an increase of 5,322 units from 2019. For the study area, an increase of 4,505 housing units is projected from 2019 to 2045. **Table 18** provides the population and housing unit projections for the study area.

Figure 6 shows where future housing units are expected to be developed by the year 2045.

Area	2019 (Calibrated Model)	% of County Totals	2020 (Census)	2045 (Future Model)	Model Growth (2019 – 2045)		
Cascade County							
Population	83,047	100%	84,414	94,127	11,080		
Housing Units	38,095	100%	38,937	43,417	5,322		
Population per housing unit					2.17		
Great Falls Study Area							
Population	71,913	87%	73,096	81,507	9,594		
Housing Units	32,248	85%	32,960	36,753	4,505		
Population per housing unit					2.22		
Outside Study Area							
Population	11,135	13%	11,318	12,620	1,486		
Housing Units	5,847	15%	5,977	6,664	817		
Population per housing unit					1.89		



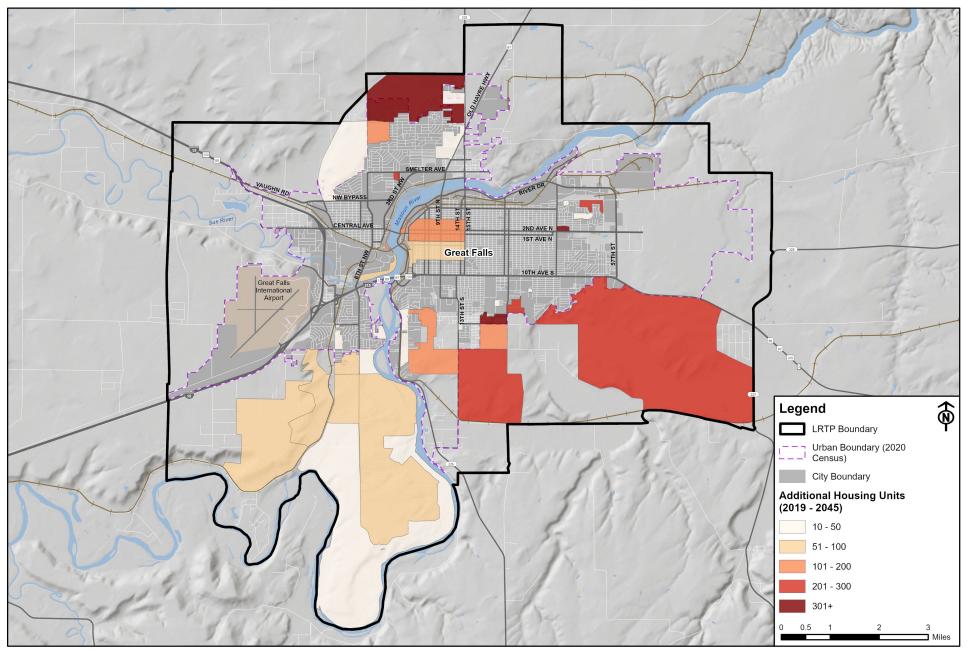


Figure 6: Future Housing Unit Allocations (2019 - 2045)



7.2. EMPLOYMENT GROWTH

For the purposes of the 2023 Great Falls Area LRTP, the W&P projection was selected by City and County representatives as the preferred employment projection for Cascade County. The W&P projections predict about 56,400 jobs in the county by 2045 which translates into a **0.57 percent** growth rate. This is slightly higher than the growth rate used for population projections (0.44 percent) but is more conservative than the historic trends.

The total employment within the study area was also extracted from the 2019 travel demand model developed by MDT. Similar to the process followed to establish baseline population data, GIS analysis was used to identify the total employment within all census blocks entirely within or crossed by the study area boundary. This analysis found that about 92 percent of the total employment within the county occurred within the Great Falls area in 2019. The model suggests that the county had 41,676 jobs in 2019, with 38,431 of those jobs occurring within the LRTP planning area boundary. The remaining 3,245 jobs occurred in areas of the county outside the study area.

The travel demand model also distinguishes between retail and non-retail jobs. Within the county, retail jobs accounted for about 23 percent of all jobs while non-retail jobs accounted for the remaining 77 percent of jobs. Within Great Falls, retail and non-retail jobs accounted for 22 and 78 percent of the area's total employment in 2019. Employment outside the study area consisted of a slightly higher proportion of retail jobs, accounting for 37 percent of the employment base outside the Great Falls study area.

Using the 0.57 percent annual growth rate determined previously, the jobs within Cascade County were projected from 2019 to 2045. This growth resulted in a total of 48,313 jobs in the county by 2045. The proportion of jobs within the Great Falls study area (92 percent) was held constant for the future projections, resulting in a total of 44,551 jobs in the study area in 2045. The percentages of retail and non-retail jobs within each area were also held constant for the future projections.

Within the Great Falls study area, 9,910 retail jobs and 34,641 non-retail jobs are projected for 2045.

An additional 6,120 jobs (1,361 retail and 4,759 non-retail) were allocated within the study area. An additional 517 jobs were distributed in other areas of the county to account for the employment increases anticipated to occur in Cascade County by 2045. **Table 20** presents the employment projections used in the model for Cascade County and the Great Falls LRTP study area to the year 2045. The total number of jobs within each area were divided into retail and non-retail jobs according to existing job distributions in the area. Where jobs don't currently existing, the jobs were allocated based on known development plans and job distributions of surrounding developments.

Figure 7 shows where the projected increases in employment are anticipated through the year 2045. The Great Falls International Airport and Calumet Refinery are both considered special generators, meaning the existing jobs at each location are directly grown at 0.57 percent.

	2019 (Calibrated	% of	2045 (Future	Model Growth			
Area	Model)	Totals	Model)	(2019 – 2045)			
Cascade County							
Total Jobs	41,676	100%	48,313	6,637			
Retail Jobs	9,752	23%	11,305	1,553			
Non-Retail Jobs	31,924	77%	37,008	5,084			
Great Falls Study Area							
Total Jobs	38,431	92%	44,551	6,120			
Retail Jobs	8,549	22%	9,910	1,361			
Non-Retail Jobs	29,882	78%	34,641	4,759			
Outside Study Area							
Total Jobs	3,245	8%	3,762	517			
Retail Jobs	1,203	37%	1,395	192			
Non-Retail Jobs	2,042	63%	2,367	325			

Table 20: Future Employment Growth - Travel Demand Model (2019 - 2045)



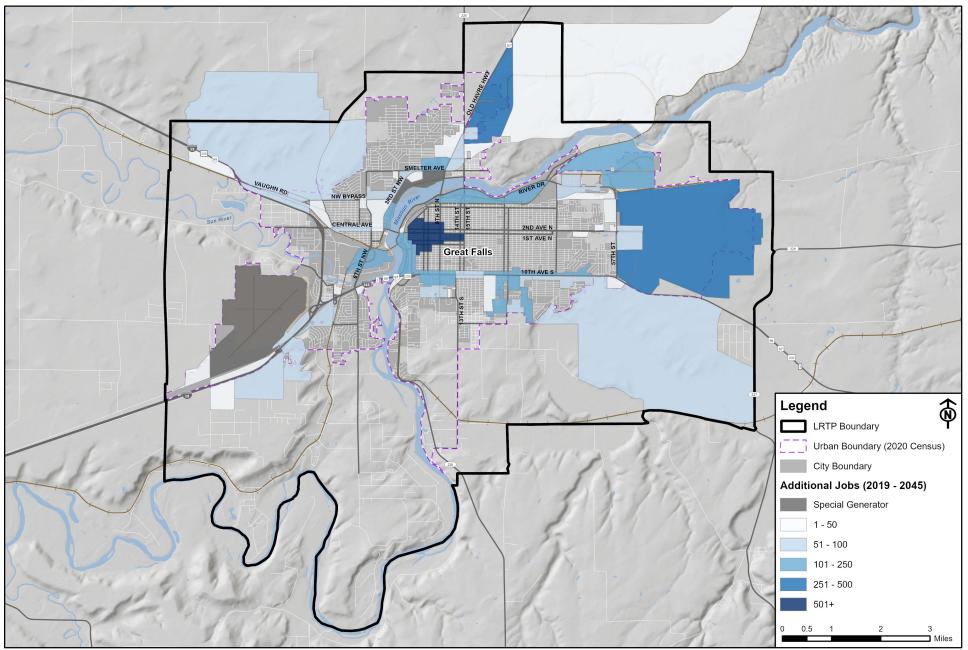


Figure 7: Future Employment Allocations (2019 - 2045)



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