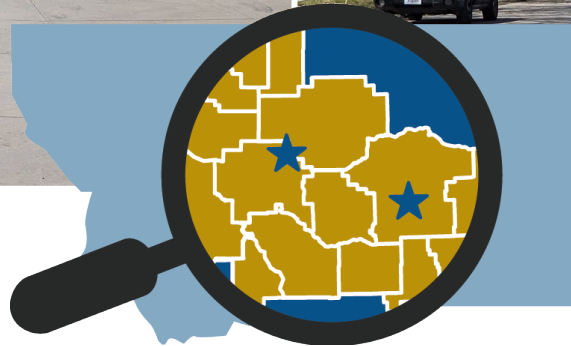
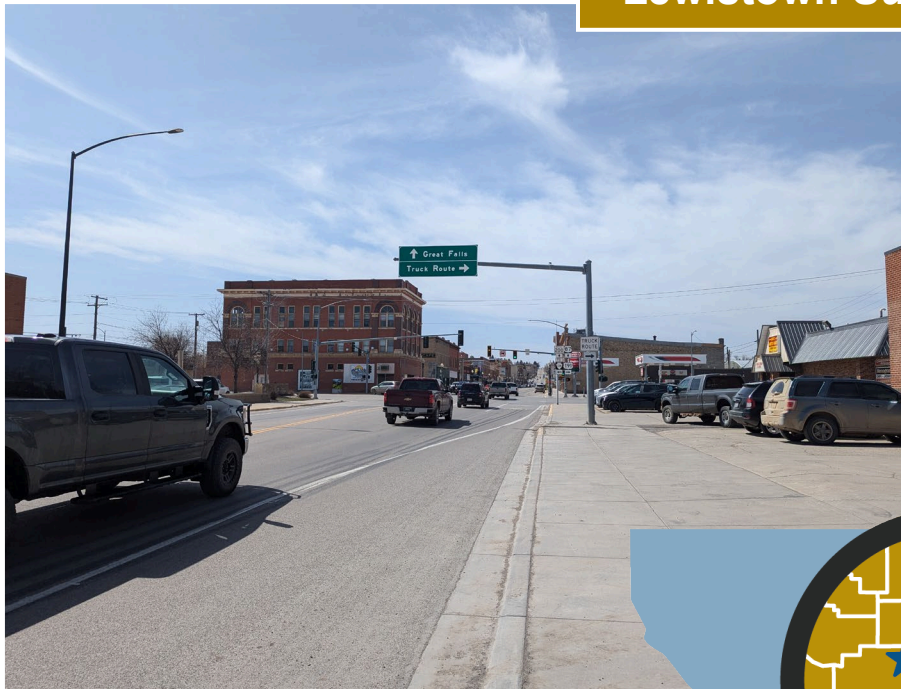


# Central Montana Transportation Study

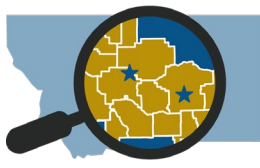
## Existing and Projected Conditions Report

### Lewistown Subarea Analysis



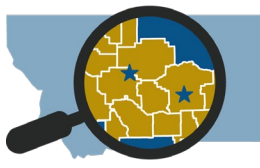
November 24, 2025

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- Appendix A: Traffic Data Collection
- Appendix B: Existing Conditions Operations Analysis
- Appendix C: Stakeholder Workshop and Field Review Summary

## 1.0 INTRODUCTION

The Montana Department of Transportation (MDT) is developing the *Central Montana Transportation Study* to create a comprehensive long-term management plan addressing the anticipated impacts of planned development and military activities in the region. The pre-Montana/National Environmental Policy Act (MEPA/NEPA) regional study will be a collaborative process with MDT, the Federal Highway Administration (FHWA), military, local jurisdictions, resource agencies, and the public to identify transportation needs and potential solutions. In addition to evaluations encompassing the entire subarea, several subcomponents were identified, including the Lewistown subarea.

The *Existing and Projected Transportation Conditions* technical memorandum for the *Lewistown* subarea provides a planning-level overview of transportation conditions and identifies potential constraints and considerations that may influence the development of improvement options for the subarea. The planning-level examination addresses demographic and economic conditions affecting traffic volumes, the physical roadway corridor and associated transportation facilities, geometric characteristics, current and projected traffic conditions, and safety conditions related to transportation. Findings are based on available data, field observations, geographical information systems (GIS) and aerial photography, and input from agencies and stakeholders.

### 1.1 Subarea Boundary

Lewistown is located in the geographic center of Montana, situated southeast of Great Falls and northwest of Billings in Fergus County. The subarea boundary is derived from the urban boundary, based on the 2020 census which encompasses city limits, as well as areas that are likely to develop over the 20-year planning horizon. It also includes all MDT on-system routes and local off-system routes within the urban boundary of Lewistown and is illustrated in **Figure 1** on the following page.

In recent years, the region has experienced growth and is expected to continue with the planned US Air Force's Sentinel project and other regional development impacting future land uses, transportation infrastructure, and traffic operations in the City of Lewistown. This study will assess ways to improve the intersections and adjoining roads to address short-, mid-, and long-term needs for the community as growth occurs in the region.

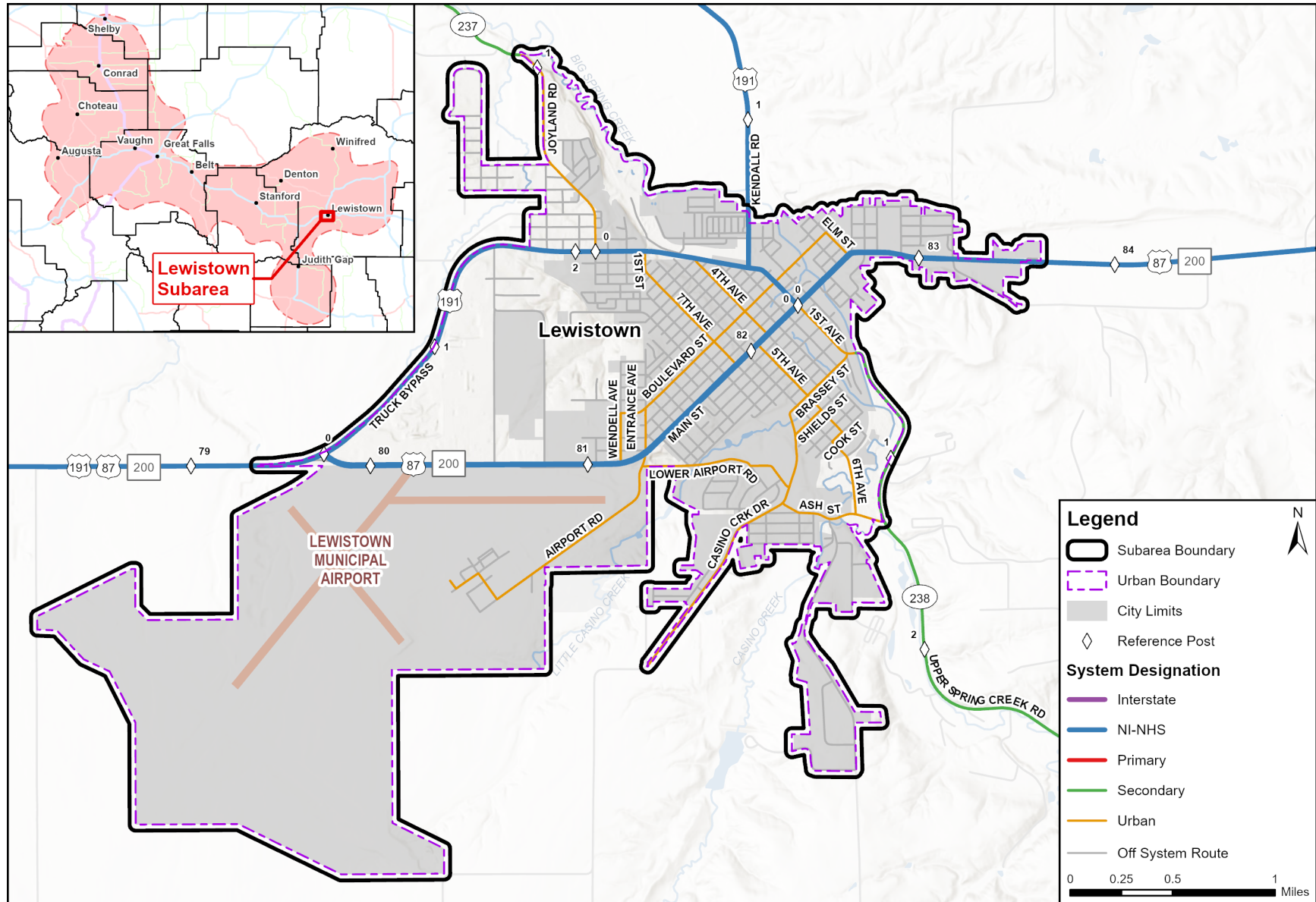
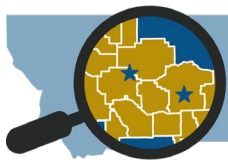


Figure 1: Lewistown Subarea Boundary

## 1.2 Existing Plans, Programs, and Projects

Understanding the broader planning landscape is essential for developing a coordinated and effective transportation strategy within the subarea. Multiple federal, state, and local initiatives influence transportation and land use decisions, shaping development patterns, infrastructure investments, and policy priorities. This section summarizes key planning documents, programs, and projects that directly or indirectly impact the subarea, offering critical insight into existing planning frameworks, planned improvements, and potential opportunities for alignment or integration.

### 1.2.1 Planning and Development Activities Influencing Transportation

This section highlights ongoing and planned development activities within and surrounding the Lewistown subarea that have the potential to influence transportation patterns, infrastructure demands, and mobility needs. It also summarizes adopted local planning documents that establish growth policies and land use priorities, providing context for transportation planning and investment decisions in the subarea.

#### **US Air Force Sentinel Project**

The US Air Force has proposed the Sentinel<sup>1</sup> system as the replacement for the aging Minuteman III intercontinental ballistic missile system (ICBM), modernizing the US land-based nuclear triad and extending its capabilities through 2075. The project involves Malmstrom Air Force Base in Montana, F.E. Warren Air Force Base in Wyoming, and Minot Air Force Base in North Dakota. As of spring 2025, off-base construction associated with the Malmstrom Air Force Base project was expected to involve the following efforts in the subarea, however specific project components are subject to change as the project evolves:

- Establish workforce hub in Lewistown
  - 50–60 acres in size
  - 2,500–3,000 residents during peaks for three to five years
- Establish construction laydown/staging areas in Lewistown.
  - About 13 acres in size
  - In place for three to five years

#### **Defense Access Road Program (DAR)**

The DAR Program<sup>2</sup> has been an essential partnership between the Department of Defense (DOD) and the predecessors of the FHWA since 1919, ensuring that military needs are considered in the nation's Federal-aid Highway Program. This collaboration continued with the establishment of the FHWA in 1966. The DAR Program helps address the unique transportation needs that arise due to defense activities, such as the access and mobility requirements for military bases and facilities. Under this program, the military can contribute to the costs of public highway improvements necessary to mitigate the impact of their operations on local transportation infrastructure. When a military base identifies a transportation need, it submits the request to the Military Surface Deployment and Distribution Command (SDDC) for evaluation. Once approved by Congress, funds are allocated through the FHWA, and the project follows Federal Highway procedures.

The FHWA collaborates with the Military SDDC to support the US Air Force's ICBM Program, specifically the Minuteman system. As part of the DAR Program, the DOD provides annual funding for the extraordinary maintenance of transporter erector routes, including tasks such as snow removal and regravelling, to ensure access to missile sites. Since its inception in 1957, the DAR Program has averaged \$20 million per year in funding to maintain these critical transportation routes that support the nation's nuclear deterrence capabilities.

### **The National Defense Authorization Act (NDAA) for Fiscal Year 2024**

The NDAA for Fiscal Year 2024<sup>3</sup> authorizes funding for military operations, construction projects, and defense programs, and sets the number of service members for the year. Section 362 establishes new regulations for antenna structure and energy projects with towers over 200 feet located within two nautical miles of active ICBM facilities. These projects are subject to national security risk assessments by the DOD and may be blocked if risks cannot be mitigated. However, the rule excludes structures built before the Act's enactment, including upgrades that do not increase height. The affected ICBM facilities include Francis E. Warren, Malmstrom, and Minot Air Force Bases, along with their missile fields.

### **VACOM Lewistown Facilities**

A German manufacturing company<sup>4</sup> announced in December 2023 its plans to locate a new American operational facility in Lewistown, with an eventual total investment of \$90 million to create about 500 new jobs. VACOM fabricates and services highly specialized components and measurement technology for industrial clean room vacuum systems, serving industries such as chipmaking, aerospace, and research and development. Construction on a smaller facility began in September 2024 on Upper Spring Creek Road. A larger facility is anticipated south of the airport and may include a 40,000 square foot clean room and production space, along with a training center, a cafeteria, and a day care and kindergarten. The main operational facility will likely be constructed in a series of phases set for completion in 2029, although project timelines may be extended based on market conditions.

### **Fergus County Growth Policy**

Fergus County's most recent growth policy was completed in 2022. This plan outlines the county's approach to growth and development which will influence transportation infrastructure and land use decisions as growth occurs in the region. The City of Lewistown, and a 4.5-mile jurisdictional area surrounding the incorporated city limits, are part of the City of Lewistown growth policy planning area which is defined by an interlocal agreement between the two entities.<sup>5</sup> This agreement has resulted in two different policy areas, with Fergus County's growth policy relying on Lewistown's growth policy for land use planning.

### **The 2024 Lewistown Plan**

The *2024 Lewistown Plan*<sup>6</sup> was adopted on October 7, 2024, and provides a 20-year roadmap for Lewistown's development, replacing the *2006 Lewistown Growth Policy*. The updated plan addresses current challenges including housing affordability, infrastructure needs, and population growth while aligning with Montana's *Land Use Planning Act*. Central to the plan are guiding principles and a tiered land use strategy that encourages infill development in central areas while setting aside outer zones for future or rural use and conservation. It also

lays out specific goals and policies that focus on land use and growth management, housing and childcare, transportation, economic development, natural and cultural resource protection, and infrastructure and community services. These are supported by a future land use map to guide zoning updates and planning decisions, which also include a planning area boundary displaying the extent of planning initiatives, as well as a newly defined urban services area to ensure fiscally responsible growth. Specific goals for the plan which are relevant to this effort include:

- Designing a transportation network that integrates multiple modes of travel and serves existing population and activity centers.
- Fostering a pedestrian-friendly environment in downtown that focus on connectivity by addressing gaps in the existing non-motorized network, while allowing for the efficient movement of vehicles.
- Planning for projected population growth to encourage a well-balanced mix of residential, commercial, and industrial uses.
- Providing an efficient and interconnected road network with well-structured intersection designs to reduce future congestion.

Implementation of these goals is guided by an action matrix prioritizing initiatives such as affordable housing incentives and infrastructure improvements, with oversight from the Lewistown Planning Commission. High-priority actions include updating zoning regulations, creating affordable housing incentives, and improving pedestrian and bicycle infrastructure by creating a *Regional Transportation Master Plan* that outlines goals, strategies, and projects for Lewistown. The plan also indicates a need for future transportation connections near the airport in response to new land use and zoning codes, future growth projections, and future housing needs. This framework aims to balance growth with preservation of Lewistown's rural character and natural environment, guiding the city's "re-growth" as a vibrant, sustainable community.

### **Lewistown Municipal Airport Economic Impact Study**

In 2016, MDT conducted an economic impact study of Montana's airports that evaluated the role of Lewistown Municipal Airport (LMA) in supporting transportation, economic growth, and community activities.<sup>7</sup> LMA is a general aviation facility with historical significance as a World War II B-17 training base and contributes to the local economy by hosting 28 companies employing over 240 people and supporting diverse activities such as agricultural spraying, firefighting, medical evacuation, and corporate travel. The study aimed to quantify the airport's economic contributions through jobs, payroll, including aviation-related and non-aviation-related businesses, visitor spending, and capital expenditures on construction, while emphasizing its importance in fostering regional development, enhancing connectivity, and supporting community events.

### **1.2.2 Past, Current, and Planned Transportation Projects**

The following transportation projects have been recently completed, are currently under development, or are planned to be completed, by MDT or the City of Lewistown within or near the subarea.

## **Past Projects**

***Lewistown West Overpass Reconstruction:*** In 2002, a cultural resource inventory<sup>8</sup> and evaluation were performed for the reconstruction of the Lewistown West Overpass on US 87. This project focused on enhancing transportation infrastructure while preserving cultural resources in the area. Key elements included:

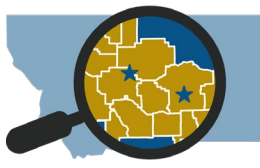
- Redesigning and reconstructing the intersection of US 87 and the truck bypass west of Lewistown.
- Improving US 87 to a three-lane section between the truck bypass and Airport Road, with realignment of minor intersecting roadways.
- Redesigning and reconstructing the intersection of US 87 and Airport Road on the western edge of Lewistown.
- Developing an access management plan along US 87 between the truck bypass and Airport Road, including identification of consolidated access points and early planning for a frontage road system.

***Lewistown Creekside Marketplace Project:*** In 2018, MDT supported the development of the Creekside Marketplace project in coordination with the City of Lewistown and the Department of Commerce, as well as other local community sponsorships. The project included construction of a pavilion, year-round public restrooms, market space, a creekside dining deck, a small play area, trail access, green space, public parking, and fishing access. The site, a previously abandoned industrial property, is located on Main Street near historical downtown Lewistown.

***Lewistown City Loop Path:*** Completed in 2017 through an MDT Transportation Alternative (TA) program grant, this project included paving 1.7 miles of an existing gravel surfaced path along an abandoned railroad line creating an Americans with Disabilities Act (ADA) compliant multi-use path in Lewistown. The project provides an off-street transportation corridor extending from A Street to Main Street on the east side of the city and from 6<sup>th</sup> Avenue to Main Street on the south side of the city. The project included an asphalt path, grading, concrete ADA ramps, curb & gutter, bollards, and revegetation.

***Downtown Parklet Placemaking Project:*** Supported by MDT, the Department of Commerce, and the City of Lewistown, this project was implemented in 2017 and sought to promote the walkability and economic vitality of the downtown commercial district. The initiative involved creating several inviting outdoor dining and seating areas within the city's arts and entertainment district, adding to downtown's accessibility for pedestrians.

***Lewistown 7th Ave ADA Ramps:*** This project included the reconstruction of 47 sidewalk corners to ADA standards along a 12-block section of 7th Avenue extending from Broadway Street to Highland Street. The project provides ADA compliant sidewalk ramps in a residential area connecting Highland Park Elementary School, Kiwanis Park, and downtown Lewistown. The project included new curb and gutter, sidewalk, ADA ramps, signing, and crosswalk striping. This project was completed in 2016 with assistance from the TA grant program.



**Lower Airport Road – Lewistown:** This pavement preservation project, completed in 2021, included resurfacing, seal and cover, and pavement markings on 0.8 miles of Lower Airport Road starting at Reference Post (RP) 0.0. The project also realigned the intersection of Lower Airport Road and Airport Road to improve traffic flow and safety.

**Airport Road - Lewistown:** This resurfacing project, completed in 2024, resurfaced approximately 1.5 miles of Airport Road on the southwest end of Lewistown, from RP 0.00 to 1.38. The project included roadway ditches that replaced degraded surface and subsurface materials, a scrub seal, and new overlay and chip seal. Additionally, sign replacement and new pavement markings were installed.

### **Current Projects**

**SF189 North D5 Safety Improvement:** This safety project, awarded for construction in 2024, aims to address road departure crashes at two locations, one of which is located within the Lewistown subarea. Improvements at the intersection of MT 200 and the truck bypass on the west side of Lewistown will include the installation of signs, rumble strips, and a splitter island.

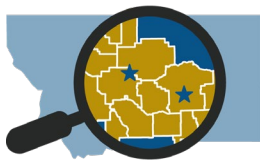
**Billings District ADA Upgrades / Lewistown ADA Upgrades:** Awarded for construction in 2024-2025, this project focuses on improving pedestrian facilities state-wide. One of the locations included in this project is a 0.5-mile stretch of 1st Avenue North in the Lewistown subarea, between W Boulevard Street and Upper Spring Creek Road. The project includes upgrading 17 existing corner ramps, installing more than 11,000 square feet of new sidewalks, 29 sign replacements, and reconstruction of 26 approaches to meet ADA standards. Construction in Lewistown began in the fall of 2024 and will continue through 2025.

**1st Avenue South - Lewistown:** This resurfacing project, scheduled for fiscal year 2025, will involve a mill and fill process along 1st Avenue S from RP 0.00 to 0.38.

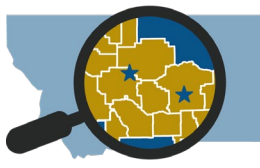
**MT 200 Bridges Lewistown Area:** This project will reconstruct 10 bridges along US 87/MT 200 in the Lewistown area,<sup>9</sup> replacing the aging structures with new bridges or culverts. All of these planned bridge improvements are located east of Lewistown towards Grass Range and are outside of the Lewistown subarea boundary. Nine of the bridges were constructed prior to 1940 and the timber structures are reaching the end of their useful and serviceable life. In addition to the bridge replacements, the project will include other elements such as new guardrails and rumble strips, widening of shoulders near the bridges, roadway flattening, and minor road and approach construction to tie the new structures into the existing road. The project is planned to begin construction in April 2025 and extend into 2026.

### **Planned Projects**

**6th / Walnut / Ash - Lewistown:** The Ash Street bridge over Big Spring Creek is a current MDT project in the early design phase, with construction estimated to begin in 2029 depending on design completion and funding availability. The project will widen the bridge to accommodate a five-foot-wide pedestrian walkway, along with a new sidewalk, curb, and gutter on the north side of the street between Casino Creek Drive and the tennis court parking lot near Fergus High School.



***Lewistown Area Bridges - DAR Structures Project:*** The Lewistown area is actively planning for a period of growth that will result in increased traffic throughout the region. As part of the preparations for this expansion, MDT will replace 11 aging bridges on or near MT 81 through the Lewistown Area Bridges-DAR Structures Project.<sup>10</sup> This project is a collaboration with the DOD and is partially funded through the DAR program, which supports essential highway improvements for defense initiatives and the upcoming growth from the Sentinel project.<sup>11</sup> Although none of the bridges are located within the Lewistown subarea boundary, eight of the structures were identified by Malmstrom Air Force Base as needing replacement to support upcoming military activities in the area, with the remaining three bridges nominated by MDT to be replaced. The project is currently in the design phase, with construction projected to begin in the spring of 2026 and extending into 2028.



## 2.0 DEMOGRAPHICS

Historical and current demographic trends help define existing conditions and support forecasting methods, as there is a direct relationship between motor vehicle travel and socioeconomic factors. This section provides an overview of the socioeconomic characteristics of the Lewistown subarea. It includes data from Fergus County and Lewistown, along with comparative data for the State of Montana and the United States as a whole. Demographic and socioeconomic data was analyzed to assess recent trends in population, age distribution, employment, economic status, and commuting patterns. Due to the time lag in the availability of socioeconomic data, this analysis presents the most current information and highlights recent and potential changes within the region.

### 2.1 Population

A review of demographic within the subarea provides essential context for understanding historical population trends and characteristics relevant to transportation planning. Population composition data is crucial as it may influence recommended improvements. For instance, a predominantly older population might necessitate specific transportation enhancements such as expanded transit services or improved pedestrian infrastructure. Similarly, areas with a high proportion of low-income residents or large numbers of adolescents may require different transportation considerations tailored to their unique needs.

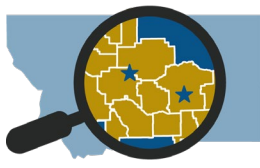
#### 2.1.1 Historic and Recent Population Trends

From 1970 through 2020, Montana's population consistently grew at a compound annual growth rate (CAGR) of 0.90 percent. From 2010 through 2022, Montana experienced the 11th highest population growth in the nation, at 13.30 percent. Fergus County and Lewistown both experienced population increases from 1970 through 1980 and population decreases from 1980 through 2020. **Table 1** provides historical and current population estimates for the city, county, state, and country.

**Table 1: Population Change Since 1970**

Area	1970	1980	1990	2000	2010	2020	Compound Annual Growth (1970 – 2020)
Lewistown	6,437	7,104	6,051	5,813	5,901	5,952	-0.16%
Fergus County	12,611	13,076	12,083	11,893	11,586	11,446	-0.19%
State of Montana	694,409	786,690	799,065	902,195	989,415	1,084,225	0.90%
United States	203.2M	226.5M	248.7M	281.4M	308.7M	331.4M	0.98%

Source: US Census Bureau & MT Census and Economic Information Center. 1970 – 2020. Population Estimates.



## 2.1.2 Subarea Population Characteristics

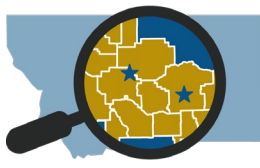
NEPA/MEPA requires federal, state, and local agencies to evaluate the potential social and economic impacts of proposed actions. Guidelines recommend considering effects on neighborhoods and community cohesion, social groups such as minority populations, local and/or regional economies, as well as potential growth and development resulting from transportation improvements. The information provided in this section aims to help identify populations that may be impacted by proposed improvements in the subarea. **Table 2** summarizes recent population and demographic data for Fergus County and Lewistown, along with data for the whole state and country for comparison. The data was obtained from the 2019 through 2023 American Community Survey (ACS) 5-Year Estimates,<sup>12</sup> which provide detailed demographic, social, economic, and housing information by combining five years of survey data to offer reliable insights for smaller geographic areas.

Both Lewistown and Fergus County have predominantly White populations. American Indian residents make up 1.8 percent of the Lewistown population and 2.0 percent of the Fergus County population, well above the national average of 0.9 percent. City and county Hispanic or Latino populations are lower than the national average of 19.0 percent, with averages of 3.7 and 2.2 percent, respectively, and slightly lower than the State of Montana at 4.4 percent. In terms of age, 21.6 percent of Lewistown residents are under 18, close to the national average of 22.2 percent. However, 27.0 percent of Lewistown residents are seniors (65+), higher than the US average of 16.8 percent. Disability rates in Lewistown are also higher, with 19.2 percent of residents reporting disabilities, above the national average of 13.0 percent.

**Table 2: Race, Age, Sex, and Disability Data**

Population Characteristics		Lewistown	Fergus County	State of Montana	United States
Race	White	92.0%	93.2%	85.7%	63.4%
	African American	1.1%	0.6%	0.5%	12.4%
	American Indian	1.8%	2.0%	5.7%	0.9%
	Asian	0.8%	0.9%	0.8%	5.8%
	Other Race/ Combination of Races	4.3%	3.2%	7.2%	17.5%
	Hispanic or Latino (any race)	3.7%	2.2%	4.4%	19.0%
Age	Under 18	21.6%	20.7%	21.3%	22.2%
	18-64	51.5%	54.6%	59.0%	61.0%
	65 and over	27.0%	24.7%	19.7%	16.8%
Sex	Male	51.9%	51.2%	50.7%	49.5%
	Female	48.1%	48.8%	49.3%	50.5%
Disability Status*	% Persons with Disability	19.2%	14.4%	14.3%	13.0%
	% Disabled (<18 years)	11.8%	7.2%	4.7%	4.7%
	% Disabled (≥65 years)	30.5%	27.6%	32.7%	32.9%
Total Population		6,028	11,581	1,105,072	332,387,540

Source: US Census Bureau. 2019-2023. ACS 5-Year Estimates. \*Disability status provided as a percentage of the noninstitutionalized population.



### 2.1.3 Population Projections

Lewistown experienced a small population growth from the five-year ACS period ending in 2018 through the period ending in 2023, with an increase of 2.3 percent, compared to 2.7 percent growth in Fergus County and 6.1 percent growth in Montana. This increase aligns with the national average growth rate of 2.9 percent. Looking ahead, population projections from the Regional Economic Models Incorporated (REMI), utilize 2021 vintage year data to forecast the population using the latest available demographic data, including birth rates, death rates, migration patterns, and other factors. The REMI model indicates that the populations in Lewistown and Fergus County are projected to decrease, with estimated declines of 3.0 percent from 2025 through 2035. In comparison, Montana is expected to grow by 4.9 percent, and the national population is projected to increase by 3.8 percent. **Table 3** details the past and projected population trends in the region and country.

The overall growth trend of Lewistown and Fergus County could be influenced by the planned developments discussed in **Section 1.2**, particularly in the Lewistown area with the upcoming Sentinel project, VACOM development, and other potential projects that may contribute to a population increase. However, it remains uncertain whether this growth will be sustained long-term after these projects are completed, or rather if these growth trends will result in temporary fluctuations of seasonal workers, with an overall decline in permanent residents over the long-term.

**Table 3: Population Change**

Parameter	Lewistown	Fergus County	State of Montana	United States
2014-2018 5-year estimate	5,895	11,273	1,041,732	322,903,030
2019-2023 5-year estimate	6,028	11,581	1,105,072	332,387,540
2025 Projection	5,982	11,545	1,160,666	338,016,000
2030 Projection	5,912	11,410	1,199,203	345,074,000
2035 Projection	5,805	11,204	1,217,232	350,861,000
Population Change (2018-2023)	2.3%	2.7%	6.1%	2.9%
Projected Population Change (2025-2035)	-3.0%	-3.0%	4.9%	3.8%

Source: US Census Bureau. 2014-2018 and 2019-2023. ACS 5-Year Estimates.

REMI. 2023 (2021 vintage year). National Population Projections Tables: Main Series.



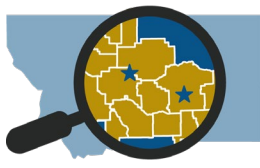
## 2.1.4 Housing Characteristics

From the five-year ACS period ending in 2018 through the period ending in 2023, the number of housing units in Lewistown decreased by 6.1 percent, while Fergus County experienced a slight increase of 1.9 percent, as shown in **Table 4**. In Lewistown, the total number of occupied housing units decreased by 1.4 percent, while Fergus County experienced an increase of 4.5 percent. Both are lower than the 7.0 percent increase experienced in Montana as a whole. Notably, the share of owner-occupied units decreased substantially in both Lewistown (-8.1 percentage points) and Fergus County (-4.2 percentage points), a stark difference with the state's increase in owner-occupancy rates at 9.7 percentage points and the national rate increase of 8.4 percentage points.

**Table 4: Housing Occupancy and Tenure Characteristics**

Subject		Lewistown	Fergus County	State of Montana	United States
2019-2023	Total Housing Units	3,047	6,008	522,939	142,332,876
	Total Occupied Housing Units	2,823	5,200	452,683	127,482,865
	Owner Occupied	1,737	3,433	314,266	82,892,037
	Renter Occupied	1,086	1,767	138,417	44,590,828
	Total Vacant	224	808	70,256	14,850,011
	Share of Owner-Occupied Units	61.5%	66.0%	69.4%	65.0%
	Average Number of Bedrooms	2.37	2.68	2.78	2.72
2014-2018	Total Housing Units	3,246	5,895	505,685	136,384,292
	Total Occupied Housing Units	2,864	4,975	423,240	119,730,128
	Owner Occupied	1,890	3,583	286,553	76,444,810
	Renter Occupied	974	1,392	136,687	43,285,318
	Total Vacant	382	920	82,445	16,654,164
	Share of Owner-Occupied Units	66.0%	72.0%	67.7%	63.8%
	Average Number of Bedrooms	2.54	2.68	2.72	2.70
Change in Total Housing Units		-6.1%	1.9%	3.4%	4.4%
Change in Occupied Housing Units		-1.4%	4.5%	7.0%	6.5%
Change in Owner Occupation Rate		-8.1%	-4.2%	9.7%	8.4%
Change in Number of Bedrooms		-6.6%	-1.7%	2.1%	0.6%

Source: US Census Bureau. 2014-2018 and 2019-2023. ACS 5-Year Estimates.



## 2.1.5 Personal Travel and Commuting Characteristics

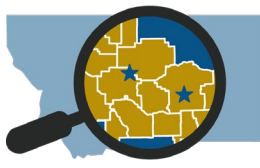
The ACS provides estimates of the total share of workers aged 16 years and older who commute or work at home, transportation modes used by commuters, and mean travel times to work for commuters. **Table 5** presents commuting characteristics for workers in Lewistown and Fergus County. Similar statistics for the State of Montana and the country are provided for comparison.

According to the 2019 through 2023 ACS data, most workers in Lewistown and Fergus County commute by car, with 75.6 and 61.6 percent driving alone, respectively. Carpooling is also a common method of commuting with 6.5 percent of workers in Lewistown and 9.8 percent in Fergus County. Walking to work is more prevalent in Lewistown (11.3 percent) compared to Fergus County (9.2 percent). Public transportation is limited throughout the State of Montana, and in both Lewistown and Fergus County it represents less than one percent of worker commute modes. The average commute time in Lewistown is 15.0 minutes, slightly lower than Fergus County's 18.6 minutes, and almost half of the national average of 26.6 minutes.

**Table 5: Mode of Transportation to Work**

Subject	Lewistown	Fergus County	State of Montana	United States
% Workers 16 Years and Older with Access to 1+ Vehicle	88.2%	92.6%	97.8%	95.7%
Number of Workers 16 Years and Older	2,570	5,617	532,519	157,645,183
% Who Commuted to Work	96.0%	83.8%	88.4%	86.5%
% Who Worked at Home	4.0%	16.2%	11.6%	13.5%
Drove alone (car, truck, van)	75.6%	61.6%	72.0%	70.2%
Carpooled	6.5%	9.8%	9.6%	8.5%
Public Transportation (excluding taxicabs)	0.0%	0.8%	0.6%	3.5%
Walked to Work	11.3%	9.2%	4.0%	2.4%
Bicycled to Work	0.0%	0.9%	1.0%	0.4%
Other means of commuting	2.6%	1.5%	1.2%	1.5%
Mean Travel Time to Work (minutes)	15.0	18.6	19.2	26.6

Source: US Census Bureau. 2019-2023. ACS 5-Year Estimates.



## 2.2 Economic Conditions and Income Characteristics

Economic conditions and income characteristics play a critical role in shaping transportation needs and informing long-term planning decisions. Analyzing employment trends, dominant industries, and income distribution can offer some insight into transportation access and infrastructure demand. Understanding the economic landscape of Lewistown and Fergus County can help ensure that transportation investments are aligned with community needs and support sustainable economic vitality over time.

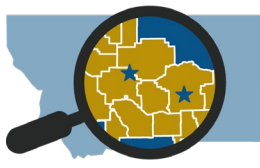
### 2.2.1 Employment Industries

Fergus County contributes to Montana's economic landscape predominantly through education and health services. Educational services, health care, and social assistance are the largest industries, accounting for nearly 20.7 percent of the workforce, while agriculture, forestry, fishing, hunting, and mining account for 16.6 percent, with retail trade employing 11.7 percent. Lewistown follows a similar trend to the rest of the county, with 29.6 percent of the workforce employed in educational services, health care and social assistance, and 14.9 percent in the retail trade industry, and 9.3 percent in transportation, warehousing, and utilities, ranking slightly higher than state and national averages for retail trade. **Table 6** presents the 2023 employment estimates by industry for the region, state, and country.

**Table 6: Employment by Industry**

Industry	Lewistown	Fergus County	State of Montana	United States
Agriculture, forestry, fishing, hunting, and mining	2.5%	16.6%	5.5%	1.6%
Construction	6.0%	9.7%	9.4%	6.9%
Manufacturing	5.4%	4.8%	5.0%	9.9%
Wholesale trade	1.0%	2.8%	2.0%	2.0%
Retail trade	14.9%	11.7%	10.8%	10.6%
Transportation, warehousing, and utilities	9.3%	6.9%	5.3%	6.0%
Information	2.1%	1.0%	1.3%	1.9%
Finance, insurance, real estate, rental and leasing	3.4%	3.1%	6.3%	6.6%
Professional, scientific, management, and administrative	8.2%	7.0%	9.8%	12.8%
Educational services, health care and social assistance	29.6%	20.7%	23.4%	23.5%
Arts, entertainment, recreation, and accommodation	6.9%	7.1%	10.3%	8.8%
Other services, except public administration	7.3%	5.9%	5.4%	4.8%
Public administration	3.2%	2.8%	5.6%	4.6%

Source: US Census Bureau. 2019-2023. ACS 5-Year Estimates.



## 2.2.2 Employment Status and Income Measures

**Table 7** presents data on employment status and income levels for Lewistown, Fergus County, the State of Montana, and the United States for the 2019 through 2023 period. Lewistown reported a median household income of \$44,195, which is lower than both the county median of \$59,731 and the state median of \$69,922. The mean household income in Lewistown was \$58,432 below both the county average of \$76,413 and the state average of \$94,544. The unemployment rate in Lewistown was 6.8 percent, which is higher than the county, state, and national averages of 3.5, 3.8, and 5.2 percent, respectively. The poverty rate in Lewistown was 20.6 percent, nearly double the state rate of 12.0 percent and the national rate of 12.4 percent.

**Table 7: Employment Status and Income Statistics**

Characteristics of Population	Lewistown	Fergus County	State of Montana	United States
Civilian Labor Force (16 years and older)	2,784	5,851	560,181	168,567,852
Employed %	93.2%	96.5%	96.2%	94.8%
Unemployed %	6.8%	3.5%	3.8%	5.2%
Median Household Income	\$44,195	\$59,731	\$69,922	\$78,538
Mean Household Income	\$58,432	\$76,413	\$94,544	\$110,491
Per Capita Income	\$28,830	\$34,970	\$39,842	\$43,289
Poverty Rate	20.6%	14.9%	12.0%	12.4%

Source: US Census Bureau. 2019-2023. ACS 5-Year Estimates.

Notes: Civilian labor force is defined as workers 16 years and over not in the Armed Forces. Unemployed percentage calculated based on total civilian labor force.

## 3.0 EXISTING TRANSPORTATION SYSTEM

Current information about the transportation system was analyzed to establish the existing traffic conditions and to determine current areas of concern. The following analysis of transportation conditions includes a planning level examination of the roadway network within the Lewistown subarea based on existing traffic data, vehicle crash history, field observations, pavement and structure condition data, aerial imagery, and GIS data. Existing data was provided by MDT. RPA collected additional data in October 2024 and April 2025 to supplement the available information. Using a combination of the supplied and collected data, the existing operational characteristics of the transportation network were established.

### 3.1 Transportation Network

A transportation network is made up of multiple connected road segments to facilitate vehicular movement, as well as public transportation, bicycles, pedestrians, freight, rail, and other modes of transportation. Gaining a thorough understanding of each component of the transportation network helps to ensure that all modes of transportation are able to navigate the transportation network safely and efficiently.

#### 3.1.1 Major Street Network

A transportation system is made up of a hierarchy of roadways classified according to certain parameters. The parameters include but are not limited to geometric configuration, traffic volumes, spacing in the community's transportation grid, speed, and adjacent land use. These characteristics help define the role that each segment of roadway plays within the overall network. The method by which these roles are defined is widely known as functional classification, which defines the nature of travel within the network in a logical and efficient manner by defining the objectives that any particular road or street should meet to effectively move trips through the entire network.

The subarea includes roadways classified as principal arterials, minor arterials, collectors, and local streets. A fifth commonly used functional classification is Interstates, however, none of the three Interstates in Montana, Interstate 90 (east-west), Interstate 94 (east-west), and Interstate 15 (north-south), passes through the Lewistown subarea. For this evaluation, the functional classifications are neither limited to, nor defined by, "urban" or "rural" settings, though some entities often make a distinction between urban and rural functional classes. Rural roadways in the subarea generally carry a smaller volume than their urban counterparts. Although traffic volumes may differ between urban and rural sections of a roadway, it is important to still maintain coordinated right-of-way standards to allow for efficient operation and potential urban development in the future.

For this evaluation, emphasis was placed on roadways within the subarea that are functionally classified as collectors, minor arterials, and principal arterials. Local streets, which are the lowest ranking roadways, were not examined in detail due to the assumption that if the major street network is functioning at an acceptable level, the local roadways should not be used beyond their intended function. However, if problems begin to occur on the major street network, then the resulting issues could begin to infiltrate the local road network. As such, the

overall health of a community's transportation system can be characterized by the health of the major street network. The following discussion provides general descriptions of these functional classifications.

### **Principal Arterial System**

The purpose of a principal arterial is to serve the major centers of activity, the highest traffic volume corridors, and the longest trip distances in an area. This classification of roadway carries a high proportion of the total traffic. Most of the vehicles entering and leaving the area use principal arterials. Major intra-area travel, such as between central business districts, outlying residential areas, and major suburban centers, is also typically served by principal arterials. Principal arterials mainly connect to other principal arterials or to the Interstate system.



*Main Street is functionally classified as a principal arterial and carries the majority of traffic through downtown Lewistown.*

### **Minor Arterial Street System**

The minor arterial street system interconnects with and supplements the principal arterial system. Minor arterials accommodate trips of moderate length at a somewhat lower level of travel mobility, as compared to principal arterials. They distribute travel to smaller geographic areas in addition to providing some access to adjacent lands.



*Lower Airport Road is considered a minor arterial. It carries heavy school traffic.*

### **Collector Street System**

The collector street network provides links from residential, commercial, and industrial areas to the arterial street network. This type of roadway differs from those of the arterial system in that collector roadways may traverse residential neighborhoods. The collector system distributes trips from the arterials to the user's ultimate destinations while also collecting traffic from local streets in the residential neighborhoods and channeling the traffic to the arterial system. Major collectors carry moderate to high traffic volumes over longer, more continuous routes, while minor collectors handle lower traffic volumes and span shorter distances.



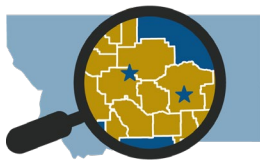
*Boulevard Street serves as a major collector street for the northern Lewistown neighborhoods.*

### **Local Street System**

The local street network comprises all facilities not included in the higher functional classes. The primary purpose of local streets is to permit direct access to abutting lands and connections to higher systems. Most local streets also provide residential and commercial access. Usually, service to through-traffic movements is intentionally discouraged either through low speeds or other traffic calming measures.

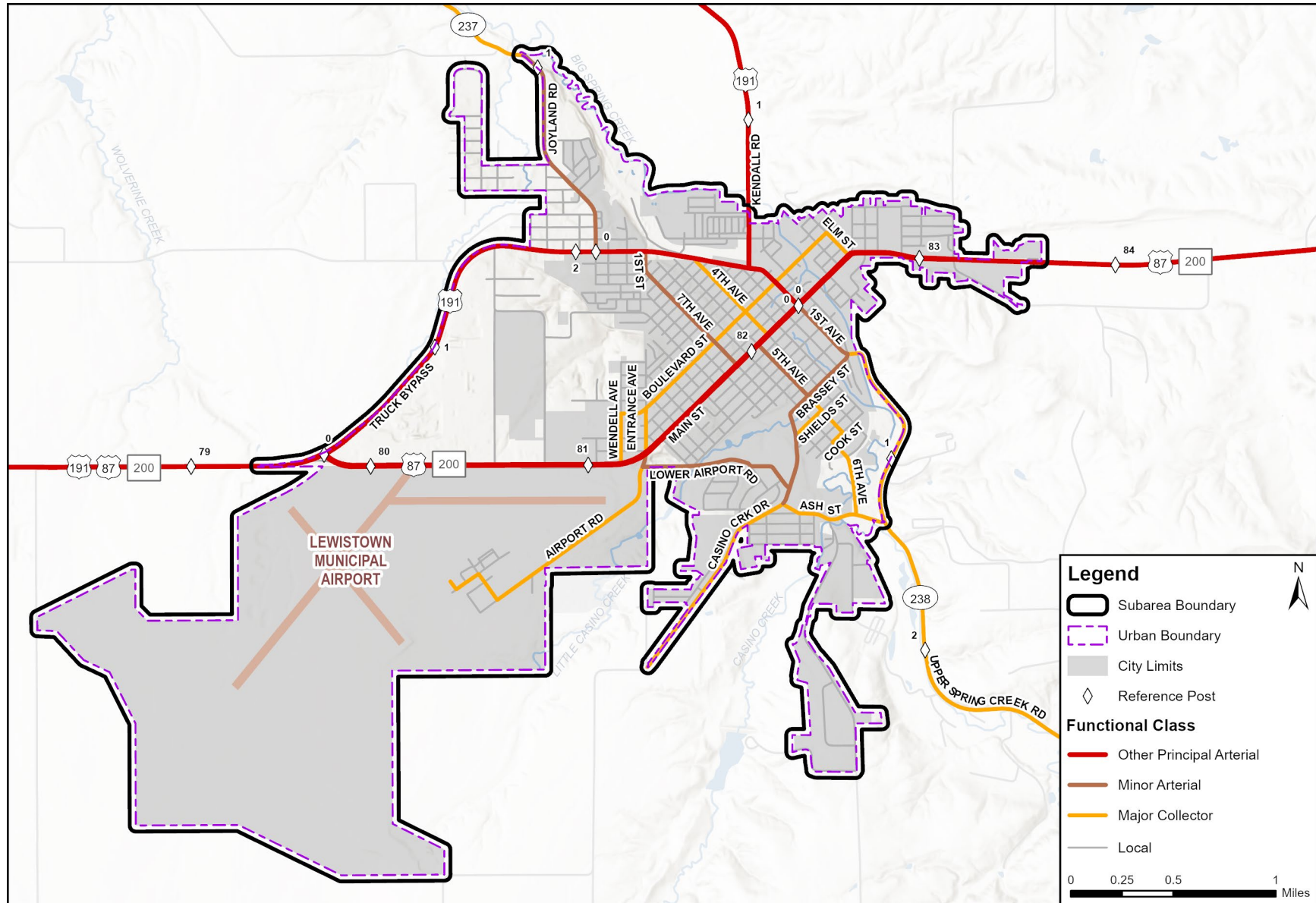
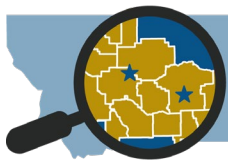


*Local streets primarily provide access to residential and commercial developments in Lewistown.*



**Figure 2** represents the existing major street network for the subarea. The functional classifications shown in the figure reflect the federally approved functional classification system as of spring 2025. However, MDT is currently assessing the existing functional classification designation of all roadways within Montana to determine the classifications that best represent the current function of roadways across the state through the *2025-2026 Statewide Functional Classification Review Project*. The recommended functional classification changes are expected to be approved by the Montana Transportation Commission and FHWA by February 2026. As a result, the designations shown in **Figure 2** may be updated in the near future. The visionary major street network, to be developed later in this planning effort, will represent the system as it is expected to function once recommended improvements are implemented.

Based on the existing functional classification designations shown in **Figure 2**, potential changes are acknowledged. For example, H Street located on the west side of the city is currently classified as a local street. However, local government representatives believe it could function as a minor arterial for Lewistown in the future as additional development occurs, serving as a convenient north to south connector on the western side of the city. Conversely, Joyland Road is currently classified as a minor arterial, and there have been discussions about potentially changing the classification. It currently carries less than 2,000 vehicles per day (vpd) but experiences congestion and periods of heavy traffic. However, steep grades and existing utilities on Joyland Road limit the opportunity for roadway expansion, so an alternative route connecting traffic to the truck bypass is desired, potentially leading to a change in classification for Joyland Road if an alternate route is identified.



**Figure 2: Existing Major Street Network**

### 3.1.2 Multimodal Network: Pedestrian, Bicycle, Truck, Freight, Rail, & Air

Aside from personal vehicle traffic, the Lewistown subarea is served by a range of multimodal transportation options such as pedestrian and bicycle activity, freight and passenger movement by truck and rail, and air travel. These modes play an important role in ensuring regional access, supporting economic activity, and connecting residents and goods to broader markets.

#### **Pedestrian and Bicycle Facilities**

With growing awareness of the physical and environmental benefits of alternative transportation, communities are seeing increased demand for non-motorized networks that support active modes like biking and walking, offering convenient connections to key landmarks across the city. The following section defines types of multimodal network facilities found in communities of similar size and describes the existing facility infrastructure in the Lewistown subarea. Due to its rural nature, the Lewistown subarea has limited dedicated on-street bike and pedestrian infrastructure, instead offering off-street walking and biking opportunities on trails and shared use paths, as shown in **Figure 3**.

According to the *2024 Lewistown Plan*, the section of US 87 that serves as Lewistown's Main Street has limitations on streetscape improvements for non-motorists due to its designation as a national highway and its ownership by MDT. Additionally, the presence of heavy truck traffic through downtown can make city streets uncomfortable for walking and biking. The city has an extensive trail system that is well used by non-motorists, but the community desires to expand the trail system to better connect rural and urban trails, parks, and public open spaces. The *2024 Lewistown Plan* outlines goals and recommends policy changes to help improve connectivity of the existing non-motorized network to enhance mobility options for pedestrians and bicyclists. Existing bicycle and pedestrian facilities are explained in the following sections and shown in **Figure 3**.

#### ***Sidewalks***

While many streets in downtown Lewistown have sidewalks, several gaps exist in the pedestrian network. Many streets in the residential and commercial areas outside of the urban center do not have sidewalks or have fragmented sections of sidewalks that end abruptly and lack connectivity to the broader sidewalk network. The MDT Lewistown ADA upgrades project, currently in construction in 2025, update and widen many of the sidewalks downtown along 1st Avenue towards Upper Springs Creek Rd, however there will still be locations where existing pedestrian facilities lack connectivity and are not compliant with ADA.

In Lewistown, the responsibility for constructing sidewalks in new developments typically falls on the property owner or developer, often leading to gaps in the broader network depending on the location and timing of development. The Lewistown city code specifies that the width of all new and reconstructed sidewalks in the city shall be determined by the building official.<sup>13</sup> The city's design and construction standards specify that the minimum sidewalk width is five feet for residential streets and seven feet for arterials and collectors. Sidewalks are required for all new developments.<sup>14</sup>

### ***Shared Use Paths and Trails***

Shared use paths are typically off-street, paved facilities designed to accommodate a variety of non-motorized users, including bicyclists, pedestrians, and individuals using personal conveyances such as wheelchairs, skateboards, and rollerblades. These paths are intended to support transportation-oriented travel, providing safe, accessible connections separate from vehicular traffic. In contrast, trails are generally unpaved and may consist of gravel, dirt, or other natural surfaces. Trails are primarily associated with recreational use, offering opportunities for hiking, nature walks, and other leisure activities in more natural settings. While both shared use paths and trails support non-motorized activity, their design, surface type, and primary function are distinguishing factors.

The Lewistown Recreational Trails System (LRTS) features an extensive 24-mile network of non-motorized paths and trails with a mix of paved, gravel, and natural surfaces, linking schools, parks, ponds, landmarks, and the downtown area throughout the Lewistown subarea. There is an ongoing initiative to pave segments of the trail network, expanding the non-motorized system and increasing connectivity across Lewistown for many user types. The focus of the LRTS is to be used by active transport modes such as walking and biking; motorized vehicles are not permitted on the LRTS at this time.

The first recreational trails in Lewistown were developed in the 1990's at Brewery Flats<sup>15</sup> as part of a stream restoration and reclamation project where Big Spring Creek was returned to its naturalized meandering route. This allowed reconnection to a historical natural landmark for Lewistown, and more trails near the Frog Ponds followed in the 2000s. The Frog Ponds are centrally located in Lewistown near the intersection of Airport Road and Fluorite Drive where a cluster of schools is located. In 2006, the City of Lewistown acquired an abandoned section of the BNSF railroad corridor which led to the removal of the railroad tracks. A 150-foot section of track remains as a historical marker, and much of the former rail corridor has been converted into a 10-foot-wide path as part of the LRTS.

The city loop is a paved segment and a central component of the LRTS, which meanders through the historic center of Lewistown and connects various community landmarks. The network of gravel trails near Frog Ponds and Brewery Flats are primarily used for recreation such as single-track mountain bike riding, walking, and hiking. **Figure 3** shows the different surface types of the LRTS.

The LRTS continues to expand, and most recently a segment of the trail near the city loop was paved in April 2025. Looking ahead, the next planned paving project focuses on the Glengarry Trail, an eight-mile stretch parallel to the former BNSF railroad bed running west of Lewistown. Long-term plans involve upgrading additional segments of the trail network with crushed gravel in some areas and paved sections in others with the goal of enhancing usability and safety for all users. Friends of the Lewistown Trails maintain trails and are actively advocating for the expansion of the non-motorized network.

### ***Bike Lanes***

Bike lanes are a portion of a roadway which have been designated by striping, signage, and pavement markings for the preferential or exclusive use of bicyclists. Bike lanes encourage predictable movement by both bicyclists and motorists. Lewistown does not have dedicated bike lanes on any streets.

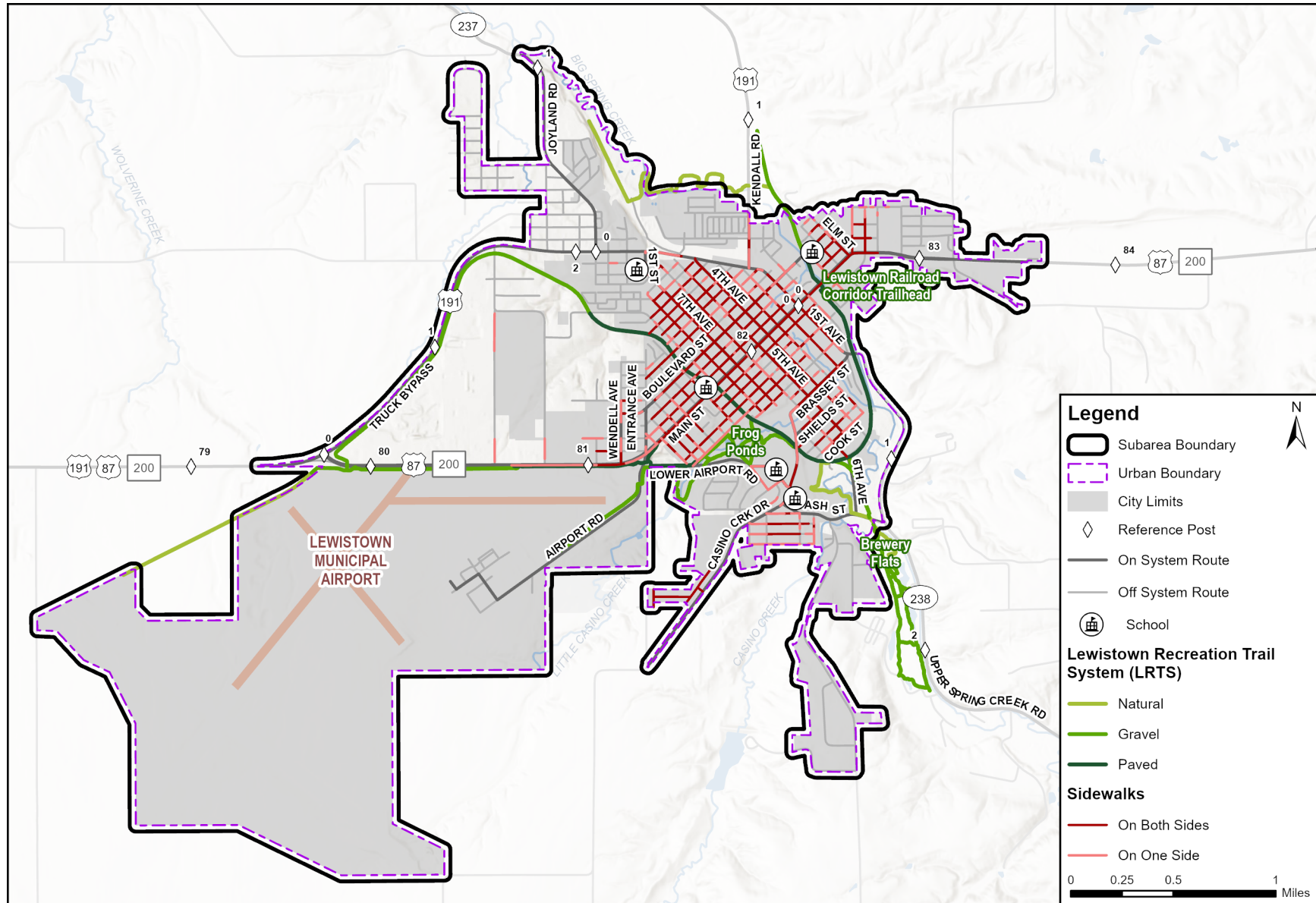
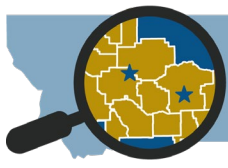


Figure 3: Existing Non-Motorized Network

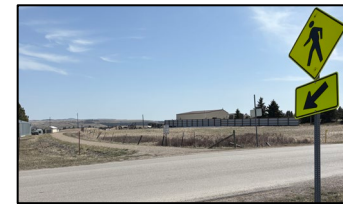
### Crosswalks

Crosswalks are a critical component of the non-motorized network, providing safe passage across streets for vulnerable road users. Three key accommodations can be used to make crosswalks visible and accessible, including signage, pavement markings, and connecting facilities (e.g., sidewalk or shared use path) with ADA-compliant curb ramps. In Lewistown, crosswalks are primarily located along routes with heavier traffic volumes such as Main Street and 7th Avenue, while local streets tend to have fewer crosswalks.

Although the most heavily traveled roads do feature crosswalks, the majority of these do not include all three recommended accommodations. **Figure 4** illustrates the locations of existing crosswalks and indicates how many accommodations each includes. The figure provides a close-up view of the city core, where most marked crosswalks are located. Beyond this area, crossings and sidewalks are largely absent. **Table 8** shows the number of crosswalks with each combination of accommodations across the entire subarea. Crosswalks are counted by intersection leg, so a four-legged intersection has the potential for four crosswalks. Legs with connecting facilities on only one side are not considered ADA compliant. Fewer than three percent of crosswalks in Lewistown are fully developed with signing, striping, and connecting facilities. Most crossings (86.5 percent) are undeveloped with no accommodations. While not all crosswalks require all three accommodations, they often enhance safety, visibility, and accessibility, especially at crossings with high activity.



*A fully developed crossing that is signed, striped, and has connecting facilities with ADA-compliant curb ramps on each side.*



*An underdeveloped crossing that is signed, but not striped, with connecting facilities on one side but no ADA accommodations.*

**Table 8: Crosswalk Accommodations**

Has Signage?	Has Pavement Markings?	Is ADA Compliant?	Number of Intersection Legs	Percent of Intersection Legs
No	No	No	1,454	86.5%
No	No	Yes	55	3.3%
No	Yes	No	24	1.4%
Yes	No	No	11	0.7%
No	Yes	Yes	56	3.3%
Yes	No	Yes	5	0.3%
Yes	Yes	No	19	1.1%
Unknown	Yes	Unknown	14	0.8%
Yes	Yes	Unknown	4	0.2%
Yes	No	Unknown	1	0.1%
Yes	Yes	Yes	38	2.3%
<b>78</b>	<b>155</b>	<b>154</b>	<b>1,681</b>	<b>100%</b>

Developed via review of available aerial and Google Streetview imagery in 2025. Fields marked as "unknown" could not be verified with available imagery.

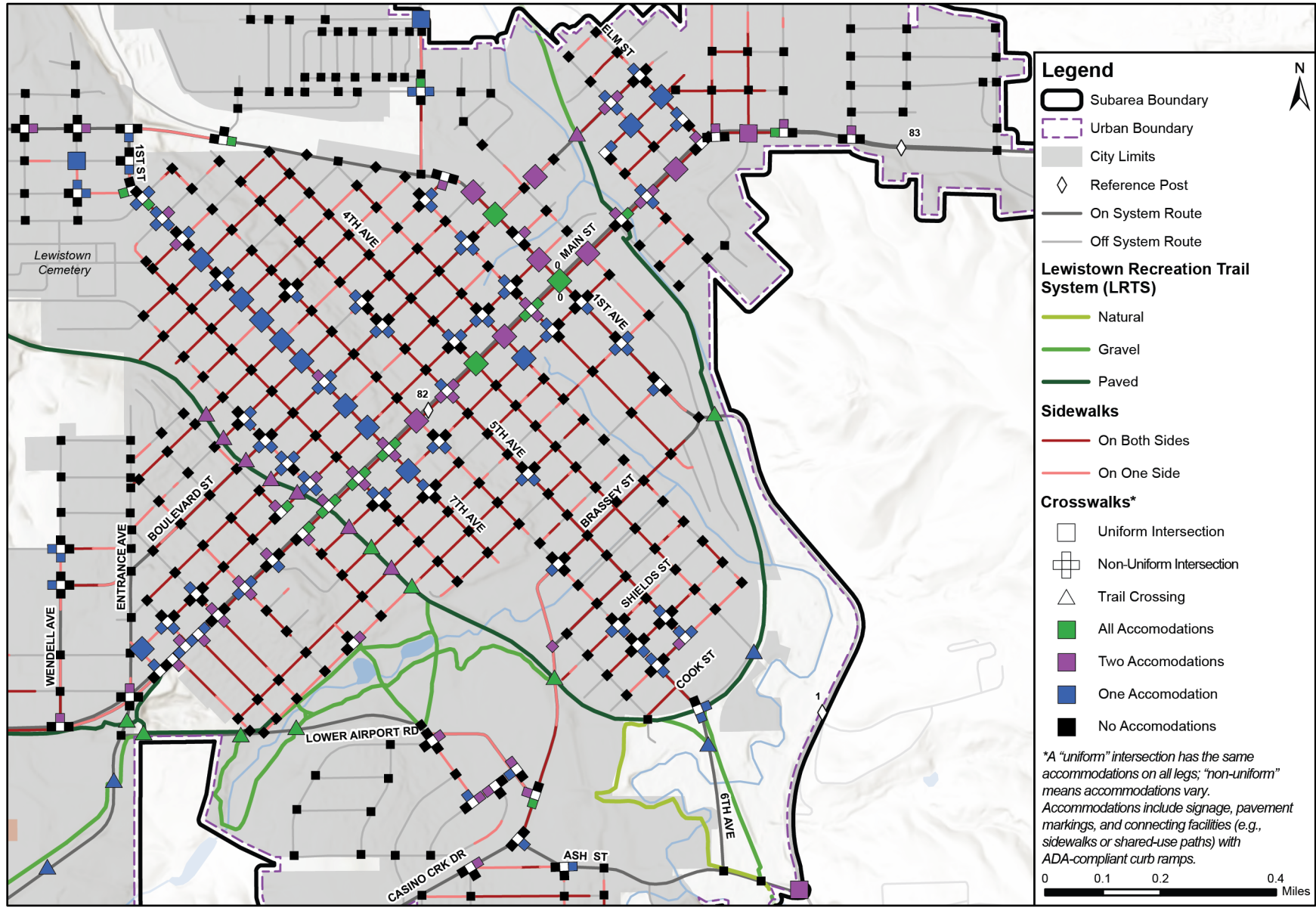
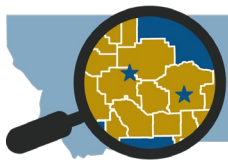


Figure 4: Existing Crosswalks

## **Public and Private Transportation Services**

Transportation services in the Lewistown subarea consist of limited public transit options and various private providers. The City of Lewistown does not operate a fixed-route bus system. Instead, transit needs are addressed through dial-a-ride programs and on-demand private transportation options such as rideshare companies and local taxi operators.

### ***Central Montana Shuttle***

Operated by the Fergus County Council on Aging<sup>16</sup> (FCCOA), the Central Montana Shuttle provides dial-a-ride services within Lewistown and Fergus County. The shuttle predominantly serves seniors and individuals with disabilities but is open to the general public. It is available on weekdays only and offers out-of-town services on an irregular basis to Billings and Great Falls. This service operates as public transit for the region and offers door-to-door assistance with wheelchair accessibility. As a nonprofit organization, FCCOA funds the Central Montana Shuttle through a combination of sources such as grants, donations, fundraising events, and a fare revenue of \$1.50 per stop.

### ***Private Transportation Services***

Several private transportation options offer services in Lewistown including network companies, such as Uber and Lyft, as well as several local taxi operators. These providers generally offer scheduled or on-demand door-to-door transportation services in the area with 24/7 ride requests available.

## **Freight and Goods Movement**

Freight movement is critical to Montana's economy, providing access to important commodities, creating jobs, and encouraging investment and economic growth. Montana's location between midwestern and northwestern port markets and continued growth in consumer demand for goods has resulted in strong freight service demand. As noted in the *Montana Freight Plan*,<sup>17</sup> 96 percent of freight by weight in Montana moves by trucks, trains, and pipelines. Understanding how freight and rail within the subarea interact with the rest of the transportation network helps ensure transportation modes can continue to move safely and efficiently through the transportation network as the demand for goods and services fluctuates.

Agriculture is an important industry in Montana, including Fergus County. The region contributes to the state's agricultural economy, with wheat and pulse crops being key commodities, transported via truck-to-rail loading facilities for shipment to other destinations across the state and country. Lewistown is part of the agricultural sector supply chain, with local facilities supporting bulk agricultural commodities. Central Montana Coop is a truck to rail loading facility in the subarea and has multiple locations throughout the city serving different purposes. These locations support the transportation of bulk agricultural commodities, such as cereal grains and pulses, which are critical to the region's agricultural economy, enabling efficient movement of goods from farms to rail networks for further distribution.

### ***Truck Bypass***

The US 87 truck bypass serves as a key freight corridor and designated truck bypass around the City of Lewistown. Skirting the northern and western edges of the city, the route is intended to help divert heavy truck traffic away from the downtown core. Although officially designated

as the US 87 truck bypass, much of the route is also signed as part of US 191. It begins just west of downtown, where US 87/MT 200 transitions into Main Street, and continues northeast, curving into 6th Avenue W. The route then extends eastward, becoming 1st Avenue N at the intersection with Kendall Road (US 191), before terminating at Main Street.

The Lewistown truck bypass serves as a critical route for heavy and oversized vehicles in the region, facilitating the movement of freight goods as well as supporting both civilian and national defense logistics, particularly in relation to the Sentinel project. While the bypass is intended to reduce truck volumes downtown, increasing congestion is still being observed in the city center, especially near the intersection of E Main Street and 1st Avenue. This area remains a frequent conduit for through traffic, serving as a key connection for trucks continuing eastbound on US 87/MT 200.

### ***Rail***

Central Montana Rail, Inc. is a Class III short line railroad operating in Judith Basin, Fergus, and Chouteau counties. The railroad's main line extends approximately 84 miles between Moccasin and Geraldine. The segment of track that once extended into the northern outskirts of Lewistown, terminating near US 191 and Lime Kiln Road, has been inactive since the 1980s and does not currently operate in the subarea.

### ***Air***

LMA<sup>18</sup> is positioned on the southwestern edge of Lewistown. It primarily operates as a general aviation facility, serving private pilots, flight training, agricultural aviation, emergency services, and other non-commercial aviation activities. It does not currently offer a commercial airline service. The Billings and Great Falls airports are the closest available commercial airports in the area.

The LMA is part of the National Air Commerce System for National Defense and Civil Aeronautics, with a mission to serve national, state, and local aeronautical needs. It features three runways, the longest being 6,100 feet, capable of accommodating regional jet aircraft. With approximately 15,348 aircraft operations annually and 45 based aircraft, the airport is self-supporting. Historically, the airport was established during World War II as a B-17 Flying Fortress training base and included a storage site for the top-secret Norden Bombsight.

Today, the airport continues to be a vital asset for the region, supporting various aviation activities and contributing to the local economy. The community is actively planning the development of an on-site museum<sup>7</sup> to honor this rich history, and Lewistown is actively seeking opportunities for airport growth and development. Airport amenities currently include access to a courtesy vehicle, bicycles for day use, as well as easy access to the trail network. With the anticipated Sentinel project on the horizon as well as VACOM facility, activity around the airport is expected to increase.

## 3.2 Transportation Conditions

An evaluation of traffic operations for the Lewistown subarea was completed using available data provided by MDT in addition to supplemental field-collected data. Mainline traffic volume data for existing and historic conditions is available for MDT on-system routes within the subarea. Turning-movement counts (TMCs) were conducted at 11 intersections within the subarea over a 24-hour period, as shown in **Figure 7**. Additionally, visual observations were made for driver behavior, vehicle queuing, and general traffic characteristics. The following sections provide details about the existing traffic characteristics for the subarea.

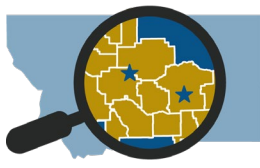
### 3.2.1 Existing Roadway Volumes

Existing roadway traffic data, provided by MDT, was used to define current traffic conditions. Average Annual Daily Traffic (AADT) counts for 2024 serve as the basis for evaluating existing conditions. **Figure 5** illustrates AADT volumes along the major street network. Traffic volumes range from 50 to almost 8,700 vpd. The roads with the highest volumes include Main Street, 1st Avenue, and the truck bypass.

Facility size is a qualitative assessment of roadway features, including the number of travel lanes and presence of physical separations such as medians or two-way left-turn lanes (TWLTL). The existing facility size for the major street network is presented in **Figure 6**. The majority of routes in the subarea consist of two lanes without a median, except for Main Street, Boulevard Street, and Kendall Road. Main Street has two lanes and a TWLTL, Boulevard Street has two lanes and a median, and Kendall Road has four lanes with no center median.

The capacity of roadways plays a vital role in supporting community growth. As traffic volumes rise, the efficiency of vehicle movement declines. When traffic volumes approach and exceed the available capacity, users experience increased congestion and vehicle delay as the road begins to “fail.” For this reason, it is important to look at the size and configuration of the current roadways and determine if these roads need to be expanded or redesigned to accommodate the existing or projected traffic needs to ensure functionality.

A roadway’s capacity is influenced by several factors, such as the number of lanes, the function and spacing of intersections and access points, the mix of vehicle types, roadway geometry, and prevailing vehicle speeds. Given the variability of these elements across different corridors, capacity should be assessed on a case-by-case basis. For planning-level comparison purposes, theoretical roadway capacities were developed based on simplified roadway configurations as shown in **Table 9**. These figures are intended to provide general context rather than establish strict performance thresholds. It is also important to recognize that traffic demand fluctuates throughout the day, with peak periods (such as morning and evening commutes) placing the greatest strain on the system. These short-term surges in volume can temporarily exceed a road’s capacity, leading to heightened perceptions of congestion. As such, peak hour conditions often drive the need for capacity improvements more than average daily traffic volumes.



**Table 9: Theoretical Roadway Capacity**

Road Configuration*	Capacity (vpd)**
2 Lane	12,000
2 Lane - Divided/TWLTL	18,000
3 Lane	18,000
3 Lane - Divided/TWLTL	24,000
4 Lane	24,000
4 Lane - Divided/TWLTL	32,000
Interstate	68,000

Source: RPA; adapted from various sources including Florida Department of Transportation, Highway Capacity Manual, and MDT.

\*TWLTL = Two-Way Left-Turn Lane

\*\*Values representing planning-level daily capacities developed for this report are intended for comparison purposes only. Actual physical roadway capacity can vary greatly depending on road design features and access control.

A critical factor in roadway performance analysis is the proportion of the facility's capacity being utilized by current or projected traffic. This factor, called the volume to capacity (v/c) ratio, is often used as a measure of sufficiency of roadway capacity. The v/c ratio can be defined as the traffic volume of a roadway divided by the capacity of the roadway. A v/c ratio of 1.00, for example, means that the amount of traffic volume on the roadway is equal to the amount of available capacity.

Roadway capacity and v/c ratio can be used as a comparison tool when looking at the transportation system. A high v/c ratio indicates congestion and resultant vehicle delay. As the v/c ratio increases, vehicle delay related to congestion increases. Vehicle speed and travel times may be impacted on roadways with high v/c ratios. A v/c ratio of 0.85 to 1.00 indicates that a roadway is approaching capacity and that vehicle flow may start to deteriorate. A v/c ratio greater than 1.00 indicates that the volumes on a roadway exceed available capacity which may result in "grid-lock" traffic conditions.

While the v/c ratio is a helpful comparison tool, it's important to note that theoretical capacities are often used in these calculations, and actual roadway performance can vary. A v/c ratio may be lowered by either increasing roadway capacity (e.g., additional lanes, turn restrictions, separating travel modes) or by decreasing traffic volumes. **Figure 7** shows the v/c ratios of the existing major street network and can be used to help identify potential capacity deficiencies in the transportation system. Notably, none of the corridors in the subarea have a v/c ratio above 0.5, suggesting they are currently operating at 50 percent capacity or less.

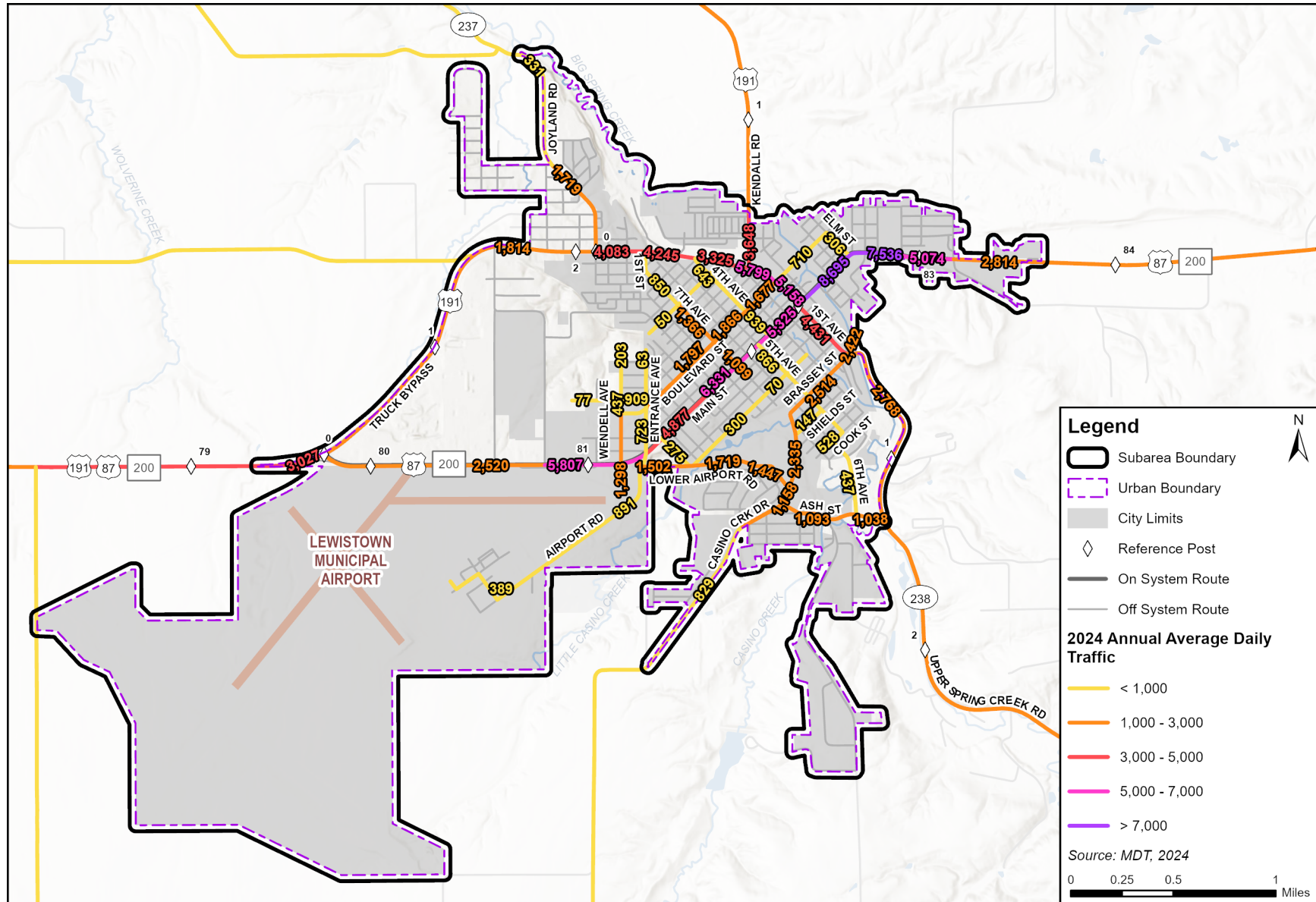
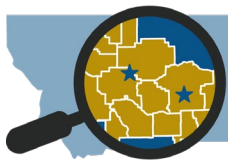


Figure 5: Existing AADT (2024)

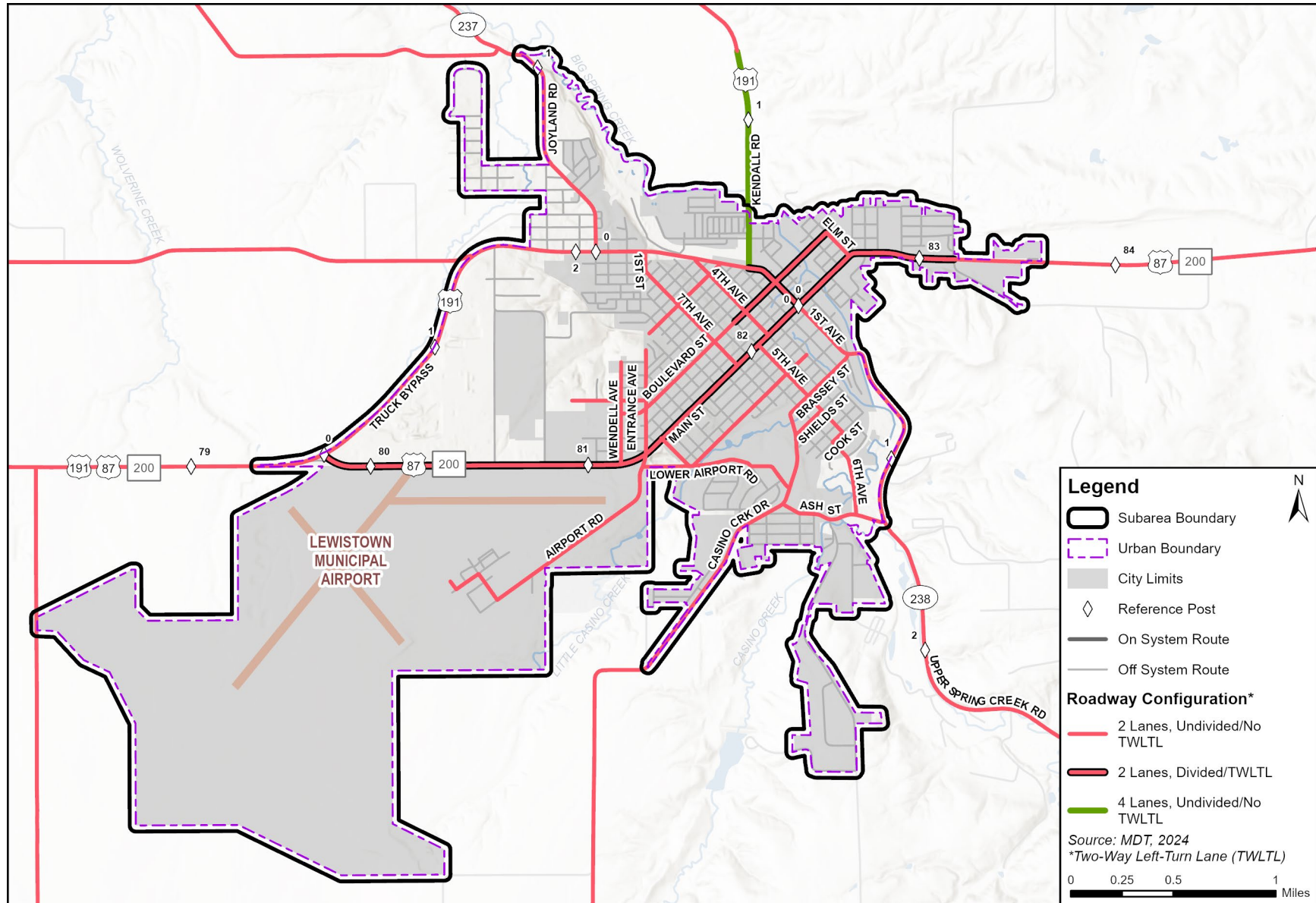
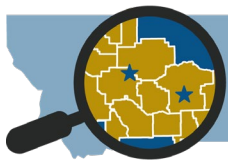


Figure 6: Existing Corridor Facility Size

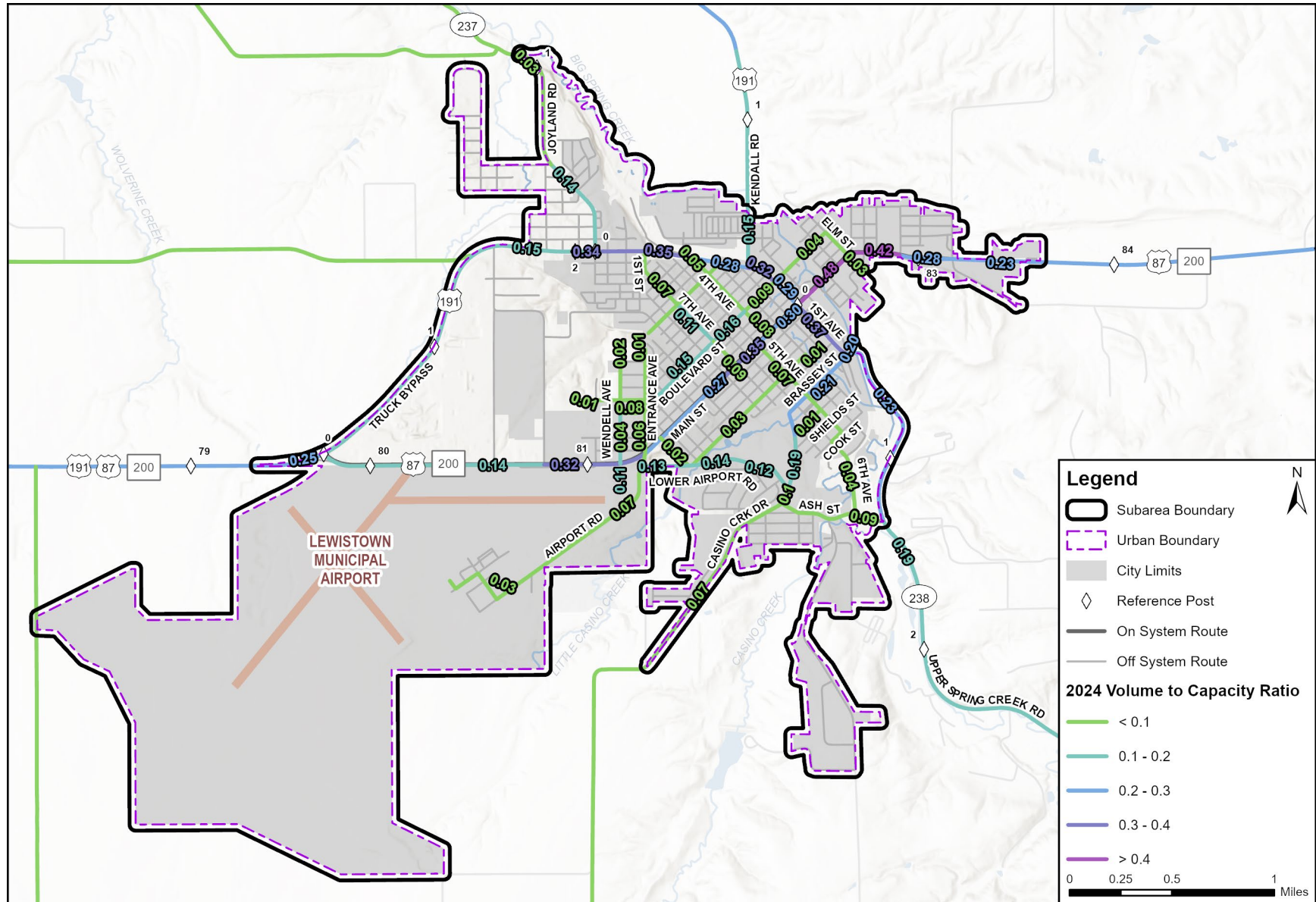
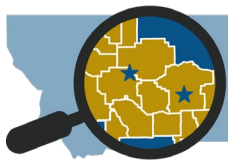


Figure 7: Existing Volume to Capacity Ratios (2024)



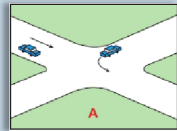
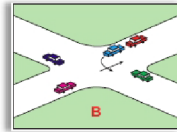
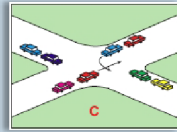
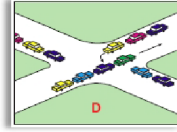

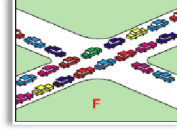
### 3.2.2 Intersection Operations

Intersection performance is evaluated in terms of vehicle delay. The amount of vehicle delay experienced at an intersection correlates to a measure called level of service (LOS). LOS is used as a means for identifying intersections that are experiencing operational difficulties and for comparing multiple intersections. The LOS scale represents the full range of operating conditions. The scale is based on the ability of an intersection to accommodate the amount of traffic using the intersection. The scale ranges from “A” which indicates little, if any, vehicle delay, to “F” which indicates significant vehicle delay and traffic congestion. **Table 10** shows the relationship between LOS and operating conditions.

The Transportation Research Board’s *Highway Capacity Manual* (HCM) is the most widely used reference in determining the performance of existing roads and intersections and for providing input into estimating future performance.<sup>19</sup> As such, the HCM methods are implemented in the Lewistown subarea intersection LOS analysis. Key inputs for the analysis

include intersection layout, traffic volumes, traffic control, and signal timings. The observed volumes are adjusted by peak hour and seasonal adjustment factors and are used to calculate the ideal flow rate through the intersection. This flow rate helps calculate the true capacity of the intersection. With this information, total vehicle delay and LOS can be calculated for each intersection.

**Table 10: Intersection LOS Descriptions**

LOS	Intersection	Signalized Delay (sec)	Unsignalized Delay (sec)	Description
<b>A</b>		<b>&lt;10</b>	<b>&lt;10</b>	<ul style="list-style-type: none"> <li>Free flow</li> <li>Low Volumes</li> <li>&lt;1 vehicle in queue</li> <li><b>Signalized:</b> most vehicles do not stop</li> <li><b>Unsignalized:</b> Very easy to find acceptable gap</li> </ul>
<b>B</b>		<b>10-20</b>	<b>10-15</b>	<ul style="list-style-type: none"> <li>Mostly free flow</li> <li>Somewhat low Volumes</li> <li>Occasionally 1+ vehicles in queue</li> <li><b>Signalized:</b> vehicles clear in one green phase</li> <li><b>Unsignalized:</b> Very easy to find acceptable gap</li> </ul>
<b>C</b>		<b>20-35</b>	<b>15-25</b>	<ul style="list-style-type: none"> <li>Smooth flow</li> <li>Moderate Volumes</li> <li>Standing queue of at least 1 vehicle</li> <li><b>Signalized:</b> Individual cycle failures may occur</li> <li><b>Unsignalized:</b> Acceptable gaps found regularly</li> </ul>
<b>D</b>		<b>35-50</b>	<b>25-35</b>	<ul style="list-style-type: none"> <li>Approaching unstable flow</li> <li>High volume/capacity ratios</li> <li>Standing queue of vehicles upon arrival</li> <li><b>Signalized:</b> Individual cycle failures are noticeable</li> <li><b>Unsignalized:</b> Hard to find acceptable gap</li> </ul>
<b>E</b>		<b>50-80</b>	<b>35-50</b>	<ul style="list-style-type: none"> <li>Unstable flow</li> <li>Volumes at or near capacity</li> <li>Standing queue of vehicles upon arrival</li> <li><b>Signalized:</b> Individual cycle failures are frequent</li> <li><b>Unsignalized:</b> Hard to find acceptable gap</li> </ul>
<b>F</b>		<b>&gt;80</b>	<b>&gt;50</b>	<ul style="list-style-type: none"> <li>Saturation condition</li> <li>Volumes over capacity</li> <li>Standing queue of vehicles upon arrival</li> <li><b>Signalized:</b> Many individual cycle failures</li> <li><b>Unsignalized:</b> Very hard to find acceptable gap</li> </ul>

A total of 11 intersections were evaluated within the subarea, including one signalized and 10 unsignalized intersections. Data was collected in October of 2024 at sites #1 through #7, April 2025 at sites #8 and #9, and May 2025 at sites #10 and #11. Each intersection was counted over a 24-hour period to obtain TMCs during the a.m. and p.m. peak hours, as well as overall AADTs for each intersection leg. Complete TMC data is contained in **Appendix A** while the peak hour TMCs for these intersections are presented in **Appendix B** with the LOS results.

In this analysis, intersections were analyzed on an individual basis, meaning the LOS was determined based on the total number of vehicles traveling through the intersection during the peak hour. Consequently, intersection queues that form as a result of delay at nearby intersections were not accounted for in this analysis.

### **Signalized Intersections**

For signalized intersections, the LOS is based on the average stopped delay per vehicle. The relationship between LOS and average stopped delay per vehicle is shown in **Table 10**. The procedures used to evaluate signalized study intersections use detailed information on geometry, lane use, signal timing, peak hour volumes, arrival types, and other parameters.

### **Unsignalized Intersections**

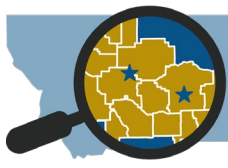
LOS for two-way stop controlled (TWSC) intersections and all way stop controlled (AWSC) intersections are based on the delay experienced by each individual movement within the intersections, rather than on the average stopped delay per vehicle at the intersection. This difference from the method used for signalized intersections is necessary since the operating characteristics of a stop-controlled intersection are substantially different, including driver expectation and perceptions.

For TWSC intersections, the through traffic on the major (uncontrolled) street experiences little to no delay at the intersection. Conversely, vehicles turning left from the minor street experience more delay than other movements and at times can experience significant delay while waiting for a gap in traffic to execute a turn. Vehicles on the minor street which are turning right or going across the major street generally experience less delay than those turning left from the same approach. Due to this situation, the intersection delay and LOS are based on the average delay incurred at the worst performing movement.

### **Intersection Level of Service**

**Table 11** presents the LOS and average vehicle delay for each intersection during the a.m. and p.m. peak hours. The existing intersection LOS is shown in **Figure 8**. Detailed results are provided in **Appendix B**. Generally, an intersection is determined to be functioning adequately if operating at LOS C or better. However, some entities consider LOS D to be adequate, especially for intersections of lower functional classifications. LOS calculations presented in **Table 11** do not account for additional delay resulting from queueing and network effects from nearby intersections. As such, the LOS at some of the intersections may not fully represent the real-life conditions.

All the subarea intersections are shown to operate at an acceptable LOS during the a.m. and p.m. peak hours. However, the eastbound and westbound approaches at the intersection of 1st Avenue and Main Street operate at LOS D during both the a.m. and p.m. peak hours.



**Table 11: Existing Conditions (2025) Intersection Operations**

ID	Intersection	Intersection Control Type*	Northbound		Southbound		Eastbound		Westbound		Intersection Total		
			Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Worst Mvmt	Delay (s)	LOS
A.M. Peak Hour													
1	Brookville Ln & US 87/191	TWSC	-	-	11.3	B	0.2	A	0.0	A	SBL	11.9	B
2	US 87/191 & Truck Bypass	TWSC	10.1	B	-	-	0.0	A	0.6	A	NBL	10.2	B
3	Joyland Rd & Truck Bypass	TWSC	10.9	B	12.0	B	0.3	A	0.1	A	SBT	12.7	B
4	Kendal Rd, Truck Bypass, & 1st Ave	TWSC	-	-	15.3	C	0.9	A	0.0	A	SBL	17.1	C
5	Elm St & Main St	TWSC	-	-	11.7	B	0.2	A	0.0	A	SBL	14.3	B
6	1st Ave & Main St	Signal	13.3	B	10.4	B	42.3	D	35.7	D	EBL	24.0	C
7	Airport Rd & Main St	TWSC	16.8	C	12.5	B	0.4	A	1.3	A	NBL	18.8	C
8	Fluorite Dr, Uranium Dr, & Birch St	AWSC	10.3	B	9.5	A	8.6	A	8.6	A	NBT	9.6	A
9	Upper Spring Creek Rd & Ash St	TWSC	3.1	A	0.0	A	10.2	B	-	-	EBL	10.8	B
10	Airport Rd & Lower Airport Rd	TWSC	0.0	A	4.7	A	-	-	9.2	A	WBL	11.1	B
11	Casino Creek Dr & Birch St	AWSC	10.5	B	10.3	B	10.9	B	9.0	A	EBL	10.4	B
P.M. Peak Hour													
1	Brookville Ln & US 87/191	TWSC	-	-	11.0	B	0.0	A	0.0	A	SBL	11.3	B
2	US 87/191 & Truck Bypass	TWSC	10.3	B	-	-	0.0	A	0.9	A	NBL	10.5	B
3	Joyland Rd & Truck Bypass	TWSC	10.6	B	11.4	B	0.6	A	0.1	A	SBT	11.7	B
4	Kendal Rd, Truck Bypass, & 1st Ave	TWSC	-	-	11.6	B	2.0	A	0.0	A	SBL	12.4	B
5	Elm St & Main St	TWSC	-	-	11.8	B	0.3	A	0.0	A	SBL	14.7	B
6	1st Ave & Main St	Signal	12.5	B	9.7	A	41.5	D	36.1	D	EBT	25.4	C
7	Airport Rd & Main St	TWSC	16.6	C	13.6	B	0.5	A	0.7	A	NBL	18.5	C
8	Fluorite Dr, Uranium Dr, & Birch St	AWSC	8.0	A	8.3	A	7.5	A	7.7	A	SBL	8.0	A
9	Upper Spring Creek Rd & Ash St	TWSC	2.1	A	0.0	A	9.3	A	-	-	EBL	10.0	B
10	Airport Rd & Lower Airport Rd	TWSC	0.0	A	6.2	A	-	-	9.7	A	WBL	10.9	B
11	Casino Creek Dr & Birch St	AWSC	9.2	A	9.5	A	9.3	A	8.4	A	SBT	9.2	A

\*TWSC = Two-Way Stop Control, AWSC = All-Way Stop Control

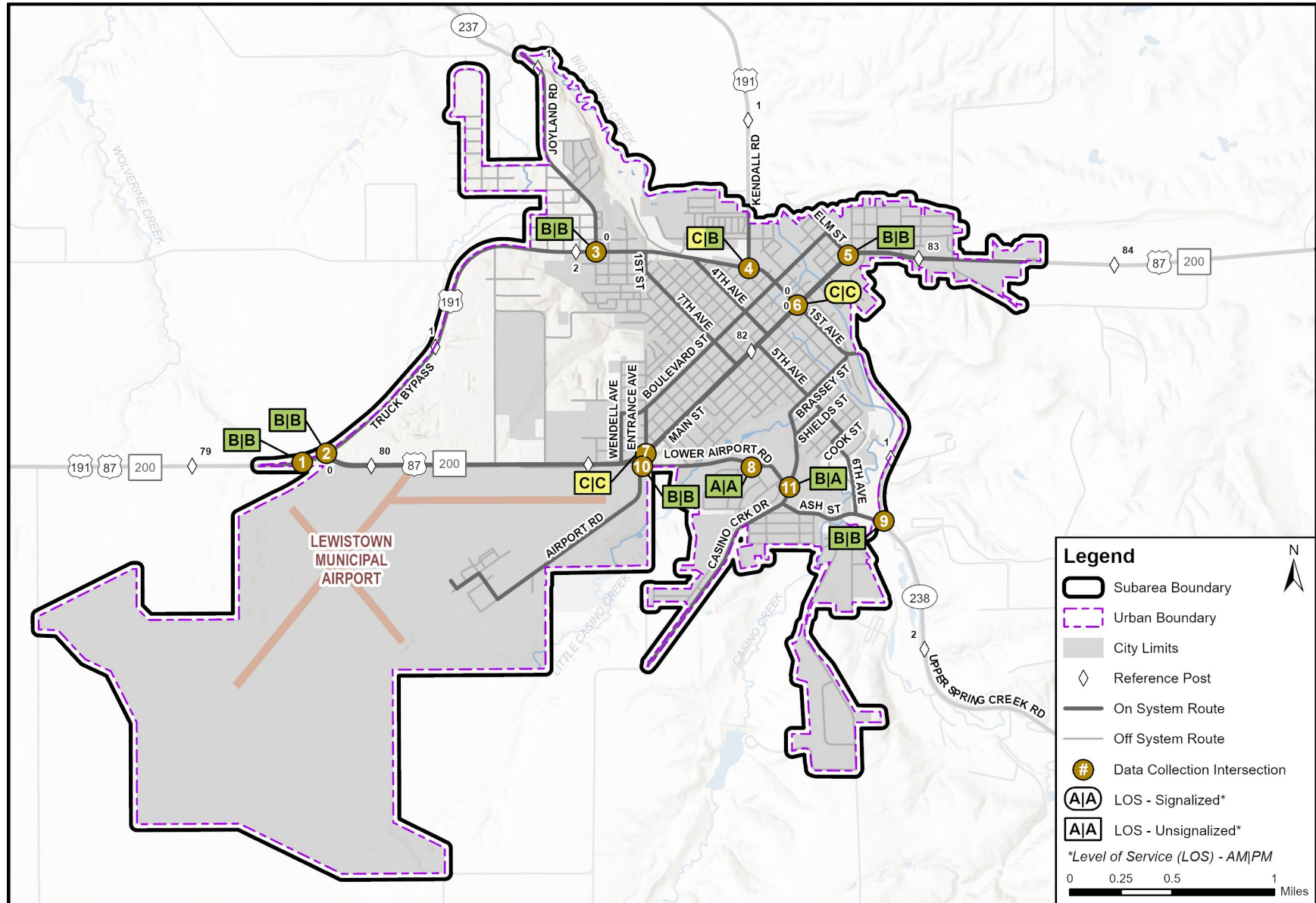
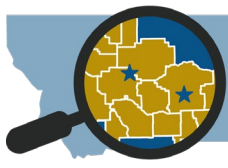


Figure 8: Existing Intersection Level of Service (2025)

### 3.2.3 Active Transportation Data

Active transportation data refers to information collected about human-powered modes of travel, primarily walking, bicycling, and other forms of personal conveyance. This data is crucial for urban planning, transportation engineering, health research, and policy development aimed at improving mobility, safety, and sustainability in growing cities. While data for rural communities is less available, this section discusses available data to understand active transportation conditions in the Lewistown subarea.

#### *Mode of Transportation to Work*

According to **Table 5**, shown in **Section 2.1.5**, 11.3 percent of Lewistown residents walk to work, compared to Fergus County where 9.2 percent of people walk to work. Both are much higher than the national average of 2.4 percent and 4.0 percent in the State of Montana. The *2024 Lewistown Plan* indicates that the LRTS shared use path through the city functions as a trail artery for many commuters on foot or bike. However, **Table 5** indicates that 0.0 percent of people bicycle to work in Lewistown.

#### *Walk Score*

Walkscore.com measures how “walkable” or “bikeable” a community is by measuring the availability of non-motorized facilities and connectivity to nearby amenities. The site indicates that Lewistown is a car-dependent city with most errands requiring a car. The site gives the city a walk score of 26, and a bike score of 30 (out of 100) due to minimal bike infrastructure. These scores are much lower than other Montana communities of similar size such as Sidney, which has a walk/bike score of 74/54 or Columbia Falls which has 76/66 score. For a larger nearby city comparison, Great Falls has a walk/bike score of 44/43, and Billings scores 35/47.

### 3.2.4 School Transportation Considerations

Schools often experience concentrated periods of high traffic volumes due to student drop-offs and pick-ups, resulting in multiple vehicle trips per day per student in the morning and in the afternoon. These trips are typically shorter in distance and present an opportunity to encourage non-motorized and active transportation. Developing a well-connected network of bicycle and pedestrian infrastructure can help promote safe, active travel options for students, and ease congestion around the schools throughout the day.

Within the Lewistown school district there are currently five public schools (three elementary, one middle, and one high school). Generally, these schools are dispersed throughout the subarea apart from Lewis & Clark Elementary School and Fergus High School which are both located in the southern part of the subarea along Casino Creek Drive. Modes of transportation to and from the schools include personal vehicles and carpools, school buses, walking, bicycling, and other forms of personal conveyance (such as scooters and skateboards).

At the Lewis & Clark Elementary School, the existing intersection alignments and grades combined with heavily used sidewalk and trail connections have created safety and operational concerns. Traffic congestion is elevated during school drop-off/pick-up times and sporting events, with queues at the Birch Street/Fluorite Drive intersection northwest of the school sometimes extending back around the curve along Lower Airport Road. Visibility is obstructed due to the skewed intersection configuration, road curvature, extended distance between stop

bars on each intersection leg, and roadway glare. Wintertime snow storage narrows the travel lanes, making turning movements challenging. At Fergus High School, the four-way intersection implemented in 2021 has improved traffic circulation, although the intersection alignment still poses challenges.

The proximity of these two schools to one another, the existing roadway and intersection alignments, and the current trail network has created additional school-related transportation congestion at nearby intersections. With anticipated land use changes and housing growth expected in the region, evaluating the circulation patterns of both motorized and non-motorized transportation surrounding school operations could be valuable for the long-term transportation planning in the Lewistown subarea.

### 3.2.5 Asset Condition

Proper management of transportation assets plays a fundamental role in maintaining their condition and ensuring reliable performance for all users. Transportation agencies frequently monitor two key types of assets: structures (such as bridges, culverts, stockpasses, and tunnels) and pavement. Evaluating the condition and performance of these assets is essential when planning projects related to preservation, rehabilitation, or reconstruction. The sections below provide an overview of the current condition of bridge structures and pavement within the Lewistown subarea.

#### *Structure Condition*

MDT performs regular condition inspections of all in-service publicly owned structures in accordance with the National Bridge Inspection (NBI) Standards. All inspections are entered into Montana's Structure Management System database. This information is used to identify structures needing repair and inform funding decisions. All of the bridges shown are for general reference and not to be used for projected improvements.

NBI item ratings are determined based on MDT inspections, and vary on a scale from zero (0) to nine (9), with zero depicting an element that is out of service and beyond corrective action (repair) and nine depicting an item that is new or in excellent condition. An overall structure rating is given based on the lowest substructure or superstructure rating for the structure. **Table 12** tabulates the structural ratings for the bridges in the subarea based on the structure owner. **Figure 9** shows the structures within the subarea color coded based on their overall structural rating with inspection data from 2024. Seven bridges in the subarea have a poor (4 or less) rating while nine bridges with a ranking of fair (5-6). None of the bridges in the subarea are rated good (7-8) or new (9).

When a structure is constructed, its structural elements are designed to have a weight capacity to meet anticipated use. When a bridge is inspected, signs of deterioration or damage that might reduce capacity are noted and a load, or weight, restriction may be recommended to preserve the integrity of the structure. Structures with load restrictions are noted in **Table 12** and **Figure 9**.



**Table 12: Lewistown Subarea Structure Ratings**

Structure Owner	Total Structures	Overall Structural Rating				Load Restrictions
		New (9)	Good (7-8)	Fair (5-6)	Poor (4 or Less)	
City of Lewistown	10	--	--	5	5	4
Fergus County	1	--	--	1	--	--
MDT	5	--	--	3	2	1
<b>Sum</b>	<b>16</b>	<b>--</b>	<b>--</b>	<b>9</b>	<b>7</b>	<b>5</b>

Source: MDT. 2024. Bridge Management System.

There are 16 existing bridges in the Lewistown subarea. The majority of the bridges are owned by the City of Lewistown (10) and MDT (five) while one bridge, on Castle Butte Road, is owned by Fergus County. Of the bridges on MDT routes, three are rated in fair condition and two are rated as poor. Similarly, half of the Lewistown-owned bridges are in fair condition and the other half are in poor condition. Five out of the 16 bridges in the subarea are posted with load restrictions, and four of them are owned by the city.

### ***Pavement Condition***

Pavement condition indices are measured and tracked annually for some of the roadways within the subarea. MDT's Pavement Management System (PvMS) is used to analyze the collected data to determine the relative performance of the pavement. Items of interest include the presence and degree of cracking and rutting. Several pavement condition indices are monitored through the PvMS. The performance measures and corresponding indices use a numerical scale from 100 (assigned to a new pavement with no flaws) to 0 (representing highly degraded pavement).

- **Ride Index (IRI):** Determined by using an internationally applied roughness index in inches per mile.
- **Rut Index (RI):** Rut measurements are taken approximately every foot and averaged into one-tenth-mile reported depths.
- **Alligator Crack Index (ACI):** Measured by combining all load associated cracking.
- **Miscellaneous Cracking Index (MCI):** Calculated by combining all non-load associate cracking.
- **Overall Performance Index (OPI):** Determined by combining and placing various weighting factors on the IRI, RI, ACI, and MCI figures. The OPI is calculated to provide a single index describing the current general health of a particular route or system.

**Figure 9** shows the 2024 OPI values for select roads in the Lewistown subarea as provided by MDT. According to the *2024 Pavement Performance and Condition Report*,<sup>20</sup> the OPI ranges from 0 to 100, with values of 63 and above indicating good condition, values between 45 and 62 considered fair, and values below 45 indicating poor condition. As shown in the figure, pavement conditions throughout the subarea are generally rated as good or fair, indicating that some of these roadways are candidates for pavement preservation treatments. The segment of 1st Avenue S that extends southeast to its intersection with Brassey Street is rated in poor condition but is scheduled for a mill and fill rehabilitation as part of the *1st Avenue South – Lewistown* project.

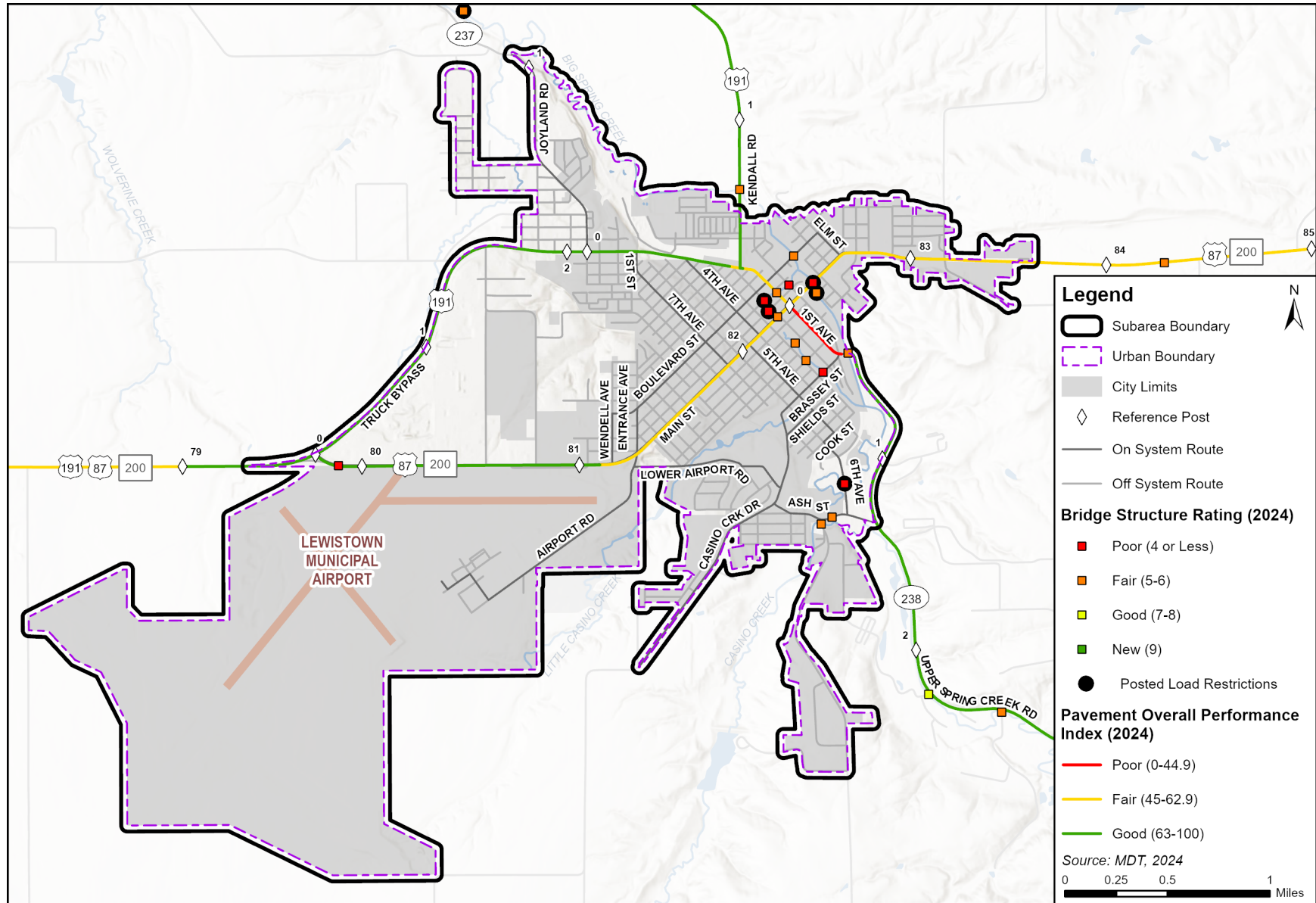
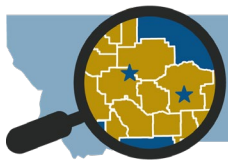


Figure 9: Existing Asset Conditions (2024)

## 4.0 SAFETY

Crash data within the subarea was analyzed to determine problem areas, “hot-spot” crash locations, and contributing factors. The following sections provide an analysis of available crash data to help identify crash trends and contributing factors.<sup>i</sup>

### 4.1 Data Limitations

Although historic crash data can help identify trends in behavioral and circumstantial contributors to crashes within the subarea, there are some limitations. A primary limitation is unreported and unknown data. Many crash records include various fields left blank. Occasionally, a report will have “unknown” listed rather than a blank field. Without this information, it may be difficult to capture the complete picture of what happened in crashes. Similarly, many crashes, especially those where individuals and vehicles are unharmed, do not get reported to the police. Underreporting can limit the ability to properly and effectively manage road safety, since the analyses in this report are based only on reported crash data. Another limitation may be inconsistencies with reporting. Although protocols have been established and training is provided for law enforcement, there may still be inconsistencies or errors. The data analysis in the following sections is based solely on the information contained in the crash records as originally reported, with no attempts made to correct errors or fill in missing information.

### 4.2 Subarea Crash Analysis

The MDT Traffic and Safety Bureau provided crash data from January 1, 2019, through December 31, 2023, for all reported crashes within the Lewistown subarea boundary. The data includes reports from the Montana Highway Patrol (MHP). While vehicle and crash characteristics were provided, the absence of person-level data made it difficult to conduct analysis from an individual behavioral perspective. The crash reports are a summation of information from the scene of the crash provided by the responding officer. Some of the information contained in the crash reports may be subjective. Any crash records from other law enforcement agencies that were not reported to or by the MHP were not contained in the database and are not included in this analysis.

MDT’s crash records included a total of 460 crashes reported within the Lewistown subarea during the five-year analysis period. The spatial distribution of all crashes was analyzed based on the reported crash locations. The density of crashes within the subarea is displayed in **Figure 10**. Locations with higher traffic volumes appear to have a higher number of crashes. Detailed crash analyses for the intersections included in the traffic LOS analysis and select hot spot locations are presented in **Sections 4.3** and **4.4**.

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<sup>i</sup> Pursuant to 23 U.S.C. § 407, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144, and 148 of Title 23, U.S.C., or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data. This publication is not intended to waive any of the State of Montana’s rights or privileges under 23 U.S.C. § 407.

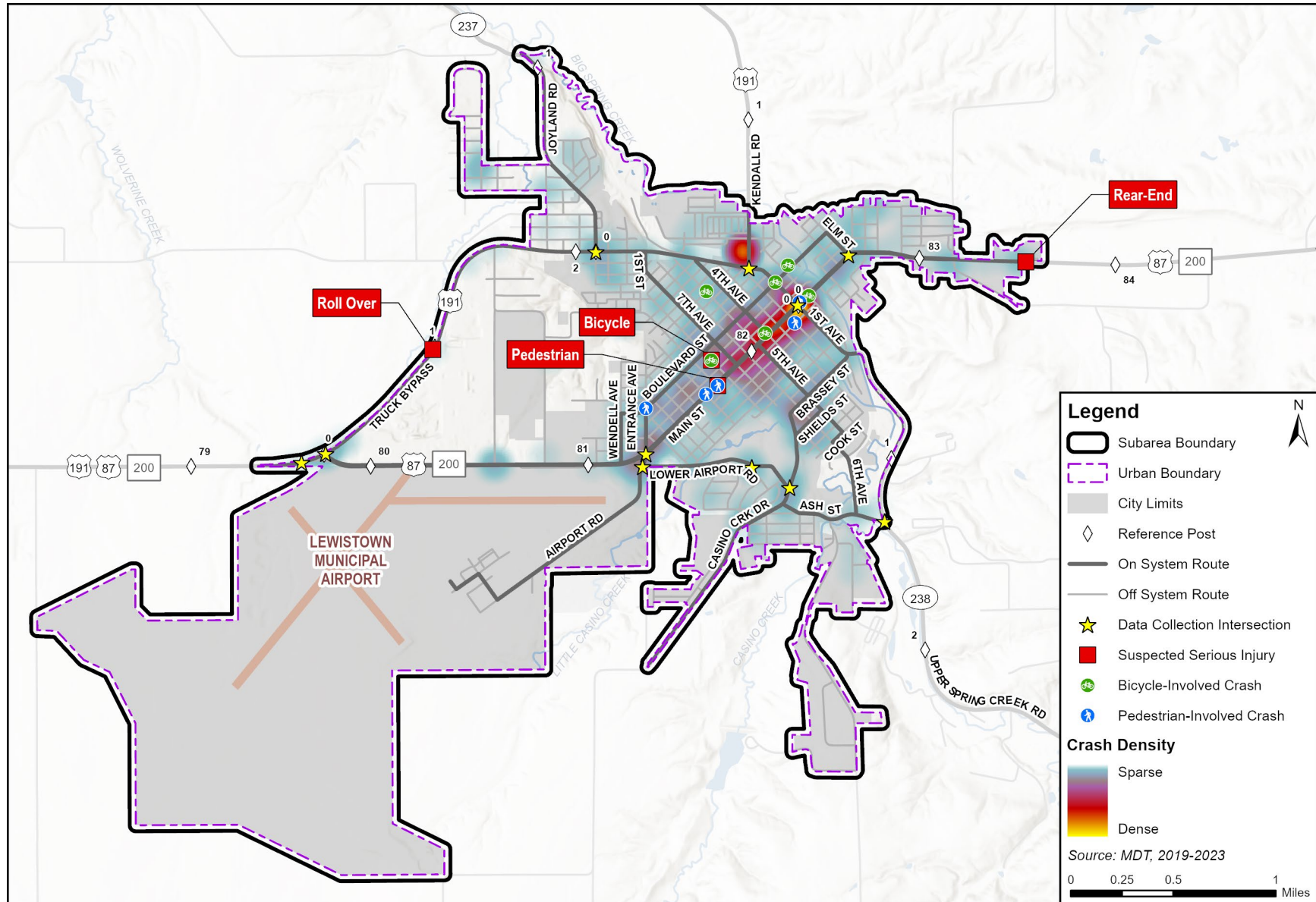
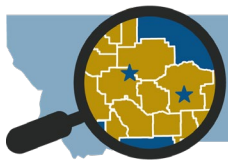


Figure 10: Crash Density

Prior to 2024, crash records from local law enforcement in Lewistown were not incorporated into MHP’s crash database. Recently, MDT data entry staff have started entering local crash records into the system. In total, 44 crashes were reported by local officers over the five-year analysis period. A review of these records shows that local crashes follow the same trends as those reported by MHP. Given the small number of additional crashes and their negligible impact on the overall trend analysis, this report only includes the original MHP-reported crash data.

### 4.2.1 Crash Severity

Crash severity is categorized based on the most severe human injury resulting from the crash. For example, if a crash results in a possible injury and a suspected serious injury, the crash is reported as a suspected serious injury crash. Crash severity includes, from least severe to most, property damage only (PDO), possible injury, suspected minor injury, suspected serious injury, and fatal injury. Severe crashes include those resulting in a fatality or suspected serious injury.

During the five-year analysis period, a total of 460 crashes occurred, involving about 1,000 individuals. As shown in **Figure 11**, about 13.6 percent of those crashes resulted in some level of injury, with less than one percent classified as severe. There were no fatal crashes and four suspected serious injury crashes. Approximately 10.7 percent of crashes resulted in a possible injury and 2.0 percent resulted in a suspected minor injury. About 86.5 percent of crashes were reported as being PDO crashes or as unknown severity. The locations of severe crashes were shown previously in **Figure 10**.

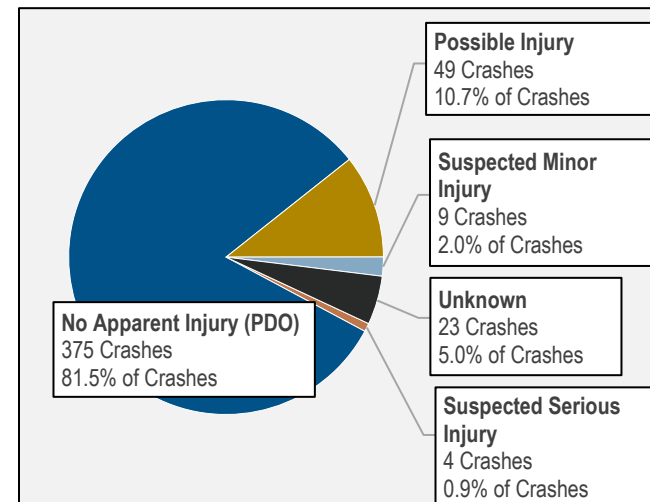
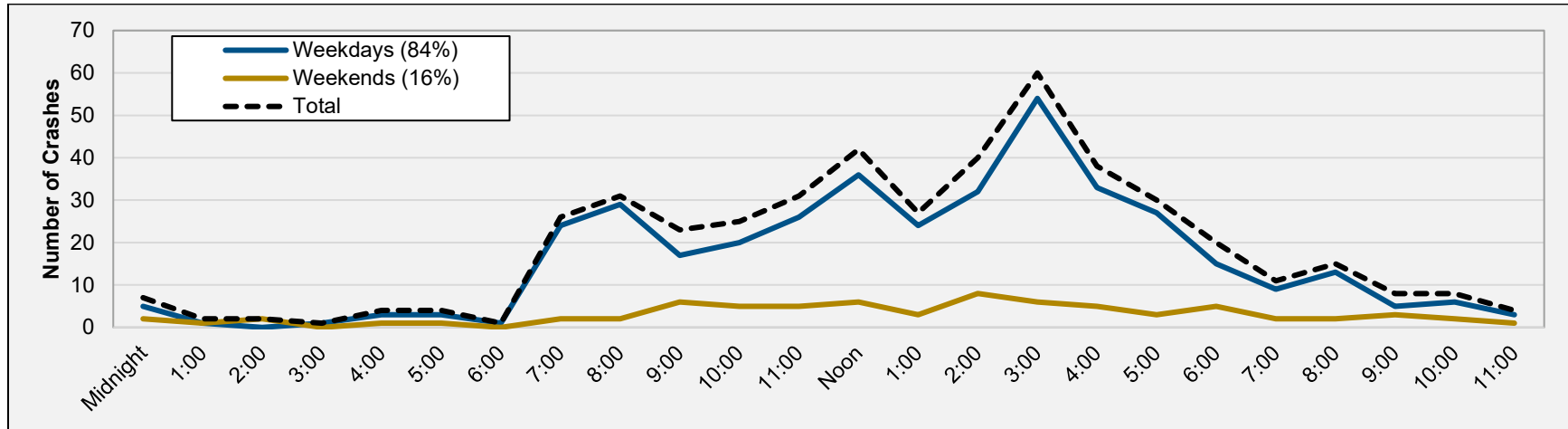
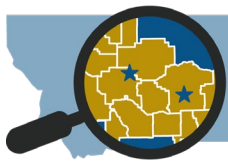


Figure 11: Crash Severity

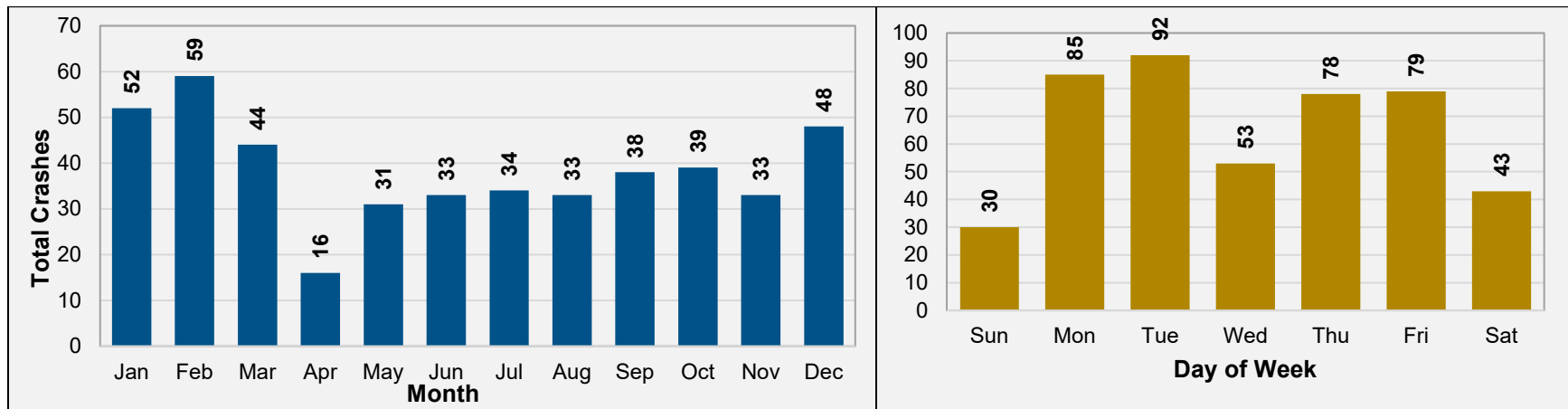
### 4.2.2 Crash Period

Each crash record includes the date and time when the crash occurred, which allows for the analysis of seasonal and other time-dependent trends. Time of day data was analyzed to determine if any specific trends were present. The data was plotted based on the hour the crash occurred and whether the crash occurred on a weekday or weekend. For weekday crashes, which made up 84 percent of all crashes, three peaks are apparent. The first occurred between the 7:00 a.m. and 8:00 p.m. hours, corresponding with the morning commute, and accounted for 14 percent of weekday crashes. The next peak was more concentrated, occurring at noon and accounting for about nine percent of weekday crashes. The largest peak hour occurred at 3:00 p.m., which accounted for 14 percent of all crashes, corresponding to school pick-up times. The evening commuting hours (5:00 p.m. to 6:00 p.m.) saw comparatively fewer crashes, which is atypical of most urban areas. Weekend crashes, representing 16 percent of the total, showed less distinct peak periods due to the lack of regular commute patterns, with crashes more evenly distributed throughout the day. However, slight increases were seen at 9:00 a.m. and noon, each with five crashes, and a slightly more pronounced increase at 2:00 p.m. with eight crashes. **Figure 12** presents the distribution of crashes with respect to the time of day that they occurred.

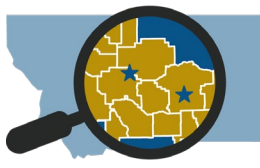


**Figure 12: Crash Occurrence by Time of Day**

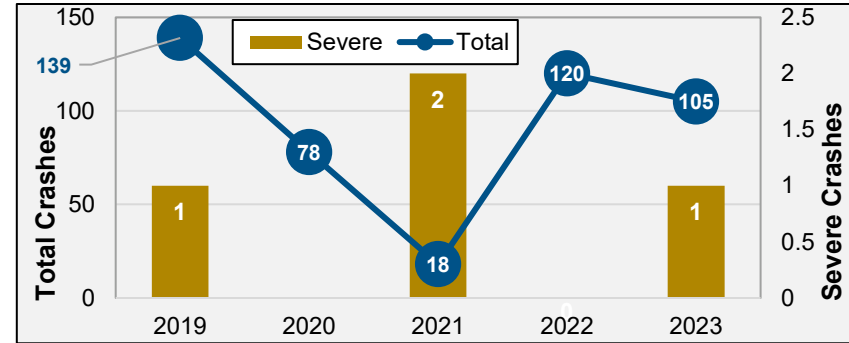
The frequency of crashes occurring during each month and on a given day were plotted in **Figure 13**. The greatest number of crashes occurred on Tuesdays (20 percent), and the fewest crashes occurred on Sundays (seven percent). Of the severe crashes, two occurred on Tuesday, while one each took place on Monday and Friday. In general, the highest number of crashes were observed during the winter months (December through February), when almost 35 percent of crashes occurred, while crashes were the lowest during the spring months (March through May). Specifically, the greatest number of crashes occurred in February (13 percent) and the fewest in April (four percent).



**Figure 13: Crash Occurrence by Month and Day of the Week**



**Figure 14** shows the frequency of crashes occurring per year, which has varied over time. The highest number of crashes occurred in 2019, with 139 crashes accounting for 30 percent of all crashes over the five-year period, followed by a steady decline, reaching a low in 2021 with 18 crashes (four percent). The rapid decline in crashes in 2020 and 2021 may be a result of decreased traffic volumes in the area due to the COVID-19 pandemic. Crashes rebounded to pre-pandemic levels in 2022, followed by a slight decrease in 2023. Interestingly, severe crashes did not follow this trend, with the most (two) occurring in 2021 when total crashes were the lowest, and one each in 2019 and 2023.

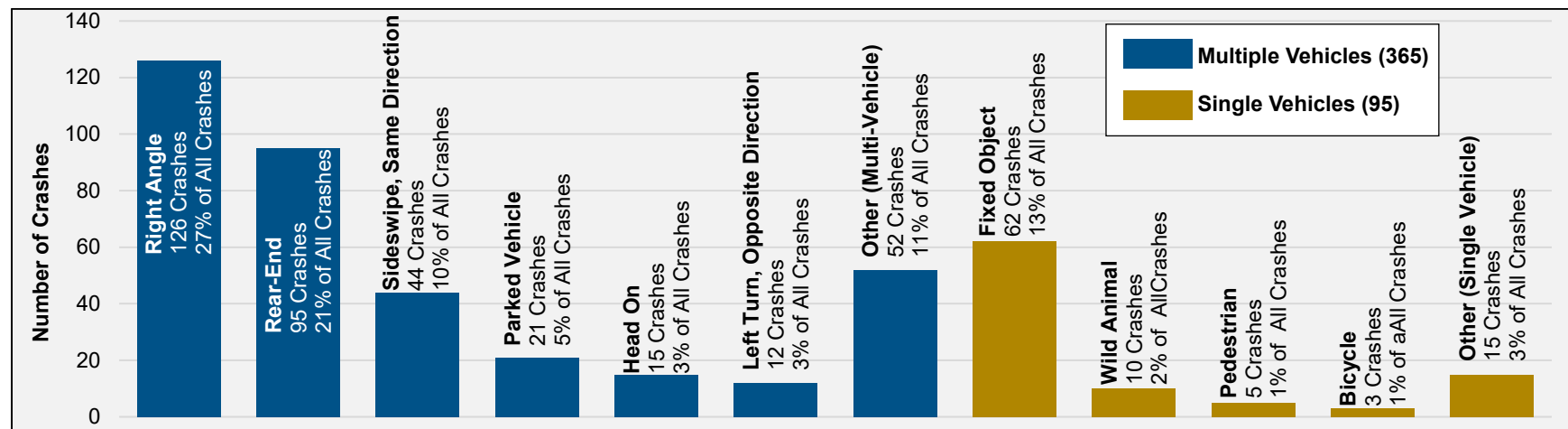


**Figure 14: Crashes per Year**

### 4.2.3 Crash Type

Crash types were grouped into two categories: single- and multiple- vehicle crashes. Single-vehicle crashes, or those that involve only one vehicle, accounted for 21 percent of all reported crashes. Of the single-vehicle crashes, fixed object crashes were the most common at 13 percent, followed by wild animal crashes at two percent. There were also five single-vehicle crashes involving pedestrians.

Multiple-vehicle crashes, or those involving two or more vehicles, accounted for 79 percent of all crashes. The most common multiple-vehicle crash types were right-angle crashes (27 percent), followed by rear-end (21 percent), sideswipe same direction (10 percent), parked vehicles (five percent), head-on (three percent), and left-turn opposite direction (three percent). **Figure 15** presents the distribution of crash types.



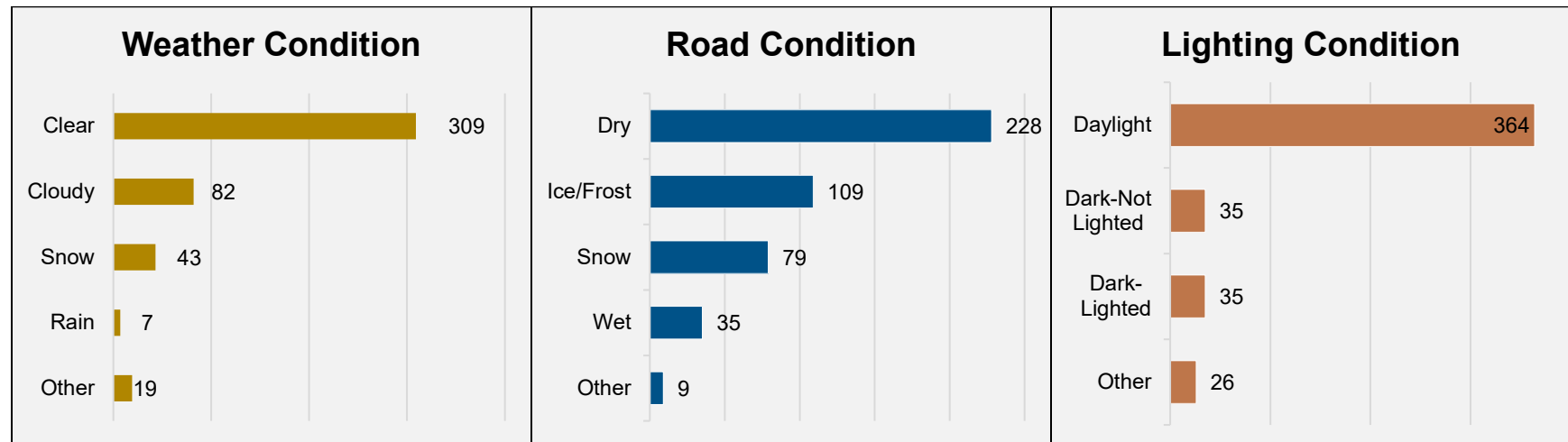
**Figure 15: Crash Type**

#### 4.2.4 Environmental Factors

Crash data was reviewed to determine if any trends exist in relation to environmental factors such as weather, roadway surface, and lighting conditions. The weather condition was reported as clear or cloudy in 85 percent of all crashes and 100 percent of severe crashes. Adverse weather conditions, including snow and rain, were reported in approximately 13 percent of crashes. **Figure 16** presents the distribution of crashes based on weather conditions. The “other” category includes blowing snow; fog, smog, and smoke; sleet, hail, freezing rain, and drizzle; and unknown.

The reported road surface condition for crashes is also presented in **Figure 16**. About half of all crashes were reported as having occurred on dry roads, while 48 percent of crashes were reported as having occurred on wet, snowy, or icy/frost-covered roads, with icy, frost-covered, and snow-covered roads making up the majority of crashes on adverse roadways (85 percent). This trend correlates with the increased number of crashes in Lewistown during the winter months. All of the severe crashes occurred on dry roads.

About 79 percent of all crashes were reported as having occurred under daylight conditions. An additional 15 percent of crashes were reported as occurring at dark, and half of those occurred where street lighting was not present. Similarly, severe crashes occurred during daylight hours 75 percent of the time, and at dark without street lighting 25 percent of the time. The distribution of crashes occurring under the different lighting conditions is presented in **Figure 16**. The “other” category includes dusk and dawn; and unknown.



**Figure 16: Crash Environmental Factors**

### 4.2.5 Crash Location

**Figure 17** shows the distribution of crashes and their respective relationship to junctions and the roadway. Approximately 40 percent of crashes were reported to have occurred at non-junction locations while about 60 percent were reported to have occurred at an intersection or were intersection-related. Crashes occurring on the roadway accounted for 67 percent of crashes. Crashes occurring on the shoulder accounted for 18 percent, and nine percent of crashes were off of the roadway. Almost half of crashes occurred on local roads, 28 percent occurred on principal arterials, 12 percent on major collectors, and 10 percent on minor arterials.

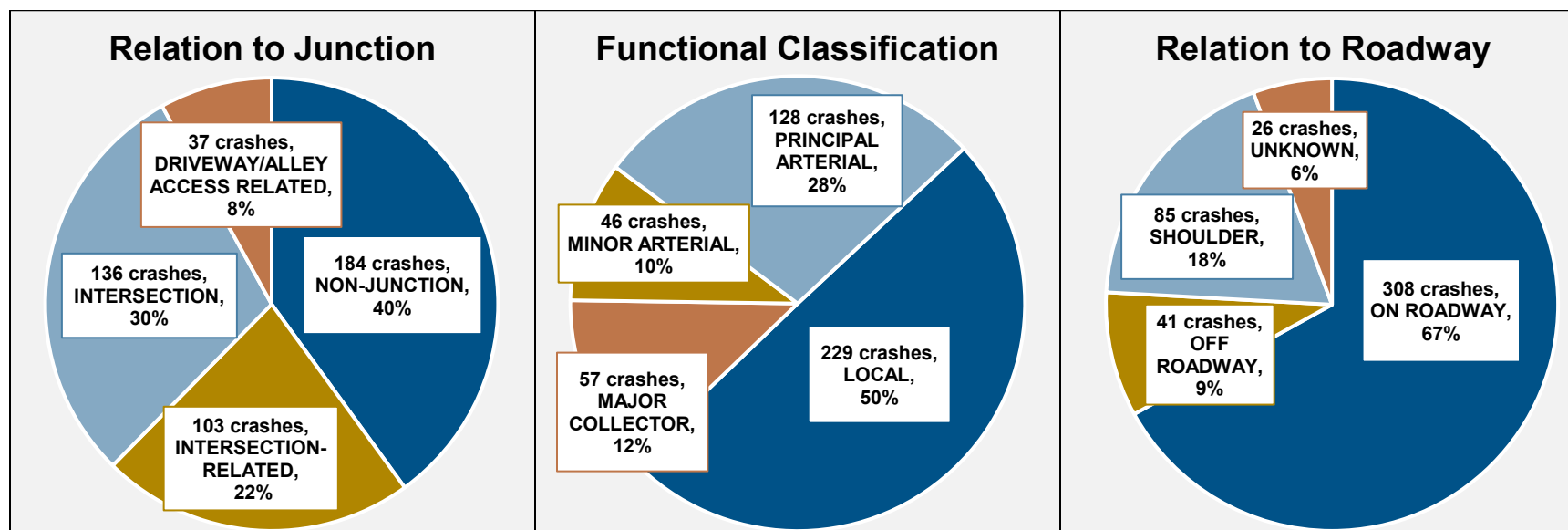


Figure 17: Crash Location

### 4.2.6 Other Factors

Although data about the driver and people involved was not provided for the subarea, some behavioral factors can be identified from the crash and vehicle data. These include non-motorist involvement, impaired driving, and vehicle maneuvers. Over the five-year period, there were five crashes involving pedestrians and six crashes involving bicycles, with one of each type categorized as severe.

Impaired driving is defined as operating a vehicle while under the influence of drugs or alcohol.<sup>21</sup> In Montana, driving under the influence is defined when the driver's blood alcohol concentration is 0.08 or higher. Impairment of marijuana in Montana is defined as exceeding a five nanogram per milliliter threshold for tetrahydrocannabinol (THC) in blood for anyone operating a motor vehicle. Of the 460 crashes, four percent involved impaired drivers, with one crash involving an impaired driver being severe.

Vehicle maneuvers at the time of the crash can provide insight into how the crash occurred. Most vehicles were traveling straight ahead (46 percent) or parked (19 percent) when the crash took place. Without reviewing crash reports, it is unknown why a large percentage of vehicles involved in crashes were parked. Vehicles attempting to turn left or right at the time of the collision make up seven and six percent of crashes, respectively. Other common vehicle maneuvers include backing, stopped in traffic, and slowing.

#### 4.2.7 Vehicle Data

Over the analysis period, 844 vehicles were involved in crashes within the subarea. Of these vehicles, 26 percent were passenger cars/vans, 35 percent were pickups, and 27 percent were sport utility vehicles. Large trucks were involved in about two percent of crashes while motorcycles and ATVs were also involved in almost two percent of crashes. Other vehicles involved in crashes include bicycles, buses, farm equipment, and heavy machinery. The most common vehicles in severe crashes were pickups and SUVs, each accounting for 33 percent. Additionally, a passenger vehicle and a low-speed vehicle (bicycle) were also involved. Commercial vehicles were involved in less than one percent of crashes.

### 4.3 Intersection Crashes and Safety Concerns

The 11 intersections that were studied for the LOS analysis were also investigated for crashes. The crash information was analyzed to identify prevalent crash characteristics that may warrant further study.

The number of crashes at each intersection was determined spatially from the GIS crash database. Any crash located within 150 feet was included in the evaluation for that intersection. Intersection traffic volumes were determined from the p.m. peak hour turning movement counts. A design hourly vehicle (DHV) factor of 11.87 was applied to the peak hour counts to estimate average daily traffic volumes based on the average DHV determined from nearby count locations with 24 hours of continuous data collected.

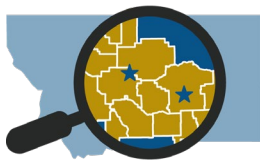
Crash rates were used to compare the number of crashes to the daily traffic volume. The rate is expressed as the number of crashes per million entering vehicles. **Equation 1** was used to calculate crash rates.

**Equation 1:**

$$\frac{\text{Total Number of Crashes} \times 1,000,000 \text{ Vehicles}}{\text{Vehicles per day} \times \text{Number of Years} \times 365 \text{ days per year}} = \text{Crash Rate}$$

**Equation 2:**

$$\frac{(\#PDO \times 0.12) + (\#Possible \text{ Injury} \times 0.73) + (\#Minor \text{ Injury} \times 1.29) + (\#Serious \text{ Injury} \times 3.53) + (\#Fatal \times 66.7)}{\text{Total Number of Crashes}} = \text{Severity Index}$$



The severity index was calculated by applying multipliers to crashes based on severity, shown in **Equation 2**. The crashes at each intersection were categorized by severity: unknown/PDO, possible injury, suspected minor injury, suspected serious injury, and fatal crashes. Each of these severities was given a different multiplier: 0.12 for PDO or unknown, 0.73 for possible injury, 1.29 for minor injury, 3.53 for serious injury, and 66.7 for fatal. These multipliers were provided by MDT's Traffic and Safety Bureau based on statewide crash costs. The severity rate is calculated by multiplying the crash rate by the severity index. **Table 13** presents the crash rates and severity indices for each of the intersections where traffic data was collected (**Section 3.2.2**).

**Table 13: Intersection Crash Rate, Severity Index, and Severity Rate**

ID	Intersection	Total Crashes	Fatal Crash	Serious Injury Crash	Minor Injury Crash	Possible Injury Crash	PDO/Unknown Crash	Crash Rate	Severity Index	Severity Rate
1	Brookville Ln & US 87/191	2	0	0	0	0	2	0.32	0.12	0.04
2	US 87/191 & Truck Bypass	4	0	0	1	0	3	0.86	0.41	0.36
3	Joyland Rd & Truck Bypass	2	0	0	0	0	2	0.33	0.12	0.04
4	Kendal Rd, Truck Bypass, & 1st Ave	3	0	0	1	0	2	0.30	0.51	0.15
5	Elm St & Main St	1	0	0	0	0	1	0.09	0.12	0.01
6	1st Ave & Main St	13	0	0	0	3	10	0.70	0.26	0.18
7	Airport Rd & Main St	2	0	0	0	0	2	0.17	0.12	0.02
8	Fluorite Dr, Uranium Dr, & Birch St	2	0	0	0	0	2	0.46	0.12	0.06
9	Upper Spring Creek Rd & Ash St	0	0	0	0	0	0	0.00	N/A	N/A
10	Airport Rd & Lower Airport Rd	5	0	0	0	0	5	1.02	0.12	0.12
11	Casino Creek Dr & Birch St	2	0	0	0	0	2	0.29	0.12	0.03

Source: MDT. 2019-2023. Crash Data.

Crash rate analysis is used to assess the relative safety of an intersection by accounting for exposure, derived from traffic volume data. Rather than relying solely on the number of crashes, this method calculates the rate of crashes per unit of traffic volume, allowing for a more meaningful comparison between intersections of varying activity levels. The severity rate then helps prioritize locations where the frequency of crashes may be lower, but the severity of the crashes is higher. For example, although the 1st Avenue and Main Street intersection has both the highest number of overall crashes as well as the highest number of injury crashes, the severity rate is lower due to a greater volume of traffic traveling through the intersection, resulting in a greater likelihood for conflicts. As shown in **Table 13**, the intersection of US 87/191 and the truck bypass has the second highest crash rate combined with a relatively high severity index resulting in the highest severity rate of all study intersections. The intersection of Kendall Road, the truck bypass, and 1st Avenue has the highest severity index among all evaluated intersections, while the intersection of Airport Road and Lower Airport Road has the highest crash rate. A detailed analysis of the crash trends at each intersection is contained in the following sections.

### **1. Brookville Lane and US 87/191**

During the five-year data analysis period, there were two crashes that occurred at the intersection of Brookville Lane and US 87/191. Both were single-vehicle fixed object crashes. One crash took place on an icy road, while the other occurred on a dry road, and both happened during daylight hours under clear or cloudy weather conditions. Neither of the crashes resulted in injury. Both crashes occurred in 2020; one in September and the other in December. Commercial vehicles were involved in both crashes with one being a medium/heavy truck and one listed as other (farm equipment heavy machinery). One vehicle was eastbound negotiating a curve, while the other was westbound and moving straight ahead.



### **2. US 87/191 and Truck Bypass**



During the analysis period, four crashes were recorded at the intersection of US 87/191 and the truck bypass: two single-vehicle crashes and two multiple-vehicle crashes. Each of the crashes involved a different collision type, including right-angle, left-turn, not fixed object, and parked vehicle collisions. The right-angle crash resulted in minor injuries while the other three crashes did not result in any reported injuries. Three crashes occurred in the morning, and one occurred in the early afternoon. None of the crashes took place under adverse weather conditions, however, one crash reported adverse icy/frosty road conditions. Additionally, one crash occurred in the dark with no lighting present, and glare was cited as a contributing factor in another.

A total of six vehicles were involved in the crashes. Of these, five were traveling westbound at the time of the crashes, and one was traveling eastbound. Half of the vehicles were traveling westbound and turning left when the crash occurred while the remaining vehicles were moving straight ahead, negotiating a curve, and slowing.

The recent *SF189 North D5 Safety Improvement* project aimed to address road departure crashes at this intersection, including the installation of signs, rumble strips, and a splitter island.

### **3. Joyland Road and Truck Bypass**

The intersection of Joyland Road and the truck bypass was the location of two crashes over the five-year analysis period, neither of which resulted in injury. One was a multiple-vehicle left-turn crash that happened during the day under clear weather and road conditions. The other was a single-vehicle crash with a fixed object. It occurred at night with no lighting, on icy and snowy roads, and the driver was impaired. Both vehicles in the left-turn crash were traveling southbound and the vehicle in the fixed object crash was traveling northbound straight ahead.



#### **4. Kendall Road, Truck Bypass, and 1st Avenue**

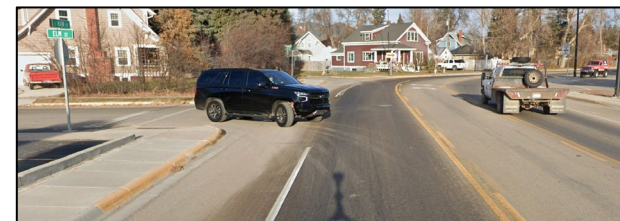


The intersection of Kendall Road, the truck bypass, and 1st Avenue experienced three crashes during the analysis period, with minor injuries resulting from one of the crashes. Two of the crashes were multiple-vehicle, with one being a rear-end collision, and the other being a left-turn collision. The third crash was a single-vehicle crash involving a fixed object. All three crashes took place on weekdays from 8:00 a.m. to 10:30 a.m., under clear weather, dry roads, and daylight conditions.

A total of five vehicles were involved in the crashes. At the time of the crashes, three were traveling southbound, one northbound, and one westbound. Two of the vehicles were southbound and moving straight ahead, two were turning left, and one was stopped in traffic.

#### **5. Elm Street and Main Street**

The intersection of Elm Street and Main Street was the location for one crash during the data analysis period. This was a fixed object crash that resulted in PDO. The crash occurred during daylight with dry road conditions. The one vehicle involved in the crash was traveling southbound and turning left.



#### **6. 1<sup>st</sup> Avenue and Main Street**



Over the five-year analysis period, the intersection of 1st Avenue and Main Street experienced 13 crashes, three of which resulted in possible injuries. Nearly 70 percent of the crashes were multiple-vehicle, including three rear-end collisions, two right-angle crashes, two sideswipe crashes, and two left-turn crashes. The remaining 30 percent were single-vehicle crashes, consisting of two fixed object collisions, one parked vehicle crash, and one pedestrian-related crash. All but one of the crashes occurred on weekdays, and all took place during daylight hours. Approximately 15 percent of the crashes happened under adverse weather conditions, while 62 percent occurred on adverse road surfaces. However, road surface conditions were listed as a contributing factor in only one case. One crash involved an impaired driver, and another involved a pedestrian.

A total of 22 vehicles were involved across all crashes. The direction of travel at the time of the crashes was nearly evenly split among all four approaches to the intersection. About 64 percent of vehicles were moving straight ahead, 18 percent were turning left, and nine percent were turning right. The addition of a future truck only turn lane has been discussed by the city to alleviate some congestion at this intersection since it is heavily used and the existing road conditions are tight for larger trucks.



### **7. Airport Road and Main Street**

A total of two crashes occurred at the intersection of Airport Road and Main Street during the five-year data analysis period, neither of which resulted in injury. One was a single-vehicle crash involving a collision with a wild animal. This crash occurred at night with no lighting, in clear weather conditions, and snow-covered roads. The other was a multi-vehicle rear-end crash that occurred during daylight hours, in rainy weather, and on wet roads.

A total of three vehicles were involved in the crashes. Of these, two vehicles were traveling southbound and one was heading eastbound. Two of the vehicles were moving straight ahead, while the third was stopped in traffic.



### **8. Fluorite Drive, Uranium Drive, and Birch Street**

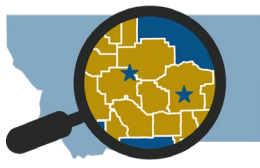


The intersection of Fluorite Drive, Uranium Drive, and Birch Street was the location of two crashes over the five-year analysis period, neither of which resulted in injury. Both crashes were multiple-vehicle rear-end collisions that occurred during daylight hours with snow-covered roads. One crash took place during snowfall, while the other occurred under cloudy conditions. A total of four vehicles involved, all traveling eastbound at the time of the crashes. Three of the vehicles were slowing, and one was moving straight ahead.

This intersection is in front of the Lewis & Clark Elementary School and experiences routine, heavy traffic during student pick-up and drop-off periods, with both school buses and parents using it to access the campus. Local officials have expressed ongoing concerns about the circulation of vehicle and pedestrian traffic and are actively seeking improvements to address safety and operational issues.

Uranium Drive intersects Fluorite Drive on a downhill grade, which makes left-hand turns at this location particularly difficult. Similarly, left turns from Birch Street are challenging because of the skewed approach angle, which reduces sight distance and maneuverability. At the intersection of Airport Road and Fluorite Drive, the stop sign for vehicles traveling on Airport Road is positioned well before the actual intersection, creating visibility issues. Vehicles on Fluorite Drive cannot easily see those stopped on Airport Road, and vice versa. Compounding these issues, a pedestrian trail crosses the Birch Street leg of the intersection and is frequently used by children walking to school.





### **9. Upper Spring Creek Road and Ash Street**



During the five-year data analysis period, no crashes occurred at the intersection of Upper Spring Creek Road and Ash Street. However, local stakeholders report that crashes have occurred at this location outside the analysis timeframe, suggesting safety concerns that are not reflected in the reviewed data.

The Ash Street leg of the intersection has an uphill grade leading to the stop sign, resulting in poor visibility and obstructed sightlines in all three directions. The guardrail located at the northwest corner of the intersection acts as a constraint and has been frequently clipped by turning vehicles. To avoid striking the guardrail, trucks often swing wide, crossing the centerline and increasing the risk of conflicts. Additionally, a pedestrian crosswalk across the south leg of the intersection (Upper Spring Creek Road) lacks appropriate landing accommodations, requiring pedestrians to climb over the guardrail to complete the crossing. The absence of connected pedestrian facilities further limits accessibility and raises safety concerns for those walking through the area.

### **10. Airport Road and Lower Airport Road**



From 2019 through 2020, five crashes were reported at the intersection of Airport Road and Lower Airport Road. In 2021, the *Lower Airport Road – Lewistown* project was completed, which included a realignment of the intersection aimed at improving traffic flow and enhancing safety. Since the completion of the project, no crashes have been recorded at the intersection, suggesting that the realignment has potentially been effective in addressing previous safety issues. However, local officials continue to express concerns, particularly regarding pedestrian safety on the southeast corner, where a trail crossing intersects Airport Road. Observations indicate that vehicles making right turns often cut the corner sharply, creating a potential hazard for pedestrians using the crossing.

### **11. Casino Creek Drive and Birch Street**



During the five-year analysis period, two crashes occurred at the intersection of Casino Creek Drive and Birch Street. Neither resulted in injury. Both involved multiple vehicles; one was a right-angle collision, and the other a left-turn, opposite direction crash. The crashes occurred in the 8:00 a.m. and 3:00 p.m. hours, respectively, coinciding with school arrival and departure times. Conditions were clear and dry with daylight present during both events. Glare was identified as a contributing factor in the afternoon left-turn collision.

## **4.4 Crash Clusters**

Spatial analysis of the crashes occurring within the subarea was conducted to identify locations with an unanticipated crash trend. On roadways with higher traffic volumes, crashes are more likely to occur more frequently due to an increased number of potential conflicts. This section focuses on the intersections and segments of roadway that experienced higher numbers of crashes than would be anticipated when considering the roadways' lower traffic volumes.

### **Entrance Avenue and C Street**



The intersection of Entrance Avenue and C Street was the location of four crashes during the analysis period. The majority were single vehicle crashes, with only one crash involving two vehicles. Of these four crashes, three resulted in PDO, and one involved a possible injury. Crash types included two fixed object collisions, one rear-end crash, and one pedestrian-related incident. Road surface conditions at the time of the crashes were reported as ice/frost (two crashes), snow (one crash), and wet (one crash). Weather conditions were clear for three crashes and snowy for one. Two of the crashes occurred during dark conditions, one indicating street lighting was present and one indicating no lighting. Notably, two crashes occurred within a week of each other in January 2020.

An impaired driver was involved in two of the PDO crashes. One of the crashes involved a pedestrian and occurred in the dark with no lighting during clear conditions on ice/frost covered roads. The other was a fixed-object collision during the day under clear conditions and wet roads.

There was a total of five vehicles involved in the crashes. The vehicle intent was reported as moving straight ahead for three of the vehicles, and as parked for the other two. Two of the vehicles were travelling west at the time of the crash and two were eastbound.

A church is located in the southwest quadrant of this intersection and C Street intersects Entrance Avenue at an approximate 45-degree angle. The Entrance Avenue approaches are yield controlled while there are free flow movements on C Street. The intersection and travel paths are ill-defined in the northeast corner.

### **Casino Creek Drive Curve**

A 90-degree curve on Casino Creek Drive where it meets Brassey Street was the site of four crashes during the five-year analysis period. One crash resulted in a possible injury, while the remaining three resulted in PDO. The reported crash types included two fixed object collisions, one right-angle crash, and one sideswipe in the opposite direction. Road surface conditions were listed as ice/frost for three of the crashes and snow for the other crash. Only one crash occurred in snowy weather while the other three took place under clear or cloudy conditions. All crashes occurred during daylight hours.



Notably, two of the crashes occurred on consecutive days, March 14 and 15, 2020. All four incidents took place between noon and 7:00 p.m., with two occurring on weekdays and two on weekends.

There were six vehicles involved in these crashes. Two were single-vehicle incidents, and the remaining two involved two vehicles each. All but one vehicle was reported to be moving straight ahead, and the remaining vehicle was turning left.

### **Uncontrolled Intersections**

Throughout the subarea, numerous uncontrolled intersections, primarily located in residential neighborhoods, were identified. The intersections and roadway segments listed below are uncontrolled and exhibit identifiable crash patterns:

- W Washington Street from 11th Avenue N to 8th Avenue N (11 crashes; eight PDO, two possible injury, one suspected serious injury)
- Cochrane Avenue from Stout Street to White Street (four crashes; three PDO and one unknown)
- 7th Avenue W and 3rd Street W (three crashes; two PDO and one possible injury)
- NE Boulevard Street and Ridgelawn Avenue (two crashes; one PDO and one unknown)
- NE Washington Street and E Lake Avenue (two crashes; two PDO)
- W Erie Street and 6th Avenue N (two crashes; two PDO)
- W Montana Street and 8th Avenue N (two crashes; two PDO)

Of the 26 crashes that occurred at the identified uncontrolled intersections, the most common crash type was right-angle collisions, accounting for 14 crashes. Other crash types included rear-end (four crashes), fixed object (two crashes), bicycle-involved (one crash), head-on (one crash), parked vehicle (one crash), rollover (one crash), and sideswipe (one crash). Adverse weather conditions were a contributing factor in 12 percent of these crashes, while adverse road surface conditions were cited in 58 percent. Only two crashes occurred during dark conditions, one in a lighted area and one in an unlit area. One crash involved an impaired driver.

### **Downtown**

While traffic volume in downtown Lewistown is high, so is the crash rate. Within the area bounded by W Boulevard Street, Dawes Street, W Water Street, and 7th Avenue, there were 164 reported crashes involving 313 vehicles over the five-year period. Approximately 79 percent of these crashes resulted in PDO, 15 percent involved possible injuries, one percent were suspected minor injuries, and five percent had unknown outcomes.

The most common type of crash was right-angle collisions, accounting for 31 percent of all incidents. The next common were rear-end collisions (27 percent), sideswipes in the same direction (10 percent), fixed object collisions (eight percent), and crashes involving parked vehicles (seven percent). The data also includes two pedestrian-involved crashes and three involving bicycles. Two crashes involved impaired drivers. Of all downtown crashes, 68 percent occurred at intersections or were intersection-related. The most frequent vehicle maneuver at the time of the crash was moving straight ahead, representing 48 percent of all vehicles. The next most common vehicle maneuvers included parked vehicles (19 percent), turning left (seven percent), and backing (seven percent).

The majority of crashes happened on weekdays, comprising 91 percent of all incidents. Two distinct time periods saw the highest crash frequencies: 29 percent occurred between 9:00 a.m. and Noon, and 43 percent occurred from 2:00 p.m. to 5:00 p.m. Seasonal trends also emerged, with 32 percent of crashes occurring during the winter months (December through February), closely followed by the fall months (September through November), which accounted for 30 percent of crashes. Likewise, weather and road surface conditions played a notable role in crash frequency. Icy, frosty, or snowy roads were a factor in 39 percent of crashes, though only 11 percent occurred during winter weather events. Additionally, eight percent of crashes happened on wet roads, and one percent occurred in rainy conditions. Lighting conditions also influenced crash rates, with 13 percent of crashes occurring in the dark. However, 86 percent of those crashes took place in areas where lighting was present.

### **School Zone**

Fergus High School is located at the intersection of Casino Creek Drive and Birch Street, and Lewis and Clark Elementary is located at the corner of Birch Street and Crystal Drive. Casino Creek Drive is the main road through this area used to access both schools. The timing of school start and dismissal periods can influence traffic volumes in the surrounding area. Depending on the schedule, high school begins at 7:15 a.m. or 8:10 a.m. and ends at 3:20 or 1:30 p.m.,<sup>22</sup> and elementary school starts at 8:25 a.m. and ends at 3:20 p.m. or 2:45 p.m.<sup>23</sup> A noticeable crash pattern has been identified along Casino Creek Drive, which may be linked to increased traffic congestion during peak school hours.





During the five-year crash analysis period, 12 crashes were reported along Casino Creek Drive between Carrol Trail and W Shields Street. The majority of these crashes resulted in PDO, with one crash involving a possible injury and another with an unknown outcome. The most frequently reported crash types were sideswipe in the same direction (three crashes), rear-end (two crashes), and right-angle collisions (two crashes). Other crash types, each occurring once, included fixed object, head-on, left-turn, parked vehicle, and right-turn collisions.

A seasonal pattern emerged, with half of the crashes occurring during the winter and early spring months (January through March). Notably, there were no reported crashes from April through August, which aligns with the school's summer break. Most of the crashes occurred on weekdays, with one crash each on Saturday and Sunday. Weekday crash data revealed a clear time-of-day trend: five of the 12 crashes occurred within a 30-minute window from 3:20 p.m. to 3:50 p.m., coinciding with school dismissal. Additionally, two crashes occurred within the first five minutes of the 8:00 a.m. hour, near school start time. The remaining three weekday crashes took place from 5:00 p.m. to 6:00 p.m., while both weekend crashes were reported in the early afternoon.

Weather and road conditions also played a role in the crashes. Although snowy weather was noted in only two crashes, icy or frosty road conditions were reported in half of the incidents; the remaining crashes occurred on dry roads. All crashes happened during daylight hours, and none involved impaired drivers. Of the 12 crashes, seven occurred at or were related to intersections. The most common vehicle maneuver at the time of the crash was driving straight ahead, accounting for 45 percent of vehicles involved. The next most common was vehicles slowing down, turning left, and turning right, each representing 14 percent of the maneuvers.

## 5.0 PROJECTED TRANSPORTATION CONDITIONS

Projections serve as informed estimates of future conditions and are developed based on assumptions about current and anticipated demographic and development trends. Population and employment projections are often used to help anticipate future travel demand and evaluate the long-term performance of the transportation system. The following sections examine potential growth scenarios for the Lewistown subarea and examine future development opportunities within the subarea, drawing on insights gathered from stakeholder workshops and field visits with representatives from city and county governments, the schools, and MDT, summarized in **Appendix C**. Much of the information presented in this section is grounded in the recently adopted *2024 Lewistown Plan*, a comprehensive growth policy update that outlines the City of Lewistown's planning vision.

According to the *Lewistown Plan*, the city is expected to undergo slow to moderate growth over the next two decades, with increasing housing pressures driven by population and employment growth linked to the arrival of VACOM and the Sentinel project. While these industries are anticipated to bring positive economic impacts, they may also intensify challenges related to housing availability and affordability, particularly in the near term. As a result, the community is likely to face demand for both temporary and permanent housing accommodations, requiring strategic infrastructure and land use planning to support the influx of new residents and workforce personnel.

### 5.1 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.

#### 5.1.1 Population and Housing Projections

Population and housing totals are used to help determine where vehicle trips are originating within the subarea. Residential growth is best represented by reporting the number of housing units. Several sources of population and housing projections for both the City of Lewistown and Fergus County were examined to help understand how the population is expected to grow within the subarea. These sources include 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 14** (population) and **Table 15** (housing).

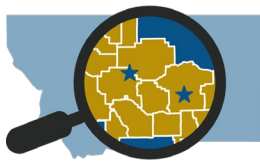
For baseline comparison purposes, the population estimates from the 2010 and 2020 **decennial censuses** are provided to demonstrate how the Fergus County and Lewistown populations have changed historically. Over the 10-year period, the county population experienced a downward trend, with an annualized growth of -0.12 percent per year, while Lewistown experienced an upward trend, with an annualized growth of 0.09 percent per year. Applying these growth factors over the 2020 through 2045 period suggests that the county may realize a net decrease of about 350 residents while the city may realize a gain of about 125 new residents.

The Montana Department of Commerce Census & Economic Information Center (CEIC)<sup>24</sup> provides updated county-level projections using the **eREMI** model built in 2021. 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 10,938 for Fergus County in the year 2045, down from a population of 11,545 in 2025. This estimate reflects a consistent downward trend from 2025 through 2040 at a rate of -0.19 percent. Interestingly, the model predicts a slight upward trend beginning in 2046 and continuing through 2060.

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 Bureau of Economic Analysis (BEA) in addition to private data sources to develop models for their demographic forecasts.<sup>25</sup> Data provided by ESRI indicates that the 2023 population of Fergus County was 11,522 and is estimated to be 11,584 in five years (2028), which translates to an annual growth rate of 0.11 percent. Similarly, housing projections indicated that the number of households in the county would increase from 5,094 to 5,165, resulting in an annual increase of 0.28 percent. For Lewistown, the data is reported at the census tract level, with the city primarily composed of two census tracts. While one census tract predicts a zero percent change, the other indicates a 0.47 percent per year change over the five-year period. Combined, ESRI estimates that the Lewistown population will grow from 8,206 in 2023 to 8,268 in 2028, for a growth rate of 0.15 percent. Likewise, the combined housing units in both census tracts are expected to increase from 3,005 in 2023 to 3,069 in 2028, increasing at an annual rate of 0.42 percent.

**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 2022, W&P projects Fergus County's population to be 11,210 by 2045. After a sharp increase from 2020 through 2023, resulting in over 300 new residents, the projection predicts that the county's population will then decline through 2045. The projection predicts an overall decrease of 265 people from 2020 through 2045, translating to an annual decrease of 0.09 percent over the 25-year period. W&P also predicts housing growth. Interestingly, the projections indicate a positive housing growth trend, with an annual increase of 0.14 percent. The projections indicate housing units in Lewistown will increase from 2020 through about 2030, then will decline through 2045, netting an increase of about 175 housing units over the 25-year period.

Given the broad range of population and housing projections, the recently completed **Lewistown Plan** projected population growth for the city from 2023 through 2043 using a linear growth curve model, paired with population changes from "known factors" such as growth from VACOM. The projected data is provided for in low (0.5 percent), moderate (1.0 percent), and high (1.5 percent) growth rate scenarios. By 2043, the city estimates the population could be as much as 7,977 (low), 8,850 (moderate), and 9,815 (high). Housing growth was projected utilizing the population projections from the low-moderate-high growth rate scenarios and dividing that value by the national average household size. The projections indicate that up to 4,158 (low), 4,483 (moderate), and 4,844 (high) housing units will be needed to accommodate the projected population growth.



**Table 14: Population Projections**

Source	2010	2020	2023	2025	2028	2030	2035	2040	2044	2045	CAGR <sup>1</sup>
<b>Fergus County</b>											
US Census Bureau <sup>3</sup>	11,586	11,446								11,103 <sup>2</sup>	-0.12%
2022 Fergus County Growth Policy		11,446				11,866		12,017		12,164 <sup>2</sup>	0.24%
Montana Department of Commerce REMI <sup>4</sup>		11,457	11,634	11,545		11,410	11,204	10,996	10,939	10,938	-0.19%
ESRI Estimates <sup>5</sup>			11,522		11,584					11,797 <sup>2</sup>	0.11%
Woods & Poole <sup>6</sup>		11,475	11,772	11,753	11,712	11,677	11,558	11,395		11,210	-0.09%
<b>City of Lewistown</b>											
US Census Bureau <sup>3</sup>	5,901	5,952								6,081 <sup>2</sup>	0.09%
2024 Lewistown Plan											
Low Growth (0.5%)						7,439	7,627	7,820	7,977	8,017 <sup>2</sup>	0.50%
Moderate Growth (1.0%)						7,699	8,092	8,505	8,850	8,939 <sup>2</sup>	1.00%
High Growth (1.5%)						7,968	8,585	9,248	9,815	9,962 <sup>2</sup>	1.50%
ESRI Estimates <sup>5</sup>											
Census Tract 302.01			3,316		3,316					5,024 <sup>2</sup>	-0.00%
Census Tract 302.02			3,129		3,203					3,468 <sup>2</sup>	0.47%
Combined			8,206		8,268					8,482 <sup>2</sup>	0.15%

<sup>1</sup> CAGR calculated using 2020 population totals (or otherwise oldest total) and latest future population projections.

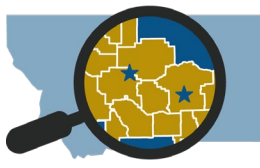
<sup>2</sup> Estimated using CAGR applied to the latest available population estimate.

<sup>3</sup> Source: US Census Bureau. Decennial Census.

<sup>4</sup> Source: Regional Economic Models Incorporated. Compiled by Montana Department of Commerce. 2023 (2021 vintage year). Montana State and County Population Projections.

<sup>5</sup> Source: ESRI. Accessed July 2025. Projected Population Growth 2023-2028 in the US.

<sup>6</sup> Source: Woods & Poole Economics, Inc. Accessed July 2025. Population Projections (base year 2022).



**Table 15: Housing Projections**

Source	2020	2023	2025	2028	2030	2035	2040	2044	2045	CAGR <sup>1</sup>
<b>Fergus County</b>										
Woods & Poole <sup>3</sup>	5,037	5,380	5,420	5,448	5,449	5,399	5,308	5,228	5,210	0.14%
ESRI Estimates <sup>4</sup>		5,094		5,165					5,414 <sup>2</sup>	0.28%
<b>City of Lewistown</b>										
2024 Lewistown Plan										
Low Growth (0.5%)					3,943	4,018	4,095	4,158	4,174 <sup>2</sup>	0.38%
Moderate Growth (1.0%)					4,022	4,179	4,345	4,483	4,518 <sup>2</sup>	0.78%
High Growth (1.5%)					4,106	4,352	4,617	4,844	4,902 <sup>2</sup>	1.19%
ESRI Estimates <sup>4</sup>										
Census Tract 302.01		1,522		1,535					1,580 <sup>2</sup>	0.17%
Census Tract 302.02		1,483		1,534					1,721 <sup>2</sup>	0.68%
Combined		3,005		3,069					3,297 <sup>2</sup>	0.42%

<sup>1</sup> CAGR calculated using 2020 housing totals (or otherwise oldest total) and latest future housing projections.

<sup>2</sup> Estimated using CAGR applied to the latest available housing estimate.

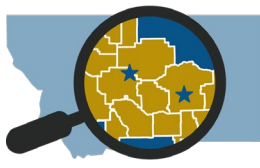
<sup>3</sup> Source: Woods & Poole Economics, Inc. Accessed July 2025. Housing Projections (base year 2022).

<sup>4</sup> Source: ESRI. Accessed July 2025. Projected Housing Growth 2023-2028 in the US.

## 5.1.2 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. Several sources of employment projections for Fergus County were examined to help understand potential growth within the county, and subsequently the subarea. 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 16** presents available employment data for Fergus County over the 2000 through 2045 period.

For baseline comparison purposes, the employment estimates from the 2000 and 2020 **decennial censuses** as well as the most recent ACS estimates are provided to demonstrate how the Fergus County civilian employed population (aged 16 and older) has changed historically. From 2000 through 2020, the county workforce experienced a downward trend, with an annualized growth of -0.22 percent per year. Conversely, ACS estimates indicate that the workforce grew from 2020 through 2021, then decrease in 2022, and increased again in 2023. Over the four years, the county realized a 1.86 percent increase in the labor force.



The **US BEA** previously provided employment data by county, however, the statistical product recently ceased production due to budgetary constraints. Based on the last available US BEA employment data, an increase of about 115 jobs occurred in the county over the 2020 through 2021 period, translating into a 1.58 percent growth rate.

Historic employment estimates provided by **MDLI** also indicate an upward trend, although at a slower rate of 0.9 percent per year, resulting in a net increase of about 210 jobs in Fergus County over the 2020 through 2025 period.

**MDLI** also provides 10-year projections for jobs within five Montana regions. Fergus County falls within the South Central Region, encompassing 10 Montana counties. The projections predict that the region's employment base will grow at an annual rate of 1.2 percent from 2023 through 2033. While this projection is not specific to Fergus 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 Fergus County are also available from **W&P**. The current W&P projections predict that total employment in the county may reach 8,300 by 2045, representing an average annual increase of 0.45 percent 25 years. Interestingly, W&P predicts that jobs will continue increasing over the 25-year period, despite predicting that the population will decrease over the same timeframe.

**Table 16: Fergus County Employment Projections**

Source	2000	2020	2021	2022	2023	2025	2030	2033	2035	2040	2045	CAGR <sup>1</sup>
US Census Bureau Decennial Census <sup>3</sup>	5,589	5,343									5,051 <sup>2</sup>	-0.22%
US Census Bureau ACS <sup>3</sup>		5,343	5,757	5,591	5,647						8,473 <sup>2</sup>	1.86%
US BEA <sup>4</sup>		7,424	7,541								10,975 <sup>2</sup>	1.58%
Montana Department of Labor & Industry – Historic <sup>5</sup>		5,526	5,510	5,752	5,734	5,738					6,671 <sup>2</sup>	0.9%
Montana Department of Labor & Industry – South Central Region Projection <sup>5</sup>					111,221			125,365			144,732 <sup>2</sup>	1.20%
Woods & Poole <sup>6</sup>		7,411	7,455	7,666	7,723	7,805	7,947	8,021	8,068	8,185	8,300	0.45%

<sup>1</sup> CAGR calculated using 2020 employment totals (or otherwise oldest total) and latest future employment projections.

<sup>2</sup> Estimated using CAGR applied to the latest available employment estimate.

<sup>3</sup> Source: US Census Bureau. Decennial Census (2000 & 2020) and ACS 5-Year Estimates (2021, 2022, & 2023).

<sup>4</sup> Source: US Department of Commerce Bureau of Economic Analysis. 2023. Table CA25 and Table CA25N. This statistical product is no longer produced due to budget constraints.

<sup>5</sup> Source: Montana Department of Labor and Industry. Accessed July 2025. Labor Force Participation Data Dashboard: Indexed employment by county (Historic) & Montana's Job Projections (2023-2033, South Central Region).

<sup>6</sup> Source: Woods & Poole Economics, Inc. Accessed July 2025. Employment Projections (base year 2022).



## 5.2 Projected Growth in the Subarea

The *2024 Lewistown Plan* anticipates slow to moderate population and employment growth over the next two decades, driven largely by new economic activity from VACOM and the Sentinel project. In response to this projected growth, the city is expecting a rise in housing demand. According to the plan's housing need projections, Lewistown is expected to face a housing deficit of 274 units by 2027, with demand increasing to 720 units by 2030 to accommodate anticipated population and employment growth. As the city's population continues to age, the demand for smaller, more affordable housing options for lower-income single residents is also projected to rise. To support population and economic expansion, and to improve housing affordability, the city recognizes the importance of promoting greater housing diversity and higher residential density. Additionally, to offset its high proportion of retirees and retain younger residents, Lewistown understands that it needs to attract employers offering higher-wage jobs. With plenty of available land and planned industry growth, Lewistown is well positioned to accommodate new residents and industries.

To understand where this growth might occur in the subarea and understand what impacts this growth may have on the transportation system, a workshop was held with local planners and officials on April 9, 2025. At the workshop, attendees had the opportunity to share where current developments are already planned and areas that are expected to develop next. City officials recommended that new residential growth be focused first on higher-density infill development within the existing urban center. From there, expansion would proceed outward into adjacent parcels consistent with the future land use map outlined in the *2024 Lewistown Plan*.

To visualize where growth is projected to occur within the subarea, and to aid in the planning process, a map of future development areas is shown in **Figure 18**. For simplicity, the areas are generalized and grouped into three categories which are defined as follows. The size of the corresponding bubbles and icons indicates the comparative size or density of the development.

- **RESIDENTIAL GROWTH:** Areas primarily designated for housing development, including both new subdivisions and infill projects supporting a variety of housing types and densities.
- **MIXED USE GROWTH:** Areas that support a combination of land uses, including commercial, office, multi-family residential, and civic or public spaces enabling residents to live in close proximity to services, employment, and transportation options.
- **COMMERCIAL/INDUSTRIAL GROWTH:** Areas set aside for economic development, including business parks, industrial facilities, manufacturing hubs, logistics centers, and office or retail space.

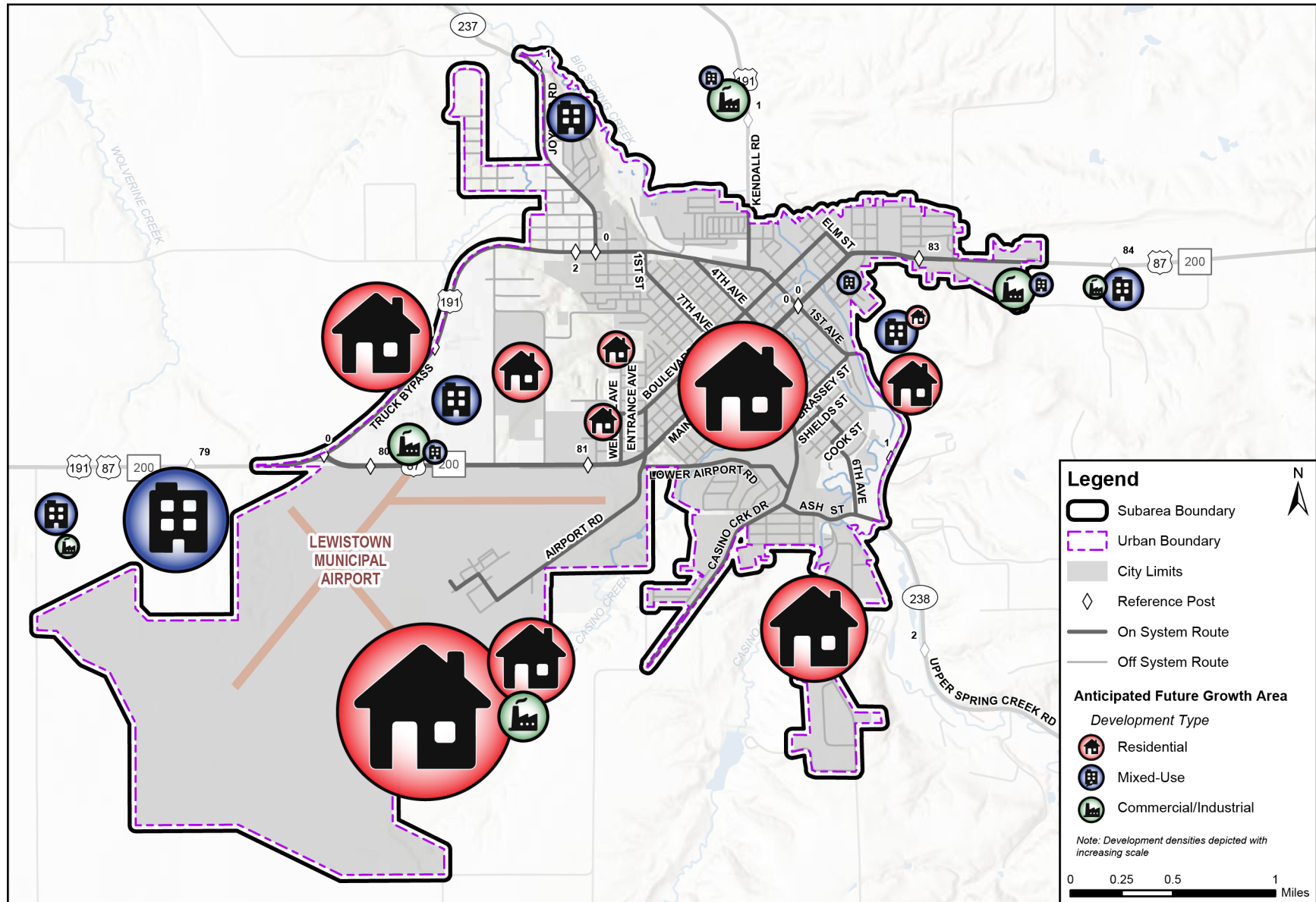
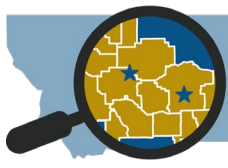
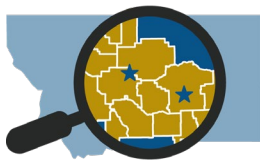


Figure 18: Anticipated Future Growth Areas



As shown in **Figure 18**, areas identified for new residential growth include mid-town neighborhoods east and west of Main Street, where infill housing is preferred. Additional residential development is anticipated near the hospital and health facilities, and in the vicinity of the elementary and high schools off Casino Creek Drive. Employment growth is expected from the new VACOM facilities, one located near Upper Spring Creek and a larger one near the airport, as well as the forthcoming Sentinel project workforce hub, with the specific location and size still to be determined. Other areas targeted for industrial and commercial development include sites off Airport Road, along the east boundary of the city on the mixed-use corridor, and on the western edge of the city adjacent to the airport.

The integration of land use and transportation planning is recognized as essential to supporting this anticipated growth. Decisions about the location, type, and design of development directly affect travel demand, mode choices, and overall traffic patterns. The placement of housing, employment centers, services, and recreational spaces influences how residents and visitors access the community and move through it. Consequently, the transportation system should evolve in response to changing land use changes. Effective, forward-looking coordination between land use and transportation planning can help Lewistown reduce congestion, improve mobility and accessibility, and offer a more diverse set of transportation options.

To visualize where future growth may impact the existing transportation system, a map of anticipated traffic volume growth was prepared. **Figure 19** shows where high traffic growth is expected to occur given the future growth areas shown in **Figure 18**. The corridor growth shown on the map is intended to represent additional traffic that could be added to the existing network should development occur in the manner predicted. This visualization helps identify which roads may need additional investment to accommodate future growth. While some roads currently have little traffic volume and do not currently have capacity issues, future growth may greatly increase traffic volumes and could cause capacity issues if road improvements are not made. The following descriptions explain the corridor growth categories.

- **HIGH GROWTH:** Higher density developments are anticipated to occur near the corridor and are expected to have greater impacts on the adjacent transportation facilities.
- **MODERATE GROWTH:** A mix of both high- and low-density developments is anticipated near the corridor. Moderate impacts to the adjacent transportation system are anticipated.
- **LOW GROWTH:** Lower density developments are anticipated to occur near the corridor. Minimal impacts to the adjacent transportation system are anticipated.

Much of the projected growth is predicted in the downtown core and out near the airport. Accordingly, Main Street and Airport Road are expected to experience increasing traffic volumes. As these main routes experience increased growth, moderate traffic growth is expected to occur on parallel routes such as the truck bypass and Boulevard Street.

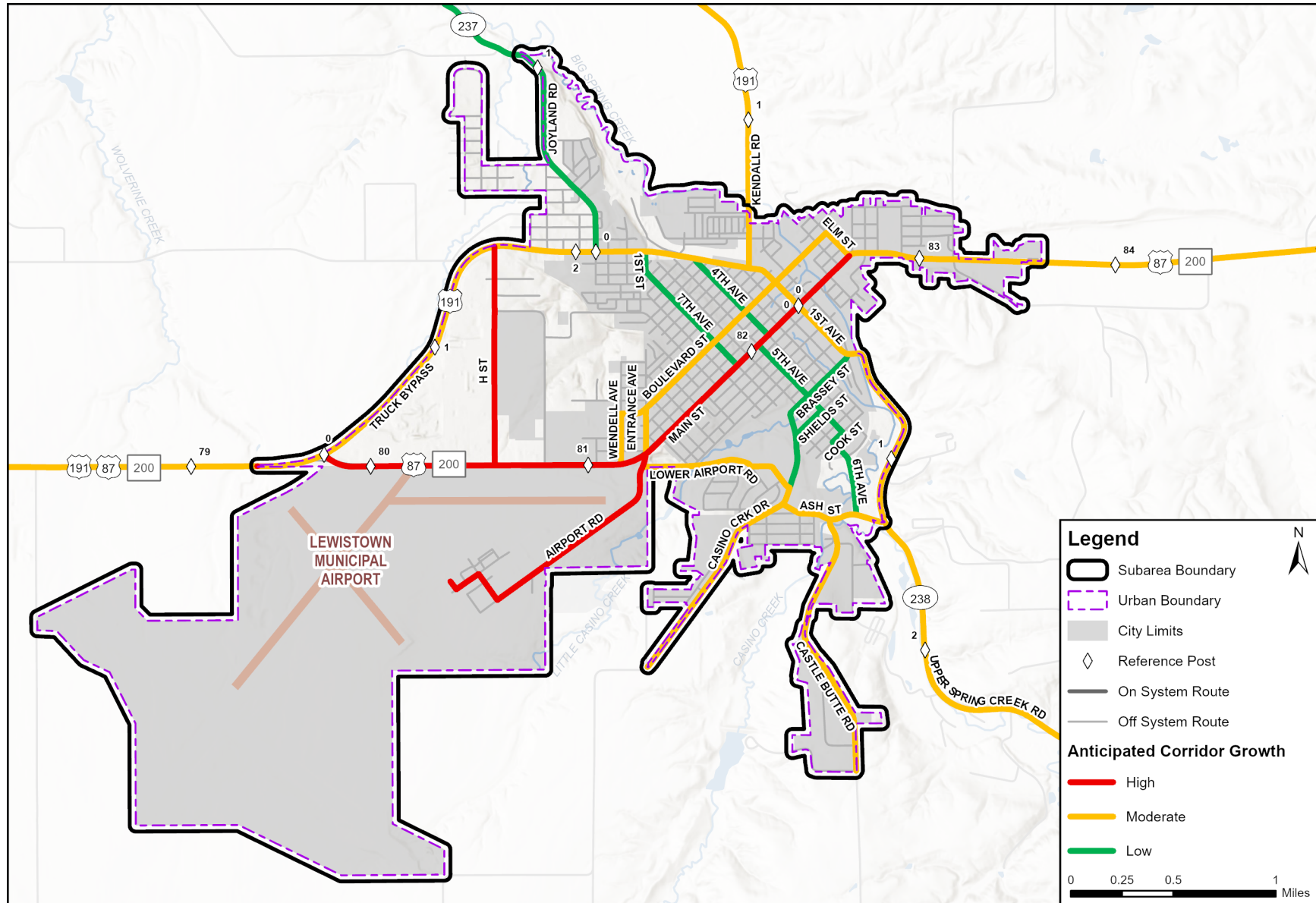
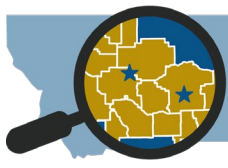


Figure 19: Anticipated Corridor Growth

## 6.0 AREAS OF CONCERN AND CONSIDERATION

This section provides a list and description of areas of concern and consideration within the subarea. These areas were identified through review of traffic and safety data, field review, public databases, and other resources. More discussion has been provided in the previous sections, and it is reiterated here as appropriate.

### 6.1 Demographics

- Lewistown's population grew from 1970 through 1980 but fluctuated in the following decades, resulting in an overall decline of 0.16 percent from 1970 through 2020.
- Lewistown has a predominantly White population, with 1.8 percent identifying as American Indian and 3.7 percent as Hispanic or Latino.
- Youth under 18 make up 21.6 percent of the population, aligning closely with the national average of 22.2 percent. In contrast, 27.0 percent of residents are 65 or older, well above the national average of 16.8 percent. Additionally, 19.2 percent of Lewistown residents report a disability, compared to 13.0 percent nationally.
- Lewistown experienced a small population growth over the past five years, with an increase of 2.3 percent, compared to 2.7 and 6.1 percent in Fergus County and Montana, respectively.
- Populations in both Lewistown and Fergus County are projected to decline by 3.0 percent over the next 10 years, while Montana as a whole is expected to grow by 4.9 percent.
- Over the past five years, the number of housing units in Lewistown decreased by 6.1 percent while Fergus County experienced a slight increase of 1.9 percent. Owner-occupied units also decreased substantially in both Lewistown (-8.1 percent) and Fergus County (-4.2 percent).
- In Lewistown, 75.6 percent of workers drive alone to work, 6.5 percent carpool, and 11.3 percent walk. Public transit and bicycle use is low, both below one percent, consistent with trends across Montana. The average commute time is 15 minutes.
- Lewistown's workforce is primarily employed in educational services, health care and social assistance (29.6 percent), the retail trade industry (14.9 percent), and transportation, warehousing, and utilities (9.3 percent).
- Lewistown's median household income (\$44,195) and mean household income (\$58,432) are both well below county and state income levels. The poverty rate in Lewistown is 20.6 percent, nearly double the state and national rates.
- The unemployment rate in Lewistown is 6.8 percent, which is higher than the county, state, and national unemployment rates.

## 6.2 Existing Transportation System

### Transportation Network

- The major street network in Lewistown is composed of collectors, minor arterials, and principal arterials. MDT is currently undergoing a statewide review of existing functional classification designations across Montana.
- Due to its rural nature, the Lewistown subarea has limited dedicated on-street bike and pedestrian facilities, aside from sidewalks which are partially complete. The LRTS features 24 miles of shared use paths and trails with a mix of paved, gravel, and natural surfaces, linking key destinations throughout the Lewistown subarea.
- Fewer than three percent of crosswalks in Lewistown are fully developed with signing, striping, and connecting facilities. Most crossings (86.5 percent) are undeveloped with no accommodations.
- The City of Lewistown does not currently operate a fixed-route bus system, however, the Central Montana Shuttle provides dial-a-ride services within Lewistown.
- The truck bypass serves as a key freight corridor and designated truck bypass around the City of Lewistown.
- LMA provides general aviation services and is part of the National Air Commerce System for National Defense and Civil Aeronautics. Activity around the airport is expected to increase with VACOM and the Sentinel project.

### Transportation Conditions

- Traffic volumes in the subarea range from 50 to almost 8,700 vpd. The roads with the highest volumes include Main Street, 1st Avenue, and the truck bypass.
- The majority of routes in the subarea consist of two lanes without a median, except for Main Street (two lanes with a TWLTL), Boulevard Street (two lanes with a center boulevard), and Kendall Road (four lanes with no center median).
- All of the corridors in the subarea are currently operating at 50 percent capacity or less.
- A total of 11 intersections were evaluated within the subarea, including one signalized and 10 unsignalized intersections. All the subarea intersections are shown to operate at an acceptable LOS (LOS C or better) during the a.m. and p.m. peak hours.
- Lewistown is a car-dependent city with most errands requiring a car. The city has a walk score of 26 and bike score of 30 (out of 100).
- The 16 bridges in Lewistown are rated fair (nine) and poor (seven). The majority of the pavement in the subarea is also rated fair, with 1st Avenue being rated as poor west of Main Street and very poor east of Main Street.

## 6.3 Safety<sup>ii</sup>

- A total of 460 crashes were reported by MHP within the subarea from January 2019 through December 2023. There were no fatal crashes and four suspected serious injury crashes.
- Crashes occurred most often during the a.m., noon, and school pick-up hours. The greatest number of crashes occurred on Tuesdays and Wednesdays while Saturdays and Sundays saw the least number of crashes. In general, the highest number of crashes were observed during the winter months.
- Crashes peaked in 2019, then declined during the pandemic, reaching a low in 2021. Numbers rebounded in 2022 and slightly declined again in 2023.
- Multiple-vehicle crashes accounted for 79 percent of all crashes. The most common crash types were right-angle crashes (27 percent), rear-end (21 percent), fixed object (13 percent), and sideswipe same direction (10 percent).
- Adverse weather conditions were reported in approximately 13 percent of crashes. About half of all crashes (48 percent) were reported as having occurred on wet, snowy, or icy/frost-covered roads. About 79 percent of all crashes were reported as having occurred under daylight conditions.
- Approximately 60 percent of crashes occurred at an intersection or were intersection-related.
- Over the five-year period, there were five pedestrian crashes and six bicycle crashes, one of each type was severe.
- Of the 460 crashes, four percent involved impaired drivers, with one crash involving an impaired driver being severe.
- The majority of vehicles involved in crashes were passenger cars/vans/pickups/SUVs. Large trucks, motorcycles, and ATVs were each involved in about two percent of crashes.
- Through spatial analysis, multiple intersections and roadway segments experiencing higher numbers of crashes than anticipated were identified and analyzed for crash trends. The clusters occurred primarily on sharp horizontal curves, at uncontrolled intersections, and in areas with a concentrated mix of motorized and non-motorized traffic.

## 6.4 Projected Transportation Conditions

- Lewistown is expected to undergo slow to moderate growth over the next two decades, with increasing housing pressures driven by population and employment growth linked to the arrival of VACOM and the Sentinel project.

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<sup>ii</sup> Pursuant to 23 U.S.C. § 407, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144, and 148 of Title 23, U.S.C., or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data. This publication is not intended to waive any of the State of Montana's rights or privileges under 23 U.S.C. § 407.

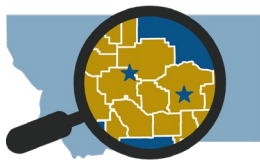
- The community is likely to face demand for both temporary and permanent housing accommodations, requiring strategic infrastructure and land use planning to support the influx of new residents and workforce personnel.
- Various sources of population projections predict that Fergus County and Lewistown will experience negative growth or very slow positive growth over the next several years. Local growth policies plan for moderate growth, ranging from about 0.25 to 1.5 percent annual growth. The number of housing units in the subarea is also expected to increase over the next 25 years.
- Despite predicting declining population numbers, all projection sources predict steady employment growth over the next several years.
- The City of Lewistown seeks to promote greater housing diversity and attract new employment industries. City officials aim to focus on in-fill residential growth within the existing urban center. From there, expansion could proceed outward into adjacent parcels consistent with the future land use map outlined in the *2024 Lewistown Plan*.
- Transportation system operations are expected to evolve in response to growth and development with several major street network corridors experience moderate to high traffic growth.

## 6.5 Environmental Constraints

Environmental constraints are summarized based on information provided in the *Central Montana Transportation Study Environmental Scan*.<sup>26</sup>

### **Physical Environment**

- About 88 percent of land in the subarea is privately owned, while the remaining 12 percent is in public ownership.
- About 65 percent of the land in the subarea is classified as farmland that may be subject to protection under the Farmland Policy Protection Act.
- The subarea is in a low seismic risk zone.
- Big Spring Creek is the only impaired water in the Lewistown subarea. Causes of impairment include nitrogen, polychlorinated biphenyls, sedimentation/siltation, and phosphorus.
- There are 251 wells in the subarea. Municipal drinking water is sourced from Big Spring; an artesian spring located approximately six miles southeast of town.
- The subarea generally has a minimal risk of flooding, though parts of Big Spring Creek have a moderate risk of flooding.
- A total of 25 wetlands, covering 26 acres, have been mapped within the subarea.
- There are four state superfund sites, six unresolved petroleum tank releases, eight hazardous waste generators, one sewage disposal site, and two opencut mining permits within the subarea.
- Residences in the subarea are sensitive noise receptors, which could be affected by future roadway improvements.



### **Biological Resources**

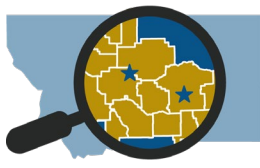
- Nearly 30 species of invasive and noxious weeds are present within the subarea.
- Vegetation in the subarea is primarily composed of agricultural fields, prairie grassland, introduced vegetation, and deciduous shrubland, supporting a variety of wildlife species including mammals, birds, aquatic species, reptiles, and invertebrates.
- In addition to protected migratory birds and aquatic species, four species of concern have been documented in the subarea.
- No endangered species have been documented near the subarea.

### **Social and Cultural Resources**

- Multiple city parks and a 20-mile-long trail system are located in the subarea.
- The Montana State Historic Preservation Office online database lists 28 historic properties/objects and five historic districts in the subarea.

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# Appendix A

## Traffic Data Collection





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Count Name: Hwy 87/Brookville  
Ln & Hwy 191/Truck Bypass  
Site Code: Lewistown  
Start Date: 10/28/2024  
Page No: 1

## Turning Movement Data

Start Time	Hwy 87 Northbound		Brookville Ln Southbound					Hwy 87 Eastbound					Hwy 191/Truck Bypass Westbound					Int. Total
	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
12:45 PM	0	0	2	4	0	0	6	0	16	19	0	35	0	34	5	0	39	80
Hourly Total	0	0	2	4	0	0	6	0	16	19	0	35	0	34	5	0	39	80
1:00 PM	0	0	2	1	1	0	4	1	18	27	0	46	0	51	4	0	55	105
1:15 PM	0	0	2	3	0	0	5	1	14	30	0	45	0	34	1	0	35	85
1:30 PM	0	0	1	1	0	0	2	0	13	16	0	29	0	42	4	0	46	77
1:45 PM	0	0	2	1	0	0	3	1	5	19	0	25	0	36	6	0	42	70
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2:30 PM	0	0	0	1	0	0	1	0	14	19	0	33	0	47	5	0	52	86
2:45 PM	0	0	3	3	0	0	6	2	15	14	0	31	0	47	5	0	52	89
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3:30 PM	0	0	0	3	2	0	5	0	13	19	0	32	0	39	3	0	42	79
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12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3
12:15 AM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	3
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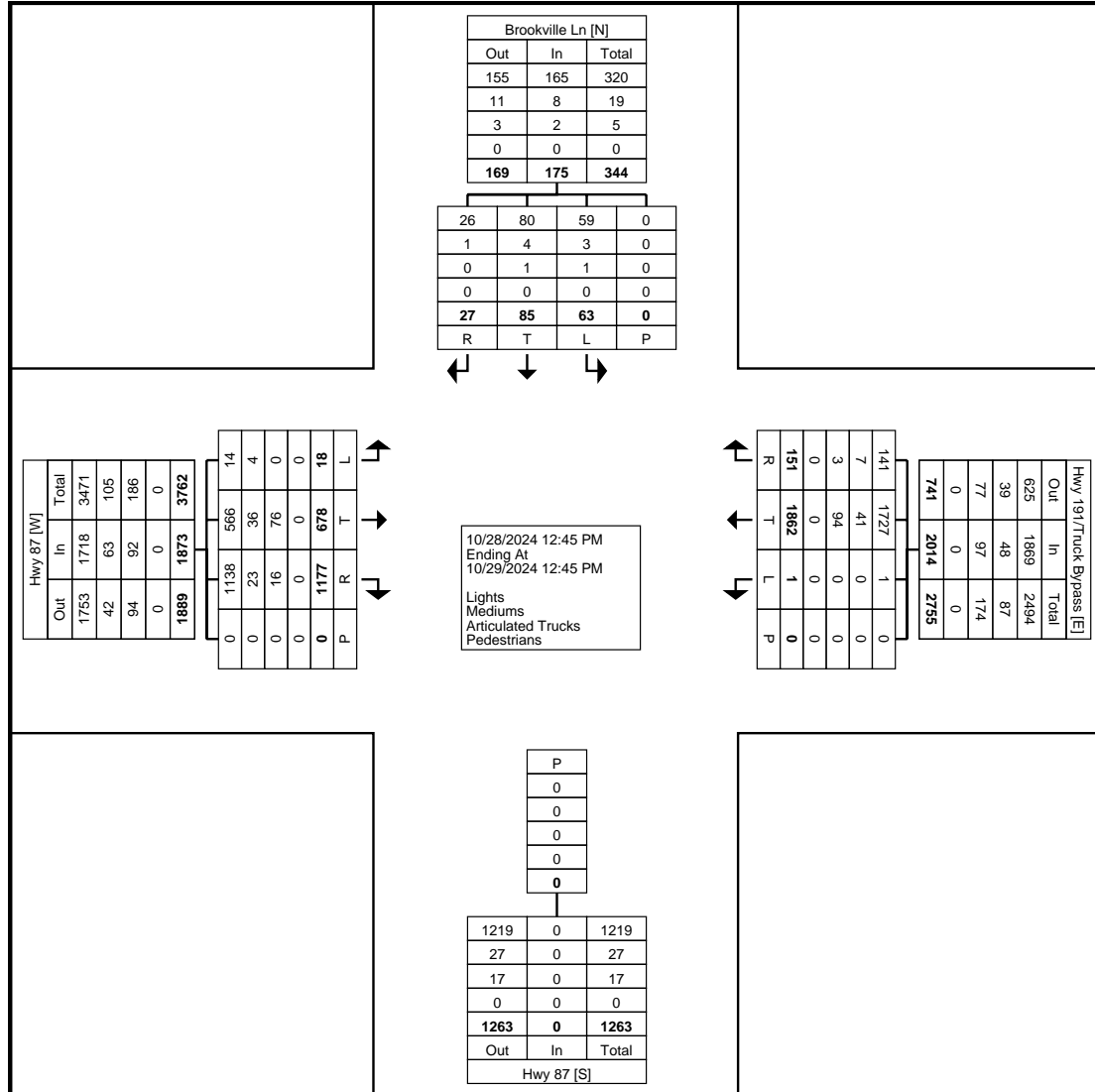
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Count Name: Hwy 87/Brookville  
Ln & Hwy 191/Truck Bypass  
Site Code: Lewistown  
Start Date: 10/28/2024  
Page No: 3



Turning Movement Data Plot

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406-447-5000 [srandall@rpa-hln.com](mailto:srandall@rpa-hln.com)

Count Name: Hwy 87/Brookville  
Ln & Hwy 191/Truck Bypass  
Site Code: Lewistown  
Start Date: 10/28/2024  
Page No: 4

### Turning Movement Peak Hour Data (4:30 PM)

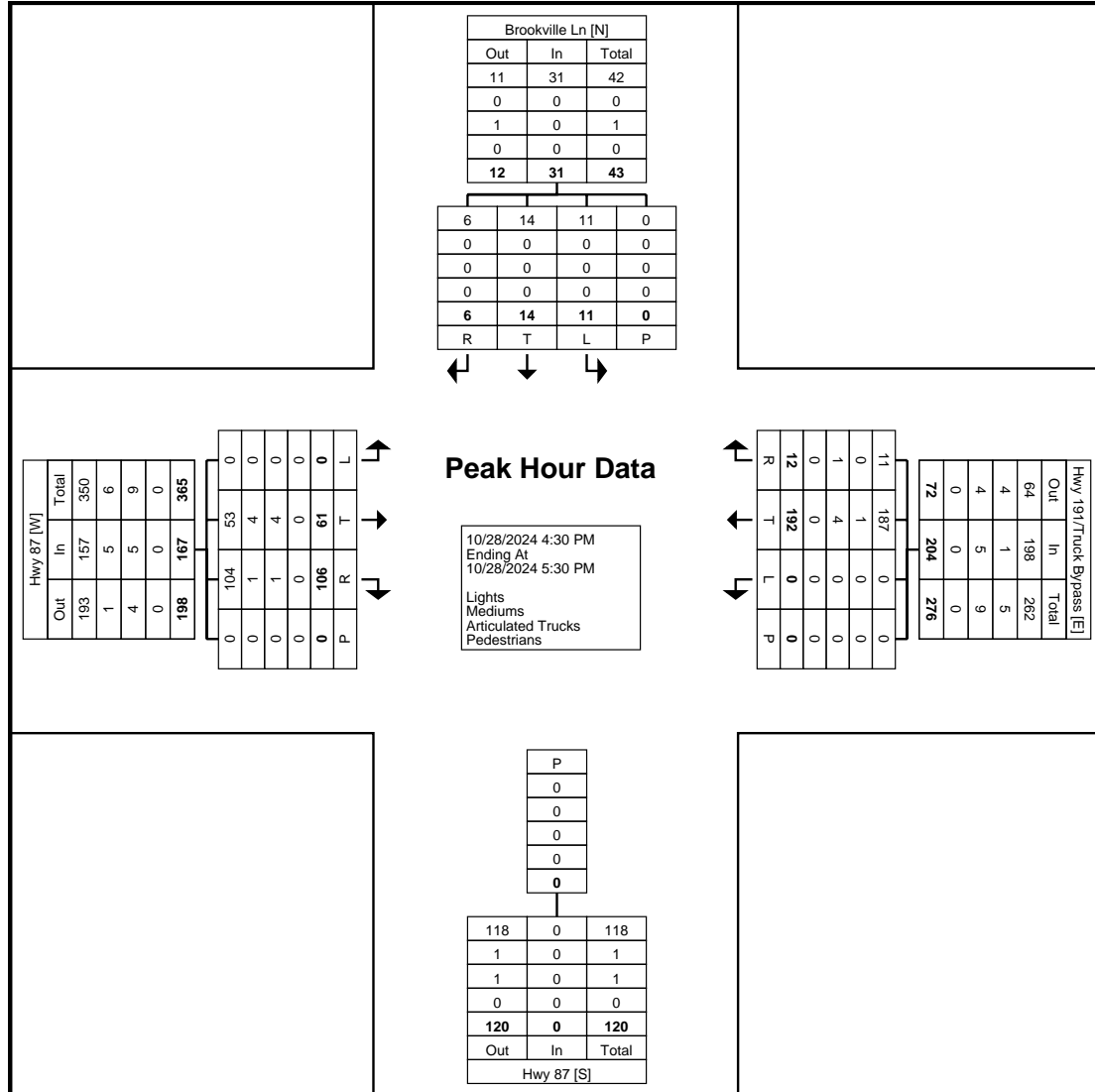
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Count Name: Hwy 87/Brookville  
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Page No: 5



Turning Movement Peak Hour Data Plot (4:30 PM)

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Ln & Hwy 191/Truck Bypass  
Site Code: Lewistown  
Start Date: 10/28/2024  
Page No: 6

### Turning Movement Peak Hour Data (7:15 AM)

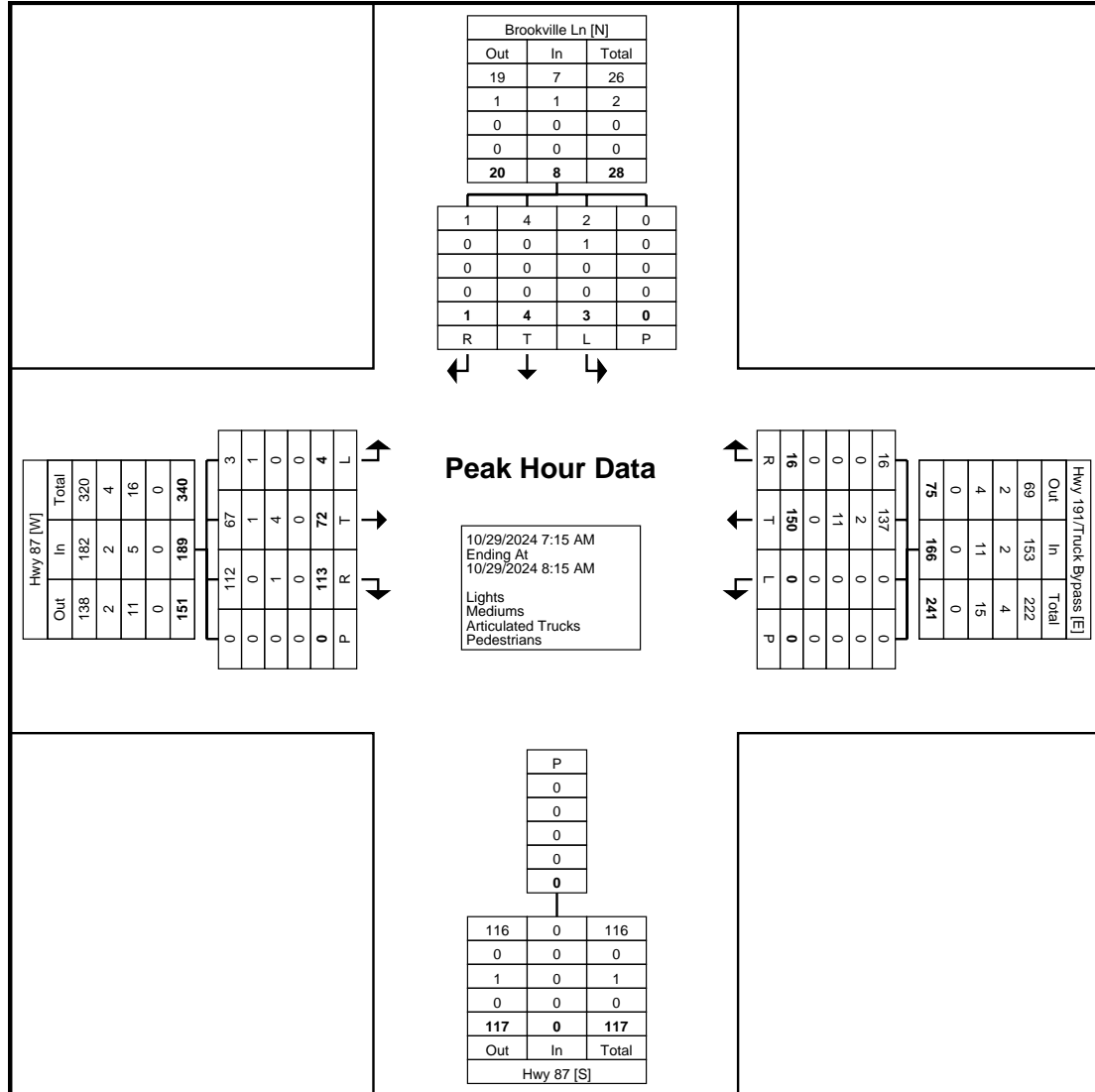
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Count Name: Hwy 87/Brookville  
Ln & Hwy 191/Truck Bypass  
Site Code: Lewistown  
Start Date: 10/28/2024  
Page No: 7



Turning Movement Peak Hour Data Plot (7:15 AM)

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Count Name: Hwy 87 & Hwy  
191  
Site Code: Lewistown  
Start Date: 10/28/2024  
Page No: 1

## Turning Movement Data

Start Time	Hwy 87				Hwy 191/Truck Bypass				Hwy 191/Truck Bypass				Int. Total
	Northbound		Peds	App. Total	Eastbound		Peds	App. Total	Westbound		App. Total		
Left	Right	Thru			Right	Left			Thru	Peds			
12:45 PM	28	2	0	30	19	0	0	19	3	10	0	13	62
Hourly Total	28	2	0	30	19	0	0	19	3	10	0	13	62
1:00 PM	39	2	0	41	19	0	0	19	0	15	0	15	75
1:15 PM	23	3	0	26	18	0	0	18	1	12	0	13	57
1:30 PM	30	3	0	33	15	0	0	15	5	18	0	23	71
1:45 PM	24	1	0	25	7	2	0	9	3	25	0	28	62
Hourly Total	116	9	0	125	59	2	0	61	9	70	0	79	265
2:00 PM	30	4	0	34	15	0	0	15	6	12	0	18	67
2:15 PM	25	4	0	29	15	0	0	15	1	10	0	11	55
2:30 PM	34	4	0	38	14	0	0	14	1	21	0	22	74
2:45 PM	37	3	0	40	18	0	0	18	2	15	0	17	75
Hourly Total	126	15	0	141	62	0	0	62	10	58	0	68	271
3:00 PM	20	3	0	23	18	0	0	18	2	18	0	20	61
3:15 PM	29	2	0	31	4	0	0	4	1	10	0	11	46
3:30 PM	24	4	0	28	13	0	0	13	4	18	0	22	63
3:45 PM	25	3	0	28	25	1	0	26	2	15	0	17	71
Hourly Total	98	12	0	110	60	1	0	61	9	61	0	70	241
4:00 PM	36	5	0	41	19	0	0	19	3	16	0	19	79
4:15 PM	25	3	0	28	21	0	0	21	1	15	0	16	65
4:30 PM	34	5	0	39	25	0	0	25	3	16	0	19	83
4:45 PM	28	0	0	28	16	0	0	16	0	15	0	15	59
Hourly Total	123	13	0	136	81	0	0	81	7	62	0	69	286
5:00 PM	32	3	0	35	27	0	0	27	3	22	0	25	87
5:15 PM	42	2	0	44	9	0	0	9	3	17	0	20	73
5:30 PM	30	2	0	32	12	0	0	12	0	15	0	15	59
5:45 PM	16	5	0	21	6	0	0	6	1	10	0	11	38
Hourly Total	120	12	0	132	54	0	0	54	7	64	0	71	257
6:00 PM	13	2	0	15	2	0	0	2	1	5	0	6	23
6:15 PM	19	4	0	23	3	0	0	3	2	5	0	7	33
6:30 PM	8	2	0	10	15	0	0	15	1	1	0	2	27
6:45 PM	8	1	0	9	16	0	0	16	0	7	0	7	32
Hourly Total	48	9	0	57	36	0	0	36	4	18	0	22	115
7:00 PM	6	2	0	8	10	0	0	10	2	5	0	7	25
7:15 PM	11	0	0	11	7	0	0	7	1	3	0	4	22
7:30 PM	12	0	0	12	5	0	0	5	0	2	0	2	19
7:45 PM	4	0	0	4	1	0	0	1	0	1	0	1	6
Hourly Total	33	2	0	35	23	0	0	23	3	11	0	14	72
8:00 PM	6	0	0	6	5	0	0	5	0	1	0	1	12
8:15 PM	9	2	0	11	1	0	0	1	1	2	0	3	15
8:30 PM	9	1	0	10	3	0	0	3	1	1	0	2	15
8:45 PM	7	0	0	7	3	0	0	3	1	1	0	2	12
Hourly Total	31	3	0	34	12	0	0	12	3	5	0	8	54
9:00 PM	3	1	0	4	1	0	0	1	1	2	0	3	8
9:15 PM	3	1	0	4	1	0	0	1	0	4	0	4	9
9:30 PM	4	0	0	4	2	0	0	2	0	0	0	0	6
9:45 PM	2	0	0	2	3	0	0	3	0	3	0	3	8
Hourly Total	12	2	0	14	7	0	0	7	1	9	0	10	31
10:00 PM	5	0	0	5	2	0	0	2	0	0	0	0	7
10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
10:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
Hourly Total	7	0	0	7	2	0	0	2	0	1	0	1	10
11:00 PM	0	0	0	0	2	0	0	2	0	1	0	1	3
11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM	2	0	0	2	0	0	0	0	0	2	0	2	4
11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	2	0	0	2	2	0	0	2	0	3	0	3	7
12:00 AM	0	0	0	0	0	0	0	0	0	4	0	4	4
12:15 AM	0	0	0	0	3	0	0	3	0	0	0	0	3
12:30 AM	0	0	0	0	2	0	0	2	0	0	0	0	2
12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0

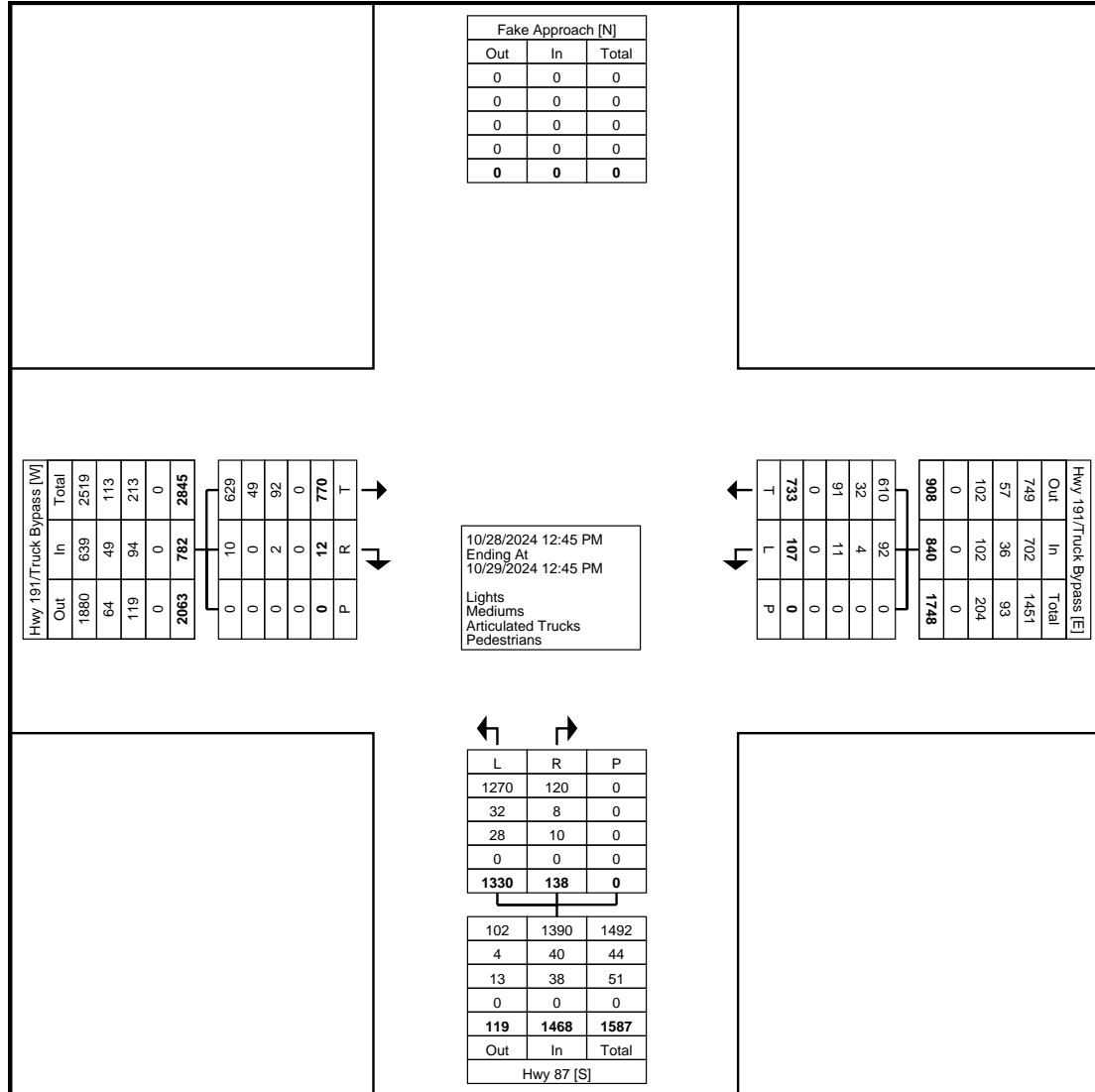
Hourly Total	0	0	0	0	5	0	0	5	0	4	0	4	9
1:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
1:15 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
1:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
1:45 AM	0	1	0	1	1	0	0	1	0	0	0	0	2
Hourly Total	1	1	0	2	1	0	0	1	1	1	0	2	5
2:00 AM	1	1	0	2	0	0	0	0	0	0	0	0	2
2:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
Hourly Total	2	1	0	3	1	0	0	1	0	1	0	1	5
3:00 AM	2	0	0	2	0	0	0	0	0	1	0	1	3
3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
3:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
Hourly Total	2	0	0	2	0	0	0	0	0	3	0	3	5
4:00 AM	0	0	0	0	2	0	0	2	0	1	0	1	3
4:15 AM	0	0	0	0	4	0	0	4	0	0	0	0	4
4:30 AM	0	0	0	0	0	0	0	0	0	2	0	2	2
4:45 AM	1	0	0	1	2	0	0	2	2	1	0	3	6
Hourly Total	1	0	0	1	8	0	0	8	2	4	0	6	15
5:00 AM	4	0	0	4	0	0	0	0	0	2	0	2	6
5:15 AM	5	0	0	5	0	0	0	0	0	2	0	2	7
5:30 AM	12	1	0	13	1	0	0	1	0	4	0	4	18
5:45 AM	9	0	0	9	0	0	0	0	3	5	0	8	17
Hourly Total	30	1	0	31	1	0	0	1	3	13	0	16	48
6:00 AM	5	0	0	5	2	0	0	2	0	3	0	3	10
6:15 AM	10	0	0	10	2	0	0	2	0	7	0	7	19
6:30 AM	10	0	0	10	2	0	0	2	1	9	0	10	22
6:45 AM	15	1	0	16	6	1	0	7	4	13	0	17	40
Hourly Total	40	1	0	41	12	1	0	13	5	32	0	37	91
7:00 AM	14	0	0	14	3	0	0	3	1	6	0	7	24
7:15 AM	23	3	0	26	8	0	0	8	1	16	0	17	51
7:30 AM	29	3	0	32	23	0	0	23	0	16	0	16	71
7:45 AM	21	3	0	24	37	0	0	37	2	19	0	21	82
Hourly Total	87	9	0	96	71	0	0	71	4	57	0	61	228
8:00 AM	28	3	0	31	10	0	0	10	2	13	0	15	56
8:15 AM	18	0	0	18	6	0	0	6	2	12	0	14	38
8:30 AM	20	1	0	21	14	1	0	15	1	10	0	11	47
8:45 AM	10	2	0	12	18	0	0	18	0	6	0	6	36
Hourly Total	76	6	0	82	48	1	0	49	5	41	0	46	177
9:00 AM	14	2	0	16	9	0	0	9	4	15	0	19	44
9:15 AM	15	0	0	15	14	0	0	14	2	17	0	19	48
9:30 AM	17	4	0	21	9	0	0	9	2	17	0	19	49
9:45 AM	23	3	0	26	12	1	0	13	0	8	0	8	47
Hourly Total	69	9	0	78	44	1	0	45	8	57	0	65	188
10:00 AM	22	5	0	27	20	0	0	20	0	21	0	21	68
10:15 AM	18	2	0	20	14	0	0	14	2	16	0	18	52
10:30 AM	19	4	0	23	13	0	0	13	0	14	0	14	50
10:45 AM	21	2	0	23	12	1	0	13	2	3	0	5	41
Hourly Total	80	13	0	93	59	1	0	60	4	54	0	58	211
11:00 AM	17	2	0	19	12	0	0	12	2	12	0	14	45
11:15 AM	29	1	0	30	15	2	0	17	5	7	0	12	59
11:30 AM	27	4	0	31	15	0	0	15	3	16	0	19	65
11:45 AM	34	1	0	35	16	0	0	16	2	14	0	16	67
Hourly Total	107	8	0	115	58	2	0	60	12	49	0	61	236
12:00 PM	27	3	0	30	21	0	0	21	1	10	0	11	62
12:15 PM	26	5	0	31	14	1	0	15	2	18	0	20	66
12:30 PM	38	2	0	40	10	2	0	12	4	17	0	21	73
Grand Total	1330	138	0	1468	770	12	0	782	107	733	0	840	3090
Approach %	90.6	9.4	-	-	98.5	1.5	-	-	12.7	87.3	-	-	-
Total %	43.0	4.5	-	47.5	24.9	0.4	-	25.3	3.5	23.7	-	27.2	-
Lights	1270	120	-	1390	629	10	-	639	92	610	-	702	2731
% Lights	95.5	87.0	-	94.7	81.7	83.3	-	81.7	86.0	83.2	-	83.6	88.4
Mediums	32	8	-	40	49	0	-	49	4	32	-	36	125
% Mediums	2.4	5.8	-	2.7	6.4	0.0	-	6.3	3.7	4.4	-	4.3	4.0
Articulated Trucks	28	10	-	38	92	2	-	94	11	91	-	102	234
% Articulated Trucks	2.1	7.2	-	2.6	11.9	16.7	-	12.0	10.3	12.4	-	12.1	7.6
Pedestrians	-	-	0	-	-	-	0	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-



Robert Peccia & Associates  
3147 Saddle Drive

Helena, Montana, United States 59601  
406-447-5000 srandall@rpa-hln.com

Count Name: Hwy 87 & Hwy  
191  
Site Code: Lewistown  
Start Date: 10/28/2024  
Page No: 3



Turning Movement Data Plot

Robert Peccia & Associates  
3147 Saddle Drive

Helena, Montana, United States 59601  
406-447-5000 [srandall@rpa-hln.com](mailto:srandall@rpa-hln.com)

Count Name: Hwy 87 & Hwy  
191  
Site Code: Lewistown  
Start Date: 10/28/2024  
Page No: 4

### Turning Movement Peak Hour Data (4:30 PM)

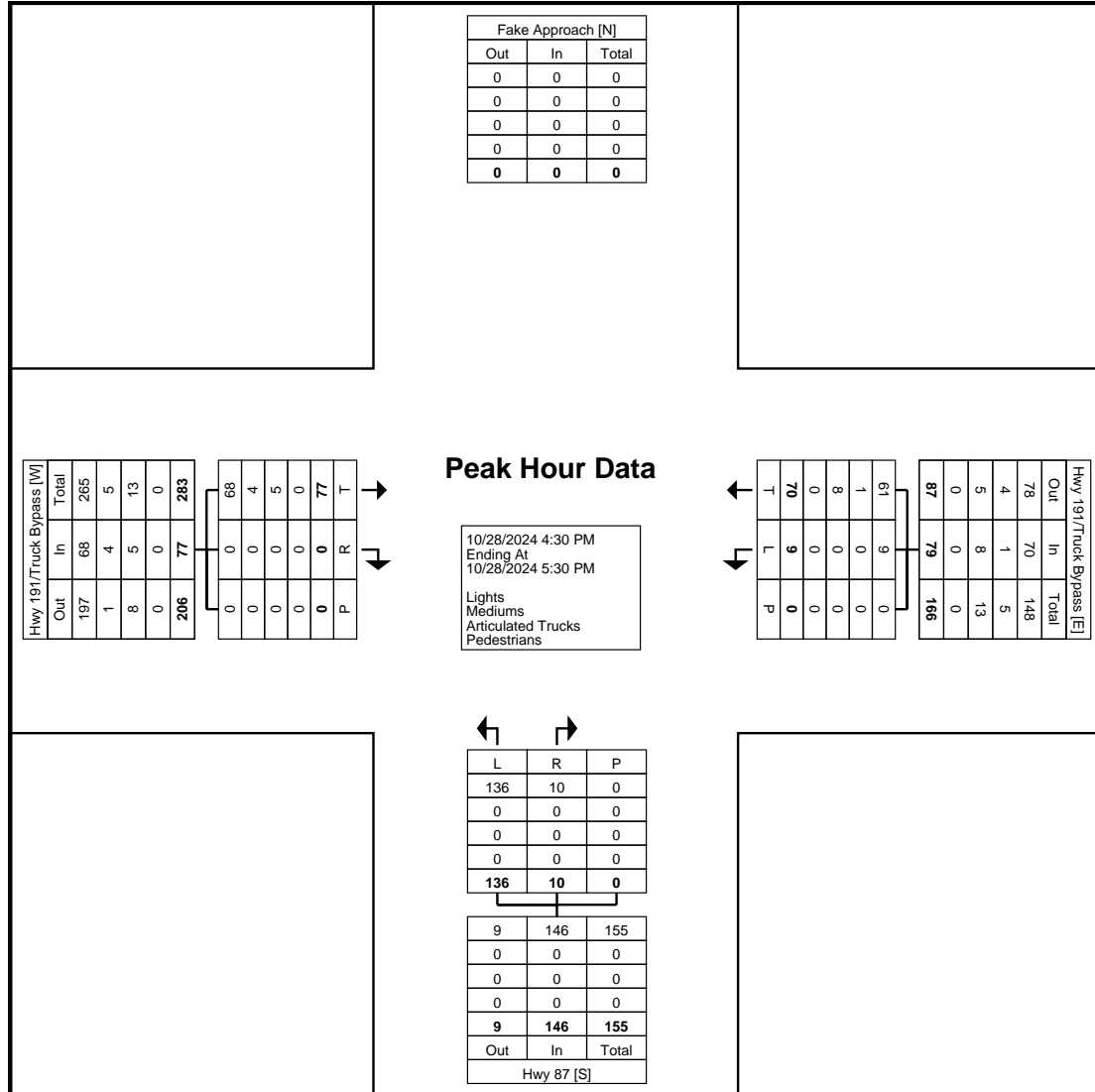
[illegible]



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406-447-5000 srandall@rpa-hln.com

Count Name: Hwy 87 & Hwy  
191  
Site Code: Lewistown  
Start Date: 10/28/2024  
Page No: 5



Turning Movement Peak Hour Data Plot (4:30 PM)

Robert Peccia & Associates  
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Helena, Montana, United States 59601  
406-447-5000 [srandall@rpa-hln.com](mailto:srandall@rpa-hln.com)

Count Name: Hwy 87 & Hwy  
191  
Site Code: Lewistown  
Start Date: 10/28/2024  
Page No: 6

### Turning Movement Peak Hour Data (11:45 AM)

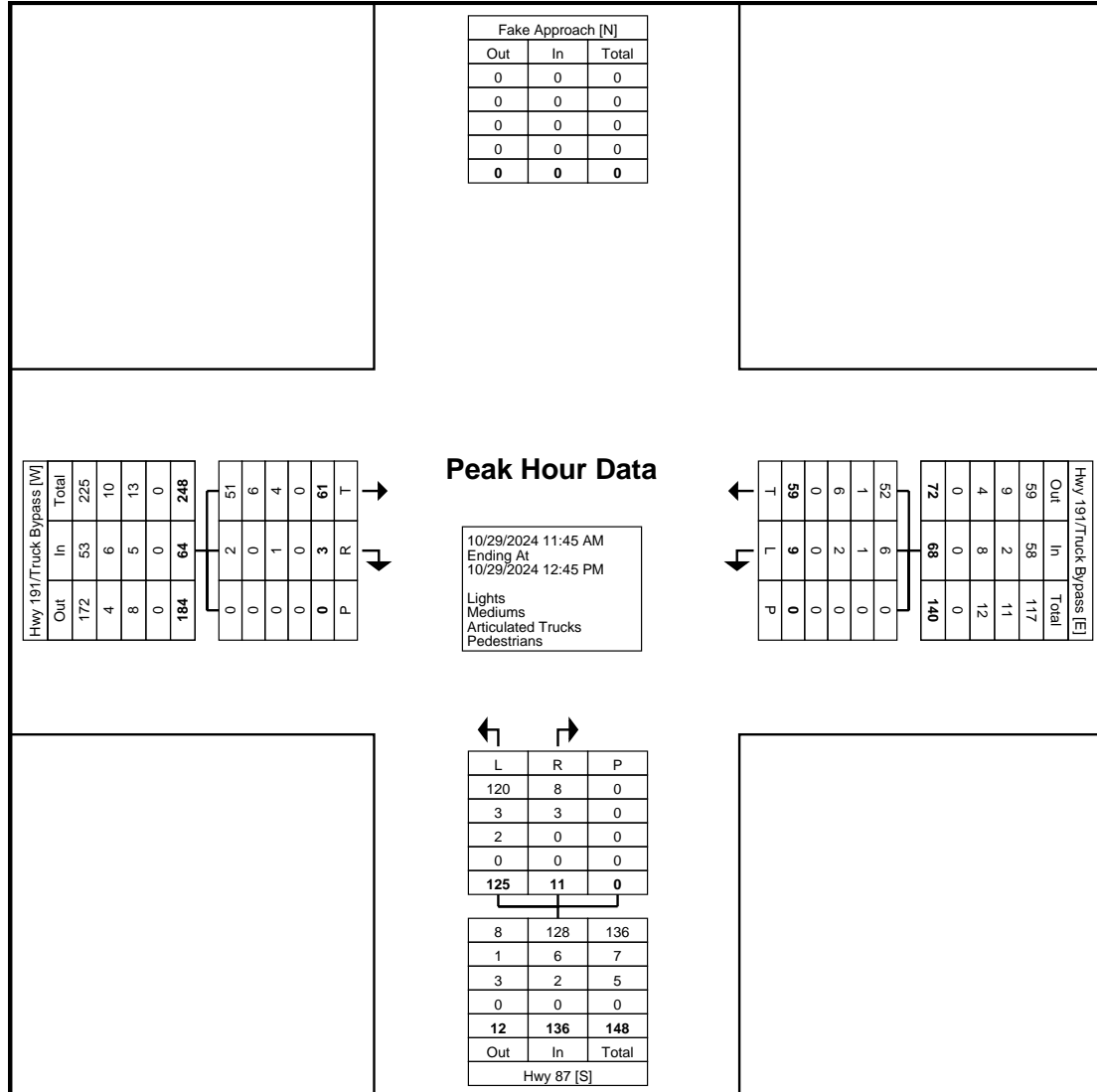
[illegible]



Robert Peccia & Associates  
3147 Saddle Drive

Helena, Montana, United States 59601  
406-447-5000 srandall@rpa-hln.com

Count Name: Hwy 87 & Hwy  
191  
Site Code: Lewistown  
Start Date: 10/28/2024  
Page No: 7



Turning Movement Peak Hour Data Plot (11:45 AM)



Robert Peccia & Associates  
3147 Saddle Drive

Helena, Montana, United States 59601  
406-447-5000 rstrandall@rpa-hln.com

Count Name: Truck Bypass &  
4th St W/Joyland Rd  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 1

## Turning Movement Data

Start Time	4th St W Northbound					Joyland Rd Southbound					Truck Bypass Eastbound					Truck Bypass Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
1:15 PM	0	1	1	0	2	9	0	2	0	11	2	31	0	0	33	0	27	5	0	32	78
1:30 PM	1	1	0	0	2	7	1	1	0	9	3	19	0	0	22	2	17	13	0	32	65
1:45 PM	0	0	0	0	0	11	0	1	0	12	2	31	1	0	34	0	21	10	0	31	77
Hourly Total	1	2	1	0	4	27	1	4	0	32	7	81	1	0	89	2	65	28	0	95	220
2:00 PM	0	0	0	0	0	10	0	4	0	14	2	21	0	0	23	0	28	8	0	36	73
2:15 PM	0	1	0	0	1	16	0	1	0	17	2	23	0	0	25	0	26	12	0	38	81
2:30 PM	1	0	1	0	2	7	1	0	0	8	2	26	0	0	28	1	13	9	0	23	61
2:45 PM	1	1	0	0	2	11	0	2	0	13	2	21	0	0	23	0	36	10	0	46	84
Hourly Total	2	2	1	0	5	44	1	7	0	52	8	91	0	0	99	1	103	39	0	143	299
3:00 PM	0	2	1	0	3	13	0	4	0	17	1	29	1	0	31	0	37	17	0	54	105
3:15 PM	1	2	0	0	3	7	1	2	0	10	2	22	0	0	24	1	23	15	0	39	76
3:30 PM	0	1	1	0	2	10	0	1	0	11	2	34	0	0	36	1	28	16	0	45	94
3:45 PM	1	0	1	0	2	15	0	4	0	19	4	21	0	1	25	0	30	13	0	43	89
Hourly Total	2	5	3	0	10	45	1	11	0	57	9	106	1	1	116	2	118	61	0	181	364
4:00 PM	0	3	1	0	4	9	1	1	0	11	4	25	0	0	29	0	21	14	0	35	79
4:15 PM	0	1	1	0	2	4	0	2	0	6	1	17	1	0	19	0	31	21	0	52	79
4:30 PM	0	0	0	0	0	17	0	1	0	18	2	40	0	0	42	0	21	10	0	31	91
4:45 PM	2	3	1	0	6	7	0	2	0	9	1	44	3	0	48	0	17	18	0	35	98
Hourly Total	2	7	3	0	12	37	1	6	0	44	8	126	4	0	138	0	90	63	0	153	347
5:00 PM	0	1	1	0	2	19	1	2	0	22	2	36	1	0	39	0	37	16	0	53	116
5:15 PM	2	2	4	0	8	14	0	0	0	14	7	26	1	0	34	1	18	17	0	36	92
5:30 PM	1	0	1	0	2	17	0	0	0	17	3	29	0	0	32	0	20	17	0	37	88
5:45 PM	0	1	0	0	1	11	1	2	0	14	3	16	0	0	19	0	20	20	0	40	74
Hourly Total	3	4	6	0	13	61	2	4	0	67	15	107	2	0	124	1	95	70	0	166	370
6:00 PM	0	0	1	0	1	11	0	0	0	11	2	17	1	0	20	1	15	26	0	42	74
6:15 PM	0	0	0	0	0	13	1	0	0	14	0	13	0	0	13	0	19	14	0	33	60
6:30 PM	0	0	1	0	1	12	0	2	0	14	3	12	0	0	15	1	9	8	0	18	48
6:45 PM	0	0	0	0	0	11	2	1	0	14	2	6	0	0	8	0	11	11	0	22	44
Hourly Total	0	0	2	0	2	47	3	3	0	53	7	48	1	0	56	2	54	59	0	115	226
7:00 PM	1	0	0	0	1	9	0	1	0	10	3	9	1	0	13	0	8	11	0	19	43
7:15 PM	0	0	0	0	0	10	0	2	0	12	2	8	1	0	11	0	5	11	0	16	39
7:30 PM	0	0	0	0	0	9	0	0	0	9	1	8	0	0	9	2	4	11	0	17	35
7:45 PM	0	0	0	0	0	6	0	0	0	6	1	6	0	0	7	0	6	10	0	16	29
Hourly Total	1	0	0	0	1	34	0	3	0	37	7	31	2	0	40	2	23	43	0	68	146
8:00 PM	1	0	0	0	1	10	0	0	0	10	0	4	1	0	5	0	13	11	0	24	40
8:15 PM	0	0	0	0	0	4	0	1	0	5	0	3	0	0	3	0	8	13	0	21	29
8:30 PM	0	0	0	0	0	6	0	0	0	6	0	5	0	0	5	0	8	3	0	11	22
8:45 PM	0	0	0	0	0	4	0	0	0	4	1	8	0	0	9	0	5	9	0	14	27
Hourly Total	1	0	0	0	1	24	0	1	0	25	1	20	1	0	22	0	34	36	0	70	118
9:00 PM	0	1	0	0	1	3	0	0	0	3	0	3	0	0	3	0	7	7	0	14	21
9:15 PM	0	0	0	0	0	3	0	1	0	4	2	6	0	0	8	0	1	7	0	8	20
9:30 PM	0	0	0	0	0	1	0	1	0	2	0	2	0	0	2	0	6	2	0	8	12
9:45 PM	0	0	0	0	0	1	0	0	0	1	1	1	0	0	2	0	2	4	0	6	9
Hourly Total	0	1	0	0	1	8	0	2	0	10	3	12	0	0	15	0	16	20	0	36	62
10:00 PM	0	0	0	0	0	0	0	0	0	0	1	3	0	0	4	0	2	0	0	2	6
10:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	1	4	0	5	7
10:30 PM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	1	2	0	3	8
10:45 PM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	2	1	0	3	5
Hourly Total	0	0	0	0	0	1	0	0	0	1	1	11	0	0	12	0	6	7	0	13	26
11:00 PM	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	0	2	1	0	3	6
11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	1	2	0	3	6
11:45 PM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Hourly Total	0	0	0	0	0	2	0	0	0	2	1	5	0	0	6	0	3	3	0	6	14
12:00 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	2	0	3	4
12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	5	5
12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3
12:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	7	1	0	8	10
Hourly Total	0	0	0	0	0	1	0	0	0	1	0	2	0	0	2	0	13	6	0	19	22
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	0	2	3

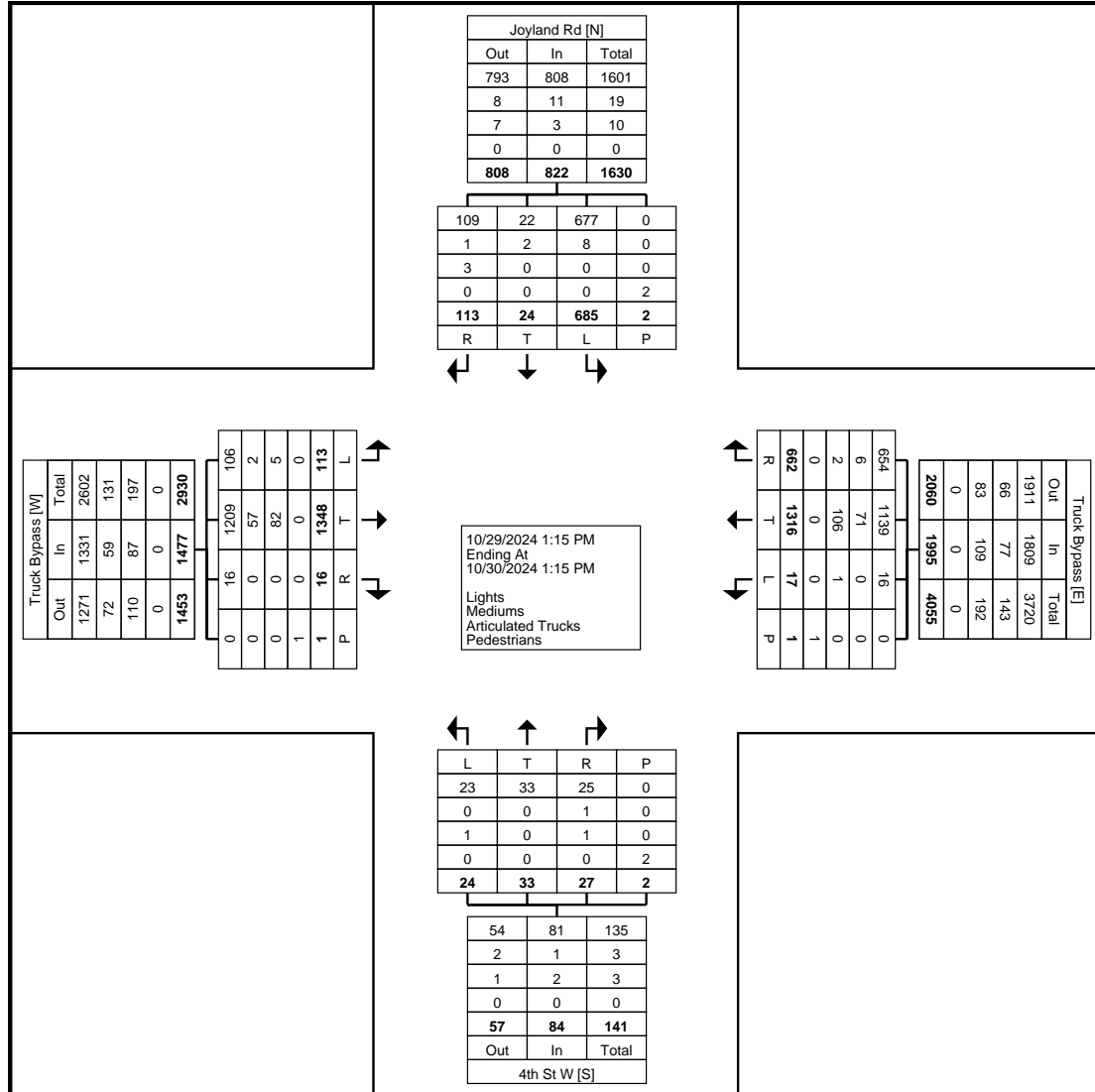
1:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1			
1:30 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	2		
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	4	
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	3	1	0	4	10	
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2	0	2	3	
2:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	2	
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	
Hourly Total	0	0	0	0	0	1	0	0	0	1	0	2	0	0	2	0	1	2	0	3	6	
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2	
3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2	
3:30 AM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	1	2	
3:45 AM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2	0	0	2	3	
Hourly Total	0	0	0	0	0	2	0	0	0	2	0	2	0	0	2	0	4	1	0	5	9	
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2	
4:15 AM	0	0	0	0	0	2	0	1	0	3	0	0	0	0	0	0	0	0	0	0	3	
4:30 AM	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	1	0	1	0	0	1	3
4:45 AM	0	0	0	0	0	2	0	1	0	3	0	2	0	0	2	0	2	1	0	3	8	
Hourly Total	0	0	0	0	0	5	0	2	0	7	0	4	0	0	4	0	4	1	0	5	16	
5:00 AM	0	0	0	0	0	2	0	0	0	2	0	4	0	0	4	0	4	0	0	4	10	
5:15 AM	0	0	0	0	0	4	0	1	0	5	0	0	0	0	0	0	1	1	0	2	7	
5:30 AM	0	0	0	0	0	3	0	0	0	3	0	3	0	0	3	0	8	0	0	8	14	
5:45 AM	0	0	0	0	0	4	0	3	0	7	0	6	0	0	6	0	12	1	0	13	26	
Hourly Total	0	0	0	0	0	13	0	4	0	17	0	13	0	0	13	0	25	2	0	27	57	
6:00 AM	2	0	1	0	3	2	0	0	0	2	0	3	0	0	3	0	6	0	0	6	14	
6:15 AM	0	0	0	0	0	6	0	1	0	7	0	4	0	0	4	0	12	1	0	13	24	
6:30 AM	0	0	0	0	0	9	0	1	0	10	0	2	0	0	2	0	12	2	0	14	26	
6:45 AM	0	0	0	0	0	14	0	2	0	16	0	8	0	0	8	0	22	3	0	25	49	
Hourly Total	2	0	1	0	3	31	0	4	0	35	0	17	0	0	17	0	52	6	0	58	113	
7:00 AM	0	0	0	0	0	8	0	2	0	10	0	11	0	0	11	0	10	2	0	12	33	
7:15 AM	2	0	0	0	2	9	1	3	0	13	1	13	0	0	14	0	16	9	0	25	54	
7:30 AM	2	1	0	0	3	28	2	2	0	32	2	23	0	0	25	0	19	2	0	21	81	
7:45 AM	2	1	1	0	4	33	1	7	0	41	0	40	0	0	40	0	32	7	0	39	124	
Hourly Total	6	2	1	0	9	78	4	14	0	96	3	87	0	0	90	0	77	20	0	97	292	
8:00 AM	0	0	0	0	0	13	3	2	0	18	1	31	0	0	32	1	19	13	0	33	83	
8:15 AM	1	0	0	0	1	13	0	0	0	13	2	27	0	0	29	0	18	4	0	22	65	
8:30 AM	0	0	0	0	0	9	0	1	1	10	1	20	0	0	21	1	16	7	0	24	55	
8:45 AM	0	0	1	0	1	19	0	1	0	20	2	37	0	0	39	1	25	6	0	32	92	
Hourly Total	1	0	1	0	2	54	3	4	1	61	6	115	0	0	121	3	78	30	0	111	295	
9:00 AM	0	0	0	0	0	9	0	0	0	9	0	16	0	0	16	0	18	6	0	24	49	
9:15 AM	1	1	0	0	2	8	0	2	0	10	3	26	1	0	30	0	19	4	0	23	65	
9:30 AM	0	0	0	0	0	8	0	3	0	11	1	24	0	0	25	0	26	10	0	36	72	
9:45 AM	0	1	1	0	2	7	0	3	0	10	1	32	0	0	33	0	30	12	0	42	87	
Hourly Total	1	2	1	0	4	32	0	8	0	40	5	98	1	0	104	0	93	32	0	125	273	
10:00 AM	1	0	0	0	1	13	0	7	0	20	0	23	1	0	24	0	32	7	0	39	84	
10:15 AM	0	0	0	0	0	6	1	1	0	8	5	27	0	0	32	0	26	5	0	31	71	
10:30 AM	0	0	0	0	0	8	0	0	0	8	2	33	0	0	35	0	26	15	0	41	84	
10:45 AM	0	2	0	0	2	6	3	3	0	12	1	21	0	0	22	0	29	9	0	38	74	
Hourly Total	1	2	0	0	3	33	4	11	0	48	8	104	1	0	113	0	113	36	0	149	313	
11:00 AM	0	2	3	0	5	8	0	3	0	11	1	35	0	0	36	1	21	10	0	32	84	
11:15 AM	0	0	0	0	0	9	1	2	0	12	2	38	1	0	41	0	20	9	0	29	82	
11:30 AM	0	0	1	1	1	5	0	3	0	8	0	23	0	0	23	0	24	8	1	32	64	
11:45 AM	0	1	0	1	1	12	0	3	0	15	5	23	0	0	28	0	32	4	0	36	80	
Hourly Total	0	3	4	2	7	34	1	11	0	46	8	119	1	0	128	1	97	31	1	129	310	
12:00 PM	0	1	0	0	1	6	1	2	0	9	9	33	1	0	43	0	39	20	0	59	112	
12:15 PM	0	0	0	0	0	11	0	1	0	12	2	21	0	0	23	1	26	13	0	40	75	
12:30 PM	1	0	0	0	1	15	0	1	0	16	1	22	0	0	23	0	25	5	0	30	70	
12:45 PM	0	1	0	0	1	19	1	7	1	27	2	34	0	0	36	1	30	12	0	43	107	
Hourly Total	1	2	0	0	3	51	2	11	1	64	14	110	1	0	125	2	120	50	0	172	364	
1:00 PM	0	1	3	0	4	20	1	3	0	24	2	31	0	0	33	1	29	15	0	45	106	
Grand Total	24	33	27	2	84	685	24	113	2	822	113	1348	16	1	1477	17	1316	662	1	1995	4378	
Approach %	28.6	39.3	32.1	-	-	83.3	2.9	13.7	-	-	7.7	91.3	1.1	-	-	0.9	66.0	33.2	-	-	-	
Total %	0.5	0.8	0.6	-	1.9	15.6	0.5	2.6	-	18.8	2.6	30.8	0.4	-	33.7	0.4	30.1	15.1	-	45.6	-	
Lights	23	33	25	-	81	677	22	109	-	808	106	1209	16	-	1331	16	1139	654	-	1809	4029	
% Lights	95.8	100.0	92.6	-	96.4	98.8	91.7	96.5	-	98.3	93.8	89.7	100.0	-	90.1	94.1	86.6	98.8	-	90.7	92.0	
Mediums	0	0	1	-	1	8	2	1	-	11	2	57	0	-	59	0	71	6	-	77	148	
% Mediums	0.0	0.0	3.7	-	1.2	1.2	8.3	0.9	-	1.3	1.8	4.2	0.0	-	4.0	0.0	5.4	0.9	-	3.9	3.4	
Articulated Trucks	1	0	1	-	2	0	0	3	-	3	5	82	0	-	87	1	106	2	-	109	201	
% Articulated Trucks	4.2	0.0	3.7	-	2.4	0.0	0.0	2.7	-	0.4	4.4	6.1	0.0	-	5.9	5.9	8.1	0.3	-	5.5	4.6	
Pedestrians	-	-	-	2	-	-	-	-	2	-	-	-	-	1	-	-	-	-	1	-	-	
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-	



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406-447-5000 srandall@rpa-hln.com

Count Name: Truck Bypass &  
4th St W/Joyland Rd  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 3



Turning Movement Data Plot

Robert Peccia & Associates  
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Count Name: Truck Bypass &  
4th St W/Joyland Rd  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 4

### Turning Movement Peak Hour Data (4:30 PM)

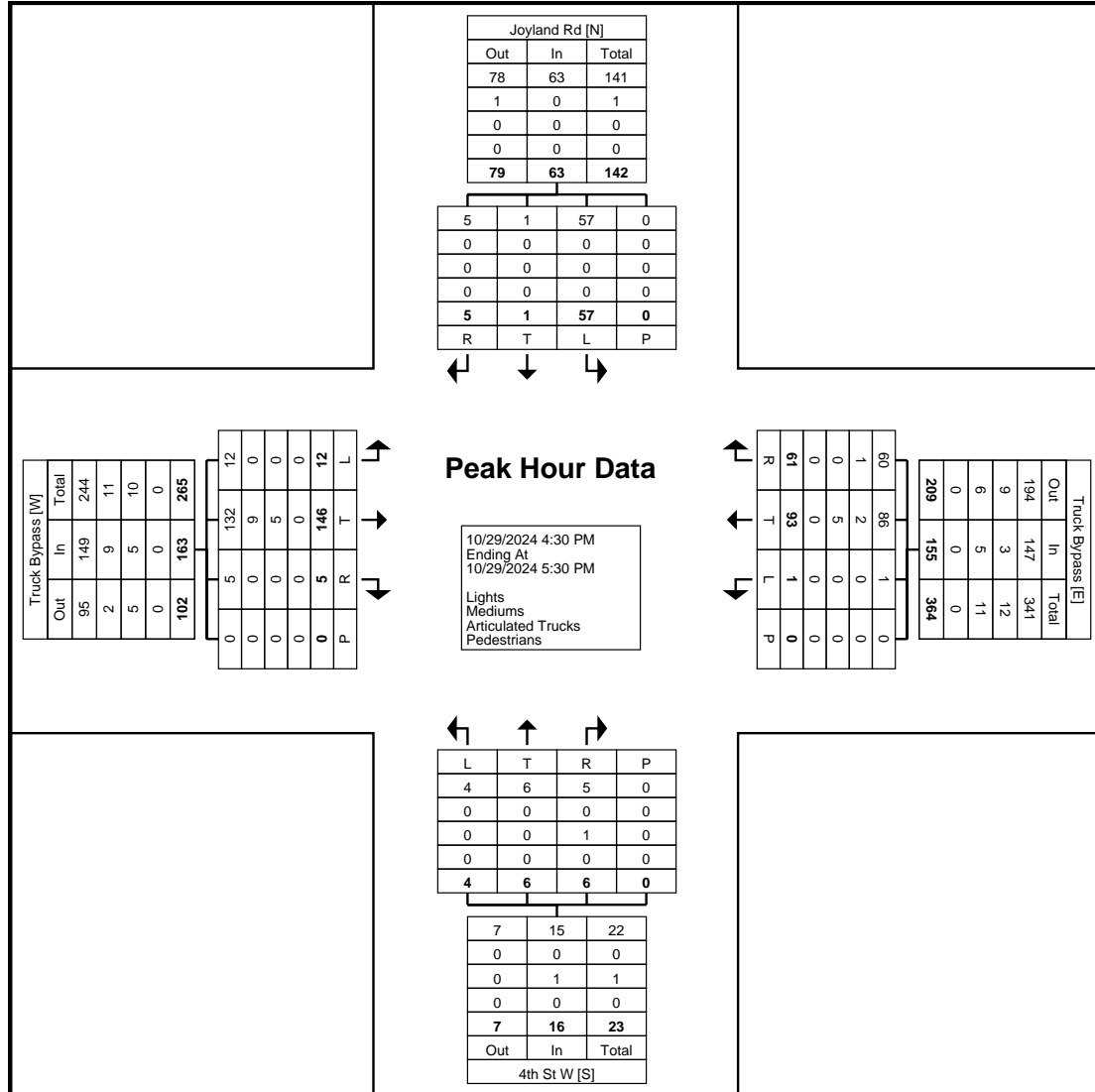
[illegible]



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Count Name: Truck Bypass &  
4th St W/Joyland Rd  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 5



Turning Movement Peak Hour Data Plot (4:30 PM)

Robert Peccia & Associates  
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406-447-5000 [srandall@rpa-hln.com](mailto:srandall@rpa-hln.com)

Count Name: Truck Bypass &  
4th St W/Joyland Rd  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 6

### Turning Movement Peak Hour Data (7:30 AM)

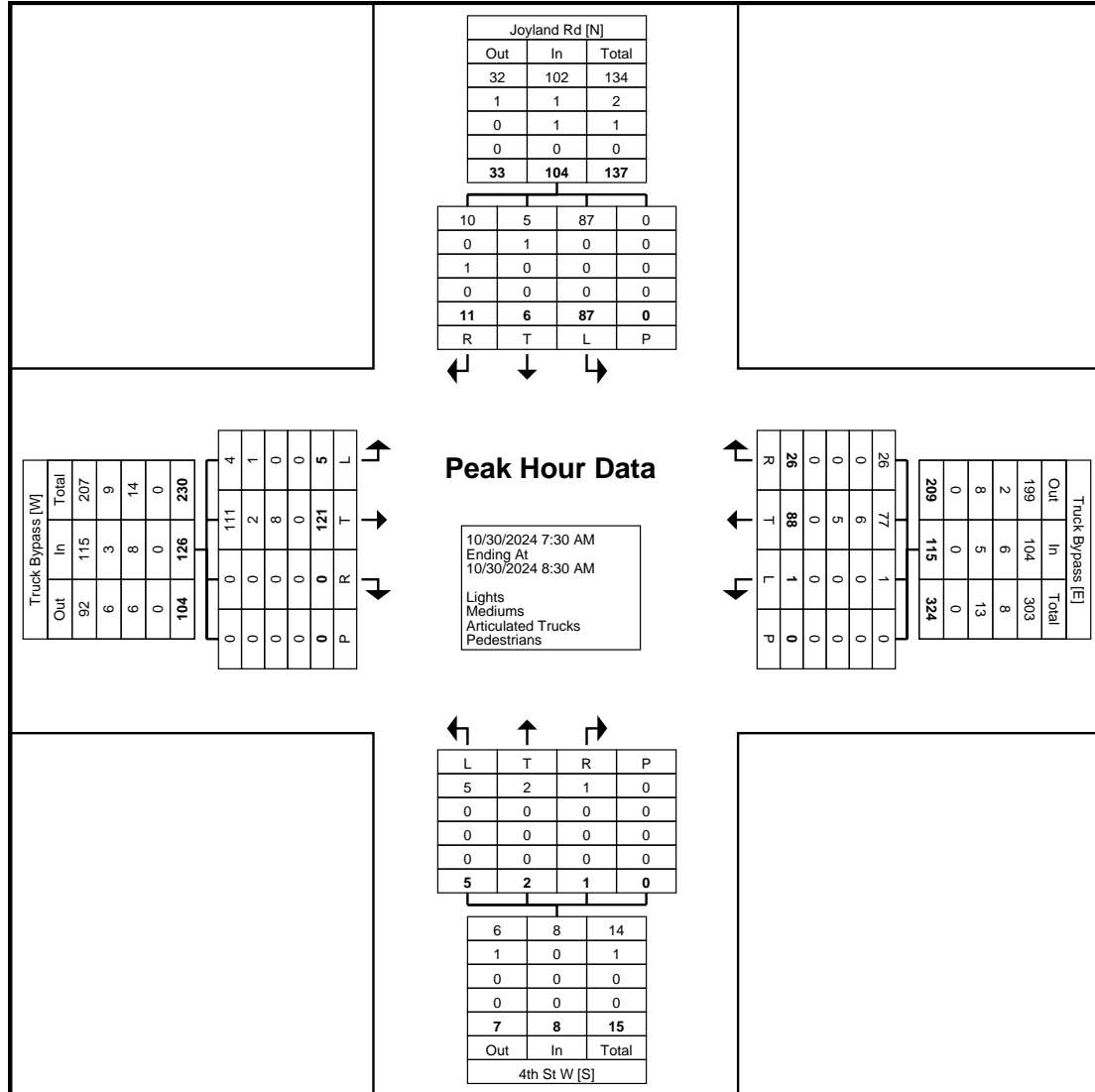
[illegible]



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Count Name: Truck Bypass &  
4th St W/Joyland Rd  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 7



Turning Movement Peak Hour Data Plot (7:30 AM)

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406-447-5000 [srandall@rpa-hln.com](mailto:srandall@rpa-hln.com)

Count Name: Truck Bypass &  
4th St W/Joyland Rd  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 8

### Turning Movement Peak Hour Data (12:00 PM)

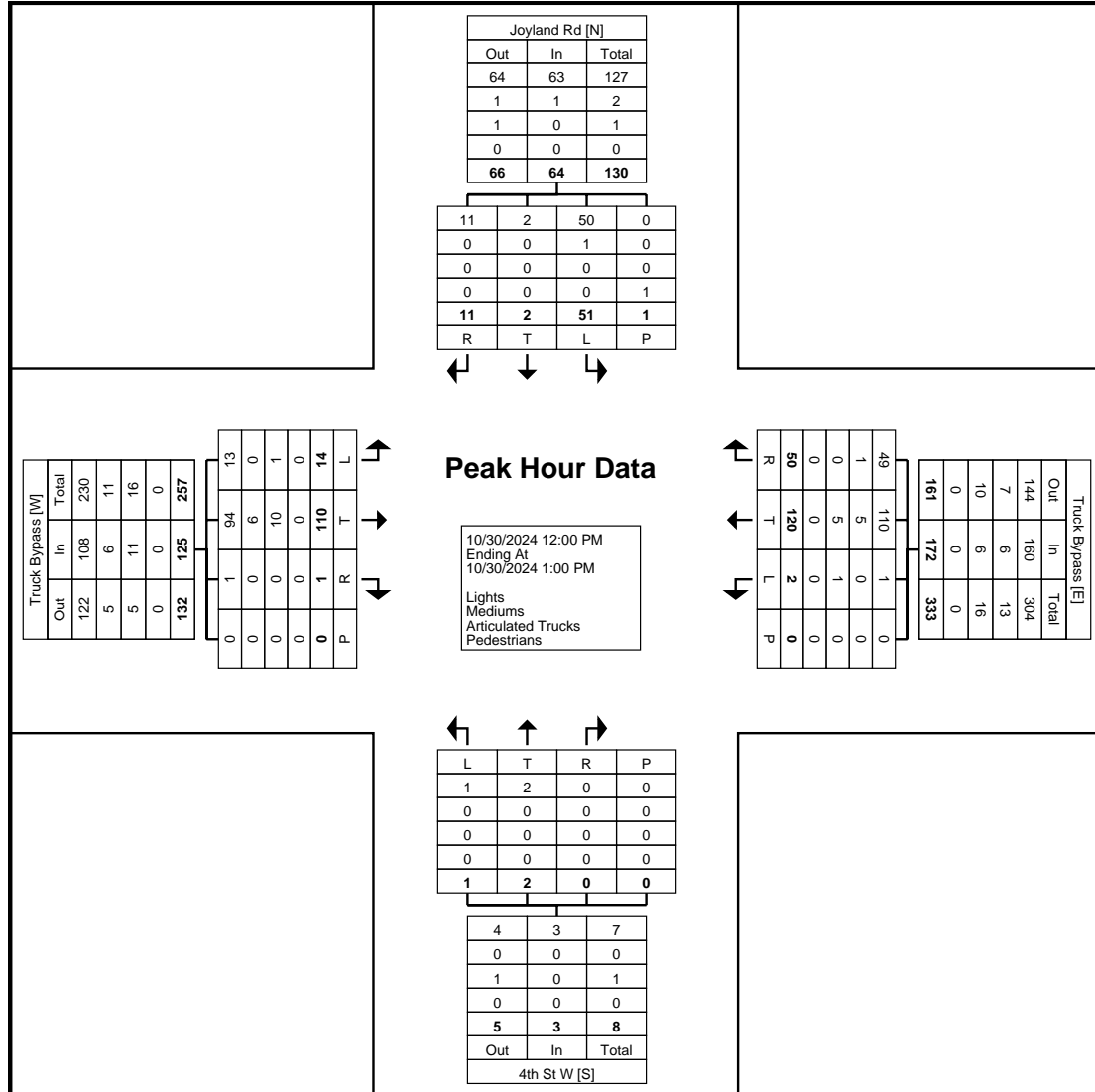
[illegible]



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Count Name: Truck Bypass &  
4th St W/Joyland Rd  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 9



Turning Movement Peak Hour Data Plot (12:00 PM)



Robert Peccia & Associates  
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406-447-5000 rrandall@rpa-hln.com

Count Name: Tuck Bypass/1st  
Ave N & Hwy 191  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 1

## Turning Movement Data

Start Time	Hwy 191 Southbound				Truck Bypass Eastbound				1st Ave N Westbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	
1:30 PM	25	7	0	32	8	17	0	25	20	30	0	50	107
1:45 PM	31	6	0	37	8	30	0	38	29	20	0	49	124
Hourly Total	56	13	0	69	16	47	0	63	49	50	0	99	231
2:00 PM	21	10	0	31	12	32	0	44	33	24	0	57	132
2:15 PM	23	8	0	31	11	17	0	28	34	29	0	63	122
2:30 PM	38	9	0	47	8	36	0	44	23	36	0	59	150
2:45 PM	32	24	0	56	5	25	0	30	25	33	0	58	144
Hourly Total	114	51	0	165	36	110	0	146	115	122	0	237	548
3:00 PM	37	14	0	51	9	41	0	50	52	29	0	81	182
3:15 PM	19	5	0	24	9	31	0	40	31	31	0	62	126
3:30 PM	22	14	0	36	7	31	0	38	34	32	0	66	140
3:45 PM	37	24	0	61	7	36	0	43	37	28	0	65	169
Hourly Total	115	57	0	172	32	139	0	171	154	120	0	274	617
4:00 PM	29	10	0	39	6	31	0	37	36	41	0	77	153
4:15 PM	38	10	0	48	11	21	0	32	31	39	0	70	150
4:30 PM	38	7	0	45	12	28	0	40	26	42	0	68	153
4:45 PM	37	14	0	51	15	36	0	51	27	36	0	63	165
Hourly Total	142	41	0	183	44	116	0	160	120	158	0	278	621
5:00 PM	35	14	0	49	10	37	0	47	42	38	0	80	176
5:15 PM	33	12	1	45	8	30	0	38	33	41	0	74	157
5:30 PM	26	10	0	36	13	33	0	46	25	38	0	63	145
5:45 PM	21	12	0	33	9	10	0	19	32	36	0	68	120
Hourly Total	115	48	1	163	40	110	0	150	132	153	0	285	598
6:00 PM	27	8	0	35	5	25	0	30	38	38	0	76	141
6:15 PM	28	9	0	37	8	17	0	25	19	26	0	45	107
6:30 PM	20	5	0	25	2	20	0	22	19	27	0	46	93
6:45 PM	24	4	0	28	2	14	0	16	18	17	0	35	79
Hourly Total	99	26	0	125	17	76	0	93	94	108	0	202	420
7:00 PM	9	4	0	13	2	15	0	17	14	18	0	32	62
7:15 PM	14	3	0	17	2	14	0	16	15	12	0	27	60
7:30 PM	6	5	0	11	6	12	0	18	11	10	0	21	50
7:45 PM	13	6	0	19	4	3	0	7	11	13	0	24	50
Hourly Total	42	18	0	60	14	44	0	58	51	53	0	104	222
8:00 PM	7	8	0	15	1	9	0	10	12	18	0	30	55
8:15 PM	10	4	0	14	0	9	0	9	18	15	0	33	56
8:30 PM	13	6	0	19	1	9	0	10	6	6	0	12	41
8:45 PM	3	4	0	7	0	7	0	7	7	7	0	14	28
Hourly Total	33	22	0	55	2	34	0	36	43	46	0	89	180
9:00 PM	3	1	0	4	2	2	0	4	13	10	0	23	31
9:15 PM	5	0	0	5	3	7	0	10	5	11	0	16	31
9:30 PM	0	1	0	1	0	5	0	5	6	6	0	12	18
9:45 PM	0	0	0	0	0	3	0	3	3	3	0	6	9
Hourly Total	8	2	0	10	5	17	0	22	27	30	0	57	89
10:00 PM	2	0	0	2	2	1	0	3	4	2	0	6	11
10:15 PM	2	2	0	4	1	2	0	3	0	3	0	3	10
10:30 PM	2	0	0	2	1	5	0	6	2	5	0	7	15
10:45 PM	4	0	0	4	0	0	0	0	1	1	0	2	6
Hourly Total	10	2	0	12	4	8	0	12	7	11	0	18	42
11:00 PM	0	0	0	0	1	1	0	2	2	2	0	4	6
11:15 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
11:30 PM	1	0	0	1	1	1	0	2	3	2	0	5	8
11:45 PM	4	0	0	4	0	1	0	1	0	5	0	5	10
Hourly Total	7	0	0	7	2	3	0	5	5	9	0	14	26
12:00 AM	3	0	0	3	0	3	0	3	2	3	0	5	11
12:15 AM	2	2	0	4	0	0	0	0	1	0	0	1	5
12:30 AM	2	1	0	3	0	0	0	0	3	0	0	3	6
12:45 AM	0	7	0	7	0	0	0	0	0	0	0	0	7
Hourly Total	7	10	0	17	0	3	0	3	6	3	0	9	29
1:00 AM	3	2	0	5	1	0	0	1	0	0	0	0	6
1:15 AM	1	0	0	1	0	1	0	1	1	1	0	2	4
1:30 AM	0	0	0	0	1	1	0	2	0	2	0	2	4

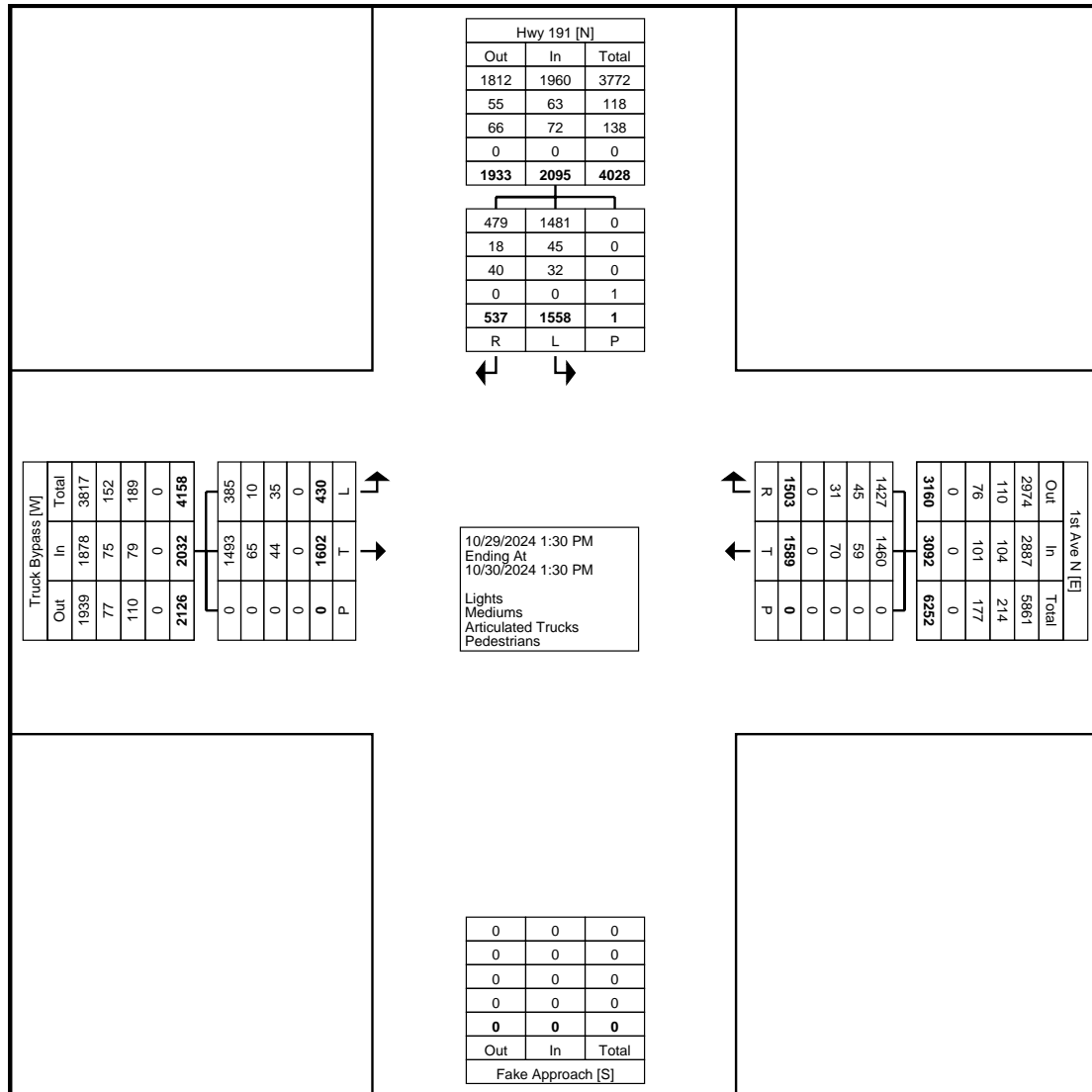
1:45 AM	0	2	0	2	0	2	0	2	0	0	0	0	4
Hourly Total	4	4	0	8	2	4	0	6	1	3	0	4	18
2:00 AM	0	0	0	0	0	1	0	1	1	0	0	1	2
2:15 AM	3	1	0	4	0	0	0	0	1	1	0	2	6
2:30 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
2:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	1
Hourly Total	5	1	0	6	0	2	0	2	2	1	0	3	11
3:00 AM	0	0	0	0	0	1	0	1	2	0	0	2	3
3:15 AM	2	1	0	3	0	0	0	0	0	1	0	1	4
3:30 AM	0	0	0	0	0	1	0	1	1	1	0	2	3
3:45 AM	1	1	0	2	0	1	0	1	0	0	0	0	3
Hourly Total	3	2	0	5	0	3	0	3	3	2	0	5	13
4:00 AM	1	1	0	2	0	1	0	1	0	1	0	1	4
4:15 AM	0	0	0	0	1	2	0	3	0	0	0	0	3
4:30 AM	1	0	0	1	0	2	0	2	2	2	0	4	7
4:45 AM	2	2	0	4	2	3	0	5	0	3	0	3	12
Hourly Total	4	3	0	7	3	8	0	11	2	6	0	8	26
5:00 AM	2	2	0	4	1	6	0	7	2	2	0	4	15
5:15 AM	2	1	0	3	0	3	0	3	2	4	0	6	12
5:30 AM	5	1	0	6	1	5	0	6	7	7	0	14	26
5:45 AM	6	2	0	8	5	9	0	14	7	9	0	16	38
Hourly Total	15	6	0	21	7	23	0	30	18	22	0	40	91
6:00 AM	11	3	0	14	1	6	0	7	5	12	0	17	38
6:15 AM	3	2	0	5	6	7	0	13	15	10	0	25	43
6:30 AM	9	1	0	10	1	9	0	10	11	19	0	30	50
6:45 AM	18	4	0	22	2	18	0	20	12	11	0	23	65
Hourly Total	41	10	0	51	10	40	0	50	43	52	0	95	196
7:00 AM	12	1	0	13	2	21	0	23	12	7	0	19	55
7:15 AM	19	2	0	21	4	15	0	19	21	9	0	30	70
7:30 AM	34	7	0	41	7	31	0	38	21	14	0	35	114
7:45 AM	49	28	0	77	9	85	0	94	37	25	0	62	233
Hourly Total	114	38	0	152	22	152	0	174	91	55	0	146	472
8:00 AM	35	11	0	46	5	55	0	60	38	27	0	65	171
8:15 AM	34	4	0	38	7	34	0	41	20	26	0	46	125
8:30 AM	25	5	0	30	7	19	0	26	20	15	0	35	91
8:45 AM	37	11	0	48	10	34	0	44	41	28	0	69	161
Hourly Total	131	31	0	162	29	142	0	171	119	96	0	215	548
9:00 AM	16	3	0	19	7	20	0	27	15	16	0	31	77
9:15 AM	21	10	0	31	10	37	0	47	21	19	0	40	118
9:30 AM	29	5	0	34	7	23	0	30	22	15	0	37	101
9:45 AM	30	11	0	41	11	24	0	35	27	28	0	55	131
Hourly Total	96	29	0	125	35	104	0	139	85	78	0	163	427
10:00 AM	21	5	0	26	8	18	0	26	32	19	0	51	103
10:15 AM	27	9	0	36	3	22	0	25	18	23	0	41	102
10:30 AM	25	7	0	32	12	36	0	48	29	20	0	49	129
10:45 AM	28	12	0	40	5	26	0	31	22	24	0	46	117
Hourly Total	101	33	0	134	28	102	0	130	101	86	0	187	451
11:00 AM	32	6	0	38	10	24	0	34	19	18	0	37	109
11:15 AM	30	5	0	35	12	33	0	45	29	14	0	43	123
11:30 AM	32	4	0	36	6	21	0	27	27	18	0	45	108
11:45 AM	32	12	0	44	5	26	0	31	29	23	0	52	127
Hourly Total	126	27	0	153	33	104	0	137	104	73	0	177	467
12:00 PM	28	13	0	41	8	28	0	36	41	30	0	71	148
12:15 PM	22	11	0	33	9	30	0	39	36	18	0	54	126
12:30 PM	29	4	0	33	3	29	0	32	30	27	0	57	122
12:45 PM	31	10	0	41	8	34	0	42	33	25	0	58	141
Hourly Total	110	38	0	148	28	121	0	149	140	100	0	240	537
1:00 PM	30	8	0	38	8	37	0	45	38	40	0	78	161
1:15 PM	30	17	0	47	13	53	0	66	39	26	0	65	178
Grand Total	1558	537	1	2095	430	1602	0	2032	1589	1503	0	3092	7219
Approach %	74.4	25.6	-	-	21.2	78.8	-	-	51.4	48.6	-	-	-
Total %	21.6	7.4	-	29.0	6.0	22.2	-	28.1	22.0	20.8	-	42.8	-
Lights	1481	479	-	1960	385	1493	-	1878	1460	1427	-	2887	6725
% Lights	95.1	89.2	-	93.6	89.5	93.2	-	92.4	91.9	94.9	-	93.4	93.2
Mediums	45	18	-	63	10	65	-	75	59	45	-	104	242
% Mediums	2.9	3.4	-	3.0	2.3	4.1	-	3.7	3.7	3.0	-	3.4	3.4
Articulated Trucks	32	40	-	72	35	44	-	79	70	31	-	101	252
% Articulated Trucks	2.1	7.4	-	3.4	8.1	2.7	-	3.9	4.4	2.1	-	3.3	3.5
Pedestrians	-	-	1	-	-	-	0	-	-	-	0	-	-
% Pedestrians	-	-	100.0	-	-	-	-	-	-	-	-	-	-



Robert Peccia & Associates  
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406-447-5000 rstrandall@rpa-hln.com

Count Name: Tuck Bypass/1st  
Ave N & Hwy 191  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 3



Turning Movement Data Plot

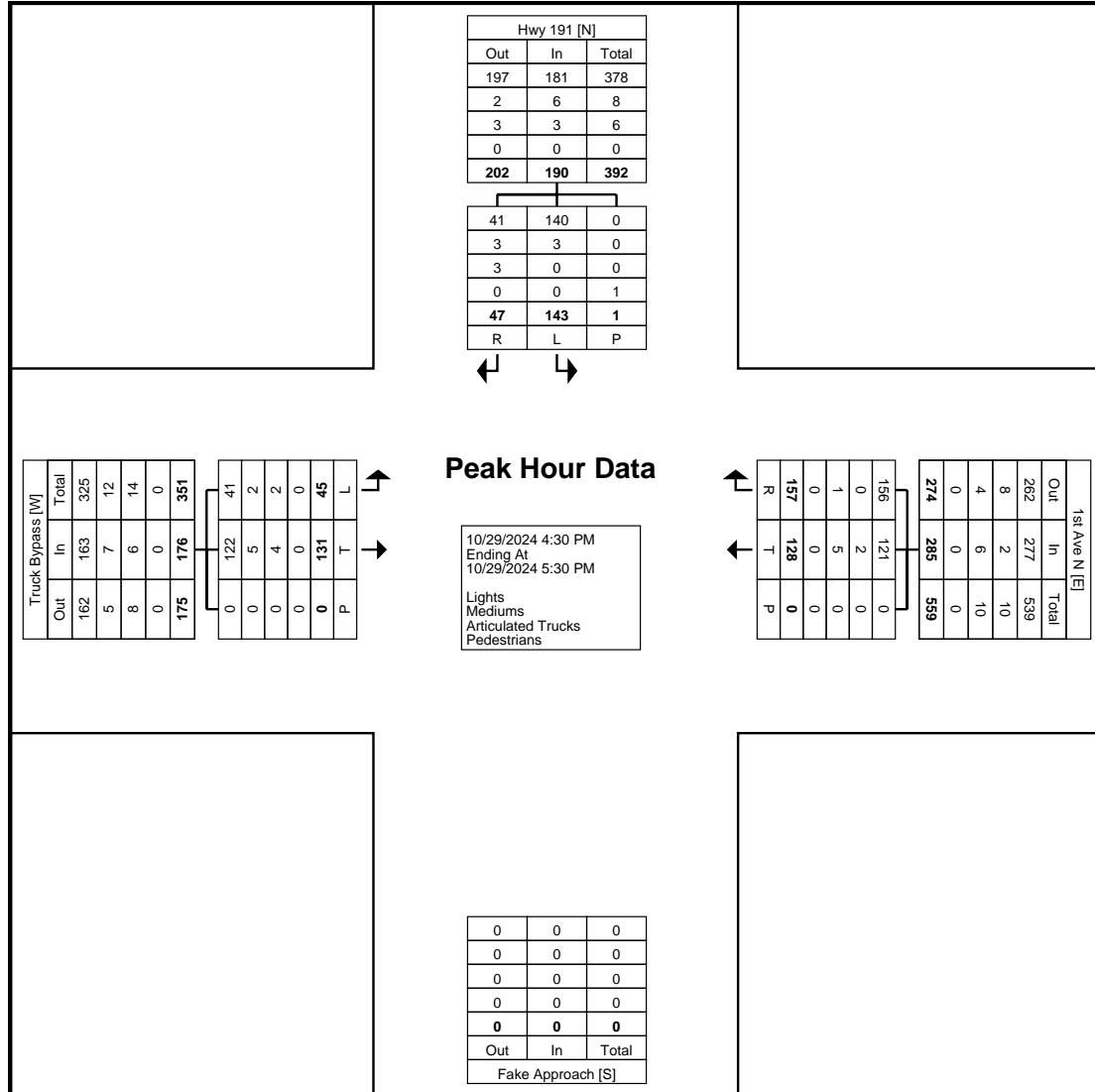




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Count Name: Tuck Bypass/1st  
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Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 5



Turning Movement Peak Hour Data Plot (4:30 PM)

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Count Name: Tuck Bypass/1st  
Ave N & Hwy 191  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 6

## Turning Movement Peak Hour Data (7:30 AM)

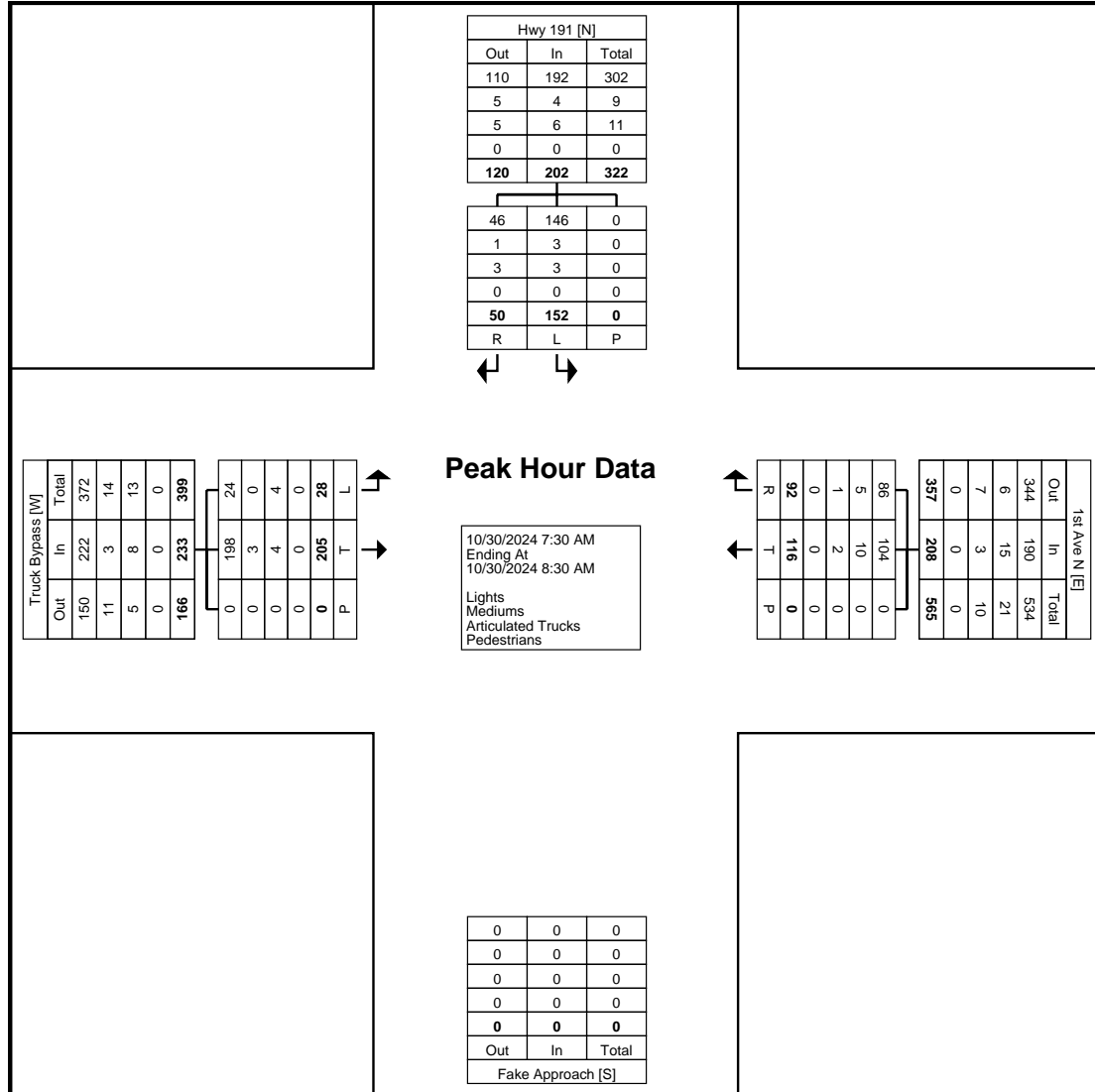
[illegible]



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Count Name: Tuck Bypass/1st  
Ave N & Hwy 191  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 7



Turning Movement Peak Hour Data Plot (7:30 AM)

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Count Name: Tuck Bypass/1st  
Ave N & Hwy 191  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 8

### Turning Movement Peak Hour Data (12:30 PM)

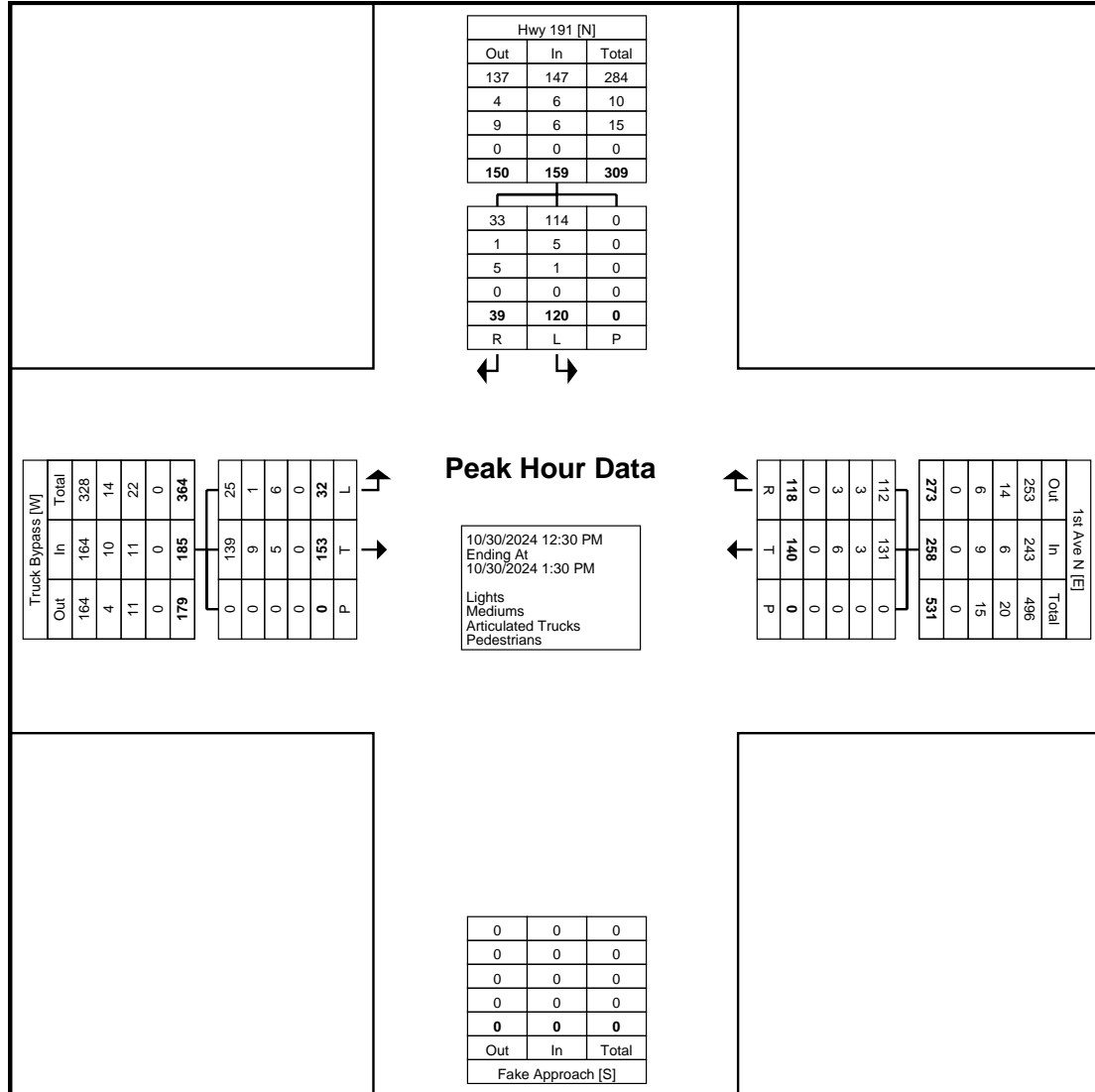
[illegible]



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Count Name: Tuck Bypass/1st  
Ave N & Hwy 191  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 9





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Count Name: Main St & N Elm  
St  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 1

## Turning Movement Data

Start Time	N Elm St Southbound				Main St Eastbound				Main St Westbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	
1:30 PM	2	4	0	6	1	69	0	70	74	1	0	75	151
1:45 PM	1	2	1	3	2	71	0	73	94	1	0	95	171
Hourly Total	3	6	1	9	3	140	0	143	168	2	0	170	322
2:00 PM	2	0	0	2	2	88	0	90	65	3	0	68	160
2:15 PM	1	3	0	4	0	68	0	68	73	1	0	74	146
2:30 PM	4	2	0	6	10	87	0	97	63	5	0	68	171
2:45 PM	4	1	0	5	4	82	0	86	79	1	0	80	171
Hourly Total	11	6	0	17	16	325	0	341	280	10	0	290	648
3:00 PM	2	11	0	13	3	82	0	85	107	2	0	109	207
3:15 PM	1	1	0	2	5	88	0	93	78	2	0	80	175
3:30 PM	1	0	0	1	2	88	0	90	86	1	0	87	178
3:45 PM	2	2	2	4	2	79	0	81	77	1	0	78	163
Hourly Total	6	14	2	20	12	337	0	349	348	6	0	354	723
4:00 PM	1	0	0	1	4	88	0	92	82	3	0	85	178
4:15 PM	1	1	0	2	3	65	0	68	82	0	0	82	152
4:30 PM	5	4	0	9	2	77	0	79	86	2	0	88	176
4:45 PM	2	3	0	5	2	72	0	74	63	3	0	66	145
Hourly Total	9	8	0	17	11	302	0	313	313	8	0	321	651
5:00 PM	0	6	0	6	7	98	0	105	97	3	0	100	211
5:15 PM	3	2	1	5	5	67	0	72	95	0	0	95	172
5:30 PM	2	6	0	8	1	78	0	79	73	2	0	75	162
5:45 PM	1	2	5	3	1	57	0	58	74	2	0	76	137
Hourly Total	6	16	6	22	14	300	0	314	339	7	0	346	682
6:00 PM	2	3	0	5	0	65	0	65	60	3	0	63	133
6:15 PM	1	3	2	4	3	44	0	47	50	1	0	51	102
6:30 PM	1	4	0	5	4	27	0	31	34	2	0	36	72
6:45 PM	1	0	0	1	0	29	0	29	43	2	0	45	75
Hourly Total	5	10	2	15	7	165	0	172	187	8	0	195	382
7:00 PM	1	1	0	2	5	31	0	36	28	1	0	29	67
7:15 PM	1	0	0	1	2	31	0	33	38	3	0	41	75
7:30 PM	1	1	0	2	3	21	0	24	32	1	0	33	59
7:45 PM	1	4	0	5	0	18	0	18	15	1	0	16	39
Hourly Total	4	6	0	10	10	101	0	111	113	6	0	119	240
8:00 PM	0	0	0	0	3	26	0	29	21	0	0	21	50
8:15 PM	1	2	0	3	2	24	0	26	27	0	0	27	56
8:30 PM	0	1	0	1	0	23	0	23	14	2	0	16	40
8:45 PM	1	1	0	2	1	17	0	18	16	0	0	16	36
Hourly Total	2	4	0	6	6	90	0	96	78	2	0	80	182
9:00 PM	0	0	1	0	2	17	0	19	16	0	0	16	35
9:15 PM	0	1	1	1	1	20	0	21	12	0	0	12	34
9:30 PM	1	0	0	1	0	11	0	11	17	1	0	18	30
9:45 PM	0	1	1	1	0	11	0	11	10	0	0	10	22
Hourly Total	1	2	3	3	3	59	0	62	55	1	0	56	121
10:00 PM	0	1	0	1	1	11	0	12	7	0	0	7	20
10:15 PM	0	0	1	0	0	9	0	9	9	0	0	9	18
10:30 PM	0	0	0	0	0	9	0	9	8	0	0	8	17
10:45 PM	1	0	0	1	0	9	0	9	4	0	0	4	14
Hourly Total	1	1	1	2	1	38	0	39	28	0	0	28	69
11:00 PM	0	0	0	0	0	2	0	2	9	0	0	9	11
11:15 PM	0	0	0	0	0	3	0	3	3	0	0	3	6
11:30 PM	0	0	0	0	1	4	0	5	7	0	0	7	12
11:45 PM	0	0	0	0	0	7	0	7	7	0	0	7	14
Hourly Total	0	0	0	0	1	16	0	17	26	0	0	26	43
12:00 AM	0	0	0	0	0	5	0	5	5	0	0	5	10
12:15 AM	0	1	0	1	0	6	0	6	4	0	0	4	11
12:30 AM	0	0	0	0	0	3	0	3	4	0	0	4	7
12:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	1
Hourly Total	0	1	0	1	0	15	0	15	13	0	0	13	29
1:00 AM	0	0	0	0	0	3	0	3	3	0	0	3	6
1:15 AM	0	0	0	0	0	4	0	4	1	0	0	1	5
1:30 AM	0	0	0	0	0	1	0	1	0	1	0	1	2

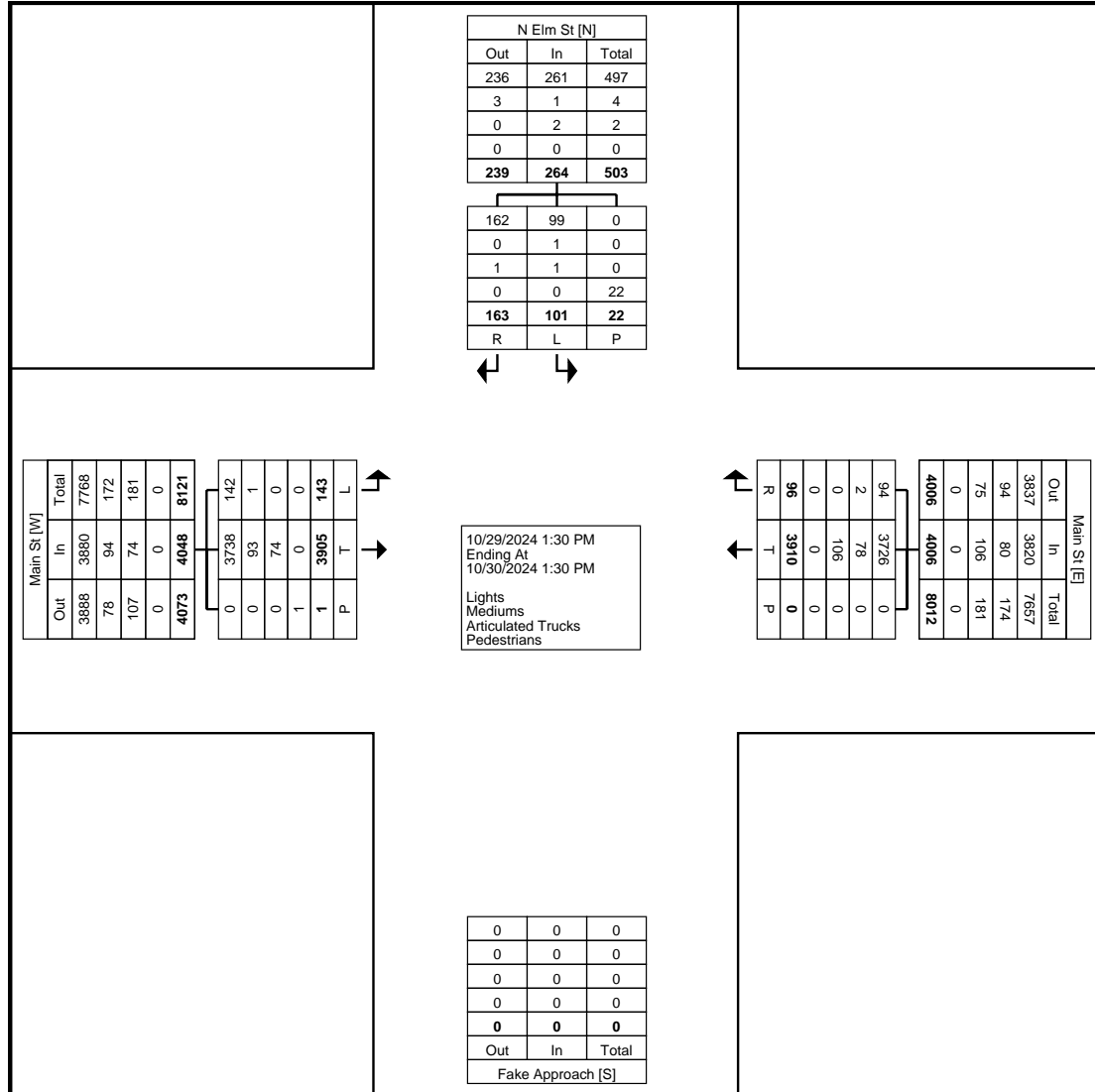
1:45 AM	0	0	1	0	0	3	0	3	1	0	0	1	4
Hourly Total	0	0	1	0	0	11	0	11	5	1	0	6	17
2:00 AM	0	0	0	0	0	1	0	1	3	0	0	3	4
2:15 AM	0	0	1	0	0	3	0	3	2	0	0	2	5
2:30 AM	0	0	0	0	0	4	0	4	5	0	0	5	9
2:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	1
Hourly Total	0	0	1	0	0	9	0	9	10	0	0	10	19
3:00 AM	0	0	0	0	0	2	0	2	2	0	0	2	4
3:15 AM	0	0	0	0	0	5	0	5	2	0	0	2	7
3:30 AM	0	0	0	0	0	0	0	0	5	0	0	5	5
3:45 AM	1	0	0	1	0	2	0	2	2	0	0	2	5
Hourly Total	1	0	0	1	0	9	0	9	11	0	0	11	21
4:00 AM	0	0	0	0	0	2	0	2	2	0	0	2	4
4:15 AM	0	0	0	0	0	4	0	4	5	0	0	5	9
4:30 AM	0	0	0	0	0	7	0	7	7	0	0	7	14
4:45 AM	0	2	0	2	1	2	0	3	10	0	0	10	15
Hourly Total	0	2	0	2	1	15	0	16	24	0	0	24	42
5:00 AM	0	1	0	1	1	11	0	12	8	0	0	8	21
5:15 AM	0	0	0	0	0	13	0	13	4	0	0	4	17
5:30 AM	0	0	0	0	0	8	0	8	16	0	0	16	24
5:45 AM	1	0	0	1	0	13	0	13	22	0	0	22	36
Hourly Total	1	1	0	2	1	45	0	46	50	0	0	50	98
6:00 AM	0	0	0	0	0	18	0	18	16	0	0	16	34
6:15 AM	1	0	0	1	0	17	0	17	21	0	0	21	39
6:30 AM	0	3	0	3	1	27	0	28	26	0	0	26	57
6:45 AM	0	2	0	2	1	39	0	40	31	0	0	31	73
Hourly Total	1	5	0	6	2	101	0	103	94	0	0	94	203
7:00 AM	0	1	0	1	1	40	0	41	24	1	0	25	67
7:15 AM	1	0	0	1	0	40	0	40	37	3	0	40	81
7:30 AM	1	3	0	4	0	52	0	52	59	1	0	60	116
7:45 AM	5	9	0	14	2	86	0	88	89	3	0	92	194
Hourly Total	7	13	0	20	3	218	0	221	209	8	0	217	458
8:00 AM	2	7	0	9	2	74	0	76	48	7	0	55	140
8:15 AM	1	1	0	2	3	53	0	56	58	2	0	60	118
8:30 AM	2	1	0	3	3	40	0	43	44	1	0	45	91
8:45 AM	3	9	0	12	1	66	0	67	53	0	0	53	132
Hourly Total	8	18	0	26	9	233	0	242	203	10	0	213	481
9:00 AM	4	7	0	11	6	76	0	82	48	0	0	48	141
9:15 AM	1	2	0	3	1	57	0	58	60	2	0	62	123
9:30 AM	4	3	0	7	0	73	0	73	66	0	0	66	146
9:45 AM	0	2	2	2	2	62	0	64	80	1	0	81	147
Hourly Total	9	14	2	23	9	268	0	277	254	3	0	257	557
10:00 AM	0	2	1	2	4	58	0	62	68	2	0	70	134
10:15 AM	2	4	0	6	1	54	0	55	61	0	0	61	122
10:30 AM	2	1	0	3	1	75	0	76	63	2	0	65	144
10:45 AM	1	2	0	3	0	81	0	81	67	0	0	67	151
Hourly Total	5	9	1	14	6	268	0	274	259	4	0	263	551
11:00 AM	2	3	0	5	2	84	0	86	77	2	0	79	170
11:15 AM	2	3	2	5	4	78	0	82	79	0	0	79	166
11:30 AM	4	0	0	4	2	83	1	85	85	1	0	86	175
11:45 AM	3	2	0	5	2	68	0	70	87	1	0	88	163
Hourly Total	11	8	2	19	10	313	1	323	328	4	0	332	674
12:00 PM	3	3	0	6	2	89	0	91	72	2	0	74	171
12:15 PM	3	3	0	6	4	84	0	88	84	3	0	87	181
12:30 PM	2	1	0	3	1	89	0	90	100	1	0	101	194
12:45 PM	1	7	0	8	2	104	0	106	93	2	0	95	209
Hourly Total	9	14	0	23	9	366	0	375	349	8	0	357	755
1:00 PM	1	3	0	4	3	81	0	84	91	3	0	94	182
1:15 PM	0	2	0	2	6	80	0	86	75	5	0	80	168
Grand Total	101	163	22	264	143	3905	1	4048	3910	96	0	4006	8318
Approach %	38.3	61.7	-	-	3.5	96.5	-	-	97.6	2.4	-	-	-
Total %	1.2	2.0	-	3.2	1.7	46.9	-	48.7	47.0	1.2	-	48.2	-
Lights	99	162	-	261	142	3738	-	3880	3726	94	-	3820	7961
% Lights	98.0	99.4	-	98.9	99.3	95.7	-	95.8	95.3	97.9	-	95.4	95.7
Mediums	1	0	-	1	1	93	-	94	78	2	-	80	175
% Mediums	1.0	0.0	-	0.4	0.7	2.4	-	2.3	2.0	2.1	-	2.0	2.1
Articulated Trucks	1	1	-	2	0	74	-	74	106	0	-	106	182
% Articulated Trucks	1.0	0.6	-	0.8	0.0	1.9	-	1.8	2.7	0.0	-	2.6	2.2
Pedestrians	-	-	22	-	-	-	1	-	-	-	0	-	-
% Pedestrians	-	-	100.0	-	-	-	100.0	-	-	-	-	-	-



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Count Name: Main St & N Elm St  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 3



Turning Movement Data Plot

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Count Name: Main St & N Elm  
St  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 4

### Turning Movement Peak Hour Data (2:45 PM)

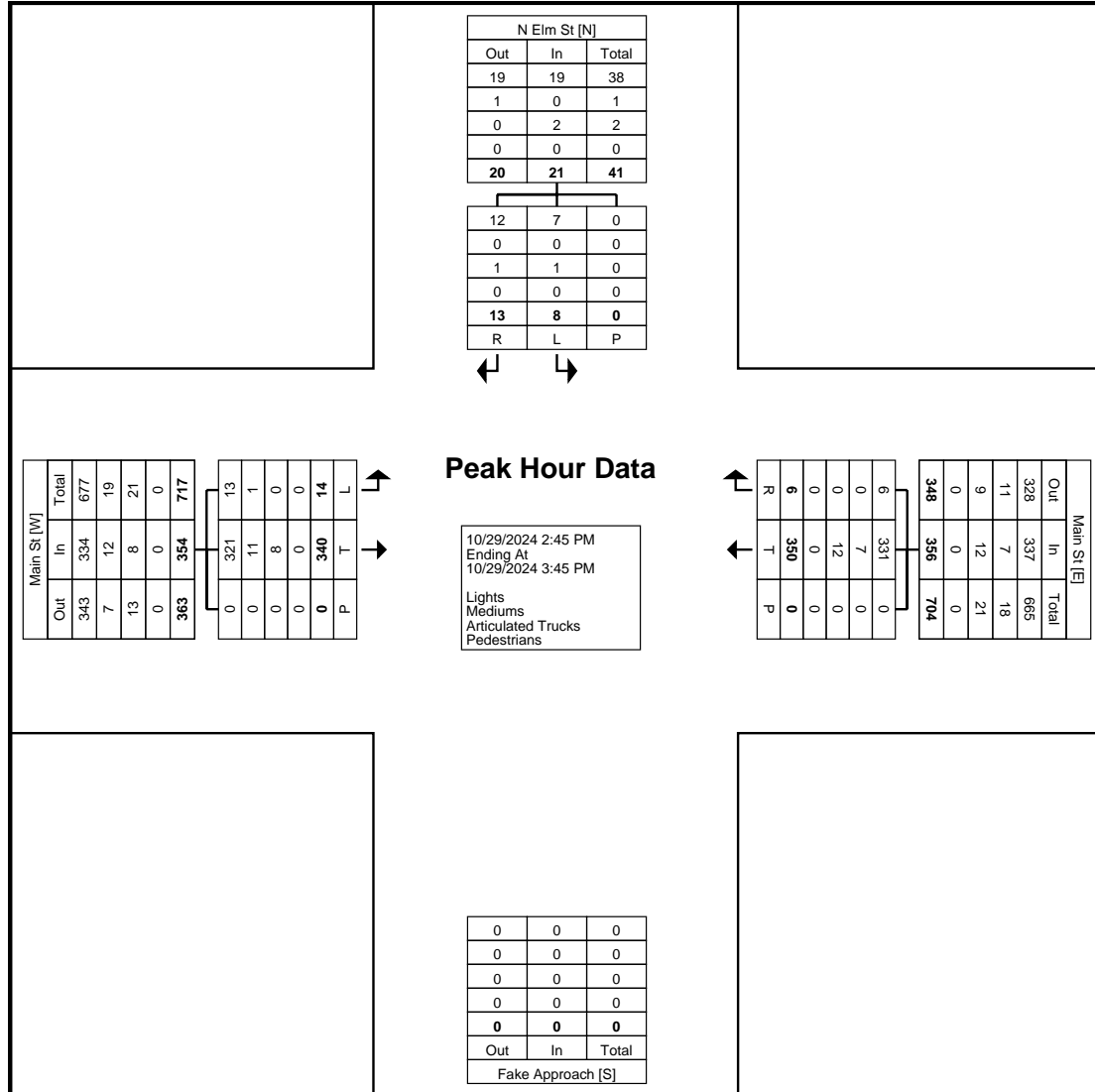
[illegible]



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Count Name: Main St & N Elm St  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 5



Turning Movement Peak Hour Data Plot (2:45 PM)



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Count Name: Main St & N Elm  
St  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 6

### Turning Movement Peak Hour Data (11:00 AM)

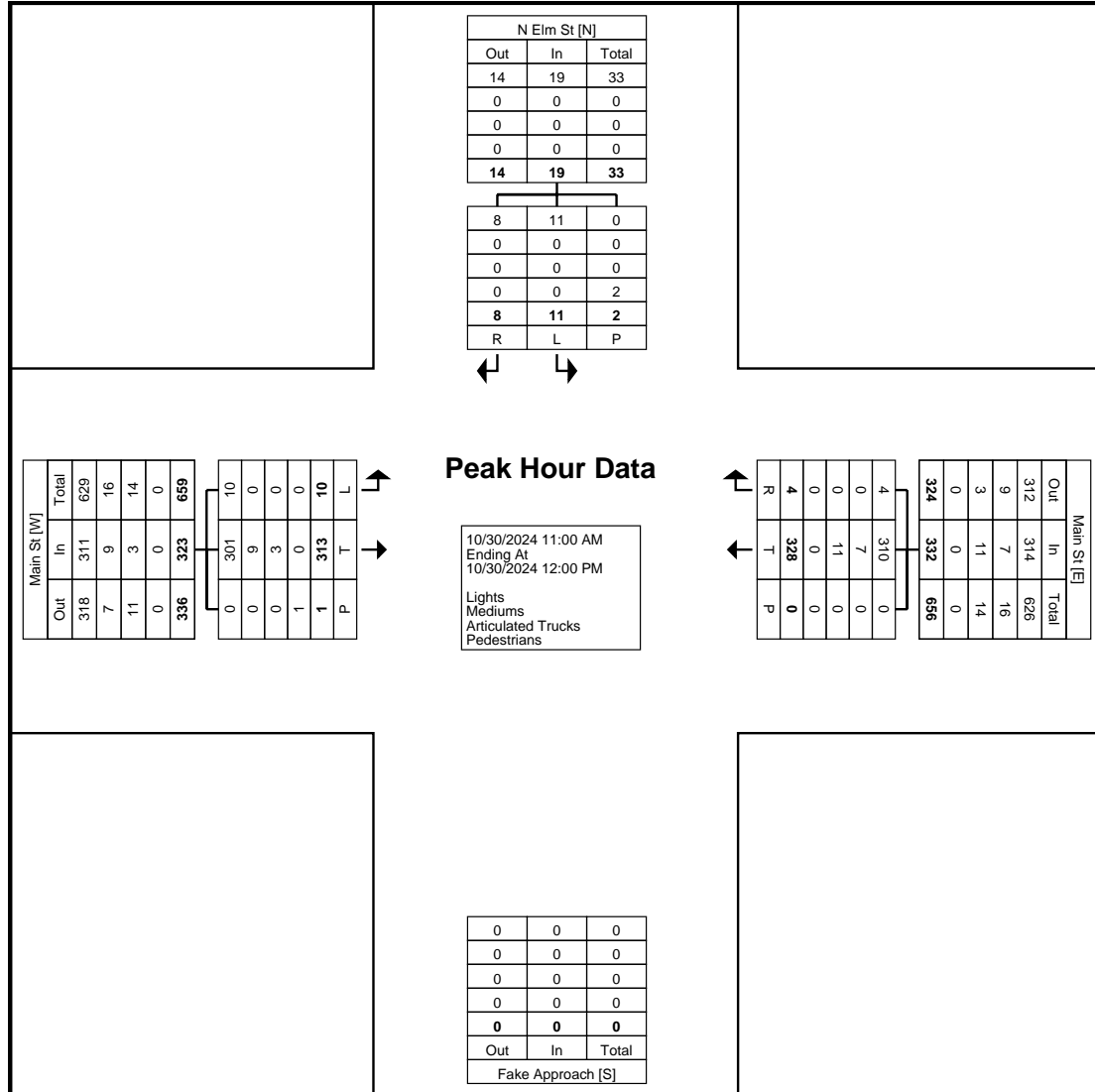
Start Time	N Elm St Southbound				Main St Eastbound				Main St Westbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	
11:00 AM	2	3	0	5	2	84	0	86	77	2	0	79	170
11:15 AM	2	3	2	5	4	78	0	82	79	0	0	79	166
11:30 AM	4	0	0	4	2	83	1	85	85	1	0	86	175
11:45 AM	3	2	0	5	2	68	0	70	87	1	0	88	163
Total	11	8	2	19	10	313	1	323	328	4	0	332	674
Approach %	57.9	42.1	-	-	3.1	96.9	-	-	98.8	1.2	-	-	-
Total %	1.6	1.2	-	2.8	1.5	46.4	-	47.9	48.7	0.6	-	49.3	-
PHF	0.688	0.667	-	0.950	0.625	0.932	-	0.939	0.943	0.500	-	0.943	0.963
Lights	11	8	-	19	10	301	-	311	310	4	-	314	644
% Lights	100.0	100.0	-	100.0	100.0	96.2	-	96.3	94.5	100.0	-	94.6	95.5
Mediums	0	0	-	0	0	9	-	9	7	0	-	7	16
% Mediums	0.0	0.0	-	0.0	0.0	2.9	-	2.8	2.1	0.0	-	2.1	2.4
Articulated Trucks	0	0	-	0	0	3	-	3	11	0	-	11	14
% Articulated Trucks	0.0	0.0	-	0.0	0.0	1.0	-	0.9	3.4	0.0	-	3.3	2.1
Pedestrians	-	-	2	-	-	-	1	-	-	-	0	-	-
% Pedestrians	-	-	100.0	-	-	-	100.0	-	-	-	-	-	-



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Count Name: Main St & N Elm St  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 7



Turning Movement Peak Hour Data Plot (11:00 AM)

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Count Name: Main St & N Elm  
St  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 8

### Turning Movement Peak Hour Data (12:15 PM)

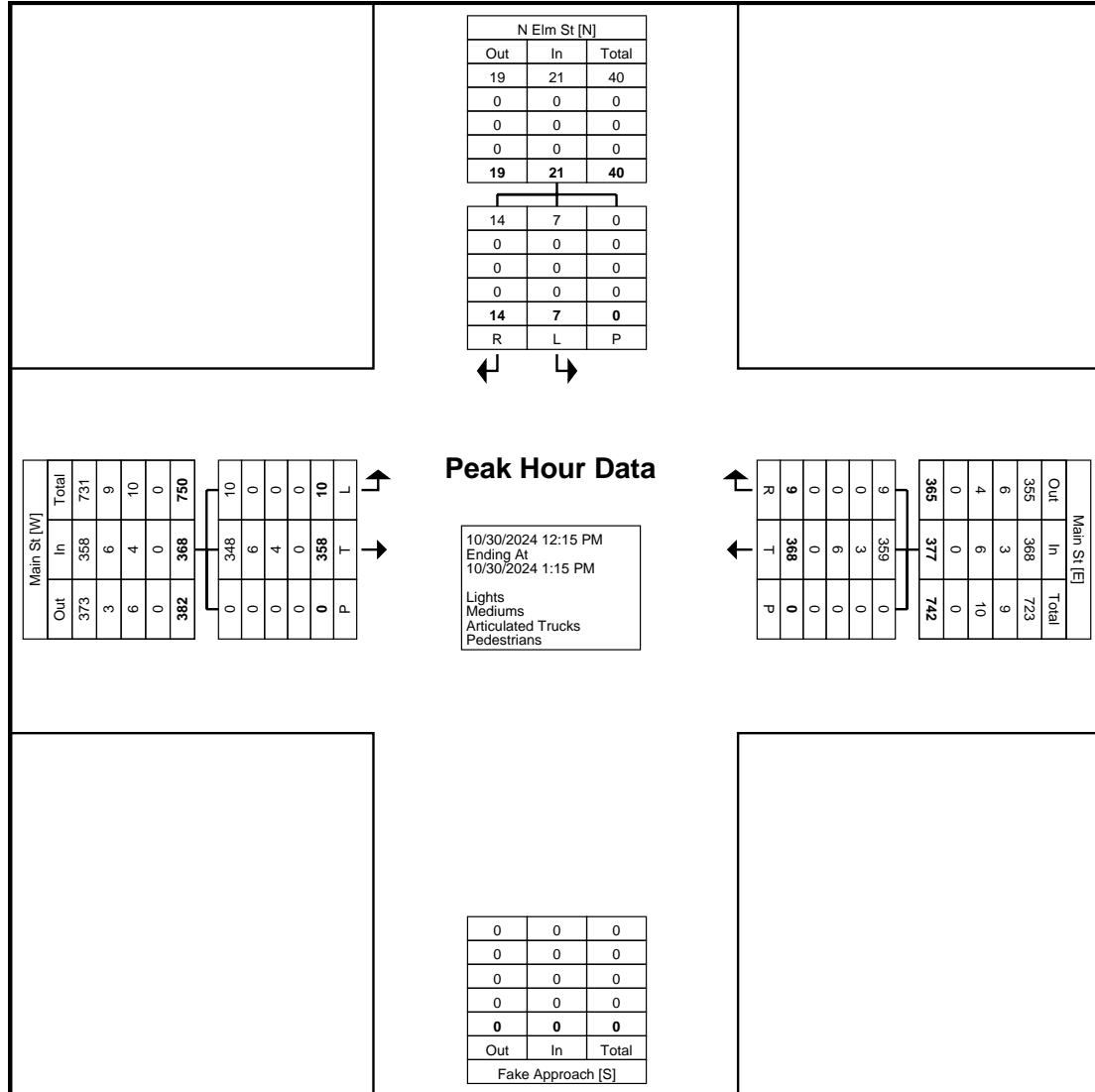
[illegible]



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Count Name: Main St & N Elm St  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 9



Turning Movement Peak Hour Data Plot (12:15 PM)



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Count Name: Main St & 1st Ave N  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 1

## Turning Movement Data

Start Time	1st Ave N Northbound					1st Ave N Southbound					Main St Eastbound					Main St Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
1:45 PM	8	24	17	0	49	27	22	13	1	62	8	37	4	0	49	18	43	31	0	92	252
Hourly Total	8	24	17	0	49	27	22	13	1	62	8	37	4	0	49	18	43	31	0	92	252
2:00 PM	9	30	17	1	56	31	29	13	2	73	7	40	7	0	54	15	36	34	0	85	268
2:15 PM	6	36	8	1	50	29	17	10	2	56	6	40	4	2	50	14	27	41	0	82	238
2:30 PM	10	30	27	1	67	40	27	11	0	78	10	46	6	0	62	25	31	26	0	82	289
2:45 PM	4	25	18	0	47	28	15	7	1	50	13	42	9	0	64	19	37	34	2	90	251
Hourly Total	29	121	70	3	220	128	88	41	5	257	36	168	26	2	230	73	131	135	2	339	1046
3:00 PM	6	29	14	0	49	34	41	9	0	84	14	35	4	0	53	41	41	47	0	129	315
3:15 PM	3	39	24	0	66	34	42	12	0	88	10	40	4	0	54	26	41	32	0	99	307
3:30 PM	9	33	24	0	66	28	36	5	2	69	20	36	18	0	74	28	34	27	0	89	298
3:45 PM	6	31	20	0	57	33	44	5	1	82	6	39	8	0	53	19	35	37	0	91	283
Hourly Total	24	132	82	0	238	129	163	31	3	323	50	150	34	0	234	114	151	143	0	408	1203
4:00 PM	9	37	16	0	62	38	33	13	0	84	15	30	8	0	53	28	24	33	0	85	284
4:15 PM	8	31	20	0	59	31	35	9	0	75	10	30	9	0	49	25	31	32	0	88	271
4:30 PM	4	34	13	0	51	33	23	9	0	65	16	32	8	0	56	24	39	33	0	96	268
4:45 PM	8	39	28	0	75	25	39	11	0	75	8	38	12	0	58	26	30	25	0	81	289
Hourly Total	29	141	77	0	247	127	130	42	0	299	49	130	37	0	216	103	124	123	0	350	1112
5:00 PM	3	43	20	0	66	40	32	7	0	79	13	39	15	0	67	37	34	30	0	101	313
5:15 PM	7	32	21	0	60	22	36	14	0	72	11	34	15	0	60	28	34	33	0	95	287
5:30 PM	0	47	24	0	71	21	35	14	0	70	14	43	8	0	65	26	41	16	0	83	289
5:45 PM	5	31	16	0	52	20	21	12	0	53	13	31	4	1	48	23	27	25	0	75	228
Hourly Total	15	153	81	0	249	103	124	47	0	274	51	147	42	1	240	114	136	104	0	354	1117
6:00 PM	6	46	29	1	81	23	17	8	1	48	10	19	6	0	35	21	26	28	1	75	239
6:15 PM	5	22	15	0	42	9	35	6	0	50	5	24	4	0	33	26	22	22	0	70	195
6:30 PM	2	25	16	0	43	10	42	4	0	56	7	22	8	2	37	17	13	16	0	46	182
6:45 PM	0	19	9	0	28	14	22	5	0	41	1	13	2	0	16	17	14	14	0	45	130
Hourly Total	13	112	69	1	194	56	116	23	1	195	23	78	20	2	121	81	75	80	1	236	746
7:00 PM	4	24	10	3	38	16	20	5	1	41	5	10	3	1	18	8	21	8	0	37	134
7:15 PM	4	12	9	0	25	11	18	4	0	33	1	19	4	0	24	6	19	12	0	37	119
7:30 PM	2	10	10	0	22	10	9	3	0	22	4	14	6	0	24	11	16	11	1	38	106
7:45 PM	1	11	6	0	18	5	11	7	0	23	9	7	2	1	18	6	12	10	0	28	87
Hourly Total	11	57	35	3	103	42	58	19	1	119	19	50	15	2	84	31	68	41	1	140	446
8:00 PM	1	12	15	0	28	5	10	6	0	21	4	13	3	0	20	4	14	17	0	35	104
8:15 PM	2	18	7	0	27	9	8	5	1	22	5	7	3	0	15	10	13	10	0	33	97
8:30 PM	0	4	6	0	10	7	8	6	0	21	4	13	3	0	20	6	5	7	0	18	69
8:45 PM	1	6	8	1	15	5	3	3	0	11	0	11	3	2	14	3	11	6	0	20	60
Hourly Total	4	40	36	1	80	26	29	20	1	75	13	44	12	2	69	23	43	40	0	106	330
9:00 PM	0	10	6	0	16	4	3	2	1	9	3	10	1	0	14	6	13	6	0	25	64
9:15 PM	1	11	9	0	21	6	11	0	0	17	5	6	3	0	14	11	7	4	0	22	74
9:30 PM	2	4	4	0	10	2	5	0	0	7	2	7	0	0	9	4	8	6	0	18	44
9:45 PM	1	5	4	0	10	2	1	1	0	4	0	5	0	0	5	3	5	3	0	11	30
Hourly Total	4	30	23	0	57	14	20	3	1	37	10	28	4	0	42	24	33	19	0	76	212
10:00 PM	0	4	5	1	9	1	4	0	0	5	0	5	0	0	5	0	3	4	0	7	26
10:15 PM	0	0	1	1	1	3	0	1	2	4	0	5	0	0	5	2	3	3	0	8	18
10:30 PM	0	1	2	0	3	4	3	1	0	8	0	5	0	0	5	1	3	6	0	10	26
10:45 PM	0	1	1	1	2	3	1	1	0	5	1	4	1	1	6	0	3	1	0	4	17
Hourly Total	0	6	9	3	15	11	8	3	2	22	1	19	1	1	21	3	12	14	0	29	87
11:00 PM	0	0	1	0	1	0	2	0	0	2	0	3	0	0	3	1	5	4	0	10	16
11:15 PM	0	1	0	0	1	2	3	1	0	6	0	1	0	0	1	1	1	1	0	3	11
11:30 PM	0	1	1	2	2	1	1	0	1	2	0	4	0	0	4	1	0	5	0	6	14
11:45 PM	0	0	0	0	0	5	2	0	0	7	0	2	0	0	2	0	2	3	0	5	14
Hourly Total	0	2	2	2	4	8	8	1	1	17	0	10	0	0	10	3	8	13	0	24	55
12:00 AM	0	1	0	0	1	3	0	0	0	3	1	1	0	0	2	1	2	4	0	7	13
12:15 AM	0	1	0	0	1	4	1	0	0	5	0	4	0	0	4	0	1	2	0	3	13
12:30 AM	0	0	1	0	1	0	1	1	0	2	0	2	0	0	2	0	1	3	0	4	9
12:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	2	1	0	3	7	2	1	1	10	1	7	0	0	8	1	4	9	0	14	35
1:00 AM	0	0	0	0	0	3	1	0	1	4	0	0	0	0	0	0	1	1	0	2	6
1:15 AM	0	0	1	0	1	2	0	1	0	3	0	1	0	0	1	0	1	2	0	3	8
1:30 AM	0	0	0	0	0	1	2	0	0	3	2	0	0	0	2	0	0	0	0	0	5

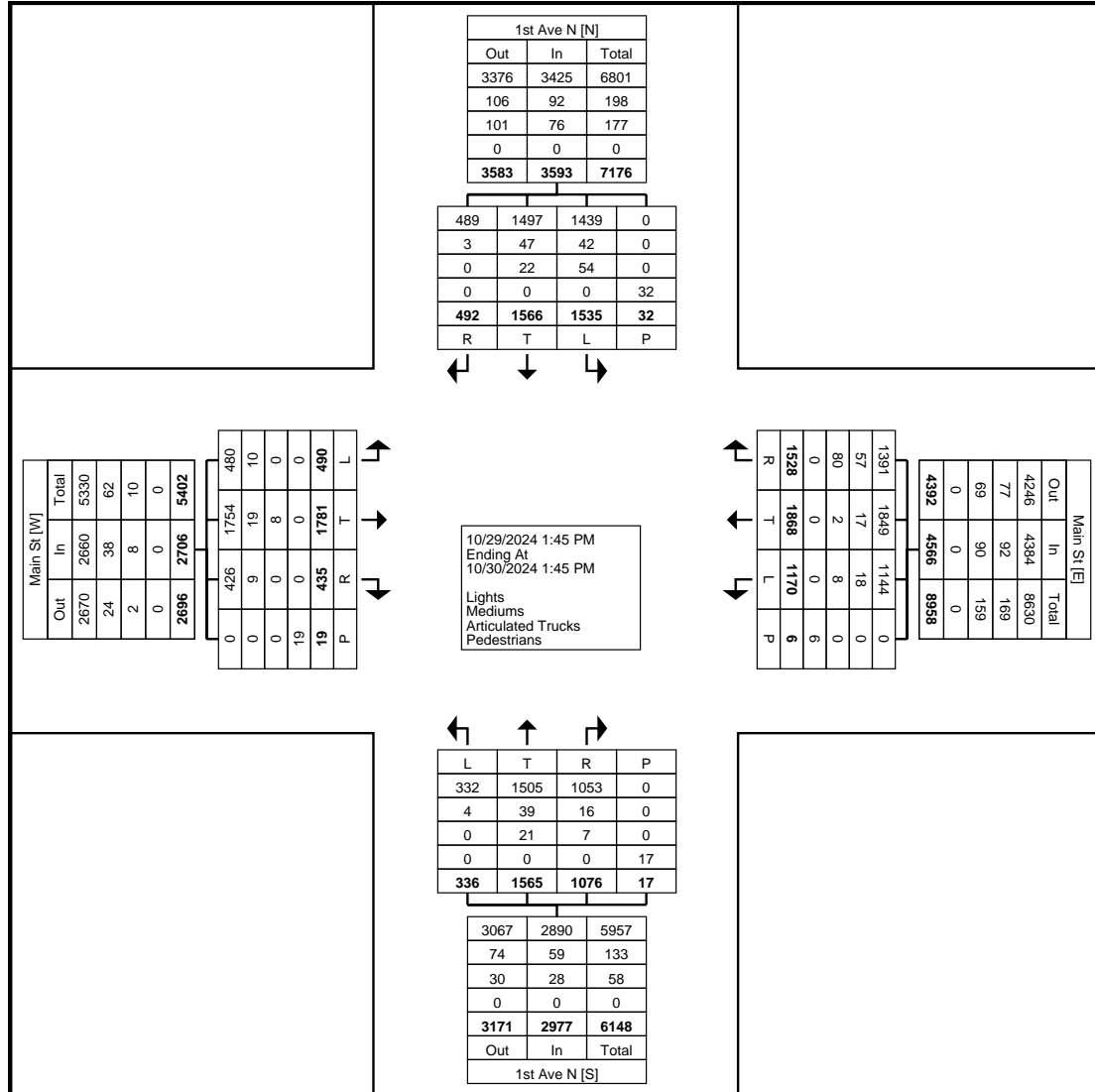
1:45 AM	1	1	1	0	3	2	0	0	1	2	0	0	0	0	0	0	1	0	0	1	6
Hourly Total	1	1	2	0	4	8	3	1	2	12	2	1	0	0	3	0	3	3	0	6	25
2:00 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	1	0	3	4
2:15 AM	0	0	0	0	0	1	1	1	0	0	2	1	2	0	0	3	0	1	0	0	6
2:30 AM	0	1	0	0	1	3	0	1	0	4	0	0	0	0	0	0	2	2	0	0	9
2:45 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hourly Total	0	1	1	0	2	5	1	1	0	7	1	2	0	0	3	2	5	1	0	8	20
3:00 AM	0	3	2	0	5	0	1	0	0	1	0	0	0	0	0	2	0	0	0	2	8
3:15 AM	1	3	4	0	8	0	0	1	0	1	0	0	0	0	0	0	1	1	0	2	11
3:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	3
3:45 AM	0	0	1	0	1	0	0	0	1	0	0	1	0	0	1	0	2	1	0	3	5
Hourly Total	1	7	7	0	15	0	1	1	1	2	0	1	0	0	1	3	3	3	0	9	27
4:00 AM	0	1	0	0	1	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0	4
4:15 AM	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4	4	1	0	0	5	9
4:30 AM	0	0	0	0	0	3	2	0	0	5	1	3	0	0	4	0	4	2	0	6	15
4:45 AM	0	0	1	0	1	0	2	1	0	3	1	2	1	0	4	5	3	3	0	11	19
Hourly Total	0	1	1	0	2	4	5	1	0	10	2	8	3	0	13	9	8	5	0	22	47
5:00 AM	1	2	4	0	7	5	6	2	0	13	1	4	1	0	6	2	5	2	0	9	35
5:15 AM	0	1	1	0	2	5	3	1	0	9	1	4	1	0	6	1	3	1	0	5	22
5:30 AM	0	5	0	0	5	4	3	0	0	7	1	3	2	0	6	3	5	7	0	15	33
5:45 AM	2	1	6	0	9	8	5	2	0	15	2	2	4	1	8	4	9	11	0	24	56
Hourly Total	3	9	11	0	23	22	17	5	0	44	5	13	8	1	26	10	22	21	0	53	146
6:00 AM	2	5	4	0	11	4	7	1	0	12	2	8	4	0	14	4	11	5	0	20	57
6:15 AM	3	7	9	0	19	2	8	0	0	10	6	8	3	0	17	6	6	9	0	21	67
6:30 AM	1	13	11	0	25	8	8	1	0	17	3	7	1	0	11	12	9	16	0	37	90
6:45 AM	10	8	17	0	35	16	21	1	0	38	3	9	10	0	22	12	14	8	0	34	129
Hourly Total	16	33	41	0	90	30	44	3	0	77	14	32	18	0	64	34	40	38	0	112	343
7:00 AM	2	15	16	0	33	13	15	2	0	30	3	19	4	0	26	12	15	7	0	34	123
7:15 AM	3	18	16	0	37	12	16	8	0	36	5	14	6	0	25	11	10	25	0	46	144
7:30 AM	7	32	12	1	51	22	30	6	0	58	3	34	10	0	47	15	25	23	0	63	219
7:45 AM	7	39	31	0	77	35	66	6	0	107	10	28	8	0	46	40	48	33	0	121	351
Hourly Total	19	104	75	1	198	82	127	22	0	231	21	95	28	0	144	78	98	88	0	264	837
8:00 AM	10	47	23	0	80	34	36	5	0	75	8	27	5	0	40	31	29	29	0	89	284
8:15 AM	12	26	19	1	57	23	29	8	3	60	8	23	3	3	34	15	29	21	1	65	216
8:30 AM	8	15	11	1	34	23	12	4	1	39	6	20	4	1	30	8	24	28	1	60	163
8:45 AM	6	27	11	0	44	35	32	12	0	79	8	23	8	0	39	13	39	21	0	73	235
Hourly Total	36	115	64	2	215	115	109	29	4	253	30	93	20	4	143	67	121	99	2	287	898
9:00 AM	8	14	19	0	41	29	16	4	1	49	5	32	6	0	43	14	35	18	0	67	200
9:15 AM	10	21	15	0	46	35	19	7	0	61	1	28	5	0	34	19	31	15	0	65	206
9:30 AM	6	18	15	0	39	28	19	8	1	55	10	28	9	0	47	17	33	21	0	71	212
9:45 AM	4	23	21	0	48	29	21	14	0	64	10	22	14	0	46	19	39	29	0	87	245
Hourly Total	28	76	70	0	174	121	75	33	2	229	26	110	34	0	170	69	138	83	0	290	863
10:00 AM	6	25	14	0	45	29	31	8	0	68	7	25	16	0	48	15	40	24	0	79	240
10:15 AM	9	25	9	0	43	23	19	9	0	51	9	25	11	0	45	10	27	25	0	62	201
10:30 AM	6	21	16	0	43	29	29	14	0	72	5	31	10	0	46	10	29	22	0	61	222
10:45 AM	6	25	15	0	46	34	17	10	1	61	6	34	15	1	55	16	36	29	0	81	243
Hourly Total	27	96	54	0	177	115	96	41	1	252	27	115	52	1	194	51	132	100	0	283	906
11:00 AM	5	19	28	0	52	29	25	11	1	65	3	32	9	0	44	24	37	26	0	87	248
11:15 AM	5	16	19	0	40	35	28	5	0	68	7	37	3	0	47	30	32	21	0	83	238
11:30 AM	12	20	20	0	52	25	35	9	1	69	7	49	0	1	56	28	42	25	0	95	272
11:45 AM	1	14	15	0	30	23	25	9	0	57	12	36	12	0	60	23	46	26	0	95	242
Hourly Total	23	69	82	0	174	112	113	34	2	259	29	154	24	1	207	105	157	98	0	360	1000
12:00 PM	12	36	29	0	77	32	24	8	0	64	7	47	10	0	64	15	45	24	0	84	289
12:15 PM	10	31	17	1	58	28	31	11	0	70	5	48	7	0	60	20	35	36	0	91	279
12:30 PM	6	27	16	0	49	42	29	10	0	81	8	36	7	0	51	21	53	33	0	107	288
12:45 PM	5	34	31	0	70	41	31	12	0	84	9	38	5	0	52	24	56	31	0	111	317
Hourly Total	33	128	93	1	254	143	115	41	0	299	29	169	29	0	227	80	189	124	0	393	1173
1:00 PM	5	34	19	0	58	23	26	9	1	58	15	35	8	0	58	24	47	41	0	112	286
1:15 PM	4	31	23	0	58	37	29	7	2	73	13	46	8	2	67	21	36	32	0	89	287
1:30 PM	3	40	31	0	74	40	37	20	0	97	15	39	8	0	62	29	41	40	0	110	343
Grand Total	336	1565	1076	17	2977	1535	1566	492	32	3593	490	1781	435	19	2706	1170	1868	1528	6	4566	13842
Approach %	11.3	52.6	36.1	-	-	42.7	43.6	13.7	-	-	18.1	65.8	16.1	-	-	25.6	40.9	33.5	-	-	-
Total %	2.4	11.3	7.8	-	21.5	11.1	11.3	3.6	-	26.0	3.5	12.9	3.1	-	19.5	8.5	13.5	11.0	-	33.0	-
Lights	332	1505	1053	-	2890	1439	1497	489	-	3425	480	1754	426	-	2660	1144	1849	1391	-	4384	13359
% Lights	98.8	96.2	97.9	-	97.1	93.7	95.6	99.4	-	95.3	98.0	98.5	97.9	-	98.3	97.8	99.0	91.0	-	96.0	96.5
Mediums	4	39	16	-	59	42	47	3	-	92	10	19	9	-	38	18	17	57	-	92	281
% Mediums	1.2	2.5	1.5	-	2.0	2.7	3.0	0.6	-	2.6	2.0	1.1	2.1	-	1.4	1.5	0.9	3.7	-	2.0	2.0
Articulated Trucks	0	21	7	-	28	54	22	0	-	76	0	8	0	-	8	8	2	80	-	90	202
% Articulated Trucks	0.0	1.3	0.7	-	0.9	3.5	1.4	0.0	-	2.1	0.0	0.4	0.0	-	0.3	0.7	0.1	5.2	-	2.0	1.5
Pedestrians	-	-	-	17	-	-	-	-	32	-	-	-	-	19	-	-	-	-	6	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-



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Count Name: Main St & 1st Ave  
N  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 3



Turning Movement Data Plot

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406-447-5000 [srandall@rpa-hln.com](mailto:srandall@rpa-hln.com)

Count Name: Main St & 1st Ave  
N  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 4

### Turning Movement Peak Hour Data (3:00 PM)

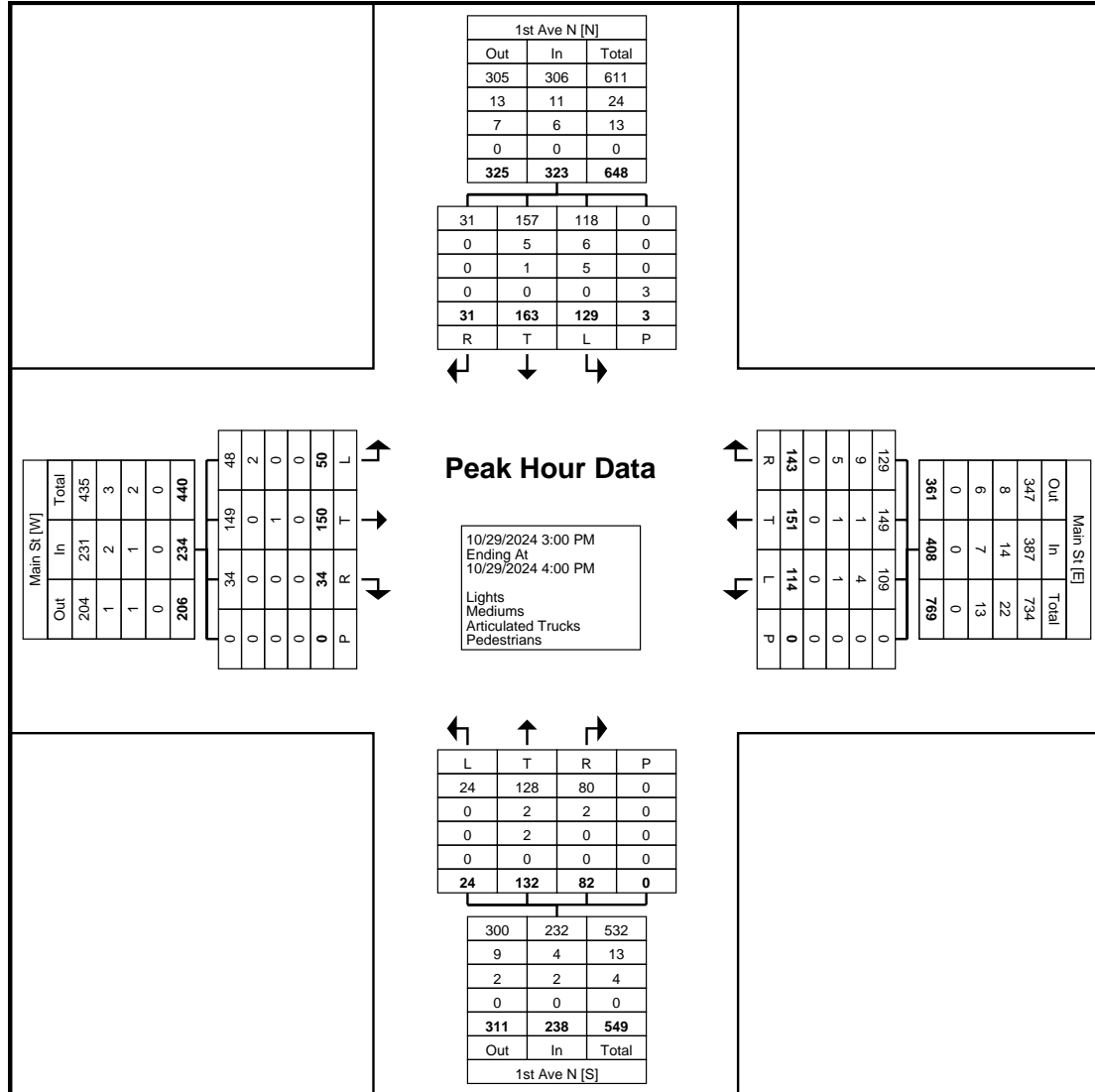
[illegible]



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Count Name: Main St & 1st Ave  
N  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 5



Turning Movement Peak Hour Data Plot (3:00 PM)



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Count Name: Main St & 1st Ave  
N  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 6

### Turning Movement Peak Hour Data (7:30 AM)

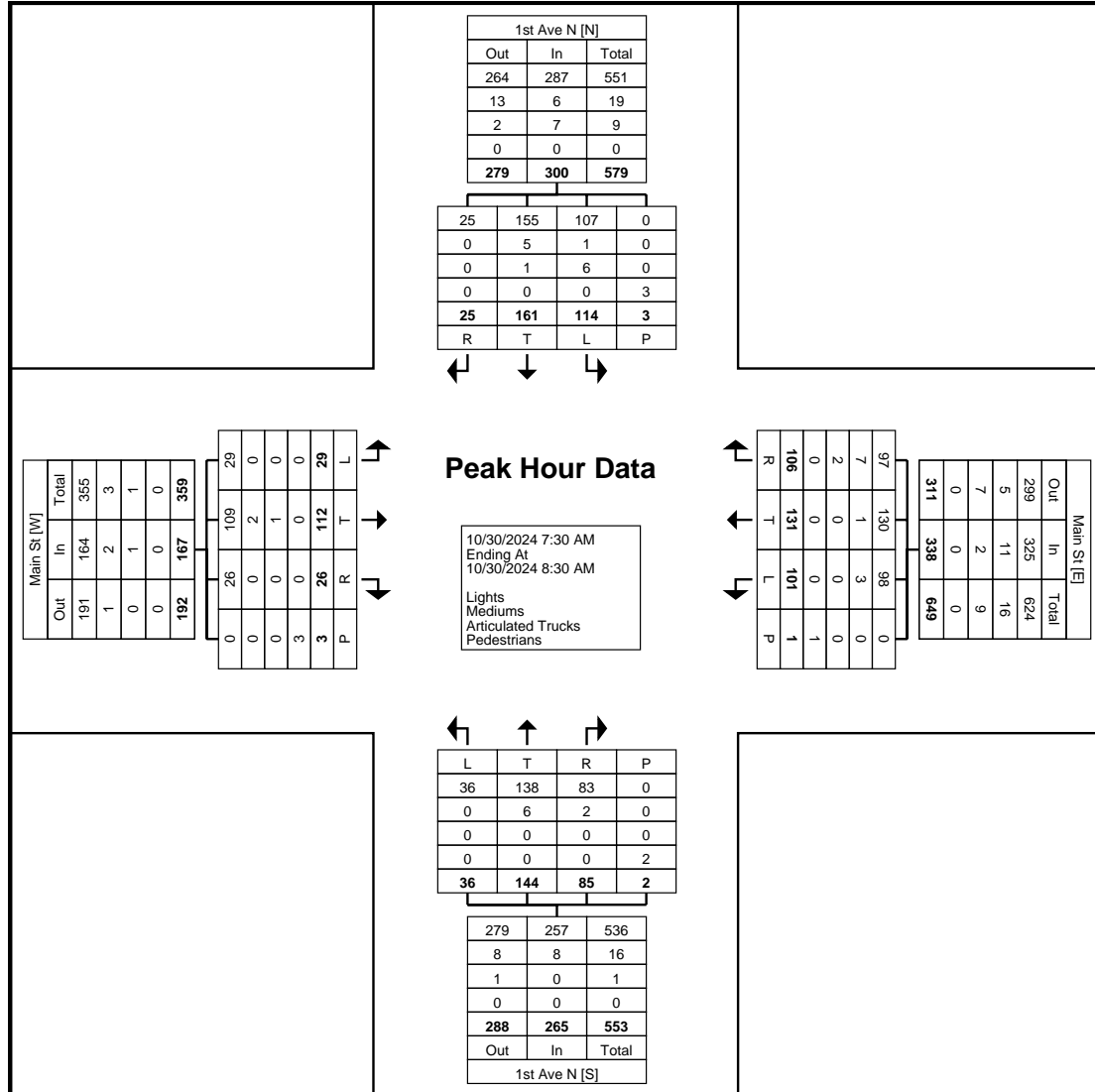
Start Time	1st Ave N Northbound					1st Ave N Southbound					Main St Eastbound					Main St Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
7:30 AM	7	32	12	1	51	22	30	6	0	58	3	34	10	0	47	15	25	23	0	63	219
7:45 AM	7	39	31	0	77	35	66	6	0	107	10	28	8	0	46	40	48	33	0	121	351
8:00 AM	10	47	23	0	80	34	36	5	0	75	8	27	5	0	40	31	29	29	0	89	284
8:15 AM	12	26	19	1	57	23	29	8	3	60	8	23	3	3	34	15	29	21	1	65	216
Total	36	144	85	2	265	114	161	25	3	300	29	112	26	3	167	101	131	106	1	338	1070
Approach %	13.6	54.3	32.1	-	-	38.0	53.7	8.3	-	-	17.4	67.1	15.6	-	-	29.9	38.8	31.4	-	-	-
Total %	3.4	13.5	7.9	-	24.8	10.7	15.0	2.3	-	28.0	2.7	10.5	2.4	-	15.6	9.4	12.2	9.9	-	31.6	-
PHF	0.750	0.766	0.685	-	0.828	0.814	0.610	0.781	-	0.701	0.725	0.824	0.650	-	0.888	0.631	0.682	0.803	-	0.698	0.762
Lights	36	138	83	-	257	107	155	25	-	287	29	109	26	-	164	98	130	97	-	325	1033
% Lights	100.0	95.8	97.6	-	97.0	93.9	96.3	100.0	-	95.7	100.0	97.3	100.0	-	98.2	97.0	99.2	91.5	-	96.2	96.5
Mediums	0	6	2	-	8	1	5	0	-	6	0	2	0	-	2	3	1	7	-	11	27
% Mediums	0.0	4.2	2.4	-	3.0	0.9	3.1	0.0	-	2.0	0.0	1.8	0.0	-	1.2	3.0	0.8	6.6	-	3.3	2.5
Articulated Trucks	0	0	0	-	0	6	1	0	-	7	0	1	0	-	1	0	0	2	-	2	10
% Articulated Trucks	0.0	0.0	0.0	-	0.0	5.3	0.6	0.0	-	2.3	0.0	0.9	0.0	-	0.6	0.0	0.0	1.9	-	0.6	0.9
Pedestrians	-	-	-	2	-	-	-	-	3	-	-	-	-	3	-	-	-	-	1	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-



Robert Peccia & Associates  
3147 Saddle Drive

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Count Name: Main St & 1st Ave  
N  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 7



Turning Movement Peak Hour Data Plot (7:30 AM)



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Count Name: Main St & 1st Ave  
N  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 8

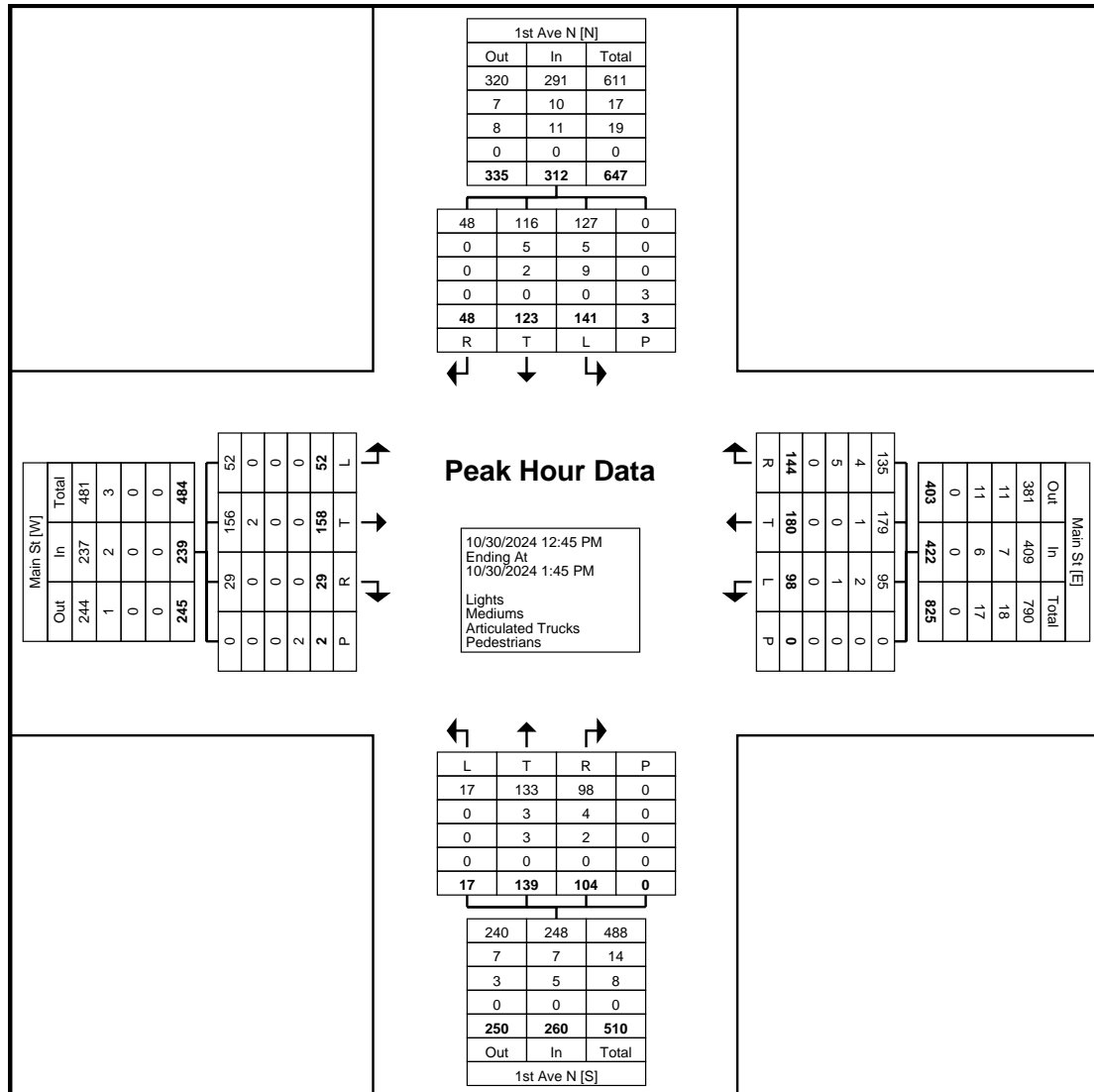
### Turning Movement Peak Hour Data (12:45 PM)

Start Time	1st Ave N Northbound					1st Ave N Southbound					Main St Eastbound					Main St Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
12:45 PM	5	34	31	0	70	41	31	12	0	84	9	38	5	0	52	24	56	31	0	111	317
1:00 PM	5	34	19	0	58	23	26	9	1	58	15	35	8	0	58	24	47	41	0	112	286
1:15 PM	4	31	23	0	58	37	29	7	2	73	13	46	8	2	67	21	36	32	0	89	287
1:30 PM	3	40	31	0	74	40	37	20	0	97	15	39	8	0	62	29	41	40	0	110	343
Total	17	139	104	0	260	141	123	48	3	312	52	158	29	2	239	98	180	144	0	422	1233
Approach %	6.5	53.5	40.0	-	-	45.2	39.4	15.4	-	-	21.8	66.1	12.1	-	-	23.2	42.7	34.1	-	-	-
Total %	1.4	11.3	8.4	-	21.1	11.4	10.0	3.9	-	25.3	4.2	12.8	2.4	-	19.4	7.9	14.6	11.7	-	34.2	-
PHF	0.850	0.869	0.839	-	0.878	0.860	0.831	0.600	-	0.804	0.867	0.859	0.906	-	0.892	0.845	0.804	0.878	-	0.942	0.899
Lights	17	133	98	-	248	127	116	48	-	291	52	156	29	-	237	95	179	135	-	409	1185
% Lights	100.0	95.7	94.2	-	95.4	90.1	94.3	100.0	-	93.3	100.0	98.7	100.0	-	99.2	96.9	99.4	93.8	-	96.9	96.1
Mediums	0	3	4	-	7	5	5	0	-	10	0	2	0	-	2	2	1	4	-	7	26
% Mediums	0.0	2.2	3.8	-	2.7	3.5	4.1	0.0	-	3.2	0.0	1.3	0.0	-	0.8	2.0	0.6	2.8	-	1.7	2.1
Articulated Trucks	0	3	2	-	5	9	2	0	-	11	0	0	0	-	0	1	0	5	-	6	22
% Articulated Trucks	0.0	2.2	1.9	-	1.9	6.4	1.6	0.0	-	3.5	0.0	0.0	0.0	-	0.0	1.0	0.0	3.5	-	1.4	1.8
Pedestrians	-	-	-	0	-	-	-	-	3	-	-	-	-	2	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-

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Count Name: Main St & 1st Ave  
N  
Site Code: Lewistown  
Start Date: 10/29/2024  
Page No: 9



### Turning Movement Peak Hour Data Plot (12:45 PM)



Robert Peccia & Associates  
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Count Name: Main St & Airport  
Rd  
Site Code: Lewistown  
Start Date: 10/28/2024  
Page No: 1

## Turning Movement Data

Start Time	Airport Rd Northbound					Entrance Ave Southbound					Main St Eastbound					Main St Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
12:30 PM	15	3	5	0	23	2	4	6	1	12	0	39	26	0	65	15	65	8	0	88	188
12:45 PM	24	6	1	0	31	4	2	6	0	12	3	45	17	0	65	12	70	4	0	86	194
Hourly Total	39	9	6	0	54	6	6	12	1	24	3	84	43	0	130	27	135	12	0	174	382
1:00 PM	16	4	11	0	31	0	2	4	0	6	1	55	19	0	75	8	68	3	0	79	191
1:15 PM	11	3	10	0	24	2	1	3	0	6	1	63	15	0	79	4	69	4	0	77	186
1:30 PM	6	2	2	0	10	4	4	0	0	8	0	45	16	0	61	6	58	4	0	68	147
1:45 PM	13	1	8	1	22	0	4	6	0	10	4	40	14	0	58	3	60	4	0	67	157
Hourly Total	46	10	31	1	87	6	11	13	0	30	6	203	64	0	273	21	255	15	0	291	681
2:00 PM	23	2	6	0	31	2	3	1	0	6	1	46	10	0	57	9	51	3	0	63	157
2:15 PM	17	3	6	0	26	4	0	3	0	7	2	47	21	0	70	6	53	1	0	60	163
2:30 PM	15	7	4	0	26	4	1	6	0	11	0	41	13	0	54	6	52	1	0	59	150
2:45 PM	22	6	6	0	34	3	2	8	0	13	3	45	8	0	56	6	56	3	0	65	168
Hourly Total	77	18	22	0	117	13	6	18	0	37	6	179	52	0	237	27	212	8	0	247	638
3:00 PM	8	2	6	0	16	2	4	3	0	9	4	51	14	0	69	6	43	2	0	51	145
3:15 PM	24	7	6	0	37	3	3	5	0	11	3	42	18	0	63	3	63	1	0	67	178
3:30 PM	17	8	16	0	41	1	6	6	0	13	5	58	15	0	78	8	53	4	0	65	197
3:45 PM	14	4	3	0	21	3	3	3	0	9	1	53	19	0	73	8	47	2	0	57	160
Hourly Total	63	21	31	0	115	9	16	17	0	42	13	204	66	0	283	25	206	9	0	240	680
4:00 PM	15	3	9	0	27	2	4	5	0	11	3	65	18	0	86	5	47	4	0	56	180
4:15 PM	9	5	8	0	22	0	0	3	0	3	3	48	22	0	73	6	58	3	0	67	165
4:30 PM	12	3	5	0	20	3	4	6	0	13	8	56	15	0	79	7	61	2	0	70	182
4:45 PM	11	6	6	0	23	4	2	3	0	9	6	59	13	0	78	8	39	2	0	49	159
Hourly Total	47	17	28	0	92	9	10	17	0	36	20	228	68	0	316	26	205	11	0	242	686
5:00 PM	13	6	4	0	23	3	4	6	0	13	7	70	28	0	105	5	66	2	0	73	214
5:15 PM	19	5	3	0	27	5	0	6	0	11	2	61	19	0	82	3	53	0	0	56	176
5:30 PM	18	7	12	0	37	2	3	3	0	8	3	54	22	0	79	7	40	2	0	49	173
5:45 PM	5	0	5	0	10	5	1	2	0	8	8	39	17	0	64	4	35	2	0	41	123
Hourly Total	55	18	24	0	97	15	8	17	0	40	20	224	86	0	330	19	194	6	0	219	686
6:00 PM	8	1	7	0	16	3	6	2	0	11	4	38	12	0	54	3	33	0	0	36	117
6:15 PM	9	3	3	0	15	1	1	5	0	7	1	20	13	0	34	4	17	0	0	21	77
6:30 PM	6	1	5	0	12	0	2	1	0	3	3	27	7	0	37	1	27	1	0	29	81
6:45 PM	2	1	4	0	7	2	0	2	0	4	1	21	8	0	30	1	30	1	0	32	73
Hourly Total	25	6	19	0	50	6	9	10	0	25	9	106	40	0	155	9	107	2	0	118	348
7:00 PM	2	0	1	0	3	2	0	0	0	2	1	24	6	0	31	3	18	3	0	24	60
7:15 PM	1	1	2	0	4	0	0	0	0	0	0	18	3	0	21	1	16	0	0	17	42
7:30 PM	4	0	1	0	5	0	2	0	1	2	2	9	3	0	14	4	11	0	0	15	36
7:45 PM	2	0	0	0	2	0	1	1	1	2	2	12	1	0	15	2	19	1	0	22	41
Hourly Total	9	1	4	0	14	2	3	1	2	6	5	63	13	0	81	10	64	4	0	78	179
8:00 PM	1	1	2	0	4	1	0	0	0	1	1	17	2	0	20	3	14	0	0	17	42
8:15 PM	1	0	2	0	3	1	1	0	0	2	0	15	2	0	17	2	16	1	0	19	41
8:30 PM	3	0	1	0	4	0	1	1	0	2	0	9	5	0	14	2	6	1	0	9	29
8:45 PM	1	1	2	0	4	0	0	0	0	0	0	8	4	0	12	1	8	2	0	11	27
Hourly Total	6	2	7	0	15	2	2	1	0	5	1	49	13	0	63	8	44	4	0	56	139
9:00 PM	2	0	5	0	7	0	0	0	0	0	1	8	0	0	9	1	9	0	0	10	26
9:15 PM	1	0	0	0	1	0	0	1	0	1	0	4	2	0	6	1	8	0	0	9	17
9:30 PM	0	0	0	0	0	0	1	1	0	2	0	8	1	0	9	1	4	1	0	6	17
9:45 PM	0	0	1	0	1	0	0	0	0	0	1	8	2	0	11	0	4	0	0	4	16
Hourly Total	3	0	6	0	9	0	1	2	0	3	2	28	5	0	35	3	25	1	0	29	76
10:00 PM	1	1	1	0	3	0	1	0	0	1	0	5	0	0	5	0	5	1	0	6	15
10:15 PM	0	0	0	0	0	0	0	0	0	0	1	2	2	0	5	0	2	0	0	2	7
10:30 PM	0	0	0	0	0	0	1	0	0	1	1	4	1	0	6	0	5	0	0	5	12
10:45 PM	1	0	0	0	1	0	0	0	0	0	0	6	0	0	6	0	2	0	0	2	9
Hourly Total	2	1	1	0	4	0	2	0	0	2	2	17	3	0	22	0	14	1	0	15	43
11:00 PM	0	1	0	0	1	0	1	0	0	1	0	3	0	0	3	0	3	0	0	3	8
11:15 PM	0	0	1	0	1	0	0	0	0	0	0	2	2	0	4	0	0	0	0	0	5
11:30 PM	0	1	0	0	1	0	0	0	0	0	0	3	2	0	5	0	5	0	0	5	11
11:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	0	2	0	0	2	5
Hourly Total	0	3	1	0	4	0	1	0	0	1	0	9	5	0	14	0	10	0	0	10	29
12:00 AM	0	0	1	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
12:15 AM	1	0	1	0	2	0	0	0	0	0	0	1	0	0	1	1	2	0	0	3	6

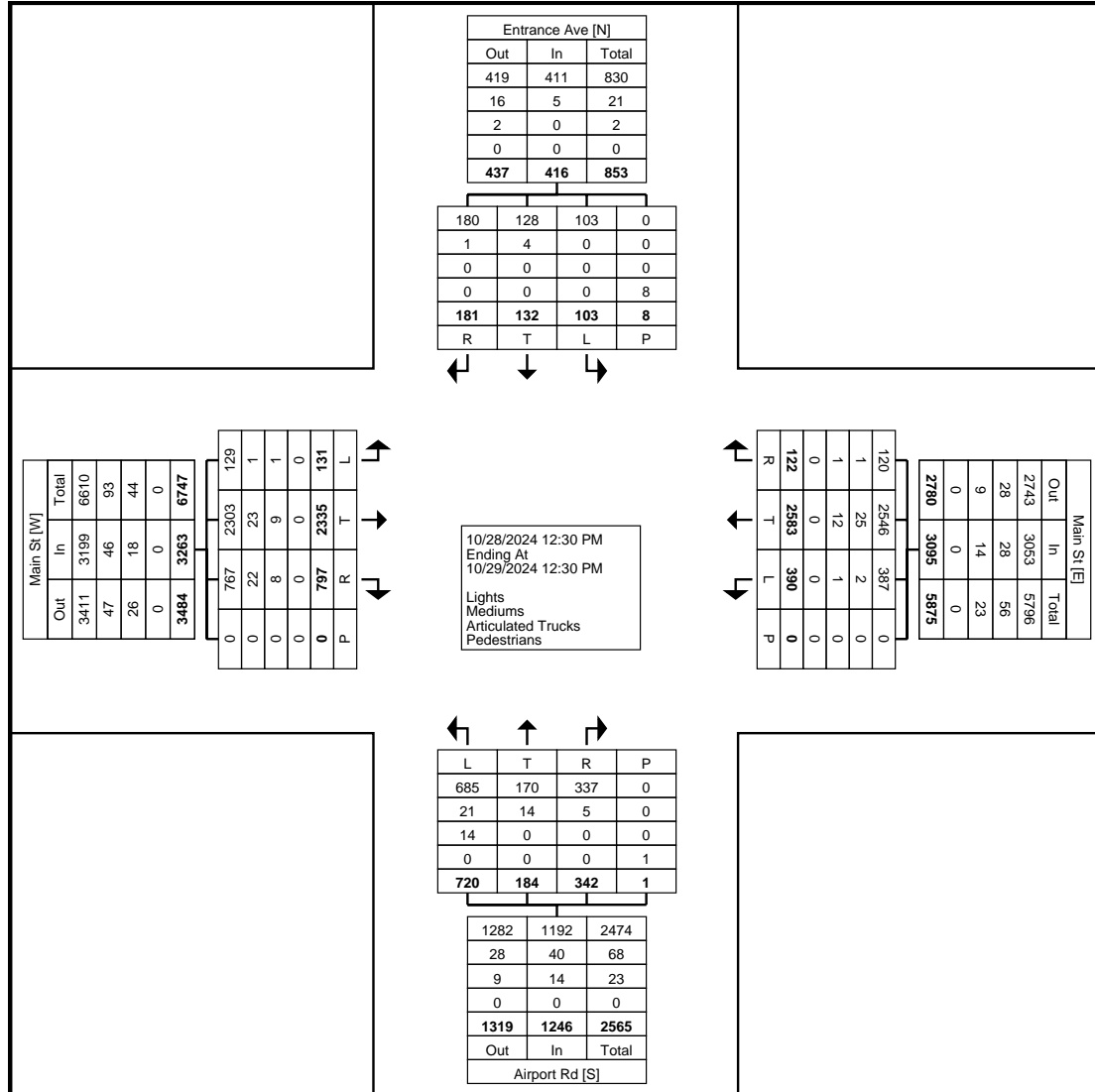
12:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	2	1	1	0	0	2	4
12:45 AM	1	0	0	0	1	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
Hourly Total	2	0	2	0	4	0	0	0	0	0	7	0	0	7	2	3	0	0	5	16
1:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2
1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
1:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	4
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	3	0	0	3	4
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 AM	0	0	1	0	1	0	0	0	0	0	2	1	0	3	0	0	0	0	0	4
2:45 AM	1	0	0	0	1	0	0	0	0	0	1	1	0	2	0	0	0	0	0	3
Hourly Total	1	0	1	0	2	0	0	0	0	0	3	3	0	6	0	3	0	0	3	11
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	2
3:15 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	1	0	0	1	3
3:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0	1	1	1	0	2	0	0	2	0	0	0	0	3
Hourly Total	0	0	0	0	0	0	0	1	2	1	0	2	3	0	5	0	2	0	0	8
4:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
4:15 AM	0	0	1	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
4:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0	0	2	3
4:45 AM	1	0	0	0	1	0	0	1	0	1	0	2	1	0	3	0	7	0	0	7
Hourly Total	1	0	1	0	2	0	0	1	0	1	0	5	1	0	6	0	9	0	0	9
5:00 AM	1	0	0	0	1	0	1	1	0	2	0	2	0	0	2	0	5	0	0	5
5:15 AM	3	1	1	0	5	0	0	1	0	1	0	4	1	0	5	0	7	0	0	7
5:30 AM	8	2	1	0	11	0	1	4	0	5	0	5	2	0	7	3	16	0	0	19
5:45 AM	5	0	0	0	5	1	0	0	0	1	0	10	5	0	15	4	14	0	0	18
Hourly Total	17	3	2	0	22	1	2	6	0	9	0	21	8	0	29	7	42	0	0	49
6:00 AM	7	3	4	0	14	0	0	0	0	0	0	9	2	0	11	6	8	0	0	14
6:15 AM	2	0	0	0	2	0	2	1	0	3	0	7	0	0	7	2	20	0	0	22
6:30 AM	2	0	0	0	2	0	2	2	0	4	0	7	7	0	14	12	18	0	0	30
6:45 AM	13	1	3	0	17	0	8	2	1	10	1	16	13	0	30	12	40	0	0	52
Hourly Total	24	4	7	0	35	0	12	5	1	17	1	39	22	0	62	32	86	0	0	118
7:00 AM	14	0	4	0	18	1	1	2	0	4	0	19	7	0	26	4	19	0	0	23
7:15 AM	14	0	4	0	18	0	2	2	0	4	0	23	12	0	35	3	35	1	0	39
7:30 AM	22	4	7	0	33	0	1	2	0	3	2	27	14	0	43	5	42	4	0	51
7:45 AM	24	9	7	0	40	1	11	3	1	15	3	32	23	0	58	22	70	2	0	94
Hourly Total	74	13	22	0	109	2	15	9	1	26	5	101	56	0	162	34	166	7	0	207
8:00 AM	27	8	11	0	46	0	4	5	0	9	1	27	15	0	43	13	49	3	0	65
8:15 AM	17	2	5	0	24	1	2	2	0	5	4	22	11	0	37	4	33	2	0	39
8:30 AM	12	2	1	0	15	0	1	2	0	3	1	31	13	0	45	1	30	4	0	35
8:45 AM	13	2	7	0	22	1	1	4	1	6	1	31	12	0	44	6	27	2	0	35
Hourly Total	69	14	24	0	107	2	8	13	1	23	7	111	51	0	169	24	139	11	0	174
9:00 AM	5	2	8	0	15	1	2	1	0	4	1	28	7	0	36	8	37	3	0	48
9:15 AM	13	3	2	0	18	1	0	5	0	6	1	40	7	0	48	7	36	2	0	45
9:30 AM	7	3	3	0	13	0	0	2	0	2	3	27	14	0	44	4	33	0	0	37
9:45 AM	14	2	5	0	21	3	2	3	0	8	2	34	8	0	44	13	45	2	0	60
Hourly Total	39	10	18	0	67	5	4	11	0	20	7	129	36	0	172	32	151	7	0	190
10:00 AM	15	3	6	0	24	1	1	3	0	5	1	39	11	0	51	6	31	4	0	41
10:15 AM	9	4	6	0	19	0	0	3	0	3	1	54	8	0	63	5	37	1	0	43
10:30 AM	12	1	9	0	22	2	0	2	0	4	0	52	12	0	64	3	42	6	0	51
10:45 AM	12	5	7	0	24	2	0	3	0	5	3	57	9	0	69	6	55	0	0	61
Hourly Total	48	13	28	0	89	5	1	11	0	17	5	202	40	0	247	20	165	11	0	196
11:00 AM	6	1	9	0	16	1	2	5	0	8	2	41	18	0	61	9	41	0	0	50
11:15 AM	6	3	6	0	15	5	2	3	0	10	6	64	19	0	89	7	48	2	0	57
11:30 AM	11	4	10	0	25	1	3	3	0	7	0	51	8	0	59	13	50	5	0	68
11:45 AM	13	4	9	0	26	4	5	1	0	10	6	51	19	0	76	9	76	1	0	86
Hourly Total	36	12	34	0	82	11	12	12	0	35	14	207	64	0	285	38	215	8	0	261
12:00 PM	23	9	17	0	49	5	2	4	0	11	2	59	22	0	83	9	56	3	0	68
12:15 PM	14	0	6	0	20	4	1	0	0	5	3	53	33	0	89	17	73	2	0	92
Grand Total	720	184	342	1	1246	103	132	181	8	416	131	2335	797	0	3263	390	2583	122	0	3095
Approach %	57.8	14.8	27.4	-	-	24.8	31.7	43.5	-	-	4.0	71.6	24.4	-	-	12.6	83.5	3.9	-	-
Total %	9.0	2.3	4.3	-	15.5	1.3	1.6	2.3	-	5.2	1.6	29.1	9.9	-	40.7	4.9	32.2	1.5	-	38.6
Lights	685	170	337	-	1192	103	128	180	-	411	129	2303	767	-	3199	387	2546	120	-	3053
% Lights	95.1	92.4	98.5	-	95.7	100.0	97.0	99.4	-	98.8	98.5	98.6	96.2	-	98.0	99.2	98.6	98.4	-	98.6
Mediums	21	14	5	-	40	0	4	1	-	5	1	23	22	-	46	2	25	1	-	28
% Mediums	2.9	7.6	1.5	-	3.2	0.0	3.0	0.6	-	1.2	0.8	1.0	2.8	-	1.4	0.5	1.0	0.8	-	0.9
Articulated Trucks	14	0	0	-	14	0	0	0	-	0	1	9	8	-	18	1	12	1	-	14
% Articulated Trucks	1.9	0.0	0.0	-	1.1	0.0	0.0	0.0	-	0.0	0.8	0.4	1.0	-	0.6	0.3	0.5	0.8	-	0.5
Pedestrians	-	-	-	1	-	-	-	-	8	-	-	-	-	0	-	-	-	-	0	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-



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Count Name: Main St & Airport  
Rd  
Site Code: Lewistown  
Start Date: 10/28/2024  
Page No: 3



Turning Movement Data Plot

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Count Name: Main St & Airport  
Rd  
Site Code: Lewistown  
Start Date: 10/28/2024  
Page No: 4

### Turning Movement Peak Hour Data (12:30 PM)

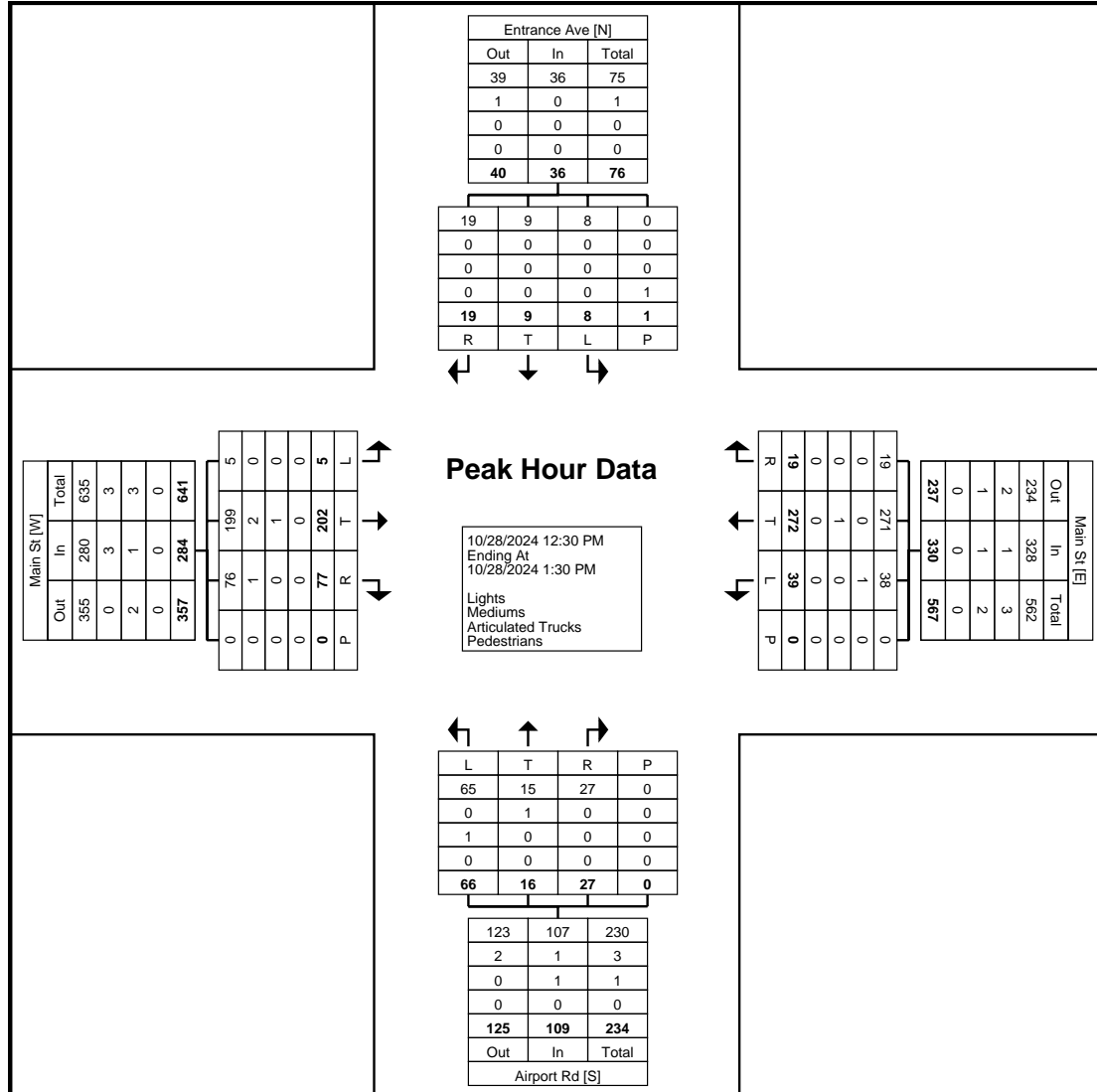
[illegible]



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Count Name: Main St & Airport  
Rd  
Site Code: Lewistown  
Start Date: 10/28/2024  
Page No: 5



Turning Movement Peak Hour Data Plot (12:30 PM)

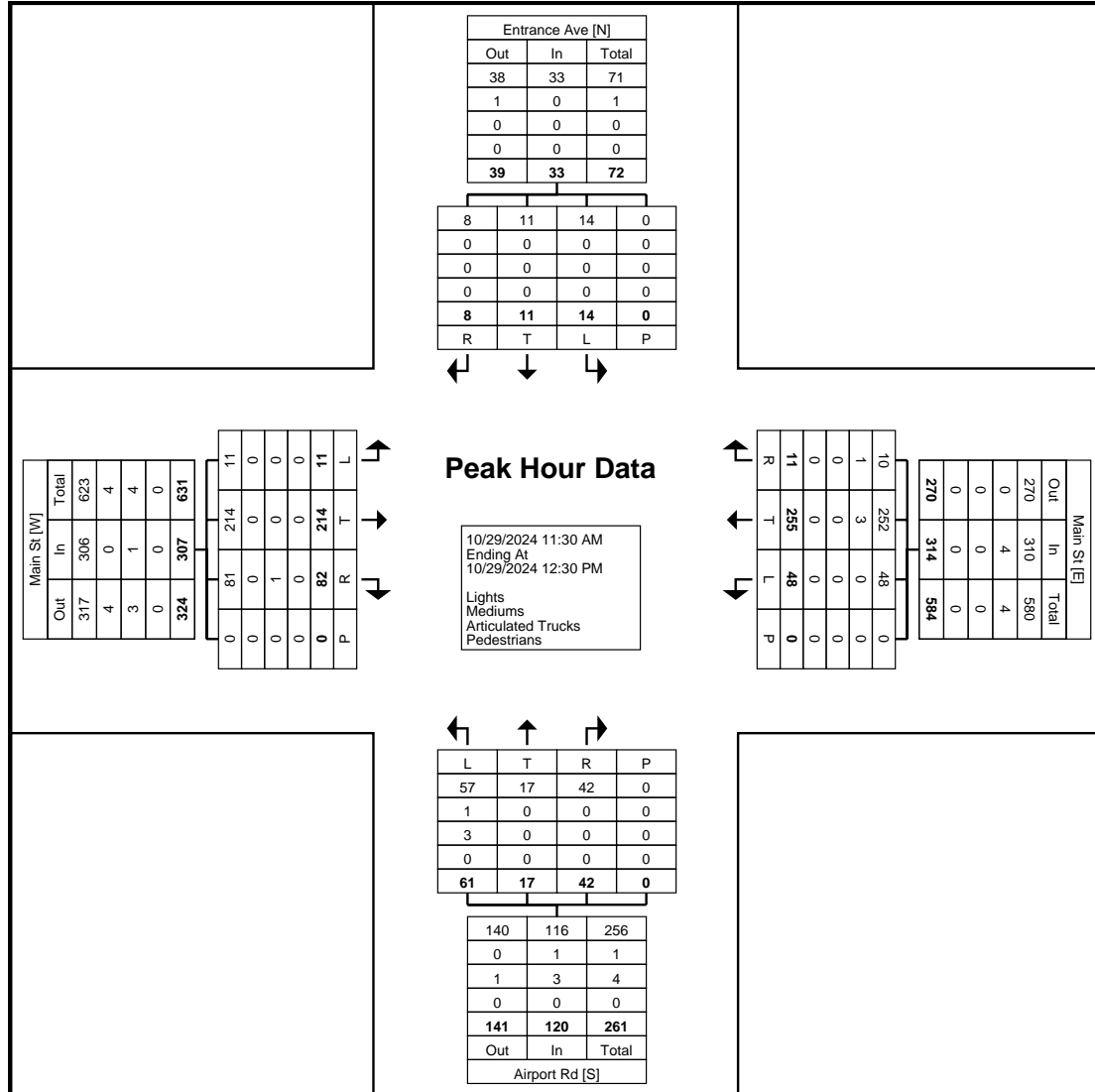




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Count Name: Main St & Airport  
Rd  
Site Code: Lewistown  
Start Date: 10/28/2024  
Page No: 7



Turning Movement Peak Hour Data Plot (11:30 AM)

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Count Name: Fluorite Dr &  
Uranium Dr/Birch St  
Site Code:  
Start Date: 04/09/2025  
Page No: 1

## Turning Movement Data

Start Time	Fluorite Dr Northbound					Fluorite Dr Southbound					Uranium Dr Eastbound					Birch St Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
2:45 PM	0	7	2	0	9	9	7	1	0	17	0	1	0	0	1	0	1	15	0	16	43
Hourly Total	0	7	2	0	9	9	7	1	0	17	0	1	0	0	1	0	1	15	0	16	43
3:00 PM	0	8	5	0	13	15	9	4	0	28	0	0	0	0	0	4	0	19	4	23	64
3:15 PM	1	34	12	0	47	15	11	4	0	30	0	0	0	0	0	3	1	31	10	35	112
3:30 PM	1	14	4	1	19	16	5	5	0	26	1	0	1	0	2	1	0	14	2	15	62
3:45 PM	0	5	1	0	6	12	7	2	0	21	0	0	0	0	0	0	0	18	0	18	45
Hourly Total	2	61	22	1	85	58	32	15	0	105	1	0	1	0	2	8	1	82	16	91	283
4:00 PM	0	7	0	1	7	7	8	2	0	17	3	0	0	1	3	0	1	12	3	13	40
4:15 PM	0	4	1	0	5	15	5	1	0	21	4	0	0	0	4	0	0	18	1	18	48
4:30 PM	1	3	0	0	4	21	9	8	0	38	1	0	0	0	1	0	2	34	3	36	79
4:45 PM	1	5	0	0	6	19	12	5	0	36	4	0	0	0	4	0	0	16	0	16	62
Hourly Total	2	19	1	1	22	62	34	16	0	112	12	0	0	1	12	0	3	80	7	83	229
5:00 PM	0	9	2	0	11	20	4	4	0	28	1	0	0	0	1	2	0	14	0	16	56
5:15 PM	2	4	0	0	6	21	9	4	0	34	2	0	0	0	2	0	2	17	1	19	61
5:30 PM	1	5	1	4	7	14	2	5	0	21	3	0	0	0	3	0	0	10	1	10	41
5:45 PM	0	2	0	0	2	18	5	0	0	23	0	0	1	0	1	0	0	6	0	6	32
Hourly Total	3	20	3	4	26	73	20	13	0	106	6	0	1	0	7	2	2	47	2	51	190
6:00 PM	0	2	0	0	2	13	4	8	0	25	1	0	0	0	1	0	1	12	0	13	41
6:15 PM	1	5	0	0	6	7	5	0	0	12	1	0	0	0	1	0	0	12	0	12	31
6:30 PM	0	1	0	0	1	12	8	1	0	21	1	0	0	0	1	0	1	12	0	13	36
6:45 PM	0	0	0	0	0	2	2	3	0	7	3	1	4	0	8	0	0	6	1	6	21
Hourly Total	1	8	0	0	9	34	19	12	0	65	6	1	4	0	11	0	2	42	1	44	129
7:00 PM	0	3	0	0	3	11	5	2	0	18	2	1	0	0	3	1	0	5	0	6	30
7:15 PM	0	3	0	0	3	8	8	2	0	18	3	0	0	0	3	0	0	5	1	5	29
7:30 PM	0	2	0	3	2	6	3	3	0	12	0	0	1	0	1	0	1	9	2	10	25
7:45 PM	0	2	1	0	3	18	5	1	0	24	0	0	0	0	0	0	2	5	1	7	34
Hourly Total	0	10	1	3	11	43	21	8	0	72	5	1	1	0	7	1	3	24	4	28	118
8:00 PM	0	3	0	0	3	6	7	0	0	13	0	0	0	1	0	0	1	4	0	5	21
8:15 PM	0	1	0	0	1	2	3	2	0	7	0	0	0	0	0	0	0	2	0	2	10
8:30 PM	0	2	0	0	2	3	2	0	0	5	1	0	0	0	1	0	0	6	0	6	14
8:45 PM	0	1	0	0	1	3	1	0	0	4	0	1	0	0	1	0	1	0	0	1	7
Hourly Total	0	7	0	0	7	14	13	2	0	29	1	1	0	1	2	0	2	12	0	14	52
9:00 PM	0	0	0	0	0	3	0	2	0	5	2	0	0	0	2	0	0	1	0	1	8
9:15 PM	0	3	0	0	3	3	0	0	0	3	1	0	0	0	1	0	0	2	0	2	9
9:30 PM	0	1	0	0	1	0	2	2	0	4	0	0	0	0	0	0	0	1	0	1	6
9:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0	1	0	1	3
Hourly Total	0	4	0	0	4	6	3	4	0	13	3	0	1	0	4	0	0	5	0	5	26
10:00 PM	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	1	2	0	3	7
10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	1	0	1	3
10:45 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
Hourly Total	0	0	0	0	0	5	1	1	0	7	0	0	0	0	0	0	1	3	0	4	11
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
11:15 PM	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	0	1	0	1	3
11:30 PM	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
11:45 PM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Hourly Total	0	1	0	0	1	3	1	0	0	4	0	1	0	0	1	0	0	2	0	2	8
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
1:00 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

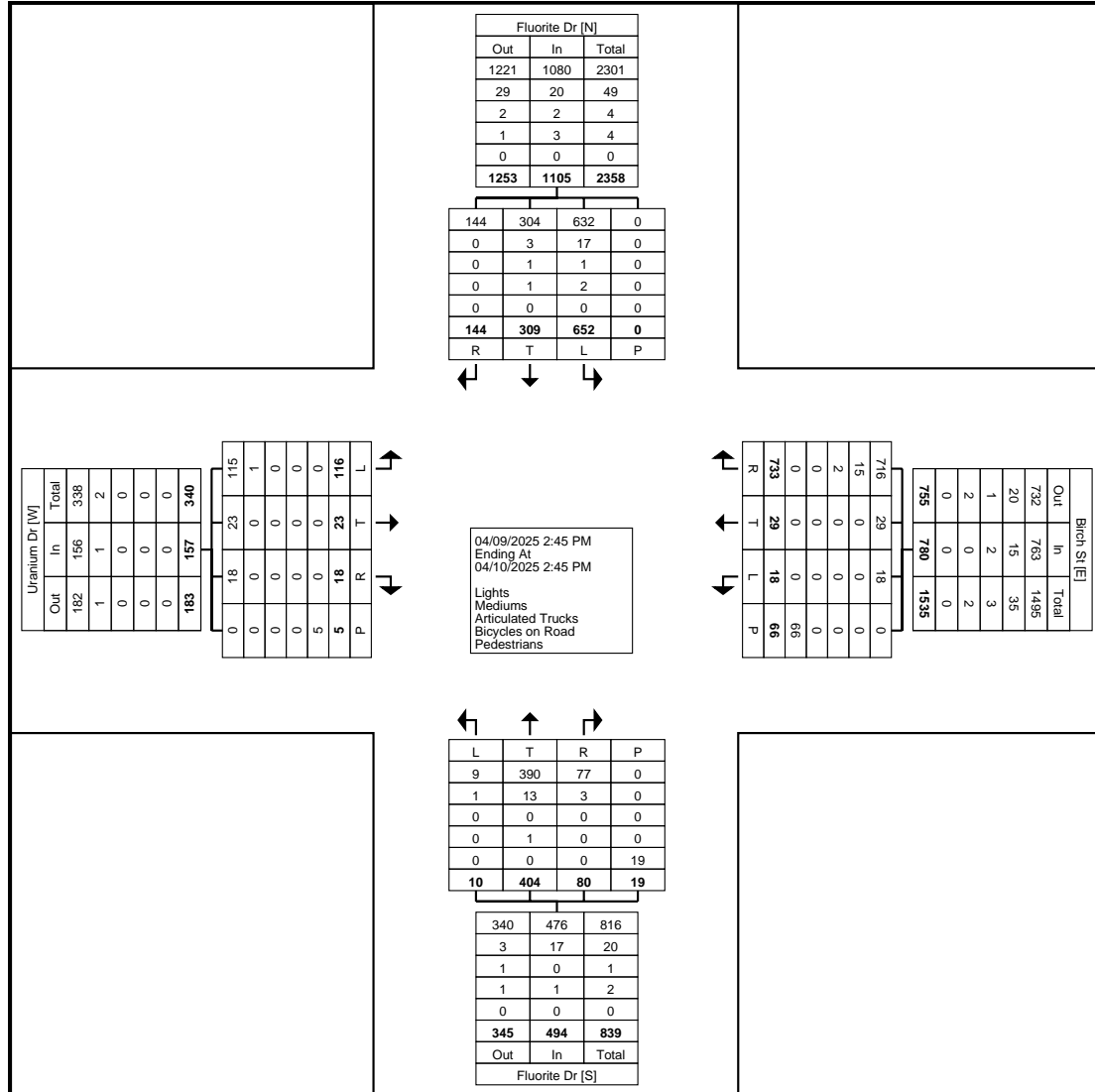
2:45 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Hourly Total	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	2
3:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1
3:45 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Hourly Total	0	0	0	0	0	2	2	0	0	4	0	0	0	0	0	0	0	0	0	4
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 AM	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	1	0	1	3
4:30 AM	0	2	0	0	2	1	0	0	0	1	0	0	0	0	0	0	1	0	1	4
4:45 AM	0	1	0	0	1	2	0	0	0	2	1	0	0	0	1	0	0	0	0	4
Hourly Total	0	4	0	0	4	4	0	0	0	4	1	0	0	0	1	0	0	2	0	11
5:00 AM	0	5	0	0	5	0	1	1	0	2	2	0	0	0	2	0	0	3	0	12
5:15 AM	0	0	0	0	0	3	5	1	0	9	0	0	0	0	0	0	0	2	0	11
5:30 AM	0	1	0	0	1	4	1	0	0	5	2	0	0	0	2	0	0	5	0	13
5:45 AM	0	1	0	0	1	5	0	1	0	6	0	0	0	0	0	0	0	6	0	13
Hourly Total	0	7	0	0	7	12	7	3	0	22	4	0	0	0	4	0	0	16	0	49
6:00 AM	0	4	1	0	5	2	2	0	0	4	2	0	0	0	2	0	0	5	0	16
6:15 AM	0	4	0	0	4	1	0	0	0	1	0	0	0	0	0	0	0	4	0	9
6:30 AM	0	4	0	0	4	2	1	0	0	3	3	0	0	0	3	0	0	12	0	22
6:45 AM	1	8	0	0	9	11	2	1	0	14	1	0	0	0	1	0	0	13	0	37
Hourly Total	1	20	1	0	22	16	5	1	0	22	6	0	0	0	6	0	0	34	0	84
7:00 AM	0	2	0	0	2	5	3	1	0	9	2	0	0	0	2	0	0	12	1	25
7:15 AM	0	3	0	0	3	4	4	1	0	9	4	0	0	0	4	0	1	13	3	30
7:30 AM	0	23	12	1	35	15	7	2	0	24	8	3	2	0	13	1	0	9	3	82
7:45 AM	0	67	17	2	84	36	18	4	0	58	0	0	5	0	5	2	0	30	19	179
Hourly Total	0	95	29	3	124	60	32	8	0	100	14	3	7	0	24	3	1	64	26	316
8:00 AM	0	19	12	0	31	12	9	2	0	23	3	1	0	0	4	0	3	16	0	77
8:15 AM	0	9	1	0	10	6	2	2	0	10	1	0	0	0	1	0	0	12	0	33
8:30 AM	0	3	3	1	6	8	3	0	0	11	2	2	0	0	4	0	0	3	3	24
8:45 AM	0	8	2	0	10	15	2	1	0	18	1	1	0	0	2	0	1	9	1	40
Hourly Total	0	39	18	1	57	41	16	5	0	62	7	4	0	0	11	0	4	40	4	174
9:00 AM	0	5	0	2	5	7	0	1	0	8	0	0	0	3	0	0	1	15	1	29
9:15 AM	0	5	0	1	5	8	2	3	0	13	2	1	0	0	3	0	1	5	2	27
9:30 AM	0	2	0	1	2	3	5	0	0	8	4	1	0	0	5	1	0	11	0	27
9:45 AM	0	3	0	0	3	9	2	0	0	11	4	1	1	0	6	0	1	6	0	27
Hourly Total	0	15	0	4	15	27	9	4	0	40	10	3	1	3	14	1	3	37	3	110
10:00 AM	1	3	0	2	4	9	0	0	0	9	1	0	0	0	1	0	1	5	2	20
10:15 AM	0	0	0	0	0	3	3	3	0	9	2	0	0	0	2	0	0	11	0	22
10:30 AM	0	0	0	0	0	3	5	2	0	10	2	1	0	0	3	1	0	10	0	24
10:45 AM	0	4	1	0	5	9	4	1	0	14	3	0	0	0	3	1	0	8	0	31
Hourly Total	1	7	1	2	9	24	12	6	0	42	8	1	0	0	9	2	1	34	2	97
11:00 AM	0	7	0	0	7	7	4	6	0	17	2	0	0	0	2	0	0	10	1	36
11:15 AM	0	7	1	0	8	8	2	2	0	12	0	0	0	0	0	0	0	9	0	29
11:30 AM	0	8	0	0	8	9	8	3	0	20	3	0	0	0	3	0	0	8	0	39
11:45 AM	0	5	0	0	5	11	5	7	0	23	0	0	0	0	0	0	1	13	0	42
Hourly Total	0	27	1	0	28	35	19	18	0	72	5	0	0	0	5	0	1	40	1	146
12:00 PM	0	5	0	0	5	13	11	5	0	29	3	0	0	0	3	0	0	32	0	69
12:15 PM	0	3	0	0	3	19	3	4	0	26	2	1	0	0	3	0	0	14	0	46
12:30 PM	0	4	0	0	4	14	7	2	0	23	2	2	2	0	6	0	3	5	0	41
12:45 PM	0	3	0	0	3	18	3	3	0	24	5	0	0	0	5	1	0	20	0	53
Hourly Total	0	15	0	0	15	64	24	14	0	102	12	3	2	0	17	1	3	71	0	209
1:00 PM	0	8	0	0	8	12	8	4	0	24	6	0	0	0	6	0	0	7	0	45
1:15 PM	0	4	1	0	5	5	3	0	0	8	2	0	0	0	2	0	1	16	0	32
1:30 PM	0	8	0	0	8	6	5	1	0	12	2	0	0	0	2	0	0	12	0	34
1:45 PM	0	8	0	0	8	9	5	1	0	15	0	1	0	0	1	0	0	8	0	32
Hourly Total	0	28	1	0	29	32	21	6	0	59	10	1	0	0	11	0	1	43	0	143
2:00 PM	0	2	0	0	2	7	0	2	0	9	0	0	0	0	0	0	0	11	0	22
2:15 PM	0	4	0	0	4	8	6	3	0	17	2	1	0	0	3	0	0	16	0	40
2:30 PM	0	4	0	0	4	10	5	2	0	17	3	2	0	0	5	0	0	13	0	39
Grand Total	10	404	80	19	494	652	309	144	0	1105	116	23	18	5	157	18	29	733	66	2536
Approach %	2.0	81.8	16.2	-	-	59.0	28.0	13.0	-	-	73.9	14.6	11.5	-	-	2.3	3.7	94.0	-	-
Total %	0.4	15.9	3.2	-	19.5	25.7	12.2	5.7	-	43.6	4.6	0.9	0.7	-	6.2	0.7	1.1	28.9	-	30.8
Lights	9	390	77	-	476	632	304	144	-	1080	115	23	18	-	156	18	29	716	-	763
% Lights	90.0	96.5	96.3	-	96.4	96.9	98.4	100.0	-	97.7	99.1	100.0	100.0	-	99.4	100.0	100.0	97.7	-	97.8
Mediums	1	13	3	-	17	17	3	0	-	20	1	0	0	-	1	0	0	15	-	15
% Mediums	10.0	3.2	3.8	-	3.4	2.6	1.0	0.0	-	1.8	0.9	0.0	0.0	-	0.6	0.0	0.0	2.0	-	1.9
Articulated Trucks	0	0	0	-	0	1	1	0	-	2	0	0	0	-	0	0	0	2	-	2
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.2	0.3	0.0	-	0.2	0.0	0.0	0.0	-	0.0	0.0	0.0	0.3	-	0.2
Bicycles on Road	0	1	0	-	1	2	1	0	-	3	0	0	0	-	0	0	0	0	-	0
% Bicycles on Road	0.0	0.2	0.0	-	0.2	0.3	0.3	0.0	-	0.3	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0
Pedestrians	-	-	-	19	-	-	-	-	0	-	-	-	-	5	-	-	-	-	66	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	100.0	-



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Count Name: Fluorite Dr &  
Uranium Dr/Birch St  
Site Code:  
Start Date: 04/09/2025  
Page No: 3



Turning Movement Data Plot



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Helena, Montana, United States 59601  
406-447-5000 srandall@rpa-hln.com

Count Name: Fluorite Dr &  
Uranium Dr/Birch St  
Site Code:  
Start Date: 04/09/2025  
Page No: 4

### Turning Movement Peak Hour Data (3:00 PM)

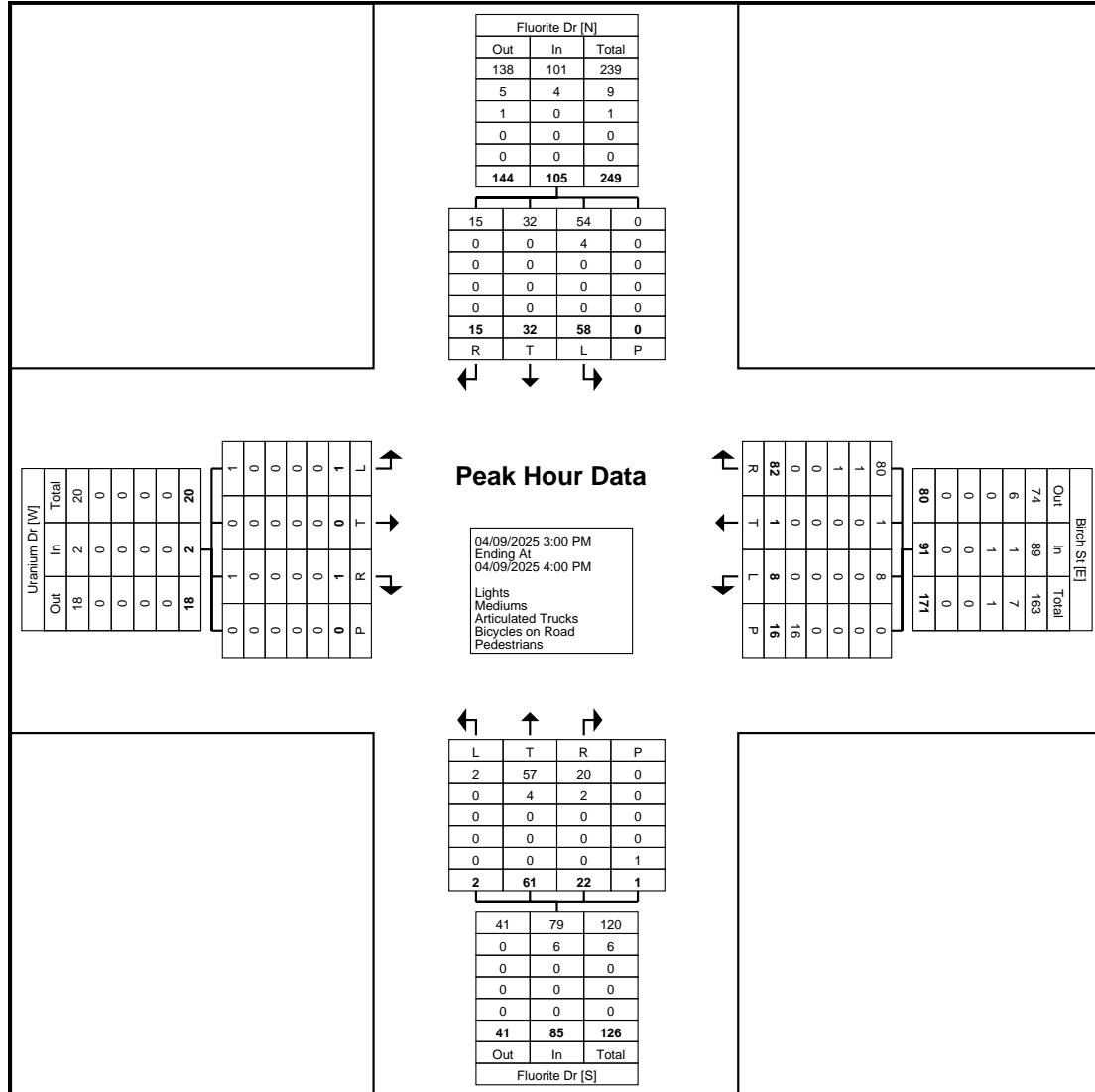
Start Time	Fluorite Dr Northbound					Fluorite Dr Southbound					Uranium Dr Eastbound					Birch St Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
3:00 PM	0	8	5	0	13	15	9	4	0	28	0	0	0	0	0	4	0	19	4	23	64
3:15 PM	1	34	12	0	47	15	11	4	0	30	0	0	0	0	0	3	1	31	10	35	112
3:30 PM	1	14	4	1	19	16	5	5	0	26	1	0	1	0	2	1	0	14	2	15	62
3:45 PM	0	5	1	0	6	12	7	2	0	21	0	0	0	0	0	0	0	18	0	18	45
Total	2	61	22	1	85	58	32	15	0	105	1	0	1	0	2	8	1	82	16	91	283
Approach %	2.4	71.8	25.9	-	-	55.2	30.5	14.3	-	-	50.0	0.0	50.0	-	-	8.8	1.1	90.1	-	-	-
Total %	0.7	21.6	7.8	-	30.0	20.5	11.3	5.3	-	37.1	0.4	0.0	0.4	-	0.7	2.8	0.4	29.0	-	32.2	-
PHF	0.500	0.449	0.458	-	0.452	0.906	0.727	0.750	-	0.875	0.250	0.000	0.250	-	0.250	0.500	0.250	0.661	-	0.650	0.632
Lights	2	57	20	-	79	54	32	15	-	101	1	0	1	-	2	8	1	80	-	89	271
% Lights	100.0	93.4	90.9	-	92.9	93.1	100.0	100.0	-	96.2	100.0	-	100.0	-	100.0	100.0	100.0	97.6	-	97.8	95.8
Mediums	0	4	2	-	6	4	0	0	-	4	0	0	0	-	0	0	0	1	-	1	11
% Mediums	0.0	6.6	9.1	-	7.1	6.9	0.0	0.0	-	3.8	0.0	-	0.0	-	0.0	0.0	0.0	1.2	-	1.1	3.9
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	1	-	1	1
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	1.2	-	1.1	0.4
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-	-	-	16	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



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Count Name: Fluorite Dr &  
Uranium Dr/Birch St  
Site Code:  
Start Date: 04/09/2025  
Page No: 5



Turning Movement Peak Hour Data Plot (3:00 PM)



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Count Name: Fluorite Dr &  
Uranium Dr/Birch St  
Site Code:  
Start Date: 04/09/2025  
Page No: 6

### Turning Movement Peak Hour Data (7:30 AM)

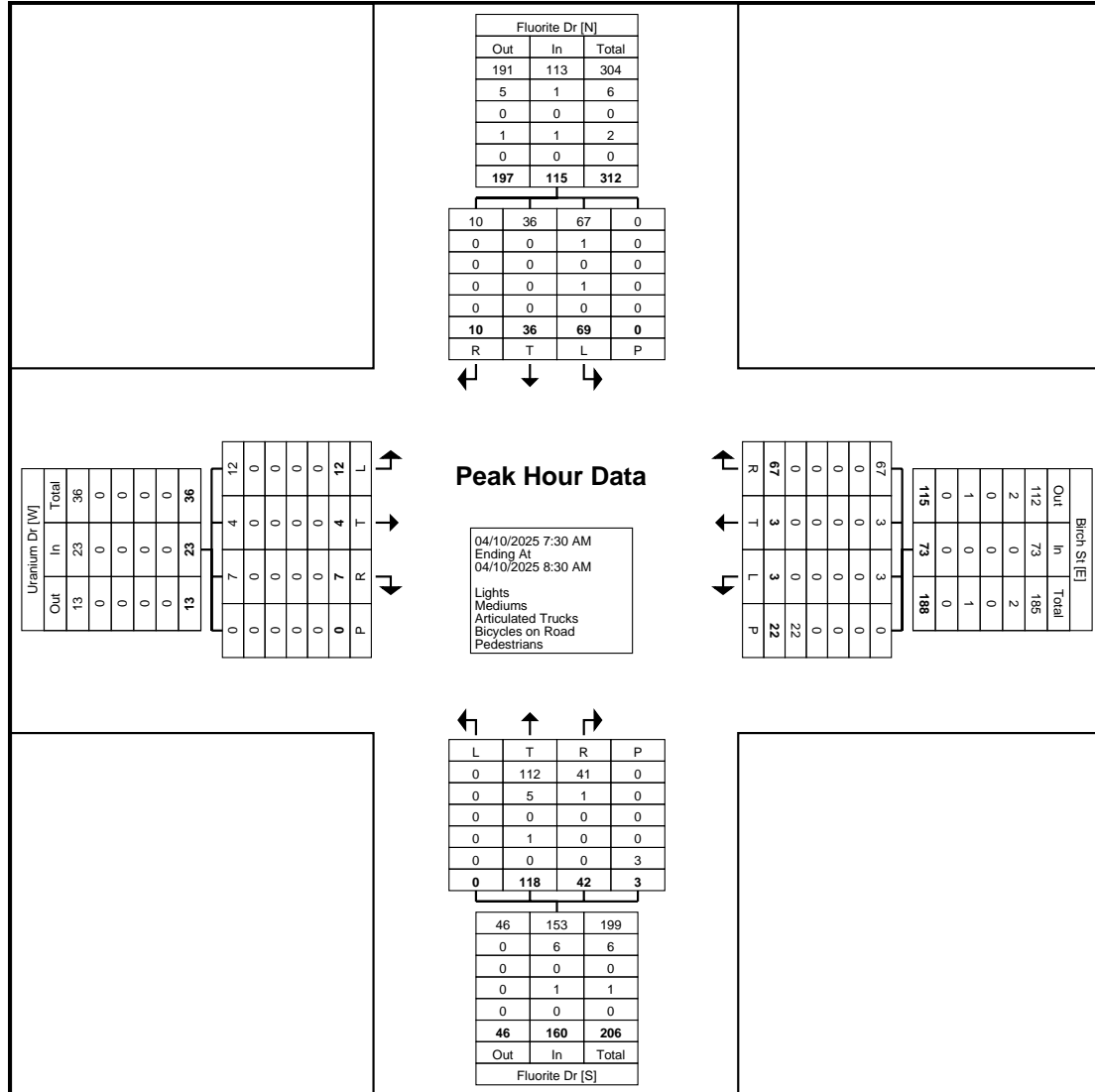
Start Time	Fluorite Dr Northbound					Fluorite Dr Southbound					Uranium Dr Eastbound					Birch St Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
7:30 AM	0	23	12	1	35	15	7	2	0	24	8	3	2	0	13	1	0	9	3	10	82
7:45 AM	0	67	17	2	84	36	18	4	0	58	0	0	5	0	5	2	0	30	19	32	179
8:00 AM	0	19	12	0	31	12	9	2	0	23	3	1	0	0	4	0	3	16	0	19	77
8:15 AM	0	9	1	0	10	6	2	2	0	10	1	0	0	0	1	0	0	12	0	12	33
Total	0	118	42	3	160	69	36	10	0	115	12	4	7	0	23	3	3	67	22	73	371
Approach %	0.0	73.8	26.3	-	-	60.0	31.3	8.7	-	-	52.2	17.4	30.4	-	-	4.1	4.1	91.8	-	-	-
Total %	0.0	31.8	11.3	-	43.1	18.6	9.7	2.7	-	31.0	3.2	1.1	1.9	-	6.2	0.8	0.8	18.1	-	19.7	-
PHF	0.000	0.440	0.618	-	0.476	0.479	0.500	0.625	-	0.496	0.375	0.333	0.350	-	0.442	0.375	0.250	0.558	-	0.570	0.518
Lights	0	112	41	-	153	67	36	10	-	113	12	4	7	-	23	3	3	67	-	73	362
% Lights	-	94.9	97.6	-	95.6	97.1	100.0	100.0	-	98.3	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	97.6
Mediums	0	5	1	-	6	1	0	0	-	1	0	0	0	-	0	0	0	0	-	0	7
% Mediums	-	4.2	2.4	-	3.8	1.4	0.0	0.0	-	0.9	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	1.9
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	1	0	-	1	1	0	0	-	1	0	0	0	-	0	0	0	0	-	0	2
% Bicycles on Road	-	0.8	0.0	-	0.6	1.4	0.0	0.0	-	0.9	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.5
Pedestrians	-	-	-	3	-	-	-	-	0	-	-	-	-	0	-	-	-	-	22	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



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Count Name: Fluorite Dr &  
Uranium Dr/Birch St  
Site Code:  
Start Date: 04/09/2025  
Page No: 7



Turning Movement Peak Hour Data Plot (7:30 AM)

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Count Name: Fluorite Dr &  
Uranium Dr/Birch St  
Site Code:  
Start Date: 04/09/2025  
Page No: 8

### Turning Movement Peak Hour Data (12:00 PM)

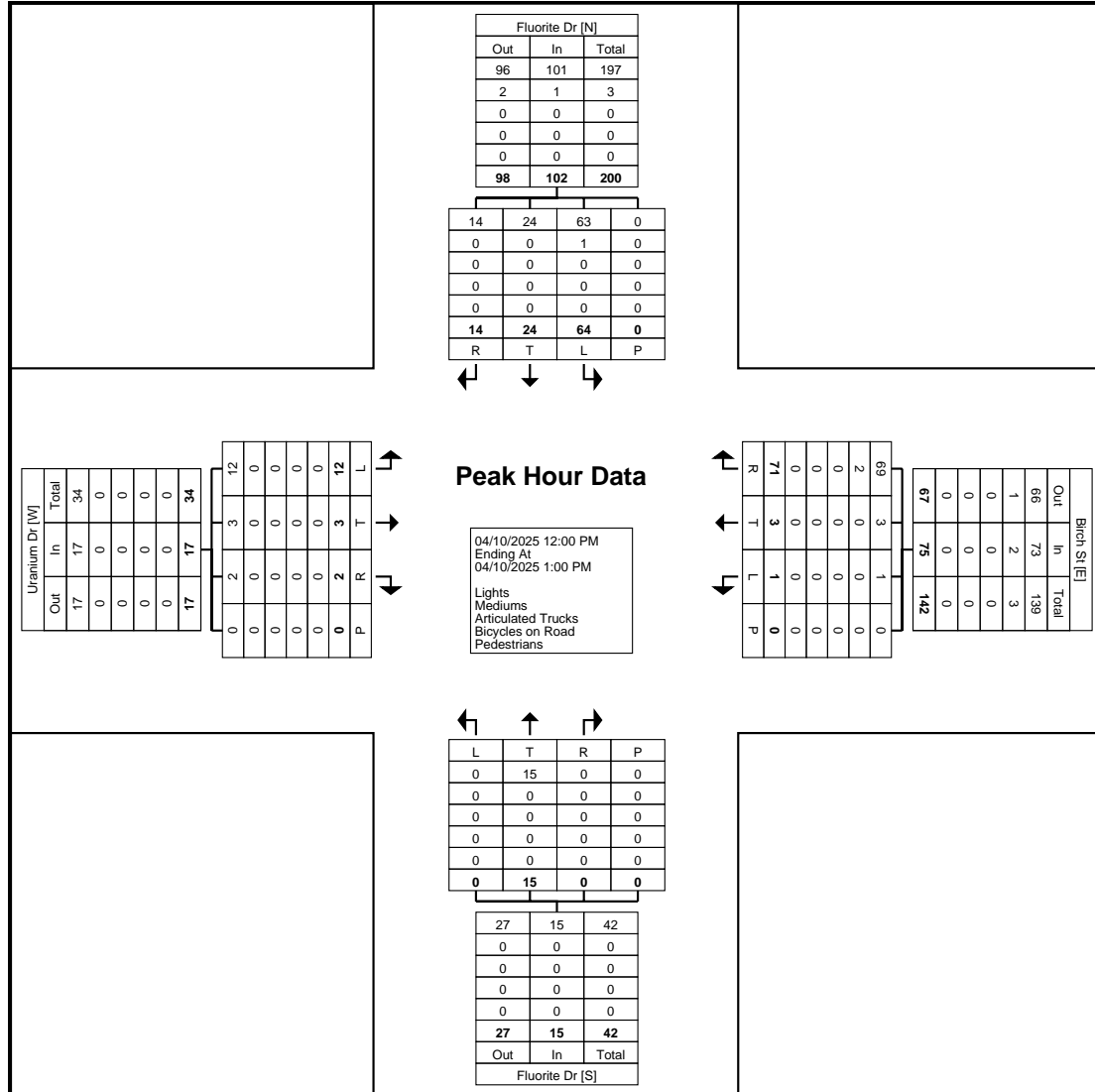
[illegible]



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Count Name: Fluorite Dr &  
Uranium Dr/Birch St  
Site Code:  
Start Date: 04/09/2025  
Page No: 9



Turning Movement Peak Hour Data Plot (12:00 PM)

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406-447-5000 [srandall@rpa-hln.com](mailto:srandall@rpa-hln.com)

Count Name: Upper Spring  
Creek Rd & E Ash St  
Site Code:  
Start Date: 04/09/2025  
Page No: 1

## Turning Movement Data

[illegible]

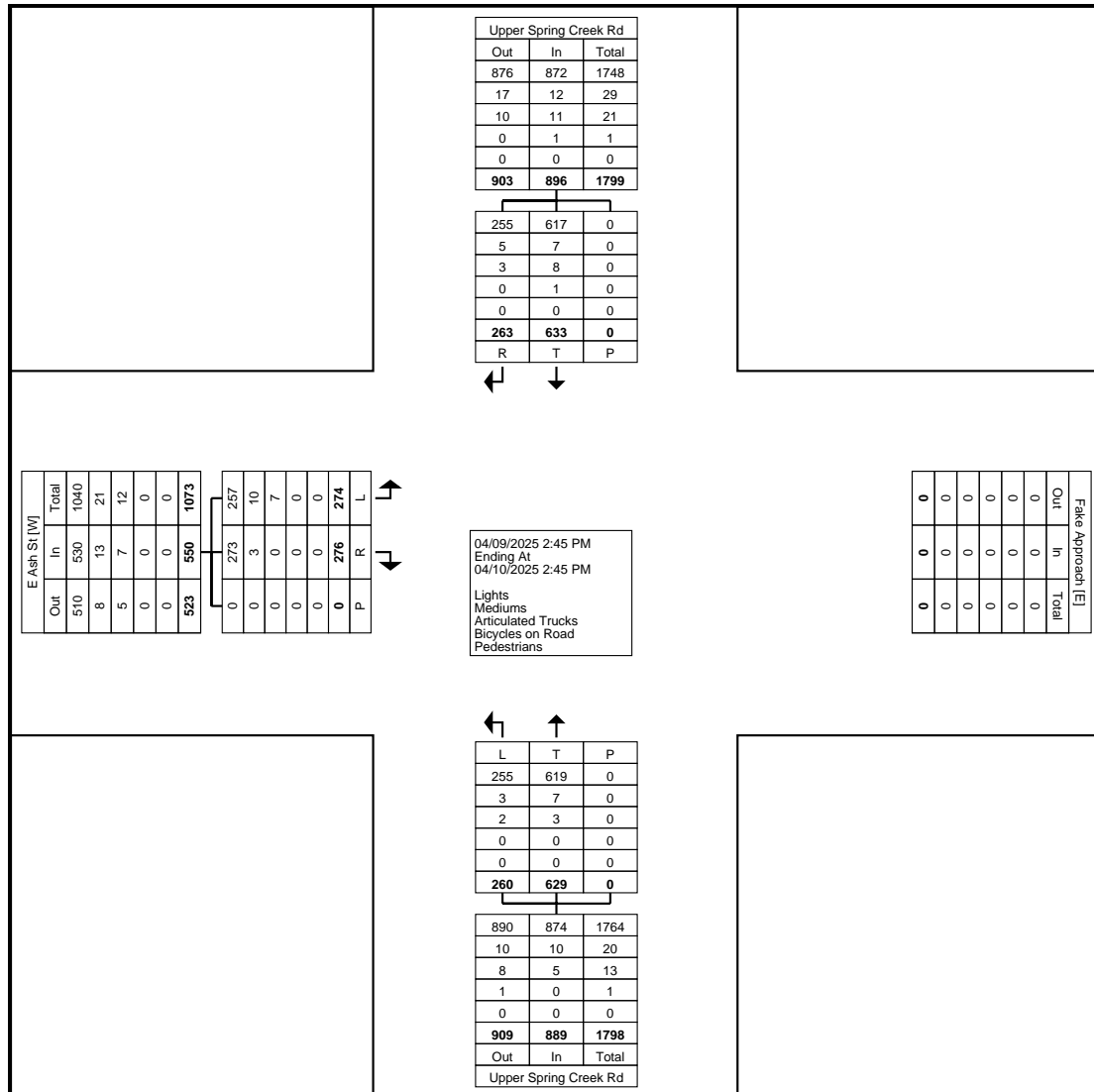
Hourly Total	0	0	0	0	0	1	0	1	0	0	0	0	1
3:00 AM	0	6	0	6	0	0	0	0	0	0	0	0	6
3:15 AM	2	4	0	6	0	0	0	0	0	0	0	0	6
3:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
3:45 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
Hourly Total	2	10	0	12	1	0	0	1	1	0	0	1	14
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	2	1	0	3	0	0	0	0	3
4:30 AM	1	1	0	2	2	0	0	2	1	0	0	1	5
4:45 AM	1	0	0	1	1	0	0	1	1	0	0	1	3
Hourly Total	2	1	0	3	5	1	0	6	2	0	0	2	11
5:00 AM	1	6	0	7	1	0	0	1	1	0	0	1	9
5:15 AM	0	3	0	3	5	0	0	5	0	1	0	1	9
5:30 AM	3	0	0	3	8	2	0	10	0	1	0	1	14
5:45 AM	3	3	0	6	7	0	0	7	1	3	0	4	17
Hourly Total	7	12	0	19	21	2	0	23	2	5	0	7	49
6:00 AM	1	1	0	2	1	2	0	3	1	0	0	1	6
6:15 AM	1	3	0	4	5	1	0	6	2	3	0	5	15
6:30 AM	3	10	0	13	4	2	0	6	4	1	0	5	24
6:45 AM	10	10	0	20	7	1	0	8	6	5	0	11	39
Hourly Total	15	24	0	39	17	6	0	23	13	9	0	22	84
7:00 AM	4	7	0	11	2	0	0	2	2	1	0	3	16
7:15 AM	11	20	0	31	4	3	0	7	8	1	0	9	47
7:30 AM	14	19	0	33	5	1	0	6	11	3	0	14	53
7:45 AM	22	26	0	48	5	5	0	10	14	5	0	19	77
Hourly Total	51	72	0	123	16	9	0	25	35	10	0	45	193
8:00 AM	10	16	0	26	11	6	0	17	2	5	0	7	50
8:15 AM	3	5	0	8	10	6	0	16	3	1	0	4	28
8:30 AM	2	15	0	17	7	3	0	10	6	4	0	10	37
8:45 AM	3	9	0	12	5	1	0	6	1	3	0	4	22
Hourly Total	18	45	0	63	33	16	0	49	12	13	0	25	137
9:00 AM	6	6	0	12	3	4	0	7	5	3	0	8	27
9:15 AM	3	9	0	12	11	4	0	15	4	2	0	6	33
9:30 AM	1	9	0	10	6	0	0	6	1	3	0	4	20
9:45 AM	4	10	0	14	10	1	0	11	1	2	0	3	28
Hourly Total	14	34	0	48	30	9	0	39	11	10	0	21	108
10:00 AM	2	5	0	7	8	2	0	10	5	4	0	9	26
10:15 AM	2	12	0	14	13	1	0	14	2	7	0	9	37
10:30 AM	3	12	0	15	9	2	0	11	2	5	0	7	33
10:45 AM	4	13	0	17	13	8	0	21	5	2	0	7	45
Hourly Total	11	42	0	53	43	13	0	56	14	18	0	32	141
11:00 AM	5	7	0	12	8	1	0	9	5	6	0	11	32
11:15 AM	3	12	0	15	8	2	0	10	5	2	0	7	32
11:30 AM	7	8	0	15	9	1	0	10	2	3	0	5	30
11:45 AM	6	12	0	18	11	2	0	13	5	2	0	7	38
Hourly Total	21	39	0	60	36	6	0	42	17	13	0	30	132
12:00 PM	4	10	0	14	9	5	0	14	6	3	0	9	37
12:15 PM	4	8	0	12	9	1	0	10	3	6	0	9	31
12:30 PM	9	14	0	23	9	5	0	14	1	5	0	6	43
12:45 PM	5	13	0	18	17	4	0	21	4	12	0	16	55
Hourly Total	22	45	0	67	44	15	0	59	14	26	0	40	166
1:00 PM	3	19	0	22	9	3	0	12	5	8	0	13	47
1:15 PM	6	5	0	11	14	8	0	22	7	2	0	9	42
1:30 PM	4	8	0	12	6	10	0	16	7	3	0	10	38
1:45 PM	0	15	0	15	8	8	0	16	6	3	0	9	40
Hourly Total	13	47	0	60	37	29	0	66	25	16	0	41	167
2:00 PM	0	5	0	5	10	9	0	19	4	3	0	7	31
2:15 PM	2	11	0	13	5	2	0	7	9	3	0	12	32
2:30 PM	4	11	0	15	16	4	0	20	6	8	0	14	49
Grand Total	260	629	0	889	633	263	0	896	274	276	0	550	2335
Approach %	29.2	70.8	-	-	70.6	29.4	-	-	49.8	50.2	-	-	-
Total %	11.1	26.9	-	38.1	27.1	11.3	-	38.4	11.7	11.8	-	23.6	-
Lights	255	619	-	874	617	255	-	872	257	273	-	530	2276
% Lights	98.1	98.4	-	98.3	97.5	97.0	-	97.3	93.8	98.9	-	96.4	97.5
Mediums	3	7	-	10	7	5	-	12	10	3	-	13	35
% Mediums	1.2	1.1	-	1.1	1.1	1.9	-	1.3	3.6	1.1	-	2.4	1.5
Articulated Trucks	2	3	-	5	8	3	-	11	7	0	-	7	23
% Articulated Trucks	0.8	0.5	-	0.6	1.3	1.1	-	1.2	2.6	0.0	-	1.3	1.0
Bicycles on Road	0	0	-	0	1	0	-	1	0	0	-	0	1
% Bicycles on Road	0.0	0.0	-	0.0	0.2	0.0	-	0.1	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	0	-	-	-	0	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-



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Count Name: Upper Spring  
Creek Rd & E Ash St  
Site Code:  
Start Date: 04/09/2025  
Page No: 3



Turning Movement Data Plot

Robert Peccia & Associates  
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Count Name: Upper Spring  
Creek Rd & E Ash St  
Site Code:  
Start Date: 04/09/2025  
Page No: 4

### Turning Movement Peak Hour Data (4:30 PM)

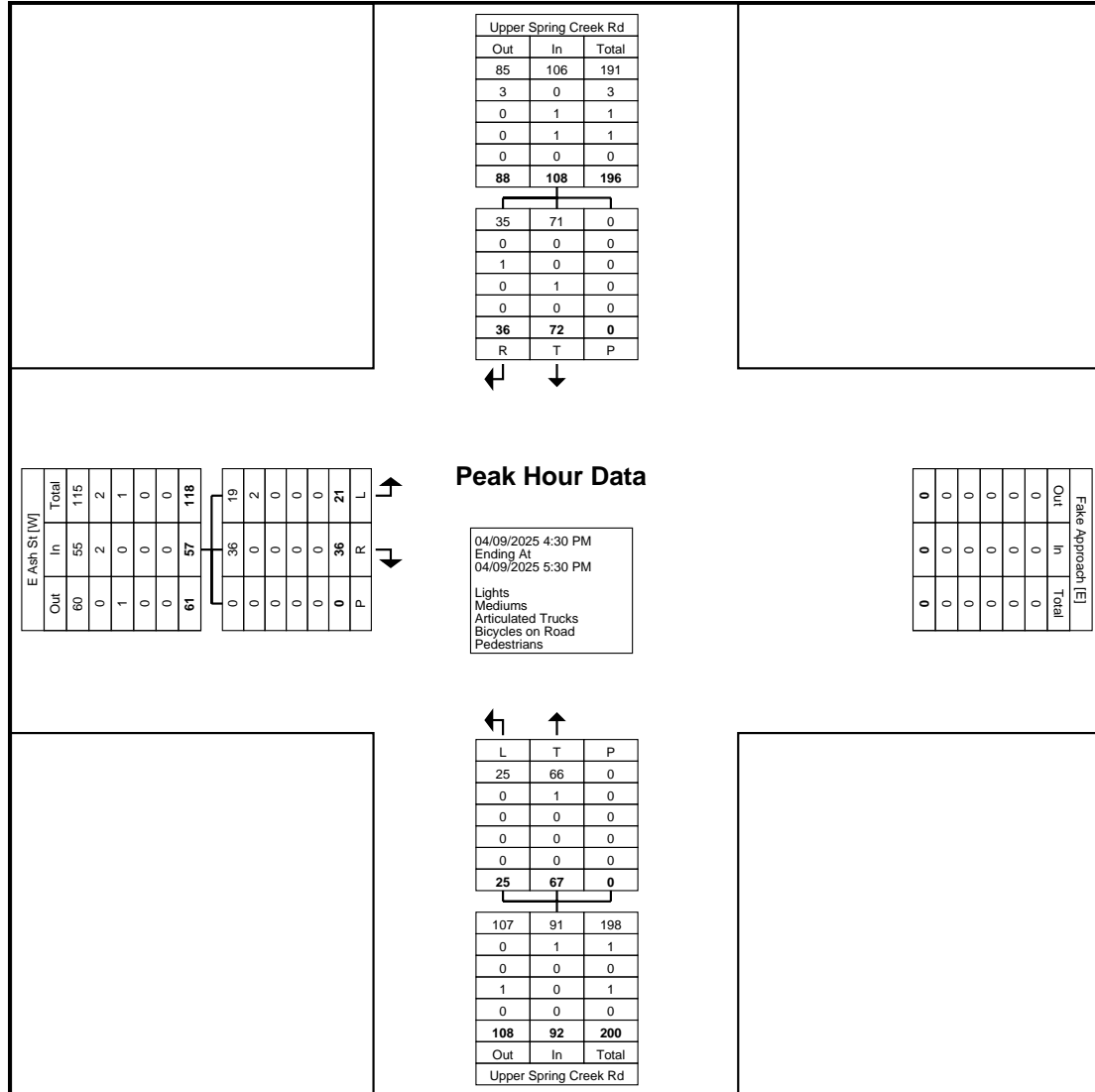
[illegible]



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406-447-5000 srandall@rpa-hln.com

Count Name: Upper Spring  
Creek Rd & E Ash St  
Site Code:  
Start Date: 04/09/2025  
Page No: 5



Turning Movement Peak Hour Data Plot (4:30 PM)

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Count Name: Upper Spring  
Creek Rd & E Ash St  
Site Code:  
Start Date: 04/09/2025  
Page No: 6

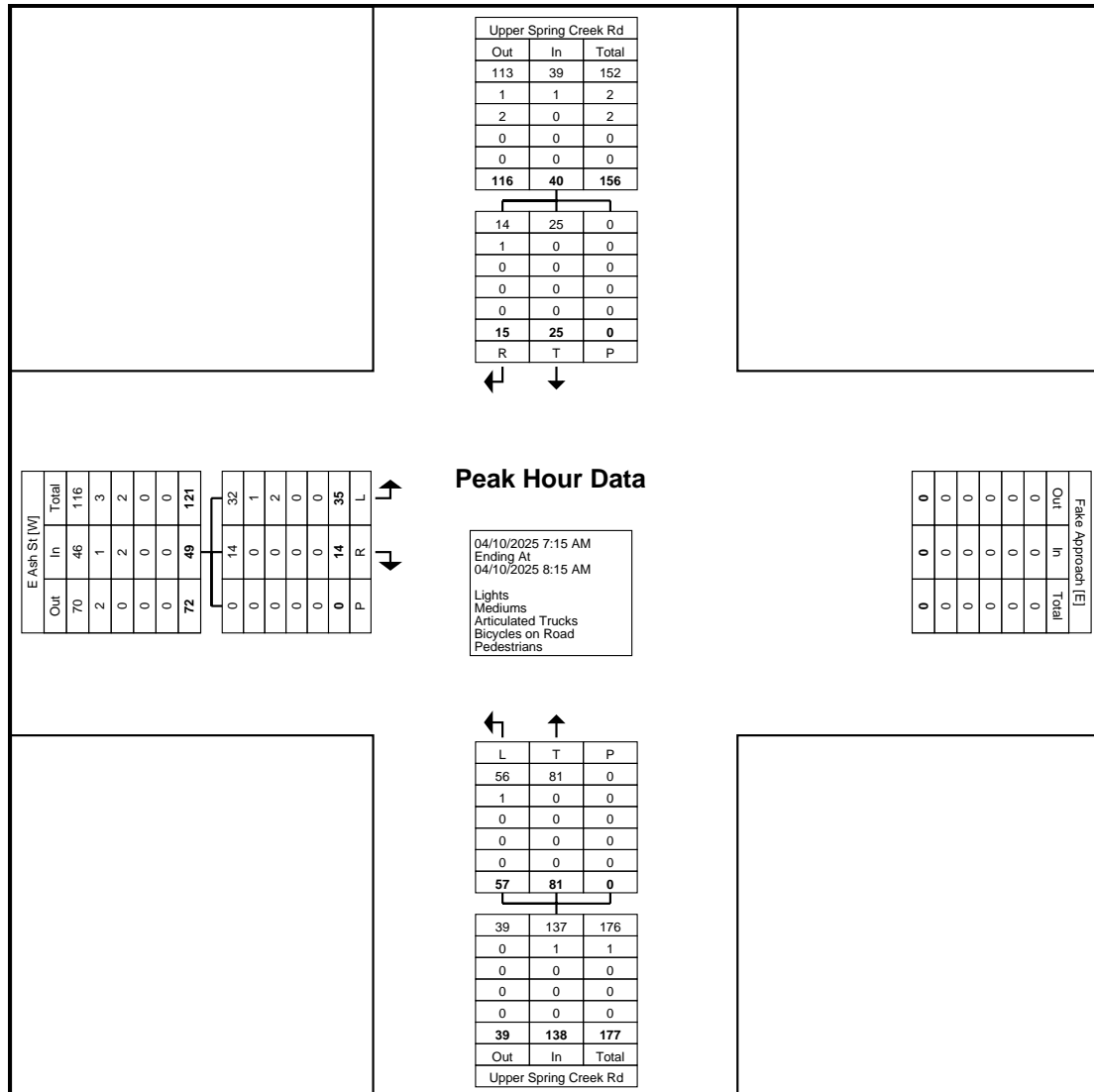
## Turning Movement Peak Hour Data (7:15 AM)

[illegible]

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Helena, Montana, United States 59601  
406-447-5000 [srandall@rpa-hln.com](mailto:srandall@rpa-hln.com)

Count Name: Upper Spring  
Creek Rd & E Ash St  
Site Code:  
Start Date: 04/09/2025  
Page No: 7



### Turning Movement Peak Hour Data Plot (7:15 AM)

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Count Name: Upper Spring  
Creek Rd & E Ash St  
Site Code:  
Start Date: 04/09/2025  
Page No: 8

### Turning Movement Peak Hour Data (12:30 PM)

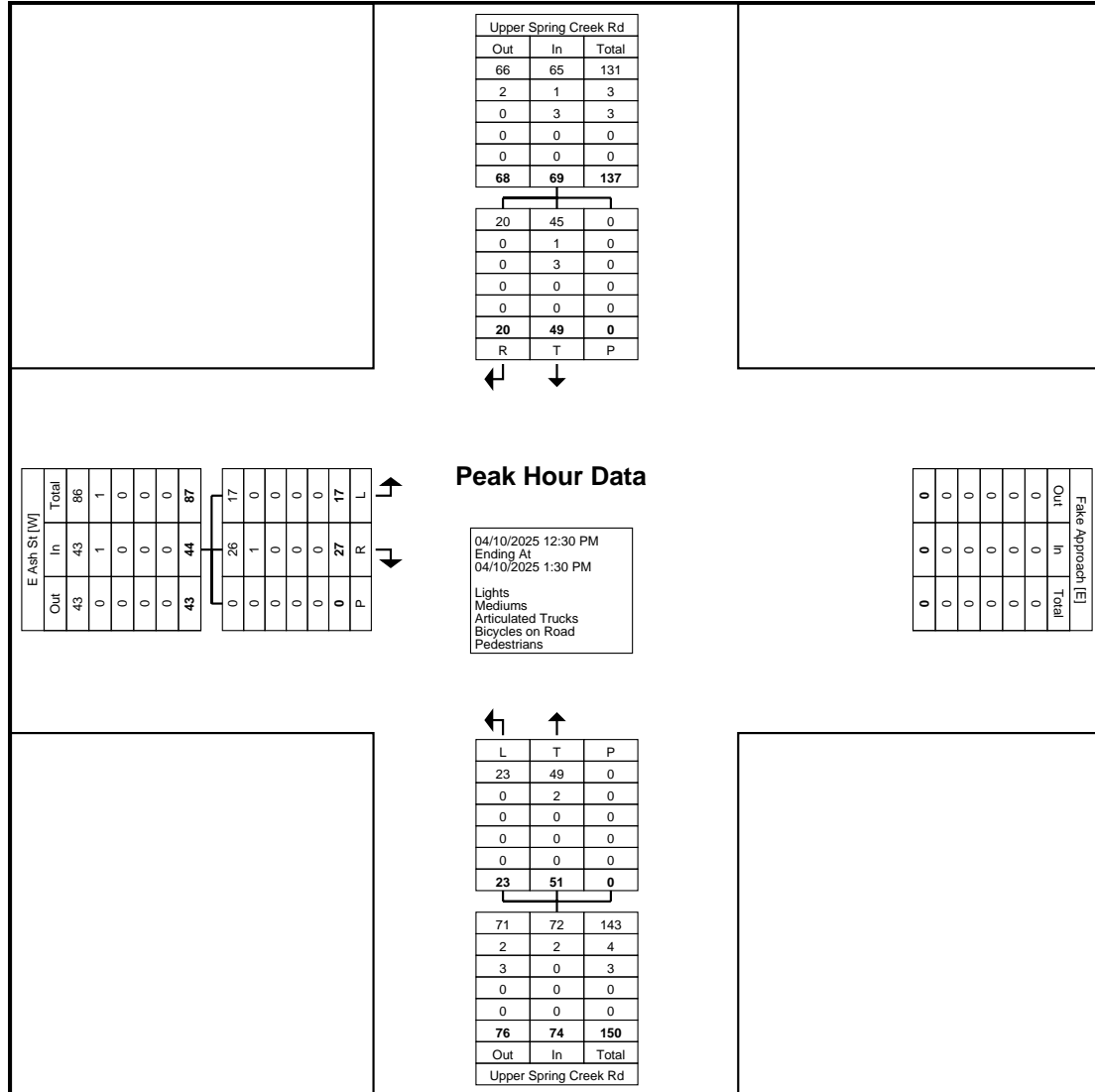
[illegible]



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Count Name: Upper Spring  
Creek Rd & E Ash St  
Site Code:  
Start Date: 04/09/2025  
Page No: 9



Turning Movement Peak Hour Data Plot (12:30 PM)



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Count Name: MDT Airport Road  
Site Code: MDT-1  
Start Date: 05/14/2025  
Page No: 1

## Turning Movement Data

Start Time	Airport Rd Northbound				Airport Rd Southbound				Lower Airport Rd Westbound				Int. Total
	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	
12:00 AM	0	0	0	0	2	1	0	3	0	0	0	0	3
12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM	0	1	0	1	0	0	0	0	0	1	0	1	2
12:45 AM	0	0	0	0	1	1	0	2	0	0	0	0	2
Hourly Total	0	1	0	1	3	2	0	5	0	1	0	1	7
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	2	0	0	2	0	0	0	0	2
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	2	0	0	2	0	0	0	0	2
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
3:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 AM	1	0	0	1	1	1	0	2	0	1	0	1	4
Hourly Total	1	0	0	1	2	1	0	3	0	2	0	2	6
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	1	1	0	2	0	2	0	2	4
4:30 AM	0	0	0	0	0	1	0	1	0	2	0	2	3
4:45 AM	2	0	0	2	1	0	0	1	0	2	0	2	5
Hourly Total	2	0	0	2	2	2	0	4	0	6	0	6	12
5:00 AM	0	0	0	0	1	2	0	3	0	2	0	2	5
5:15 AM	1	0	0	1	0	2	0	2	1	3	0	4	7
5:30 AM	0	1	0	1	2	12	0	14	2	6	0	8	23
5:45 AM	1	0	0	1	4	9	0	13	0	2	0	2	16
Hourly Total	2	1	0	3	7	25	0	32	3	13	0	16	51
6:00 AM	4	2	0	6	4	6	0	10	0	5	0	5	21
6:15 AM	2	0	0	2	1	0	0	1	0	5	0	5	8
6:30 AM	3	1	0	4	4	2	0	6	3	7	0	10	20
6:45 AM	3	1	0	4	8	19	0	27	5	15	0	20	51
Hourly Total	12	4	0	16	17	27	0	44	8	32	0	40	100
7:00 AM	4	0	0	4	3	7	0	10	3	9	0	12	26
7:15 AM	6	0	0	6	4	6	0	10	0	11	0	11	27
7:30 AM	7	1	0	8	19	15	0	34	4	30	0	34	76
7:45 AM	3	0	0	3	38	18	0	56	3	35	0	38	97
Hourly Total	20	1	0	21	64	46	0	110	10	85	0	95	226
8:00 AM	4	2	0	6	18	14	0	32	1	23	0	24	62
8:15 AM	6	0	0	6	12	4	0	16	0	16	0	16	38
8:30 AM	6	0	0	6	6	7	0	13	3	12	0	15	34
8:45 AM	5	1	0	6	13	6	0	19	2	9	0	11	36
Hourly Total	21	3	0	24	49	31	0	80	6	60	0	66	170
9:00 AM	8	1	0	9	11	11	0	22	3	13	0	16	47
9:15 AM	5	1	0	6	9	8	0	17	0	16	0	16	39
9:30 AM	7	0	0	7	12	14	0	26	2	10	0	12	45
9:45 AM	8	3	0	11	7	8	0	15	1	9	0	10	36
Hourly Total	28	5	0	33	39	41	0	80	6	48	0	54	167
10:00 AM	11	1	0	12	11	10	0	21	0	8	0	8	41
10:15 AM	12	1	0	13	9	7	0	16	3	9	0	12	41
10:30 AM	9	1	0	10	14	12	0	26	1	10	0	11	47
10:45 AM	7	1	0	8	12	13	0	25	2	7	0	9	42
Hourly Total	39	4	0	43	46	42	0	88	6	34	0	40	171
11:00 AM	11	0	0	11	13	7	0	20	3	16	0	19	50
11:15 AM	11	3	0	14	10	11	0	21	0	13	0	13	48
11:30 AM	11	1	0	12	21	8	0	29	0	15	0	15	56
11:45 AM	11	1	0	12	20	6	0	26	1	11	0	12	50
Hourly Total	44	5	0	49	64	32	0	96	4	55	0	59	204
12:00 PM	18	3	0	21	24	8	0	32	3	24	0	27	80

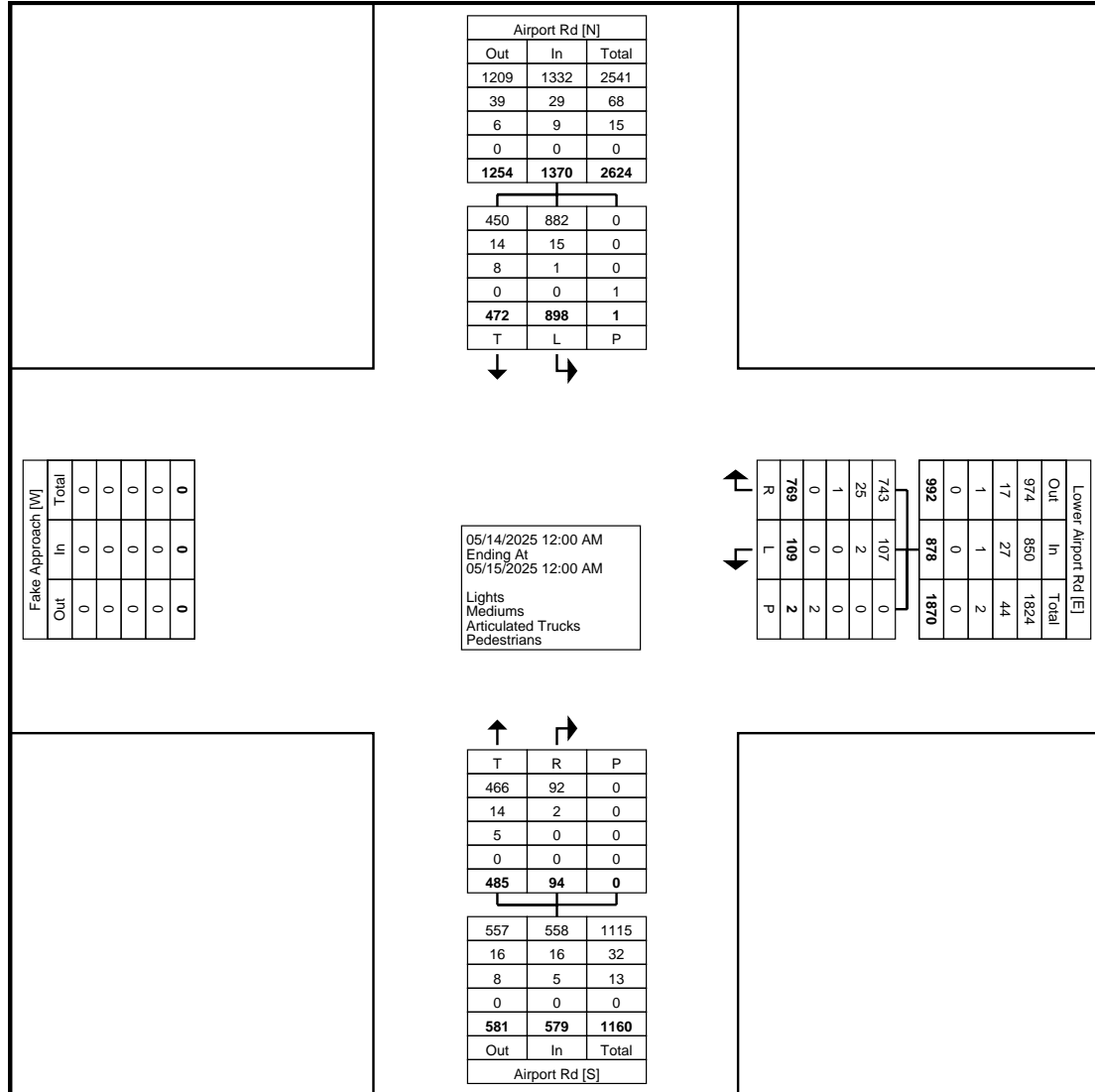
12:15 PM	14	2	0	16	26	13	0	39	1	16	0	17	72
12:30 PM	4	1	0	5	21	3	0	24	1	16	0	17	46
12:45 PM	8	0	0	8	12	9	0	21	1	22	0	23	52
Hourly Total	44	6	0	50	83	33	0	116	6	78	0	84	250
1:00 PM	13	1	0	14	9	7	0	16	4	10	0	14	44
1:15 PM	8	1	0	9	11	15	0	26	1	15	0	16	51
1:30 PM	9	0	0	9	14	11	0	25	2	6	0	8	42
1:45 PM	8	0	0	8	12	6	0	18	1	10	0	11	37
Hourly Total	38	2	0	40	46	39	0	85	8	41	0	49	174
2:00 PM	6	2	0	8	10	8	0	18	1	11	0	12	38
2:15 PM	4	1	0	5	15	10	0	25	1	11	0	12	42
2:30 PM	4	3	0	7	12	7	0	19	3	18	0	21	47
2:45 PM	11	0	0	11	18	5	0	23	0	13	0	13	47
Hourly Total	25	6	0	31	55	30	0	85	5	53	0	58	174
3:00 PM	7	0	0	7	17	10	0	27	0	20	0	20	54
3:15 PM	6	3	0	9	22	7	0	29	2	27	0	29	67
3:30 PM	12	4	0	16	30	6	0	36	1	22	0	23	75
3:45 PM	11	0	0	11	23	8	0	31	1	9	0	10	52
Hourly Total	36	7	0	43	92	31	0	123	4	78	0	82	248
4:00 PM	16	2	0	18	22	7	0	29	1	14	0	15	62
4:15 PM	6	4	0	10	22	6	0	28	25	16	0	41	79
4:30 PM	28	8	0	36	30	4	0	34	0	17	0	17	87
4:45 PM	20	10	0	30	20	7	1	27	2	13	0	15	72
Hourly Total	70	24	0	94	94	24	1	118	28	60	0	88	300
5:00 PM	17	3	0	20	34	6	0	40	2	19	0	21	81
5:15 PM	6	0	0	6	33	9	0	42	1	13	0	14	62
5:30 PM	11	1	0	12	24	11	0	35	1	5	0	6	53
5:45 PM	10	4	0	14	21	7	0	28	1	6	0	7	49
Hourly Total	44	8	0	52	112	33	0	145	5	43	0	48	245
6:00 PM	10	0	0	10	16	2	0	18	1	5	0	6	34
6:15 PM	5	2	0	7	8	2	0	10	0	9	0	9	26
6:30 PM	3	1	0	4	9	0	0	9	1	6	0	7	20
6:45 PM	4	1	0	5	9	5	0	14	1	8	0	9	28
Hourly Total	22	4	0	26	42	9	0	51	3	28	0	31	108
7:00 PM	1	2	0	3	14	0	0	14	2	8	0	10	27
7:15 PM	2	2	0	4	9	7	0	16	2	2	0	4	24
7:30 PM	3	2	0	5	12	0	0	12	0	4	0	4	21
7:45 PM	4	0	0	4	5	1	0	6	1	8	0	9	19
Hourly Total	10	6	0	16	40	8	0	48	5	22	0	27	91
8:00 PM	5	2	0	7	7	1	0	8	1	3	0	4	19
8:15 PM	4	1	0	5	8	0	0	8	0	5	2	5	18
8:30 PM	3	2	0	5	4	3	0	7	0	4	0	4	16
8:45 PM	1	1	0	2	1	3	0	4	0	4	0	4	10
Hourly Total	13	6	0	19	20	7	0	27	1	16	2	17	63
9:00 PM	4	0	0	4	4	0	0	4	0	5	0	5	13
9:15 PM	0	0	0	0	3	1	0	4	0	1	0	1	5
9:30 PM	1	1	0	2	1	0	0	1	0	2	0	2	5
9:45 PM	0	0	0	0	2	1	0	3	0	2	0	2	5
Hourly Total	5	1	0	6	10	2	0	12	0	10	0	10	28
10:00 PM	3	0	0	3	3	0	0	3	0	1	0	1	7
10:15 PM	2	0	0	2	1	2	0	3	0	0	0	0	5
10:30 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
10:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
Hourly Total	6	0	0	6	5	2	0	7	0	2	0	2	15
11:00 PM	0	0	0	0	1	2	0	3	0	0	0	0	3
11:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
11:30 PM	2	0	0	2	1	1	0	2	1	2	0	3	7
11:45 PM	0	0	0	0	2	2	0	4	0	0	0	0	4
Hourly Total	3	0	0	3	4	5	0	9	1	2	0	3	15
Grand Total	485	94	0	579	898	472	1	1370	109	769	2	878	2827
Approach %	83.8	16.2	-	-	65.5	34.5	-	-	12.4	87.6	-	-	-
Total %	17.2	3.3	-	20.5	31.8	16.7	-	48.5	3.9	27.2	-	31.1	-
Lights	466	92	-	558	882	450	-	1332	107	743	-	850	2740
% Lights	96.1	97.9	-	96.4	98.2	95.3	-	97.2	98.2	96.6	-	96.8	96.9
Mediums	14	2	-	16	15	14	-	29	2	25	-	27	72
% Mediums	2.9	2.1	-	2.8	1.7	3.0	-	2.1	1.8	3.3	-	3.1	2.5
Articulated Trucks	5	0	-	5	1	8	-	9	0	1	-	1	15
% Articulated Trucks	1.0	0.0	-	0.9	0.1	1.7	-	0.7	0.0	0.1	-	0.1	0.5
Pedestrians	-	-	0	-	-	-	1	-	-	-	2	-	-
% Pedestrians	-	-	-	-	-	-	100.0	-	-	-	100.0	-	-



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406-447-5000 srandall@rpa-hln.com

Count Name: MDT Airport Road  
Site Code: MDT-1  
Start Date: 05/14/2025  
Page No: 3



Turning Movement Data Plot

Robert Peccia & Associates  
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406-447-5000 [srandall@rpa-hln.com](mailto:srandall@rpa-hln.com)

Count Name: MDT Airport Road  
Site Code: MDT-1  
Start Date: 05/14/2025  
Page No: 4

## Turning Movement Peak Hour Data (7:30 AM)

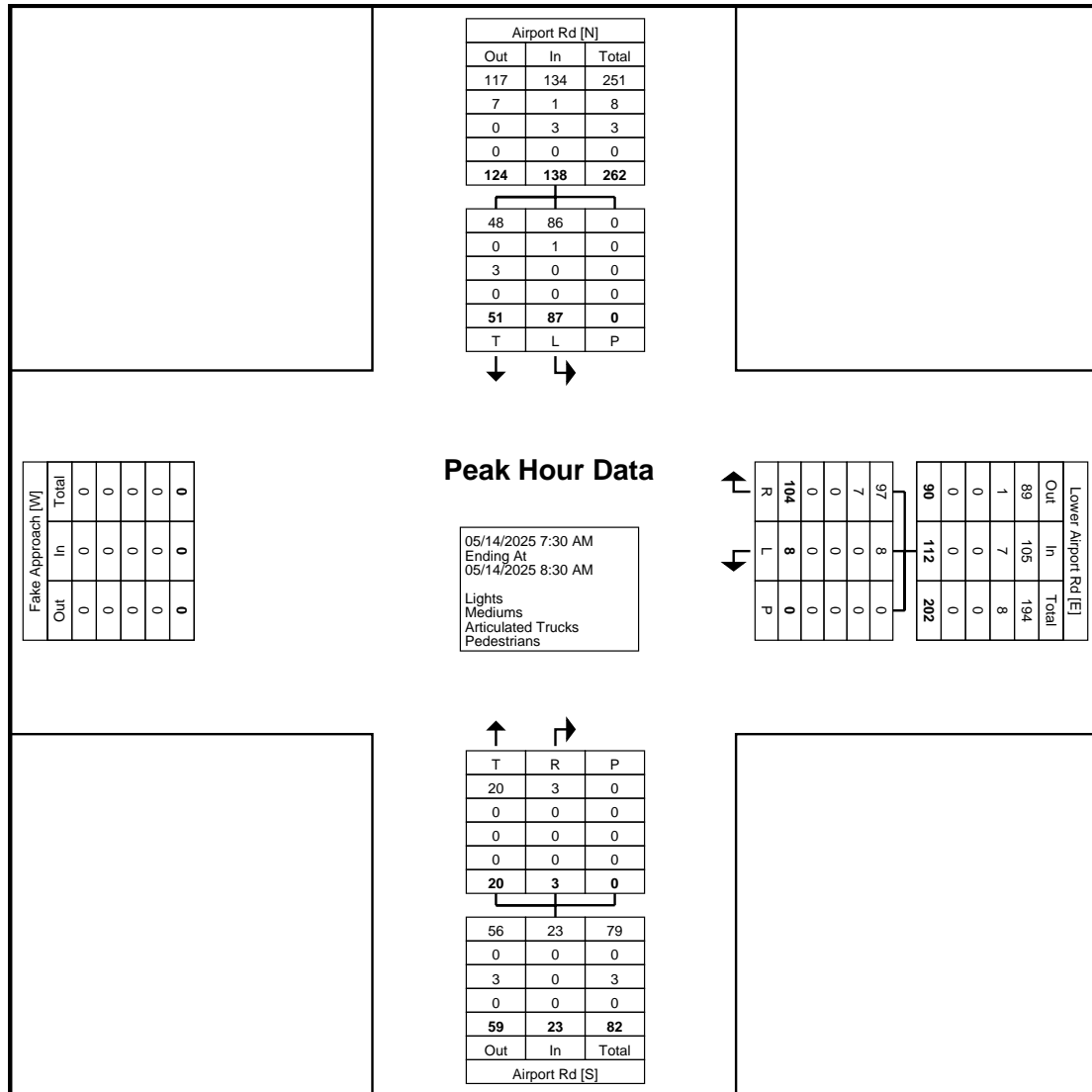
[illegible]



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Count Name: MDT Airport Road  
Site Code: MDT-1  
Start Date: 05/14/2025  
Page No: 5



Turning Movement Peak Hour Data Plot (7:30 AM)



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Count Name: MDT Airport Road  
Site Code: MDT-1  
Start Date: 05/14/2025  
Page No: 6

### Turning Movement Peak Hour Data (4:15 PM)

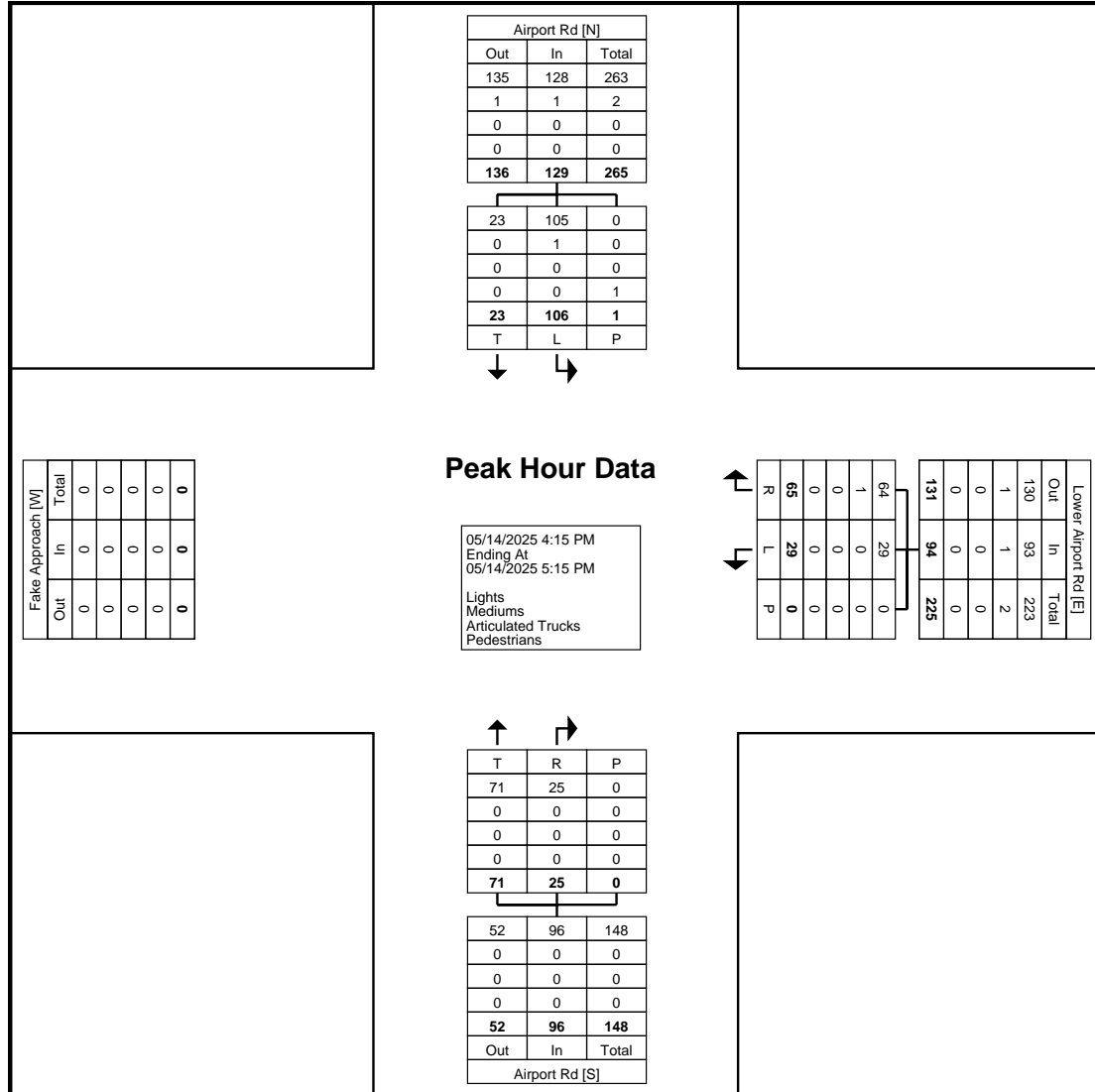
Start Time	Airport Rd Northbound				Airport Rd Southbound				Lower Airport Rd Westbound				Int. Total
	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	
4:15 PM	6	4	0	10	22	6	0	28	25	16	0	41	79
4:30 PM	28	8	0	36	30	4	0	34	0	17	0	17	87
4:45 PM	20	10	0	30	20	7	1	27	2	13	0	15	72
5:00 PM	17	3	0	20	34	6	0	40	2	19	0	21	81
Total	71	25	0	96	106	23	1	129	29	65	0	94	319
Approach %	74.0	26.0	-	-	82.2	17.8	-	-	30.9	69.1	-	-	-
Total %	22.3	7.8	-	30.1	33.2	7.2	-	40.4	9.1	20.4	-	29.5	-
PHF	0.634	0.625	-	0.667	0.779	0.821	-	0.806	0.290	0.855	-	0.573	0.917
Lights	71	25	-	96	105	23	-	128	29	64	-	93	317
% Lights	100.0	100.0	-	100.0	99.1	100.0	-	99.2	100.0	98.5	-	98.9	99.4
Mediums	0	0	-	0	1	0	-	1	0	1	-	1	2
% Mediums	0.0	0.0	-	0.0	0.9	0.0	-	0.8	0.0	1.5	-	1.1	0.6
Articulated Trucks	0	0	-	0	0	0	-	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	0	-	-	-	1	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	100.0	-	-	-	-	-	-



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Count Name: MDT Airport Road  
Site Code: MDT-1  
Start Date: 05/14/2025  
Page No: 7



Turning Movement Peak Hour Data Plot (4:15 PM)



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Count Name: MDT Birch St &  
Casino Creek Dr  
Site Code: MDT-2  
Start Date: 05/14/2025  
Page No: 1

## Turning Movement Data

Start Time	Casino Creek Dr Northbound					Casino Creek Dr Southbound					Birch St Eastbound					Parking Lot Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	2
12:30 AM	1	0	0	0	1	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	3
12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	1	0	0	0	1	0	1	0	0	1	2	0	1	0	3	0	0	0	0	0	5
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
1:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Hourly Total	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	2
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 AM	1	0	0	0	1	0	3	0	0	3	0	0	1	0	1	0	0	0	0	0	5
2:30 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 AM	0	1	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hourly Total	1	1	0	7	2	0	3	0	0	3	0	0	1	0	1	0	0	0	0	0	6
3:00 AM	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	2
3:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hourly Total	0	2	0	0	2	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	4
4:00 AM	0	1	0	0	1	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	3
4:15 AM	1	0	0	0	1	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	3
4:30 AM	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
4:45 AM	1	3	0	0	4	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	5
Hourly Total	3	5	0	0	8	0	1	2	0	3	0	2	1	0	3	0	0	0	0	0	14
5:00 AM	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 AM	5	5	0	0	10	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	12
5:30 AM	4	1	0	0	5	0	1	1	0	2	3	0	1	2	4	0	0	0	0	0	11
5:45 AM	0	7	0	0	7	0	4	1	0	5	2	0	4	0	6	0	0	0	0	0	18
Hourly Total	11	14	0	0	25	0	5	2	0	7	7	0	5	2	12	0	0	0	0	0	44
6:00 AM	1	1	0	0	2	0	2	2	0	4	0	1	2	2	3	0	0	0	0	0	9
6:15 AM	1	7	0	0	8	0	5	1	0	6	3	0	1	0	4	0	0	0	0	0	18
6:30 AM	8	5	1	0	14	0	1	3	0	4	2	1	2	0	5	0	1	0	0	1	24
6:45 AM	14	14	2	0	30	0	10	2	0	12	5	1	5	0	11	0	0	0	0	0	53
Hourly Total	24	27	3	0	54	0	18	8	0	26	10	3	10	2	23	0	1	0	0	1	104
7:00 AM	5	10	1	0	16	1	4	3	0	8	2	1	2	0	5	1	0	0	0	1	30
7:15 AM	9	10	0	0	19	1	5	4	0	10	4	1	0	0	5	0	0	2	0	2	36
7:30 AM	20	26	2	0	48	4	9	23	0	36	14	1	5	0	20	0	1	1	0	2	106
7:45 AM	30	39	5	0	74	23	18	36	0	77	39	19	10	0	68	0	9	19	1	28	247
Hourly Total	64	85	8	0	157	29	36	66	0	131	59	22	17	0	98	1	10	22	1	33	419
8:00 AM	12	25	6	1	43	6	13	15	0	34	26	8	10	0	44	0	6	7	0	13	134
8:15 AM	10	15	0	0	25	0	18	5	0	23	4	0	5	0	9	1	0	2	0	3	60
8:30 AM	11	10	0	1	21	1	17	3	0	21	3	1	6	0	10	0	0	0	0	0	52
8:45 AM	8	17	0	0	25	1	9	2	0	12	3	0	10	0	13	0	0	2	0	2	52
Hourly Total	41	67	6	2	114	8	57	25	0	90	36	9	31	0	76	1	6	11	0	18	298
9:00 AM	11	9	0	0	20	1	5	2	0	8	4	0	8	1	12	0	0	1	0	1	41
9:15 AM	9	12	0	0	21	0	9	3	0	12	1	2	5	0	8	0	0	1	0	1	42
9:30 AM	5	11	0	0	16	0	8	3	0	11	2	0	9	1	11	0	0	0	0	0	38
9:45 AM	7	16	1	0	24	1	10	3	0	14	1	1	6	0	8	2	1	1	0	4	50
Hourly Total	32	48	1	0	81	2	32	11	0	45	8	3	28	2	39	2	1	3	0	6	171
10:00 AM	11	10	0	0	21	1	14	1	0	16	2	0	2	0	4	2	2	5	0	9	50
10:15 AM	8	17	0	1	25	0	12	4	0	16	6	1	4	0	11	0	0	8	0	8	60
10:30 AM	7	7	0	0	14	0	8	5	0	13	3	0	10	0	13	1	0	0	0	1	41
10:45 AM	7	10	0	0	17	0	6	5	0	11	6	0	7	0	13	0	0	0	0	0	41
Hourly Total	33	44	0	1	77	1	40	15	0	56	17	1	23	0	41	3	2	13	0	18	192
11:00 AM	11	15	0	0	26	0	13	4	0	17	5	0	9	0	14	0	1	1	0	2	59
11:15 AM	6	15	1	0	22	0	9	9	0	18	3	0	6	0	9	1	0	1	0	2	51
11:30 AM	9	10	0	0	19	1	14	7	1	22	8	1	9	0	18	3	1	1	0	5	64
11:45 AM	8	10	1	0	19	2	15	7	0	24	2	1	9	0	12	4	2	1	0	7	62
Hourly Total	34	50	2	0	86	3	51	27	1	81	18	2	33	0	53	8	4	4	0	16	236

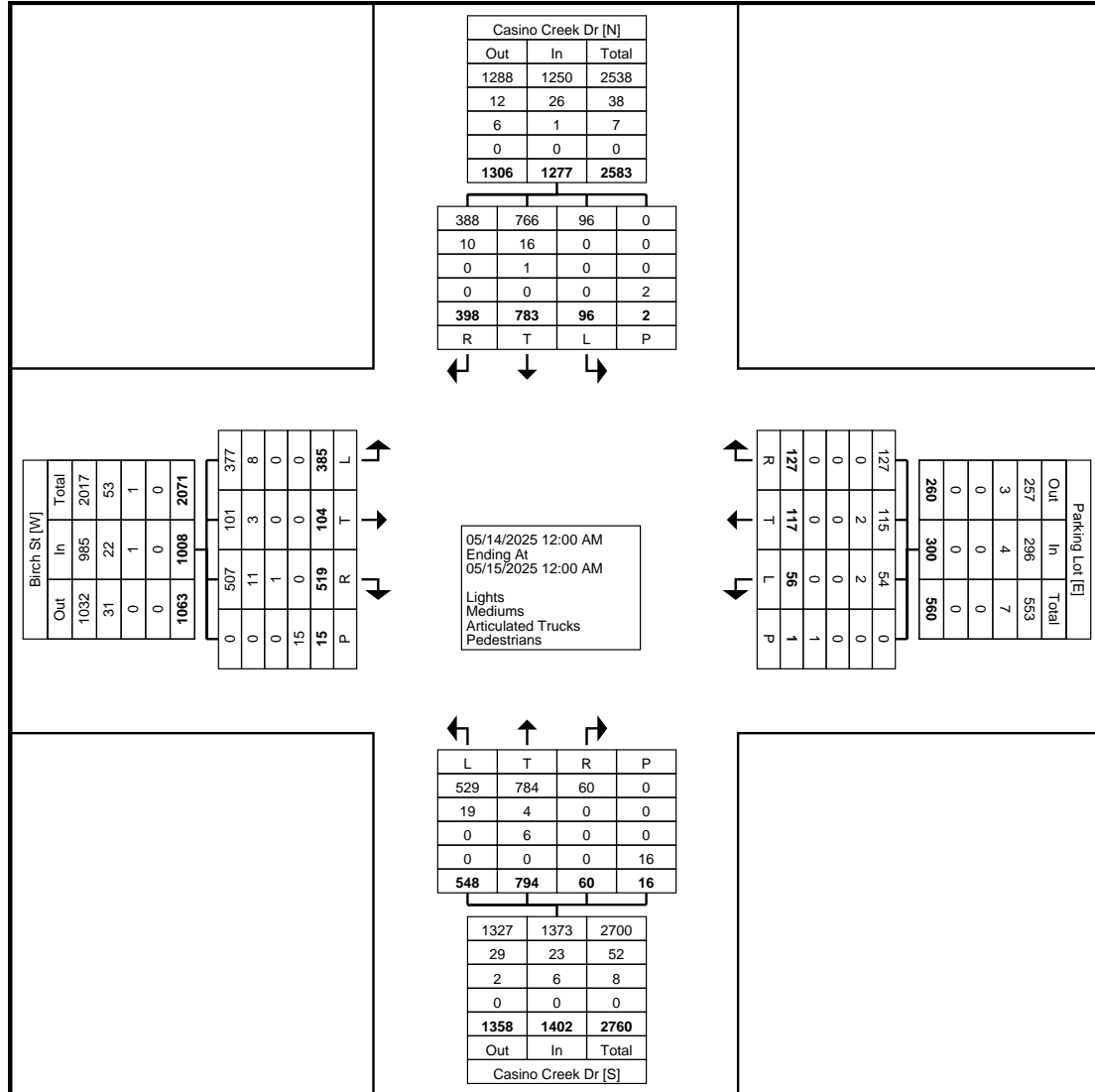
12:00 PM	12	16	1	0	29	1	18	13	0	32	9	3	11	0	23	8	16	11	0	35	119
12:15 PM	9	16	5	0	30	1	22	7	0	30	14	5	10	0	29	1	1	3	0	5	94
12:30 PM	8	21	13	0	42	9	10	2	0	21	16	8	9	0	33	0	1	1	0	2	98
12:45 PM	14	18	1	1	33	0	17	5	1	22	8	2	3	0	13	1	1	0	0	2	70
Hourly Total	43	71	20	1	134	11	67	27	1	105	47	18	33	0	98	10	19	15	0	44	381
1:00 PM	3	15	0	0	18	0	18	5	0	23	4	0	5	0	9	1	0	0	0	1	51
1:15 PM	8	9	0	0	17	2	17	8	0	27	3	0	5	0	8	0	0	0	0	0	52
1:30 PM	3	11	2	0	16	0	13	3	0	16	5	1	4	0	10	3	1	5	0	9	51
1:45 PM	11	12	0	0	23	2	7	6	0	15	9	1	7	0	17	0	0	3	0	3	58
Hourly Total	25	47	2	0	74	4	55	22	0	81	21	2	21	0	44	4	1	8	0	13	212
2:00 PM	8	18	0	0	26	0	10	8	0	18	2	0	4	0	6	0	2	0	0	2	52
2:15 PM	11	11	0	0	22	1	18	8	0	27	8	0	5	0	13	1	1	1	0	3	65
2:30 PM	14	17	0	0	31	0	12	9	0	21	6	0	10	0	16	1	1	2	0	4	72
2:45 PM	7	9	1	0	17	2	10	17	0	29	7	0	10	0	17	1	0	2	0	3	66
Hourly Total	40	55	1	0	96	3	50	42	0	95	23	0	29	0	52	3	4	5	0	12	255
3:00 PM	14	14	1	0	29	5	17	21	0	43	7	4	11	0	22	2	0	1	0	3	97
3:15 PM	24	25	1	4	50	10	30	18	0	58	26	3	11	2	40	1	13	27	0	41	189
3:30 PM	9	14	3	0	26	6	19	2	0	27	11	2	27	4	40	1	0	3	0	4	97
3:45 PM	6	13	0	0	19	1	13	6	0	20	7	4	13	0	24	0	1	1	0	2	65
Hourly Total	53	66	5	4	124	22	79	47	0	148	51	13	62	6	126	4	14	32	0	50	448
4:00 PM	10	5	0	0	15	1	19	7	0	27	6	6	7	0	19	0	0	2	0	2	63
4:15 PM	15	14	1	1	30	3	15	5	0	23	10	4	16	0	30	3	27	5	0	35	118
4:30 PM	12	11	0	0	23	0	18	7	0	25	8	3	26	0	37	2	5	1	0	8	93
4:45 PM	10	22	0	0	32	2	23	10	0	35	3	2	14	0	19	1	2	1	0	4	90
Hourly Total	47	52	1	1	100	6	75	29	0	110	27	15	63	0	105	6	34	9	0	49	364
5:00 PM	7	13	0	0	20	0	31	11	0	42	7	2	22	0	31	1	8	0	0	9	102
5:15 PM	10	8	0	0	18	0	22	5	0	27	5	1	17	0	23	0	4	0	0	4	72
5:30 PM	5	18	0	0	23	0	21	4	0	25	5	3	13	0	21	0	0	0	0	0	69
5:45 PM	4	8	5	0	17	1	13	4	0	18	3	3	13	0	19	0	2	1	0	3	57
Hourly Total	26	47	5	0	78	1	87	24	0	112	20	9	65	0	94	1	14	1	0	16	300
6:00 PM	6	20	1	0	27	0	17	5	0	22	5	0	8	0	13	1	1	0	0	2	64
6:15 PM	6	10	0	0	16	0	5	2	0	7	5	1	4	0	10	1	2	0	0	3	36
6:30 PM	4	7	0	0	11	2	8	1	0	11	0	0	5	2	5	0	0	1	0	1	28
6:45 PM	7	7	1	0	15	1	7	1	0	9	3	0	9	1	12	1	0	0	0	1	37
Hourly Total	23	44	2	0	69	3	37	9	0	49	13	1	26	3	40	3	3	1	0	7	165
7:00 PM	4	10	0	0	14	0	7	3	0	10	2	0	11	0	13	0	0	0	0	0	37
7:15 PM	6	7	0	0	13	1	10	6	0	17	4	0	8	0	12	0	0	1	0	1	43
7:30 PM	5	4	0	0	9	0	13	8	0	21	2	0	8	0	10	0	0	0	0	0	40
7:45 PM	1	6	1	0	8	1	11	7	0	19	3	1	11	0	15	2	2	1	0	5	47
Hourly Total	16	27	1	0	44	2	41	24	0	67	11	1	38	0	50	2	2	2	0	6	167
8:00 PM	5	6	0	0	11	0	8	4	0	12	6	0	9	0	15	1	0	0	0	1	39
8:15 PM	4	2	0	0	6	0	6	2	0	8	2	1	4	0	7	0	0	0	0	0	21
8:30 PM	3	8	2	0	13	0	3	3	0	6	1	0	6	0	7	1	0	0	0	1	27
8:45 PM	4	8	0	0	12	0	8	1	0	9	1	0	2	0	3	4	0	0	0	4	28
Hourly Total	16	24	2	0	42	0	25	10	0	35	10	1	21	0	32	6	0	0	0	6	115
9:00 PM	5	4	1	0	10	1	7	1	0	9	0	1	1	0	2	1	1	0	0	2	23
9:15 PM	2	1	0	0	3	0	2	1	0	3	2	0	2	0	4	0	0	0	0	0	10
9:30 PM	3	6	0	0	9	0	3	2	0	5	0	0	1	0	1	0	0	0	0	0	15
9:45 PM	1	2	0	0	3	0	1	0	0	1	2	0	2	0	4	0	1	0	0	1	9
Hourly Total	11	13	1	0	25	1	13	4	0	18	4	1	6	0	11	1	2	0	0	3	57
10:00 PM	1	0	0	0	1	0	2	1	0	3	0	1	0	0	1	1	0	0	0	1	6
10:15 PM	1	1	0	0	2	0	1	0	0	1	0	0	2	0	2	0	0	0	0	0	5
10:30 PM	1	3	0	0	4	0	4	0	0	4	0	0	0	0	0	0	0	1	0	1	9
10:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	2
Hourly Total	3	4	0	0	7	0	8	1	0	9	0	1	3	0	4	1	0	1	0	2	22
11:00 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:45 PM	0	0	0	0	0	0	1	1	0	2	0	0	1	0	1	0	0	0	0	0	3
Hourly Total	1	1	0	0	2	0	2	1	0	3	0	0	1	0	1	0	0	0	0	0	6
Grand Total	548	794	60	16	1402	96	783	398	2	1277	385	104	519	15	1008	56	117	127	1	300	3987
Approach %	39.1	56.6	4.3	-	-	7.5	61.3	31.2	-	-	38.2	10.3	51.5	-	-	18.7	39.0	42.3	-	-	-
Total %	13.7	19.9	1.5	-	35.2	2.4	19.6	10.0	-	32.0	9.7	2.6	13.0	-	25.3	1.4	2.9	3.2	-	7.5	-
Lights	529	784	60	-	1373	96	766	388	-	1250	377	101	507	-	985	54	115	127	-	296	3904
% Lights	96.5	98.7	100.0	-	97.9	100.0	97.8	97.5	-	97.9	97.9	97.1	97.7	-	97.7	96.4	98.3	100.0	-	98.7	97.9
Mediums	19	4	0	-	23	0	16	10	-	26	8	3	11	-	22	2	2	0	-	4	75
% Mediums	3.5	0.5	0.0	-	1.6	0.0	2.0	2.5	-	2.0	2.1	2.9	2.1	-	2.2	3.6	1.7	0.0	-	1.3	1.9
Articulated Trucks	0	6	0	-	6	0	1	0	-	1	0	0	1	-	1	0	0	0	-	0	8
% Articulated Trucks	0.0	0.8	0.0	-	0.4	0.0	0.1	0.0	-	0.1	0.0	0.0	0.2	-	0.1	0.0	0.0	0.0	-	0.0	0.2
Pedestrians	-	-	-	16	-	-	-	-	2	-	-	-	-	15	-	-	-	-	1	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-



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Count Name: MDT Birch St &  
Casino Creek Dr  
Site Code: MDT-2  
Start Date: 05/14/2025  
Page No: 3



Turning Movement Data Plot



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Count Name: MDT Birch St &  
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Site Code: MDT-2  
Start Date: 05/14/2025  
Page No: 4

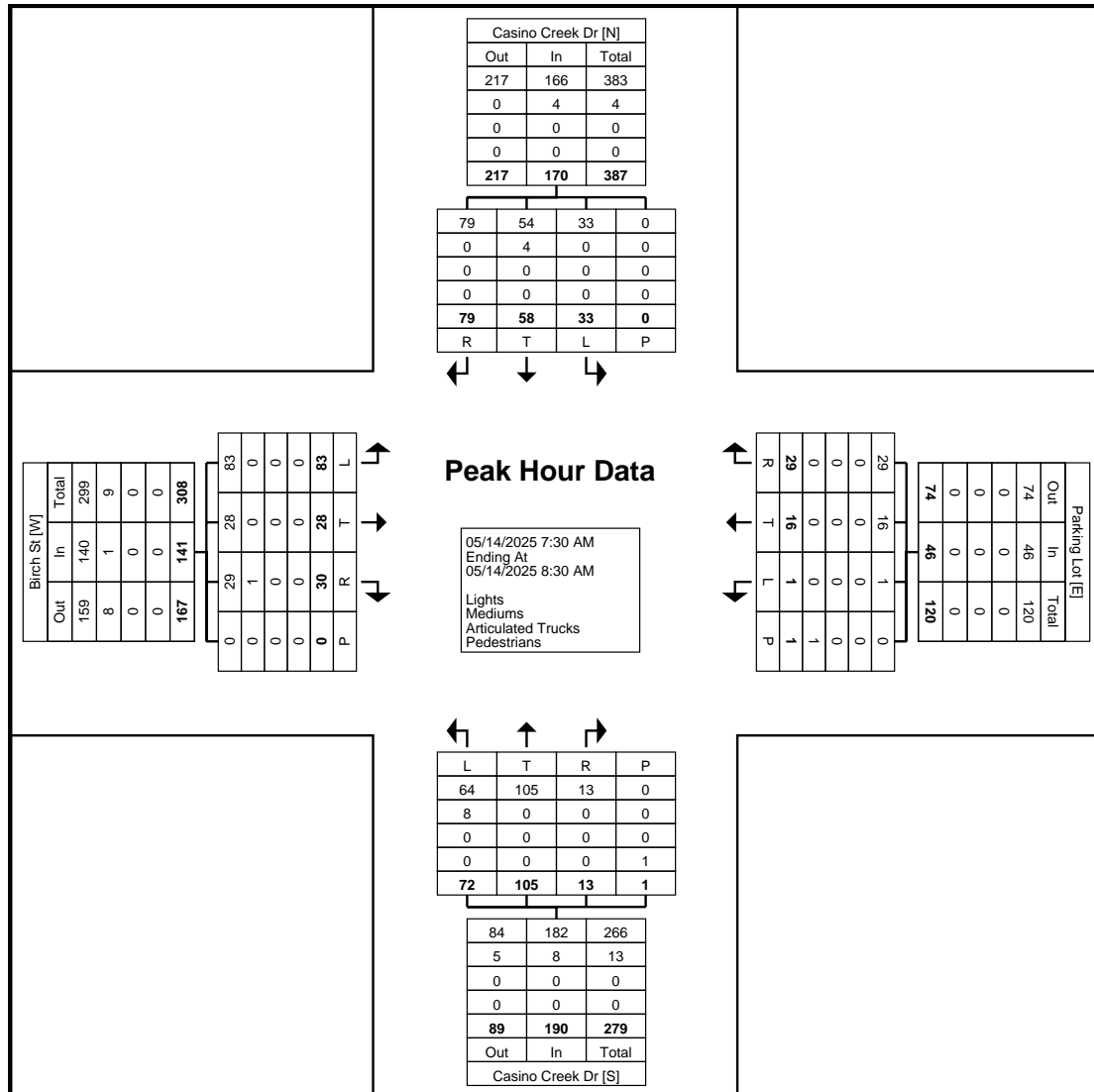
### Turning Movement Peak Hour Data (7:30 AM)

Start Time	Casino Creek Dr Northbound					Casino Creek Dr Southbound					Birch St Eastbound					Parking Lot Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
7:30 AM	20	26	2	0	48	4	9	23	0	36	14	1	5	0	20	0	1	1	0	2	106
7:45 AM	30	39	5	0	74	23	18	36	0	77	39	19	10	0	68	0	9	19	1	28	247
8:00 AM	12	25	6	1	43	6	13	15	0	34	26	8	10	0	44	0	6	7	0	13	134
8:15 AM	10	15	0	0	25	0	18	5	0	23	4	0	5	0	9	1	0	2	0	3	60
Total	72	105	13	1	190	33	58	79	0	170	83	28	30	0	141	1	16	29	1	46	547
Approach %	37.9	55.3	6.8	-	-	19.4	34.1	46.5	-	-	58.9	19.9	21.3	-	-	2.2	34.8	63.0	-	-	-
Total %	13.2	19.2	2.4	-	34.7	6.0	10.6	14.4	-	31.1	15.2	5.1	5.5	-	25.8	0.2	2.9	5.3	-	8.4	-
PHF	0.600	0.673	0.542	-	0.642	0.359	0.806	0.549	-	0.552	0.532	0.368	0.750	-	0.518	0.250	0.444	0.382	-	0.411	0.554
Lights	64	105	13	-	182	33	54	79	-	166	83	28	29	-	140	1	16	29	-	46	534
% Lights	88.9	100.0	100.0	-	95.8	100.0	93.1	100.0	-	97.6	100.0	100.0	96.7	-	99.3	100.0	100.0	100.0	-	100.0	97.6
Mediums	8	0	0	-	8	0	4	0	-	4	0	0	1	-	1	0	0	0	-	0	13
% Mediums	11.1	0.0	0.0	-	4.2	0.0	6.9	0.0	-	2.4	0.0	0.0	3.3	-	0.7	0.0	0.0	0.0	-	0.0	2.4
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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Count Name: MDT Birch St &  
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Site Code: MDT-2  
Start Date: 05/14/2025  
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### Turning Movement Peak Hour Data Plot (7:30 AM)



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Count Name: MDT Birch St &  
Casino Creek Dr  
Site Code: MDT-2  
Start Date: 05/14/2025  
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### Turning Movement Peak Hour Data (2:45 PM)

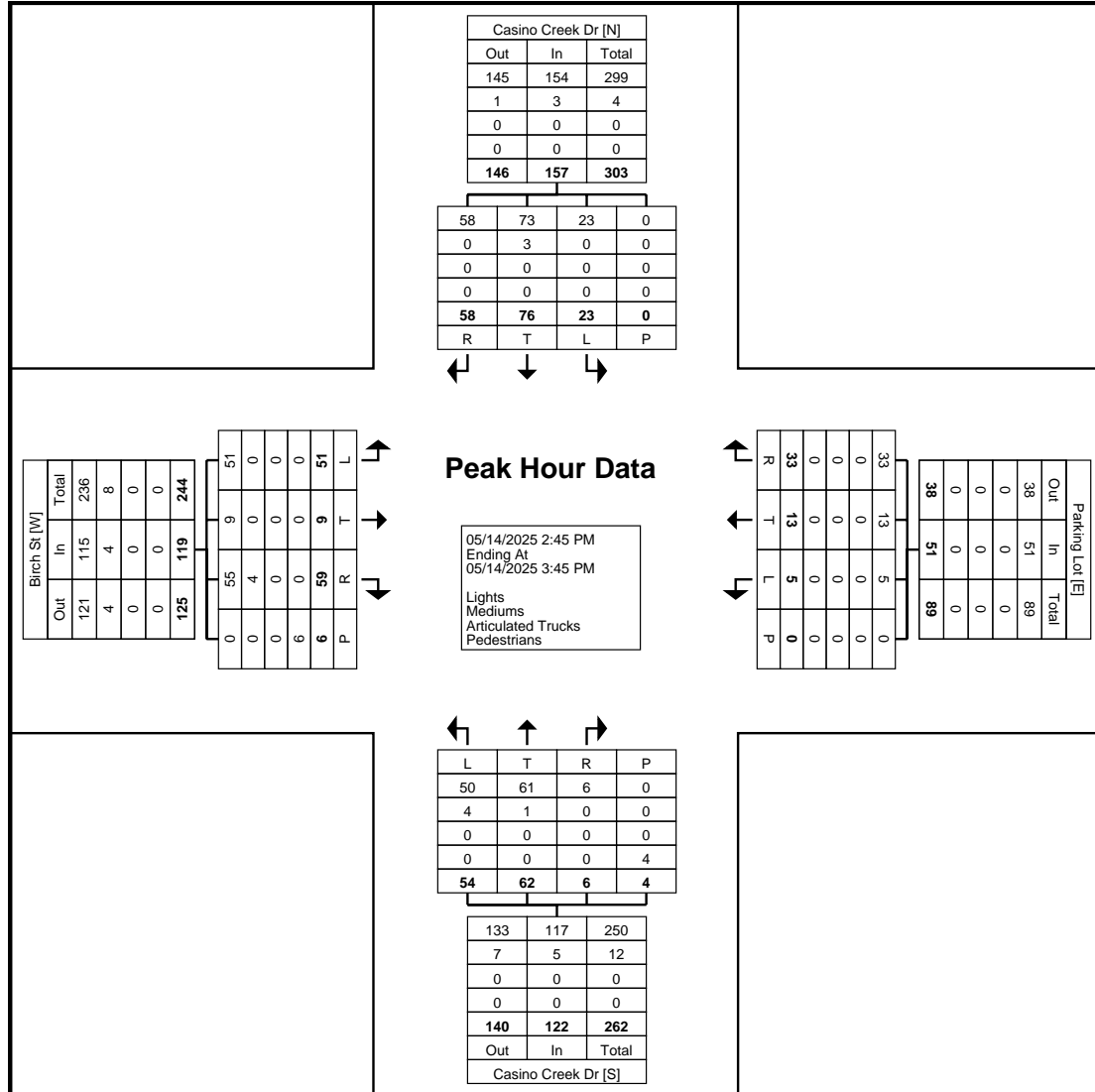
Start Time	Casino Creek Dr Northbound					Casino Creek Dr Southbound					Birch St Eastbound					Parking Lot Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
2:45 PM	7	9	1	0	17	2	10	17	0	29	7	0	10	0	17	1	0	2	0	3	66
3:00 PM	14	14	1	0	29	5	17	21	0	43	7	4	11	0	22	2	0	1	0	3	97
3:15 PM	24	25	1	4	50	10	30	18	0	58	26	3	11	2	40	1	13	27	0	41	189
3:30 PM	9	14	3	0	26	6	19	2	0	27	11	2	27	4	40	1	0	3	0	4	97
Total	54	62	6	4	122	23	76	58	0	157	51	9	59	6	119	5	13	33	0	51	449
Approach %	44.3	50.8	4.9	-	-	14.6	48.4	36.9	-	-	42.9	7.6	49.6	-	-	9.8	25.5	64.7	-	-	-
Total %	12.0	13.8	1.3	-	27.2	5.1	16.9	12.9	-	35.0	11.4	2.0	13.1	-	26.5	1.1	2.9	7.3	-	11.4	-
PHF	0.563	0.620	0.500	-	0.610	0.575	0.633	0.690	-	0.677	0.490	0.563	0.546	-	0.744	0.625	0.250	0.306	-	0.311	0.594
Lights	50	61	6	-	117	23	73	58	-	154	51	9	55	-	115	5	13	33	-	51	437
% Lights	92.6	98.4	100.0	-	95.9	100.0	96.1	100.0	-	98.1	100.0	100.0	93.2	-	96.6	100.0	100.0	100.0	-	100.0	97.3
Mediums	4	1	0	-	5	0	3	0	-	3	0	0	4	-	4	0	0	0	-	0	12
% Mediums	7.4	1.6	0.0	-	4.1	0.0	3.9	0.0	-	1.9	0.0	0.0	6.8	-	3.4	0.0	0.0	0.0	-	0.0	2.7
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	4	-	-	-	-	0	-	-	-	-	6	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-



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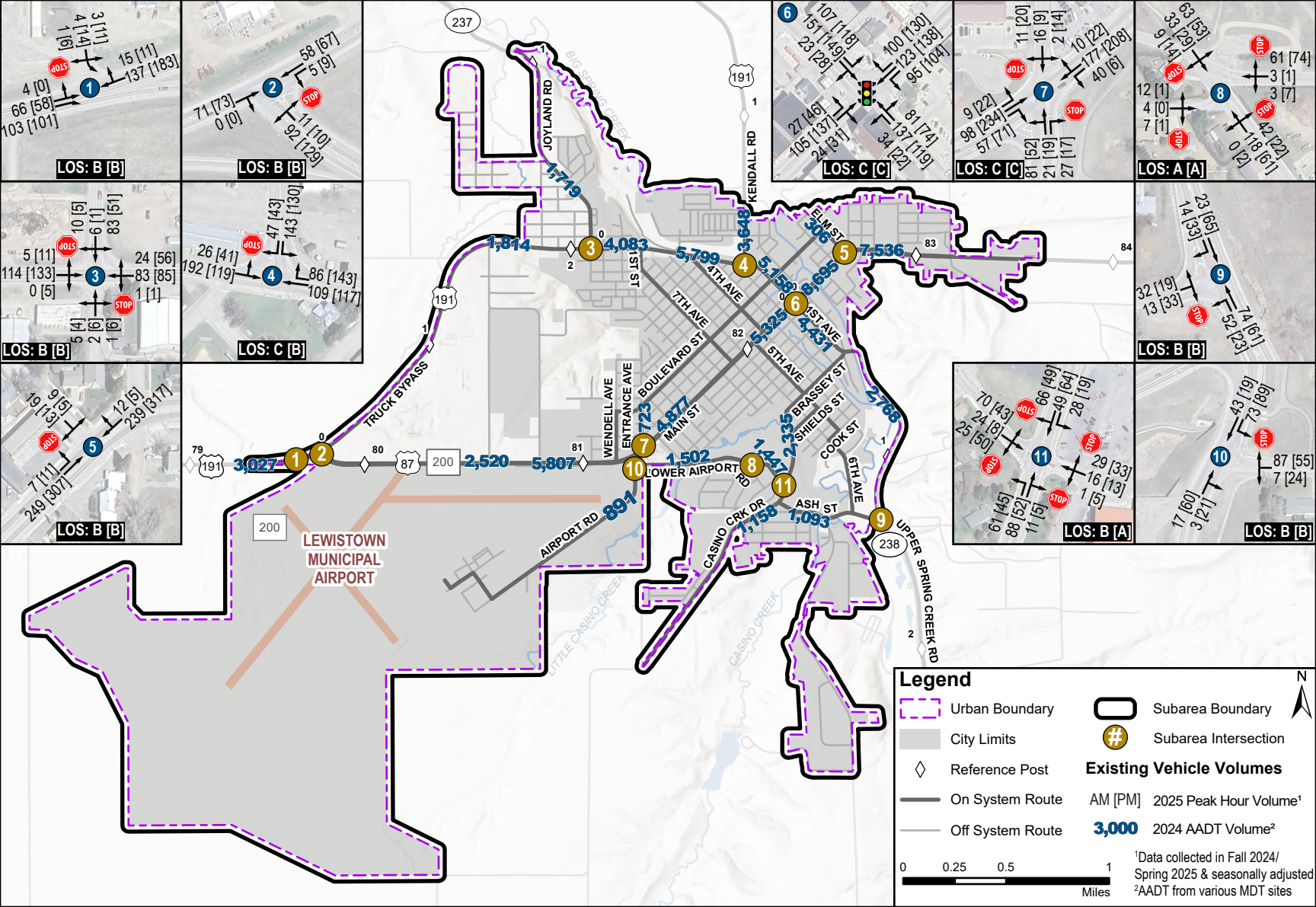
Count Name: MDT Birch St &  
Casino Creek Dr  
Site Code: MDT-2  
Start Date: 05/14/2025  
Page No: 7



# Appendix B

## Existing Conditions Operations Analysis





Central MT Regional Study - Lewistown

Vistro File: F:\...\Lewistown\_ExtistingConditons.vistro

Scenario 1 2025 AM Existing Geometry

Report File: F:\...\2025 AM Existing Geometry.pdf

6/26/2025

### Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Brookville Ln & US 87/191	Two-way stop	HCM 7th Edition	SBL2	0.008	11.9	B
2	US 87/191 & Truck Bypass	Two-way stop	HCM 7th Edition	NB Left	0.145	10.2	B
3	Joyland Rd & Truck Bypass	Two-way stop	HCM 7th Edition	SB Thru	0.014	12.7	B
4	Kendall Rd, Truck Bypass, & 1st Ave N	Two-way stop	HCM 7th Edition	SB Left	0.413	17.1	C
5	N Elm St & Main St	Two-way stop	HCM 7th Edition	SB Left	0.030	14.3	B
6	1st Ave N & Main St	Signalized	HCM 7th Edition	EB Thru	0.430	24.0	C
7	Airport Rd & Main St	Two-way stop	HCM 7th Edition	NB Left	0.279	18.8	C
8	Fluorite Dr, Uranium Dr, & Birch St	All-way stop	HCM 7th Edition	NB Thru	0.386	9.6	A
9	Upper Spring Creek Rd & Ash St	Two-way stop	HCM 7th Edition	EB Left	0.064	10.8	B
10	Airport Rd & Lower Airport Rd	Two-way stop	HCM 7th Edition	WB Left	0.015	11.1	B
11	Casino Creek Dr & Birch St	All-way stop	HCM 7th Edition	EB Left	0.321	10.4	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.



**Intersection Level Of Service Report**  
**Intersection 1: Brookville Ln & US 87/191**

Control Type: Two-way stop  
Analysis Method: HCM 7th Edition  
Analysis Period: 15 minutes

Delay (sec / veh): 11.9  
Level Of Service: B  
Volume to Capacity (v/c): 0.008

**Intersection Setup**

Name	US 87			Brookville Ln			US 87/191			US 87/191		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration				⬆			⬆			⬆		
Turning Movement	Left	Right	Right	Left2	Left	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	600.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

**Volumes**

Name	US 87			Brookville Ln			US 87/191			US 87/191		
Base Volume Input [veh/h]	0	0	0	3	4	1	4	72	113	0	150	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9120	0.9120	0.9120	1.0000	0.9120	0.9120
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	33.30	0.00	0.00	25.00	7.00	0.90	2.00	8.60	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	3	4	1	4	66	103	0	137	15
Peak Hour Factor	1.0000	1.0000	1.0000	0.7320	0.7320	0.7320	0.7320	0.7320	0.7320	1.0000	0.7320	0.7320
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	1	1	0	1	23	35	0	47	5
Total Analysis Volume [veh/h]	0	0	0	4	5	1	5	90	141	0	187	20
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**




V/C, Movement V/C Ratio	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	11.86	11.21	9.35	7.91	0.00	0.00	0.00	0.00	0.00
Movement LOS				B	B	A	A	A	A		A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.05	0.05	0.05	0.01	0.01	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	1.31	1.31	1.31	0.21	0.21	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			11.28			0.17			0.00		
Approach LOS	A			B			A			A		
d_I, Intersection Delay [s/veh]	0.34											
Intersection LOS	B											

### Intersection Level Of Service Report

#### Intersection 2: US 87/191 & Truck Bypass

Control Type:	Two-way stop	Delay (sec / veh):	10.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.145

#### Intersection Setup

Name	US 87		US 87/ US 191		Truck Bypass	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	1	0
Entry Pocket Length [ft]	400.00	100.00	100.00	100.00	500.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

#### Volumes

Name	US 87		US 87/ US 191		Truck Bypass	
Base Volume Input [veh/h]	101	12	78	0	5	64
Base Volume Adjustment Factor	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120
Heavy Vehicles Percentage [%]	5.90	37.40	9.00	0.00	20.00	10.90
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	92	11	71	0	5	58
Peak Hour Factor	0.7930	0.7930	0.7930	0.7930	0.7930	0.7930
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	3	22	0	2	18
Total Analysis Volume [veh/h]	116	14	90	0	6	73
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**





V/C, Movement V/C Ratio	0.14	0.02	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.24	9.16	0.00	0.00	7.58	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.50	0.05	0.00	0.00	0.01	0.00
95th-Percentile Queue Length [ft/ln]	12.60	1.21	0.00	0.00	0.32	0.00
d_A, Approach Delay [s/veh]	10.13		0.00		0.58	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	4.55					
Intersection LOS	B					

### Intersection Level Of Service Report

#### Intersection 3: Joyland Rd & Truck Bypass

Control Type:	Two-way stop	Delay (sec / veh):	12.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.014

#### Intersection Setup

Name	4th St			Joyland Rd			Truck Bypass			Truck Bypass		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

#### Volumes

Name	4th St			Joyland Rd			Truck Bypass			Truck Bypass		
Base Volume Input [veh/h]	5	2	1	87	6	11	5	121	0	1	88	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	0.9530	0.9530	0.9530	0.9390	0.9390	0.9390	0.9390	0.9390	0.9390
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	16.70	9.10	20.00	11.20	0.00	0.00	14.30	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	2	1	83	6	10	5	114	0	1	83	24
Peak Hour Factor	0.7120	0.7120	0.7120	0.7120	0.7120	0.7120	0.7120	0.7120	0.7120	0.7120	0.7120	0.7120
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	1	0	29	2	4	2	40	0	0	29	8
Total Analysis Volume [veh/h]	7	3	1	117	8	14	7	160	0	1	117	34
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**




V/C, Movement V/C Ratio	0.01	0.01	0.00	0.18	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.97	11.20	9.15	12.15	12.73	10.51	7.72	0.00	0.00	7.52	0.00	0.00
Movement LOS	B	B	A	B	B	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.05	0.80	0.80	0.80	0.01	0.01	0.01	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.34	1.34	1.34	20.09	20.09	20.09	0.29	0.29	0.29	0.04	0.04	0.04
d_A, Approach Delay [s/veh]	10.87			12.02			0.32			0.05		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	3.95											
Intersection LOS	B											

### Intersection Level Of Service Report

#### Intersection 4: Kendall Rd, Truck Bypass, & 1st Ave N

Control Type:	Two-way stop	Delay (sec / veh):	17.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.413

#### Intersection Setup

Name	Kendall Rd		Truck Bypass		1st Ave N	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	200.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		35.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

#### Volumes

Name	Kendall Rd		Truck Bypass		1st Ave N	
Base Volume Input [veh/h]	152	50	28	205	116	92
Base Volume Adjustment Factor	0.9390	0.9390	0.9390	0.9390	0.9390	0.9390
Heavy Vehicles Percentage [%]	4.00	8.00	14.30	3.50	10.30	6.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	143	47	26	192	109	86
Peak Hour Factor	0.6900	0.6900	0.6900	0.6900	0.6900	0.6900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	52	17	9	70	39	31
Total Analysis Volume [veh/h]	207	68	38	278	158	125
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**




V/C, Movement V/C Ratio	0.41	0.08	0.03	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	17.15	9.48	7.71	0.00	0.00	0.00
Movement LOS	C	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	2.00	0.25	0.06	0.06	0.00	0.00
95th-Percentile Queue Length [ft/ln]	50.06	6.33	1.62	1.62	0.00	0.00
d_A, Approach Delay [s/veh]	15.25		0.93		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	5.13					
Intersection LOS	C					

**Intersection Level Of Service Report****Intersection 5: N Elm St & Main St**

Control Type: Two-way stop  
 Analysis Method: HCM 7th Edition  
 Analysis Period: 15 minutes

Delay (sec / veh): 14.3  
 Level Of Service: B  
 Volume to Capacity (v/c): 0.030

**Intersection Setup**

Name	N Elm St		Main St		Main St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

**Volumes**

Name	N Elm St		Main St		Main St	
Base Volume Input [veh/h]	9	20	7	265	254	13
Base Volume Adjustment Factor	0.9530	0.9530	0.9390	0.9390	0.9390	0.9390
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	5.70	4.20	7.70
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	19	7	249	239	12
Peak Hour Factor	0.7320	0.7320	0.7320	0.7320	0.7320	0.7320
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	6	2	85	82	4
Total Analysis Volume [veh/h]	12	26	10	340	327	16
Pedestrian Volume [ped/h]	2		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.03	0.04	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	14.31	10.53	7.97	0.00	0.00	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.21	0.21	0.02	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	5.31	5.31	0.62	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	11.72		0.23		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.72					
Intersection LOS	B					





**Intersection Level Of Service Report****Intersection 6: 1st Ave N & Main St**

Control Type:  
Analysis Method:  
Analysis Period:

Signalized  
HCM 7th Edition  
15 minutes

Delay (sec / veh): 24.0  
Level Of Service: C  
Volume to Capacity (v/c): 0.430

**Intersection Setup**

Name	1st Ave S			1st Ave N			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	140.00	100.00	100.00	170.00	100.00	100.00	150.00	100.00	150.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	1st Ave S			1st Ave N			Main St			Main St		
Base Volume Input [veh/h]	36	144	85	114	161	25	29	112	26	101	131	106
Base Volume Adjustment Factor	0.9530	0.9530	0.9530	0.9390	0.9390	0.9390	0.9390	0.9390	0.9390	0.9390	0.9390	0.9390
Heavy Vehicles Percentage [%]	0.00	4.20	2.40	6.20	3.70	0.00	0.00	2.70	0.00	3.00	0.80	8.50
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	34	137	81	107	151	23	27	105	24	95	123	100
Peak Hour Factor	0.7620	0.7620	0.7620	0.7620	0.7620	0.7620	0.7620	0.7620	0.7620	0.7620	0.7620	0.7620
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	45	27	35	50	8	9	34	8	31	40	33
Total Analysis Volume [veh/h]	45	180	106	140	198	30	35	138	31	125	161	131
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	2			3			3			1		
v_di, Inbound Pedestrian Volume crossing m	3			1			2			3		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing (Basic)**

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Flashing Yellow Arrow	No			No			No			No		
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Maximum Green [s]	4	18	0	4	18	0	4	14	0	4	14	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	14.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Phasing & Timing: Pattern 1**

Split [s]	10.0	37.0	0.0	10.0	37.0	0.0	10.0	33.0	0.0	10.0	33.0	0.0
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	C	L	C	L	C	L	C	R
C, Calculated Cycle Length [s]	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	0.00	3.00	0.00	3.00	0.00	3.00	3.00
g_i, Effective Green Time [s]	57.6	47.0	57.6	49.2	22.4	12.4	22.4	14.5	14.5
g / C, Green / Cycle	0.64	0.52	0.64	0.55	0.25	0.14	0.25	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.04	0.20	0.14	0.15	0.03	0.11	0.10	0.10	0.11
s, saturation flow rate [veh/h]	1103	1429	1022	1494	1128	1487	1221	1565	1233
c, Capacity [veh/h]	722	745	642	816	306	206	307	252	199
d1, Uniform Delay [s]	6.43	12.90	7.37	10.94	26.32	37.69	28.24	35.30	35.38
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.04	1.50	0.78	0.85	0.16	7.91	0.87	2.68	3.69
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.06	0.38	0.22	0.28	0.11	0.82	0.41	0.64	0.66
d, Delay for Lane Group [s/veh]	6.46	14.40	8.15	11.80	26.49	45.60	29.11	37.97	39.07
Lane Group LOS	A	B	A	B	C	D	C	D	D
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.30	3.63	1.12	2.53	0.59	4.06	2.28	3.48	2.89
50th-Percentile Queue Length [ft/ln]	7.53	90.79	28.08	63.15	14.79	101.39	56.94	86.91	72.15
95th-Percentile Queue Length [veh/ln]	0.54	6.54	2.02	4.55	1.07	7.30	4.10	6.26	5.19
95th-Percentile Queue Length [ft/ln]	13.56	163.42	50.54	113.66	26.63	182.50	102.49	156.44	129.87

### Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	6.46	14.40	14.40	8.15	11.80	11.80	26.49	45.60	45.60	29.11	37.97	39.07
Movement LOS	A	B	B	A	B	B	C	D	D	C	D	D
d_A, Approach Delay [s/veh]	13.32			10.41			42.32			35.66		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	24.05											
Intersection LOS	C											
Intersection V/C	0.430											

### Emissions

Vehicle Miles Traveled [mph]	2.40	15.27	9.58	15.60	2.44	11.78	7.45	9.60	7.81
Stops [stops/h]	12.05	145.27	44.92	101.03	23.67	162.22	91.10	139.06	115.44
Fuel consumption [US gal/h]	0.21	2.08	0.84	1.64	0.39	2.72	1.43	2.21	1.84
CO [g/h]	14.92	145.56	58.40	114.40	27.20	190.14	99.61	154.42	128.30
NOx [g/h]	2.90	28.32	11.36	22.26	5.29	36.99	19.38	30.04	24.96
VOC [g/h]	3.46	33.73	13.53	26.51	6.30	44.07	23.09	35.79	29.73

### Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.156	2.144	2.097	2.404
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	711	711	622	622
d_b, Bicycle Delay [s]	18.69	18.69	21.36	21.36
I_b,int, Bicycle LOS Score for Intersection	2.106	2.167	1.896	2.248
Bicycle LOS	B	B	A	B

### Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-





**Intersection Level Of Service Report**  
**Intersection 7: Airport Rd & Main St**

Control Type: Two-way stop  
Analysis Method: HCM 7th Edition  
Analysis Period: 15 minutes

Delay (sec / veh): 18.8  
Level Of Service: C  
Volume to Capacity (v/c): 0.279

**Intersection Setup**

Name	Airport Rd			Entrance Ave			US 87			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	150.00	100.00	100.00	100.00	100.00	100.00	300.00	100.00	900.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

**Volumes**

Name	Airport Rd			Entrance Ave			US 87			Main St		
Base Volume Input [veh/h]	90	23	30	2	18	12	10	108	63	44	194	11
Base Volume Adjustment Factor	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120
Heavy Vehicles Percentage [%]	7.80	26.10	0.00	0.00	0.00	0.00	0.00	0.00	7.90	2.30	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	81	21	27	2	16	11	9	98	57	40	177	10
Peak Hour Factor	0.7310	0.7310	0.7310	0.7310	0.7310	0.7310	0.7310	0.7310	0.7310	0.7310	0.7310	0.7310
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	7	9	1	5	4	3	34	19	14	61	3
Total Analysis Volume [veh/h]	111	29	37	3	22	15	12	134	78	55	242	14
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0





**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.28	0.07	0.04	0.01	0.05	0.02	0.01	0.00	0.00	0.04	0.00	0.00
d_M, Delay for Movement [s/veh]	18.82	18.65	9.08	15.56	13.69	10.10	7.75	0.00	0.00	7.58	0.00	0.00
Movement LOS	C	C	A	C	B	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.54	1.54	0.13	0.25	0.25	0.25	0.03	0.00	0.00	0.12	0.00	0.00
95th-Percentile Queue Length [ft/ln]	38.60	38.60	3.14	6.21	6.21	6.21	0.69	0.00	0.00	2.96	0.00	0.00
d_A, Approach Delay [s/veh]	16.76			12.49			0.42			1.34		
Approach LOS	C			B			A			A		
d_I, Intersection Delay [s/veh]	5.29											
Intersection LOS	C											

**Intersection Level Of Service Report****Intersection 8: Fluorite Dr, Uranium Dr, & Birch St**

Control Type:	All-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.386

**Intersection Setup**

Name	Fluorite Dr			Lower Airport Rd			Uranium Dr			Birch St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			15.00			15.00			15.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			No			Yes		

**Volumes**

Name	Fluorite Dr			Lower Airport Rd			Uranium Dr			Birch St		
Base Volume Input [veh/h]	0	118	42	69	36	10	12	4	7	3	3	67
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	0.9170	0.9170	0.9170	1.0000	1.0000	1.0000	0.9170	0.9170	0.9170
Heavy Vehicles Percentage [%]	0.00	4.20	2.40	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	118	42	63	33	9	12	4	7	3	3	61
Peak Hour Factor	0.5180	0.5180	0.5180	0.5180	0.5180	0.5180	0.5180	0.5180	0.5180	0.5180	0.5180	0.5180
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	57	20	30	16	4	6	2	3	1	1	29
Total Analysis Volume [veh/h]	0	228	81	122	64	17	23	8	14	6	6	118
Pedestrian Volume [ped/h]	3			0			0			22		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	801	753	691	778
Degree of Utilization, x	0.39	0.27	0.07	0.17

**Movement, Approach, & Intersection Results**




95th-Percentile Queue Length [veh]	1.83	1.09	0.21	0.60
95th-Percentile Queue Length [ft]	45.73	27.25	5.21	14.94
Approach Delay [s/veh]	10.29	9.54	8.57	8.55
Approach LOS	B	A	A	A
Intersection Delay [s/veh]	9.62			
Intersection LOS	A			

### Intersection Level Of Service Report

#### Intersection 9: Upper Spring Creek Rd & Ash St

Control Type:	Two-way stop	Delay (sec / veh):	10.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.064

#### Intersection Setup

Name	Upper Spring Creek Rd		Upper Spring Creek Rd		Ash St	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0
Entry Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

#### Volumes

Name	Upper Spring Creek Rd		Upper Spring Creek Rd		Ash St	
Base Volume Input [veh/h]	57	81	25	15	35	14
Base Volume Adjustment Factor	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170
Heavy Vehicles Percentage [%]	1.80	0.00	0.00	6.70	8.60	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	52	74	23	14	32	13
Peak Hour Factor	0.7370	0.7370	0.7370	0.7370	0.7370	0.7370
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	25	8	5	11	4
Total Analysis Volume [veh/h]	71	100	31	19	43	18
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**




V/C, Movement V/C Ratio	0.05	0.00	0.00	0.00	0.06	0.02
d_M, Delay for Movement [s/veh]	7.42	0.00	0.00	0.00	10.79	8.86
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.14	0.00	0.00	0.00	0.26	0.26
95th-Percentile Queue Length [ft/ln]	3.58	0.00	0.00	0.00	6.62	6.62
d_A, Approach Delay [s/veh]	3.08		0.00		10.22	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	4.08					
Intersection LOS	B					

### Intersection Level Of Service Report

#### Intersection 10: Airport Rd & Lower Airport Rd

Control Type:	Two-way stop	Delay (sec / veh):	11.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.015

#### Intersection Setup

Name	Airport Rd		Airport Rd		Lower Airport Rd	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

#### Volumes

Name	Airport Rd		Airport Rd		Lower Airport Rd	
Base Volume Input [veh/h]	20	3	87	51	8	104
Base Volume Adjustment Factor	0.8410	0.8410	0.8410	0.8410	0.8410	0.8410
Heavy Vehicles Percentage [%]	0.00	0.00	1.10	5.90	0.00	6.70
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	3	73	43	7	87
Peak Hour Factor	0.7040	0.7040	0.7040	0.7040	0.7040	0.7040
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	1	26	15	2	31
Total Analysis Volume [veh/h]	24	4	104	61	10	124
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**





V/C, Movement V/C Ratio	0.00	0.00	0.07	0.00	0.02	0.12
d_M, Delay for Movement [s/veh]	0.00	0.00	7.42	0.00	11.06	9.04
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.21	0.00	0.47	0.47
95th-Percentile Queue Length [ft/ln]	0.00	0.00	5.24	0.00	11.65	11.65
d_A, Approach Delay [s/veh]	0.00		4.68		9.19	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.13					
Intersection LOS	B					

### Intersection Level Of Service Report

#### Intersection 11: Casino Creek Dr & Birch St

Control Type:	All-way stop	Delay (sec / veh):	10.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.321

#### Intersection Setup

Name	Casino Creek Dr			Casino Creek Dr			Birch St			Parking Lot		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

#### Volumes

Name	Casino Creek Dr			Casino Creek Dr			Birch St			Parking Lot		
Base Volume Input [veh/h]	72	105	13	33	58	79	83	28	30	1	16	29
Base Volume Adjustment Factor	0.8410	0.8410	0.8410	0.8410	0.8410	0.8410	0.8410	0.8410	0.8410	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	11.10	0.00	0.00	0.00	6.90	0.00	0.00	0.00	3.30	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	88	11	28	49	66	70	24	25	1	16	29
Peak Hour Factor	0.5540	0.5540	0.5540	0.5540	0.5540	0.5540	0.5540	0.5540	0.5540	0.5540	0.5540	0.5540
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	40	5	13	22	30	32	11	11	0	7	13
Total Analysis Volume [veh/h]	110	159	20	51	88	119	126	43	45	2	29	52
Pedestrian Volume [ped/h]	1			0			0			1		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	565	643	577	669	666	680
Degree of Utilization, x	0.19	0.28	0.09	0.31	0.32	0.12

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.72	1.13	0.29	1.31	1.39	0.41
95th-Percentile Queue Length [ft]	17.91	28.37	7.25	32.86	34.66	10.36
Approach Delay [s/veh]	10.51		10.29		10.94	9.02
Approach LOS	B		B		B	A
Intersection Delay [s/veh]	10.41					
Intersection LOS	B					

Central MT Regional Study - Lewistown

Vistro File: F:\...\Lewistown\_ExtistingConditons.vistro

Scenario 2 2025 PM Existing Geometry

Report File: F:\...\2025 PM Existing Geometry.pdf

6/26/2025

### Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Brookville Ln & US 87/191	Two-way stop	HCM 7th Edition	SB Left	0.028	11.3	B
2	US 87/191 & Truck Bypass	Two-way stop	HCM 7th Edition	NB Left	0.184	10.5	B
3	Joyland Rd & Truck Bypass	Two-way stop	HCM 7th Edition	SB Thru	0.002	11.7	B
4	Kendall Rd, Truck Bypass, & 1st Ave N	Two-way stop	HCM 7th Edition	SB Left	0.224	12.4	B
5	N Elm St & Main St	Two-way stop	HCM 7th Edition	SB Left	0.016	14.7	B
6	1st Ave N & Main St	Signalized	HCM 7th Edition	EB Thru	0.373	25.4	C
7	Airport Rd & Main St	Two-way stop	HCM 7th Edition	NB Left	0.176	18.5	C
8	Fluorite Dr, Uranium Dr, & Birch St	All-way stop	HCM 7th Edition	SB Left	0.184	8.0	A
9	Upper Spring Creek Rd & Ash St	Two-way stop	HCM 7th Edition	EB Left	0.029	10.0	B
10	Airport Rd & Lower Airport Rd	Two-way stop	HCM 7th Edition	WB Left	0.039	10.9	B
11	Casino Creek Dr & Birch St	All-way stop	HCM 7th Edition	SB Thru	0.268	9.2	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.



**Intersection Level Of Service Report**  
**Intersection 1: Brookville Ln & US 87/191**

Control Type: Two-way stop  
Analysis Method: HCM 7th Edition  
Analysis Period: 15 minutes

Delay (sec / veh): 11.3  
Level Of Service: B  
Volume to Capacity (v/c): 0.028

**Intersection Setup**

Name	US 87			Brookville Ln			US 87/191			US 87/191		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration				⬆			⬆			⬆		
Turning Movement	Left	Right	Right	Left	Left	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	600.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

**Volumes**

Name	US 87			Brookville Ln			US 87/191			US 87/191		
Base Volume Input [veh/h]	0	0	0	11	14	6	0	61	106	0	192	12
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9520	0.9520	0.9520	1.0000	0.9520	0.9520
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	0.00	13.20	1.80	2.00	2.60	8.30
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	11	14	6	0	58	101	0	183	11
Peak Hour Factor	1.0000	1.0000	1.0000	0.8450	0.8450	0.8450	0.8450	0.8450	0.8450	1.0000	0.8450	0.8450
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	3	4	2	0	17	30	0	54	3
Total Analysis Volume [veh/h]	0	0	0	13	17	7	0	69	120	0	217	13
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**




V/C, Movement V/C Ratio	0.00	0.00	0.00	0.02	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	11.29	11.29	9.73	7.67	0.00	0.00	0.00	0.00	0.00
Movement LOS				B	B	A	A	A	A		A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.18	0.18	0.18	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	4.61	4.61	4.61	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			10.99			0.00			0.00		
Approach LOS	A			B			A			A		
d_I, Intersection Delay [s/veh]	0.89											
Intersection LOS	B											

### Intersection Level Of Service Report

#### Intersection 2: US 87/191 & Truck Bypass

Control Type:	Two-way stop	Delay (sec / veh):	10.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.184

#### Intersection Setup

Name	US 87		US 87/ US 191		Truck Bypass	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	1	0
Entry Pocket Length [ft]	400.00	100.00	100.00	100.00	500.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

#### Volumes

Name	US 87		US 87/ US 191		Truck Bypass	
Base Volume Input [veh/h]	136	10	77	0	9	70
Base Volume Adjustment Factor	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520
Heavy Vehicles Percentage [%]	0.00	0.00	11.70	0.00	0.00	12.80
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	129	10	73	0	9	67
Peak Hour Factor	0.8680	0.8680	0.8680	0.8680	0.8680	0.8680
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	37	3	21	0	3	19
Total Analysis Volume [veh/h]	149	12	84	0	10	77
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.18	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	10.46	8.72	0.00	0.00	7.38	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.67	0.04	0.00	0.00	0.02	0.00
95th-Percentile Queue Length [ft/ln]	16.83	0.93	0.00	0.00	0.49	0.00
d_A, Approach Delay [s/veh]	10.33		0.00		0.85	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	5.23					
Intersection LOS	B					





### Intersection Level Of Service Report

#### Intersection 3: Joyland Rd & Truck Bypass

Control Type: Two-way stop  
 Analysis Method: HCM 7th Edition  
 Analysis Period: 15 minutes

Delay (sec / veh): 11.7  
 Level Of Service: B  
 Volume to Capacity (v/c): 0.002

#### Intersection Setup

Name	4th St			Joyland Rd			Truck Bypass			Truck Bypass		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

#### Volumes

Name	4th St			Joyland Rd			Truck Bypass			Truck Bypass		
Base Volume Input [veh/h]	4	6	6	57	1	5	12	146	5	1	93	61
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	0.9010	0.9010	0.9010	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120
Heavy Vehicles Percentage [%]	0.00	0.00	16.70	0.00	0.00	0.00	0.00	9.60	0.00	0.00	7.60	1.60
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	6	6	51	1	5	11	133	5	1	85	56
Peak Hour Factor	0.8560	0.8560	0.8560	0.8560	0.8560	0.8560	0.8560	0.8560	0.8560	0.8560	0.8560	0.8560
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	2	2	15	0	1	3	39	1	0	25	16
Total Analysis Volume [veh/h]	5	7	7	60	1	6	13	155	6	1	99	65
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**




V/C, Movement V/C Ratio	0.01	0.01	0.01	0.10	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.93	11.46	9.39	11.55	11.74	9.57	7.54	0.00	0.00	7.52	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.09	0.09	0.09	0.35	0.35	0.35	0.02	0.02	0.02	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2.20	2.20	2.20	8.86	8.86	8.86	0.55	0.55	0.55	0.04	0.04	0.04
d_A, Approach Delay [s/veh]	10.56			11.37			0.56			0.05		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	2.51											
Intersection LOS	B											

### Intersection Level Of Service Report

#### Intersection 4: Kendall Rd, Truck Bypass, & 1st Ave N

Control Type:	Two-way stop	Delay (sec / veh):	12.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.224

#### Intersection Setup

Name	Kendall Rd		Truck Bypass		1st Ave N	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	200.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		35.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

#### Volumes

Name	Kendall Rd		Truck Bypass		1st Ave N	
Base Volume Input [veh/h]	143	47	45	131	128	157
Base Volume Adjustment Factor	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120
Heavy Vehicles Percentage [%]	2.10	12.80	8.80	6.90	5.50	0.60
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	130	43	41	119	117	143
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	12	11	32	32	39
Total Analysis Volume [veh/h]	141	47	45	129	127	155
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**




V/C, Movement V/C Ratio	0.22	0.05	0.03	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.38	9.25	7.59	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.86	0.17	0.08	0.08	0.00	0.00
95th-Percentile Queue Length [ft/ln]	21.40	4.15	1.92	1.92	0.00	0.00
d_A, Approach Delay [s/veh]	11.60		1.96		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	3.92					
Intersection LOS	B					

**Intersection Level Of Service Report****Intersection 5: N Elm St & Main St**

Control Type: Two-way stop  
 Analysis Method: HCM 7th Edition  
 Analysis Period: 15 minutes

Delay (sec / veh): 14.7  
 Level Of Service: B  
 Volume to Capacity (v/c): 0.016

**Intersection Setup**

Name	N Elm St		Main St		Main St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

**Volumes**

Name	N Elm St		Main St		Main St	
Base Volume Input [veh/h]	6	14	12	337	348	6
Base Volume Adjustment Factor	0.9010	0.9010	0.9120	0.9120	0.9120	0.9120
Heavy Vehicles Percentage [%]	0.00	7.10	8.30	5.40	4.30	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	13	11	307	317	5
Peak Hour Factor	0.8730	0.8730	0.8730	0.8730	0.8730	0.8730
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	4	3	88	91	1
Total Analysis Volume [veh/h]	6	15	13	352	363	6
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**





V/C, Movement V/C Ratio	0.02	0.02	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	14.72	10.65	8.15	0.00	0.00	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.12	0.12	0.03	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2.98	2.98	0.85	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	11.81		0.29		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.47					
Intersection LOS	B					

**Intersection Level Of Service Report****Intersection 6: 1st Ave N & Main St**

Control Type: Signalized  
 Analysis Method: HCM 7th Edition  
 Analysis Period: 15 minutes

Delay (sec / veh): 25.4  
 Level Of Service: C  
 Volume to Capacity (v/c): 0.373

**Intersection Setup**

Name	1st Ave S			1st Ave N			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	140.00	100.00	100.00	170.00	100.00	100.00	150.00	100.00	150.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	1st Ave S			1st Ave N			Main St			Main St		
Base Volume Input [veh/h]	24	132	82	129	163	31	50	150	34	114	151	143
Base Volume Adjustment Factor	0.9010	0.9010	0.9010	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120
Heavy Vehicles Percentage [%]	0.00	3.00	2.40	8.60	3.70	0.00	4.00	0.70	0.00	4.40	1.40	9.80
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	22	119	74	118	149	28	46	137	31	104	138	130
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	32	20	32	40	8	13	37	8	28	38	35
Total Analysis Volume [veh/h]	24	129	80	128	162	30	50	149	34	113	150	141
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			3			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			3		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing (Basic)**

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Flashing Yellow Arrow	No			No			No			No		
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Maximum Green [s]	4	18	0	4	18	0	4	14	0	4	14	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	14.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Phasing & Timing: Pattern 1**

Split [s]	10.0	37.0	0.0	10.0	37.0	0.0	10.0	33.0	0.0	10.0	33.0	0.0
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	

**Exclusive Pedestrian Phase**

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	C	L	C	L	C	L	C	R
C, Calculated Cycle Length [s]	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	0.00	3.00	0.00	3.00	0.00	3.00	3.00
g_i, Effective Green Time [s]	57.1	46.7	57.1	49.8	22.9	12.9	22.9	14.4	14.4
g / C, Green / Cycle	0.63	0.52	0.63	0.55	0.25	0.14	0.25	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.02	0.15	0.12	0.13	0.05	0.12	0.09	0.10	0.12
s, saturation flow rate [veh/h]	1127	1440	1058	1488	1104	1517	1195	1558	1224
c, Capacity [veh/h]	744	746	691	822	315	219	302	249	196
d1, Uniform Delay [s]	6.41	12.22	7.08	10.36	26.16	37.47	27.66	35.13	35.84
k, delay calibration	0.11	0.50	0.50	0.50	0.12	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.02	0.93	0.59	0.67	0.25	8.15	0.77	2.33	4.92
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.03	0.28	0.19	0.23	0.16	0.84	0.37	0.60	0.72
d, Delay for Lane Group [s/veh]	6.43	13.15	7.67	11.02	26.41	45.61	28.42	37.46	40.76
Lane Group LOS	A	B	A	B	C	D	C	D	D
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.16	2.48	1.03	2.03	0.85	4.40	2.02	3.21	3.19
50th-Percentile Queue Length [ft/ln]	4.05	62.07	25.70	50.72	21.22	109.93	50.55	80.19	79.72
95th-Percentile Queue Length [veh/ln]	0.29	4.47	1.85	3.65	1.53	7.84	3.64	5.77	5.74
95th-Percentile Queue Length [ft/ln]	7.29	111.72	46.26	91.29	38.20	195.91	90.99	144.34	143.50

### Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	6.43	13.15	13.15	7.67	11.02	11.02	26.41	45.61	45.61	28.42	37.46	40.76
Movement LOS	A	B	B	A	B	B	C	D	D	C	D	D
d_A, Approach Delay [s/veh]	12.46			9.68			41.49			36.08		
Approach LOS	B			A			D			D		
d_I, Intersection Delay [s/veh]	25.42											
Intersection LOS	C											
Intersection V/C	0.373											

### Emissions

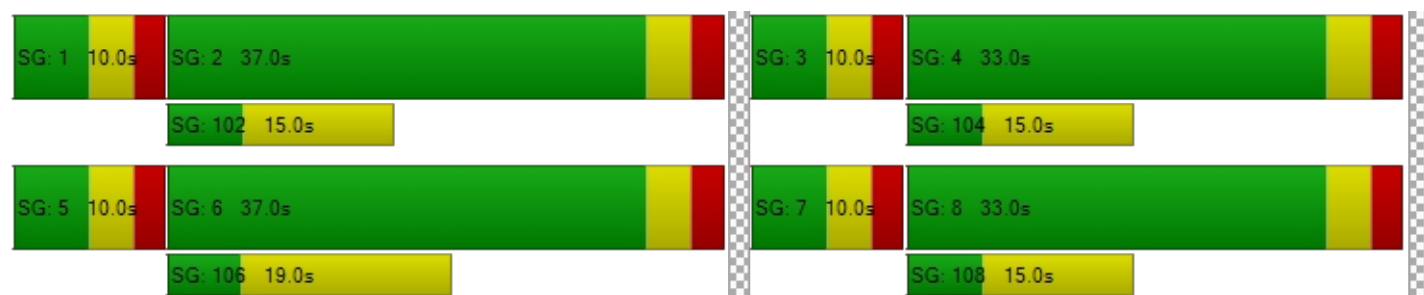
Vehicle Miles Traveled [mph]	1.28	11.16	8.76	13.14	3.49	12.76	6.74	8.94	8.41
Stops [stops/h]	6.48	99.31	41.12	81.15	33.95	175.89	80.88	128.30	127.55
Fuel consumption [US gal/h]	0.11	1.44	0.75	1.33	0.56	2.95	1.27	2.04	2.04
CO [g/h]	7.96	100.81	52.53	93.17	38.84	205.99	88.55	142.44	142.37
NOx [g/h]	1.55	19.61	10.22	18.13	7.56	40.08	17.23	27.71	27.70
VOC [g/h]	1.85	23.36	12.17	21.59	9.00	47.74	20.52	33.01	33.00

### Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.115	2.128	2.080	2.386
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	711	711	622	622
d_b, Bicycle Delay [s]	18.69	18.69	21.36	21.36
I_b,int, Bicycle LOS Score for Intersection	1.944	2.088	1.944	2.226
Bicycle LOS	A	B	A	B

### Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-





**Intersection Level Of Service Report**  
**Intersection 7: Airport Rd & Main St**

Control Type: Two-way stop  
Analysis Method: HCM 7th Edition  
Analysis Period: 15 minutes

Delay (sec / veh): 18.5  
Level Of Service: C  
Volume to Capacity (v/c): 0.176

**Intersection Setup**

Name	Airport Rd			Entrance Ave			US 87			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	150.00	100.00	100.00	100.00	100.00	100.00	300.00	100.00	900.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

**Volumes**

Name	Airport Rd			Entrance Ave			US 87			Main St		
Base Volume Input [veh/h]	55	20	18	15	10	21	23	246	75	23	219	6
Base Volume Adjustment Factor	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520
Heavy Vehicles Percentage [%]	5.50	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	52	19	17	14	9	20	22	234	71	22	208	6
Peak Hour Factor	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	6	5	4	3	6	6	69	21	6	61	2
Total Analysis Volume [veh/h]	61	22	20	16	11	23	26	274	83	26	244	7
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**





V/C, Movement V/C Ratio	0.18	0.06	0.03	0.05	0.03	0.03	0.02	0.00	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	18.46	17.55	9.80	17.14	15.21	10.44	7.77	0.00	0.00	7.82	0.00	0.00
Movement LOS	C	C	A	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.89	0.89	0.08	0.36	0.36	0.36	0.06	0.00	0.00	0.06	0.00	0.00
95th-Percentile Queue Length [ft/ln]	22.32	22.32	2.00	8.94	8.94	8.94	1.50	0.00	0.00	1.53	0.00	0.00
d_A, Approach Delay [s/veh]	16.59			13.64			0.53			0.73		
Approach LOS	C			B			A			A		
d_I, Intersection Delay [s/veh]	3.44											
Intersection LOS	C											

### Intersection Level Of Service Report

#### Intersection 8: Fluorite Dr, Uranium Dr, & Birch St

Control Type:	All-way stop	Delay (sec / veh):	8.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.184

#### Intersection Setup

Name	Fluorite Dr			Lower Airport Rd			Uranium Dr			Birch St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			15.00			15.00			15.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			No			Yes		

#### Volumes

Name	Fluorite Dr			Lower Airport Rd			Uranium Dr			Birch St		
Base Volume Input [veh/h]	2	61	22	58	32	15	1	0	1	8	1	82
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	0.9070	0.9070	0.9070	1.0000	1.0000	1.0000	0.9070	0.9070	0.9070
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	61	22	53	29	14	1	0	1	7	1	74
Peak Hour Factor	0.6320	0.6320	0.6320	0.6320	0.6320	0.6320	0.6320	0.6320	0.6320	0.6320	0.6320	0.6320
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	24	9	21	11	6	0	0	0	3	0	29
Total Analysis Volume [veh/h]	3	97	35	84	46	22	2	0	2	11	2	117
Pedestrian Volume [ped/h]	1			0			0			16		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	856	827	802	892
Degree of Utilization, x	0.16	0.18	0.00	0.15

**Movement, Approach, & Intersection Results**




95th-Percentile Queue Length [veh]	0.56	0.67	0.02	0.51
95th-Percentile Queue Length [ft]	13.94	16.76	0.38	12.73
Approach Delay [s/veh]	7.99	8.33	7.51	7.72
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	8.03			
Intersection LOS	A			

### Intersection Level Of Service Report

#### Intersection 9: Upper Spring Creek Rd & Ash St

Control Type:	Two-way stop	Delay (sec / veh):	10.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.029

#### Intersection Setup

Name	Upper Spring Creek Rd		Upper Spring Creek Rd		Ash St	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0
Entry Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

#### Volumes

Name	Upper Spring Creek Rd		Upper Spring Creek Rd		Ash St	
Base Volume Input [veh/h]	25	67	72	36	21	36
Base Volume Adjustment Factor	0.9070	0.9070	0.9070	0.9070	0.9070	0.9070
Heavy Vehicles Percentage [%]	0.00	1.50	0.00	3.80	9.50	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	61	65	33	19	33
Peak Hour Factor	0.8590	0.8590	0.8590	0.8590	0.8590	0.8590
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	18	19	10	6	10
Total Analysis Volume [veh/h]	27	71	76	38	22	38
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**




V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.03	0.04
d_M, Delay for Movement [s/veh]	7.46	0.00	0.00	0.00	10.05	8.93
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.06	0.00	0.00	0.00	0.22	0.22
95th-Percentile Queue Length [ft/ln]	1.39	0.00	0.00	0.00	5.41	5.41
d_A, Approach Delay [s/veh]	2.06		0.00		9.34	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.80					
Intersection LOS	B					

### Intersection Level Of Service Report

#### Intersection 10: Airport Rd & Lower Airport Rd

Control Type:	Two-way stop	Delay (sec / veh):	10.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.039

#### Intersection Setup

Name	Airport Rd		Airport Rd		Lower Airport Rd	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

#### Volumes

Name	Airport Rd		Airport Rd		Lower Airport Rd	
Base Volume Input [veh/h]	71	25	106	23	29	65
Base Volume Adjustment Factor	0.8410	0.8410	0.8410	0.8410	0.8410	0.8410
Heavy Vehicles Percentage [%]	0.00	0.00	0.90	0.00	0.00	1.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	60	21	89	19	24	55
Peak Hour Factor	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	6	24	5	7	15
Total Analysis Volume [veh/h]	65	23	97	21	26	60
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**





V/C, Movement V/C Ratio	0.00	0.00	0.06	0.00	0.04	0.06
d_M, Delay for Movement [s/veh]	0.00	0.00	7.54	0.00	10.94	9.12
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.21	0.00	0.33	0.33
95th-Percentile Queue Length [ft/ln]	0.00	0.00	5.13	0.00	8.34	8.34
d_A, Approach Delay [s/veh]	0.00		6.20		9.67	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.35					
Intersection LOS	B					

### Intersection Level Of Service Report

#### Intersection 11: Casino Creek Dr & Birch St

Control Type:	All-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.268

#### Intersection Setup

Name	Casino Creek Dr			Casino Creek Dr			Birch St			Parking Lot		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	180.00	100.00	100.00	220.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

#### Volumes

Name	Casino Creek Dr			Casino Creek Dr			Birch St			Parking Lot		
Base Volume Input [veh/h]	54	62	6	23	76	58	51	9	59	5	13	33
Base Volume Adjustment Factor	0.8410	0.8410	0.8410	0.8410	0.8410	0.8410	0.8410	0.8410	0.8410	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	7.40	1.60	0.00	0.00	3.90	0.00	0.00	0.00	6.80	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	45	52	5	19	64	49	43	8	50	5	13	33
Peak Hour Factor	0.5940	0.5940	0.5940	0.5940	0.5940	0.5940	0.5940	0.5940	0.5940	0.5940	0.5940	0.5940
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	19	22	2	8	27	21	18	3	21	2	5	14
Total Analysis Volume [veh/h]	76	88	8	32	108	82	72	13	84	8	22	56
Pedestrian Volume [ped/h]	4			0			6			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	598	673	615	708	745	759
Degree of Utilization, x	0.13	0.14	0.05	0.27	0.23	0.11

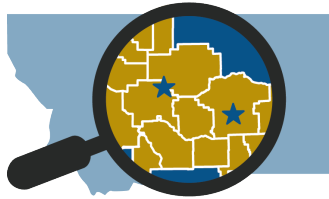
**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.43	0.50	0.16	1.08	0.87	0.38
95th-Percentile Queue Length [ft]	10.85	12.41	4.11	27.06	21.75	9.54
Approach Delay [s/veh]	9.23		9.53		9.25	8.35
Approach LOS	A		A		A	A
Intersection Delay [s/veh]	9.22					
Intersection LOS	A					

# Appendix C

## Stakeholder Workshop and Field Review Summary





# MEETING SUMMARY

Lewistown Workshop & Field Review

## MEETING GOALS

The purpose of the stakeholder workshop was to review future land use maps from the 2024 *Lewistown Plan*, discuss anticipated future developments, and review potential areas of concern related to the Lewistown transportation system. Additionally, attendees participated in a field review to observe transportation concerns near the Lewis & Clark Elementary School.

## MEETING DETAILS

<b>Date:</b>	April 9, 2025	April 10, 2025
<b>Time:</b>	3:30 PM – 5:00 PM	7:30 AM to 9:00 AM
<b>Location:</b>	Lewistown Public Library 701 W Main St, Lewistown, MT 59457	Lewis & Clark Elementary School 212 Crystal Drive

## ATTENDEES

Name	Agency	Role
Jackson Lang	MDT Planning	Corridor Planner   Project Manager
Samantha Wood	MDT Planning	Billings District Planner
Kyle Dubbs	MDT Lewistown	Senior Engineering Project Manager
Zach Kirkemo	MDT Billings District	Traffic Engineer
Ken Hamblen	MDT Billings District	Lewistown Maintenance
Holly Phelps	City of Lewistown	City Manager
Tim Robertson	City of Lewistown	City Council Member
Jason Frye	Lewistown School District	Maintenance Director
Danny Wirtzberger	Lewistown School District	Lewis and Clark Elementary Principal
Brad Moore	Lewistown School District	School District Superintendent
Sarah Nicolai	RPA	Consultant Project Manager
Scott Randall	RPA	Senior Advisor
Rebekah Rongo	RPA	Planning Specialist

## DISCUSSION

After introductions and an overview of the future land use and transportation maps, meeting attendees participated in an open, interactive discussion of upcoming developments and transportation issues. Input from the group was captured on maps and handwritten notes throughout the meeting. Comments are summarized in Table 1 and Table 2 (below), with each comment numbered to correlate with locations on the attached future land use and transportation maps (attached). To help identify general locations, comments have been categorized into four quadrants. Highway 87/200 serves as the east-west axis, while Entrance Ave defines the north-south axis. The housing tier classifications used within the tables for future land use are based on the recently adopted 2024 *Lewistown Plan*. Comments are not listed in order of priority.



Table 1: Future Land Use

#	Map Comment	Location
1	Due to market volatility, the number of anticipated jobs from VACOM has continued to fluctuate. Current estimates include ~25 jobs at the Upper Spring Creek facility and up to ~150 jobs at a new facility near the airport (designated as Tier 1: Current Urbanizing Tier) by 2030.	NE Quadrant & SW Quadrant/Airport
2	The US Air Force Sentinel project will likely need ~40-50 acres to provide housing for officers and workforce hubs, including childcare facilities. It is estimated that the Sentinel project could eventually produce a total of ~3,000 jobs in the Lewistown area over the length of the project with ~500 at one time. The city is realistically expecting ~450 temporary/seasonal jobs and ~50 permanent positions. Location will likely be near the airport within area categorized as Tier 1: Current Urbanizing Tier. No update on project timing.	SW Quadrant
3	Private parties are interested in using land near the airport to develop private/corporate/commercial airplane hangars.	SW Quadrant
4	Potential developable land in an area designated as Tier 1: Medium Commercial on the west side of town west of the airport and east of Cottonwood Creek Rd is owned by a single landowner who may be amenable to selling for development.	SW Quadrant
5	Potential for future mixed use development on Upper Cottonwood Creek Rd, west of the airport along the mixed-use corridor. Interested parties are Torgerson's Equipment, Spika Manufacturing and Design, and Allied Steele/Fred Gillette.	SW Quadrant
6	Increased traffic congestion is anticipated with potential growth in areas designated as Tier 1 & 2 Housing between G and H Streets, northwest of the Central Montana Medical Center hospital. Anticipated to be Urban Residential, Medium Commercial, and Rural Residential Node type developments.	NW Quadrant/ Hospital
7	Anticipated development in an area designated as Tier 2: Urban Residential near the hospital. Number of units and developer unidentified.	NW Quadrant/ Hospital
8	Growth is anticipated near the hospital on Wendell Ave, as well as Entrance Ave, with Benefis Health Systems starting an outpatient medical clinic sometime in 2025.	NW Quadrant/ Hospital
9	H Street is recommended to function in the future as an arterial street. Traffic data recorded at both the north and the south intersections would be useful for transportation planning and growth.	NW Quadrant
10	Expansion of the multi-use trail network and improved crossings and connections are desired near H street where additional housing is anticipated. Currently, the sidewalk ends at fenced ditches with little connection to downtown or adjacent trails.	NW Quadrant
11	A large ~200-acre mixed use/housing development is anticipated northwest of the US 191/Truck Bypass in an area designated as Tier 2: Urban Residential.	NW Quadrant
12	Possible commercial growth on the far east side of town near the area designated as Mixed-Use Corridor for Tier 2: Suburban Residential Housing. Location just outside the Urban Boundary. Number of units and developer unidentified.	NE Quadrant
13	Possible housing development east of 1 <sup>st</sup> Ave, north of Brassey St just outside the urban boundary in area designated as Tier 2: Suburban Residential. Number of units and developer unidentified.	NE Quadrant
14	Potentially ~60 residential units west of Casino Creek Dr, east of Kolar Ln in area designated as Tier 2: Urban Residential.	SE Quadrant
15	Potentially ~60 residential units west of Casino Creek Dr, south of Agate Dr in area designated as Tier 2: Urban Residential.	SE Quadrant
16	Potentially ~60 residential units east of Casino Creek Dr, south of Bluebird Ln in area designated as Tier 2: Suburban Residential.	SE Quadrant



#	Map Comment	Location
17	Potential box store developments are anticipated along multiple areas designated as Tier 1: Mixed Use Corridor. No specific developments known at this time.	Central/Along Mixed Use Corridors
18	Preserving the triangle parcel near the center of town that is currently home to Charles M. Russell National Wildlife Refuge is a priority.	SW Quadrant
19	Maintaining the existing unpaved trail network at the Frog Ponds is desired.	NE/SE Quadrants
20	Approximately 130 residential/commercial units are anticipated in the existing Berg Lumber triangle, which is designated as Tier 2: Urban Residential and is located east of Waite St, north of Lane St, off Joyland Rd.	NW Quadrant
21	Approximately 200-300 additional houses are anticipated in neighborhoods north of the elementary school, which will add to congestion and school intersection issues.	NE Quadrant/ School Area
#	General Comments ( <i>Not Mapped</i> )	Location
a	The City of Lewistown is focused on "growth from within." Initial expansion from infill, proximity to the city center, and economic hubs will be prioritized for growth.	Throughout Lewistown

**Table 2: Transportation Concerns**

#	Map Comment	Location
22	The left-hand turn from Birch St onto Fluorite Dr is tight given the intersection alignment. The lengthened Airport Rd leg of the intersection poses a conflict with school children and other pedestrians entering from the two heavily used gravel trails that connect from the north. Crashes involving both pedestrians and vehicles have occurred here.	Elementary School Area/ Airport Rd
23	It may be possible to consider extending the driveway alignment for the adjacent mental health facility to connect into the Lower Airport Rd intersection and bypass the school area.	Elementary School Area/ Airport Rd
24	The grade on Uranium Dr and skewed intersection alignment makes it difficult to make a left-hand turn onto Flourite Dr to head east onto Birch St toward the high school. Right-hand turns are also difficult with oncoming traffic from Airport Rd headed south onto Flourite Dr, and sight lines are restricted.	Elementary School Area/ Airport Rd
25	Sight lines at the stop sign of Airport Rd are limited due to road curvature and distance to the Birch St and Uranium Dr stop bars. A roundabout or other enhanced traffic control should be considered at this intersection.	Elementary School Area/ Airport Rd
26	Preliminary design plans propose back-in angled parking on Flourite Dr as a solution for teacher parking. To achieve this, the curb would need to be backed up 10 ft. Currently, this location is partially fenced and is where students gather to play or to wait for school to begin.	Elementary School Area
27	The intersections of Carroll Trail and Crystal Drive are used as a drop-off area for parents that are coming from neighborhoods to the southwest to avoid congestion along Birch St and Airport Rd.	Elementary School Area
28	The majority of curbside parent school drop off congestion is on Flourite Dr, Birch St, and Crystal Dr. Preliminary design plans indicate curbside drop off for parents on Birch St for northbound traffic. The parent drop off on Birch St may not be permanent if Birch St is realigned in the future.	Elementary School Area
29	The existing dirt lot adjacent to Birch St next to the school that connects to the gym and loading docks will be paved to serve as a parking lot for events and hopefully alleviate school-related traffic congestion.	Elementary School Area
30	The angled curve of Birch St as it goes from south to east behind the elementary school has no yield sign, and vehicles have been observed speeding in this area. There is a guardrail present, in addition to directional curved arrows.	Elementary School Area/ Airport Rd



#	Map Comment	Location
31	The elementary school is open to removing the fenced triangle near the crosswalk landings on Birch St and Flourite Dr if needed for roadway improvements.	Elementary School Area
32	Brassey St backs up with elementary and high school traffic and is a bottleneck for congestion.	NE Quadrant/ Schools Area
33	The four-way intersection near the high school was implemented four years ago in 2021 and improved school circulation, although problems still include intersection alignment and drop off route leading directly to the school's front doors, as well as the proximity of the parking lot to the drop off route.	SW Quadrant/High School Area
34	Road glare from Birch St up to Airport Rd is dangerous during the morning drop off period. The length and grade on Airport Rd adds to the site limitations and visibility issues.	Elementary School Area/Airport Rd
35	A roundabout was previously proposed at US 191/Entrance Ave. There is currently no pedestrian crossing on the north side of Entrance Ave, but it could be integrated into a roundabout. The existing pedestrian facility on the northeast side of the street is not used during winter months.	NE Quadrant/ Hospital/Central
36	The intersection of Lower Airport Rd/Airport Rd is often clipped by drivers heading east and cutting the corner, resulting in safety concerns for pedestrians.	Airport Rd
37	South of Lower Airport Rd/Airport Rd, there is desire to pave the current gravel trail north of Airport Rd to better connect schools, neighborhoods, and other recreational hubs such as the Frog Ponds, which lead to larger inter-urban trail connections south near Brewery Flats.	Airport Rd/General Lewistown
38	5 <sup>th</sup> and 6 <sup>th</sup> streets are congested with school traffic and community traffic.	NE Quadrant/ Schools Area
39	The Ash St bridge over Big Spring Creek is a current MDT project. It is in the early design phase with construction estimated to begin in 2029 depending on design completion and funding availability. The project will widen the bridge to accommodate a 5-ft-wide pedestrian walkway, along with new sidewalk, curb, and gutter on the north side of the street between Casino Creek Dr and the tennis court parking lot near Fergus High School. Additional project information is provided at <a href="https://mdt.mt.gov/pubinvolve/walnutash/">https://mdt.mt.gov/pubinvolve/walnutash/</a>	SE Quadrant
40	Multiple crashes have occurred at the Upper Springs Creek Rd/Ash St intersection. The Ash St leg of the intersection has an uphill grade leading to the stop sign, resulting in poor visibility and wintertime conditions. Sightlines are obstructed in all three directions.	SE Quadrant
41	Guardrail on the northwest corner of the Upper Springs Creek Rd/Ash St intersection is a constraint and is clipped frequently. To avoid impacting the guardrail, trucks swing wide and cross the roadway centerline.	SE Quadrant
42	The Upper Springs Creek Rd crosswalk leads to a roadside ditch on the east side and guardrail on the west, with no connecting pedestrian facilities.	SE Quadrant
43	Improvements at the Upper Springs Creek Rd/Ash St intersection could include installation of a box culvert at the south end and shifting recreational parking to the secondary lower lot located farther east from the intersection that is less frequently used and much larger. This would free up space for roadway improvements while maintaining recreational and trail use parking.	SE Quadrant
44	A gravel portion of the existing trail that connects Brewery Flats and the City Loop trail is located east of 6 <sup>th</sup> Ave S, with no pedestrian crosswalk on Ash St as it enters the Brewery Flats Trail entrance and parking lot. This is a safety concern for both drivers and pedestrians.	SE Quadrant
45	The 1 <sup>st</sup> and Main St intersection is tight for trucks making turning movements between Main St and the truck bypass. Additionally, the intersection serves residents, tourists, and recreational users. Widening or additional turn lanes for trucks could be beneficial, although corner parcels would likely need to be acquired, along with business relocations.	NE Quadrant



#	Map Comment	Location
46	As an alternative to the US 191/truck bypass connection at the 1 <sup>st</sup> Ave and Main St intersection downtown, there may be an opportunity for an alternative route at the northeast side of the city boundary with a new connection potentially tying into Marcella Ave.	NE Quadrant
47	Joyland Rd experiences heavy traffic and congestion. Steep grades and existing utilities on Joyland Rd limit lane expansion, there is desire to explore an alternative route connecting to the truck bypass. Waite Ave was proposed as a potential option.	NW Quadrant
48	At the west entrance of town, a large pedestrian tunnel under US 87/MT 200 was constructed but is rarely used by pedestrians, potentially because of the lack of trail connections in the area.	NW Quadrant/Central
49	A new connection is desired between Airport Rd, Casino Creek Dr, and Cottonwood Crk. An existing gravel service road is gated and extends past the end of Airport Rd just north of the gravel pit. A new connection would enable growth opportunities for housing and/or future industrial uses reflected on the Future Land Use map for Tier 3: Future Urbanizing Tier designated as Urban Reserve parcels. During the field review, RPA observed additional land with potential of ~10-20 infill lots available in this neighborhood, with flat grades amenable to development.	SW Quadrant/Airport Rd
50	New potential roadways are desired north of Kolar Ln connecting to Airport Rd and west of Casino Creek Dr connecting to the southern portion of Armory/Airport Rd and extending past the airport runway to the south. These connections would provide opportunities to serve future housing and industrial developments. Crossing Little Casino Creek would pose an environmental constraint for implementation.	SW Quadrant/Airport Rd
51	The route sign at the west entrance of town has been identified as unneeded and was recommended to be removed to improve truck access.	SW Quadrant
#	General Comments ( <i>Not Mapped</i> )	Location
a	Multiple crosswalks are in poor condition throughout Lewistown and should be evaluated for improvements.	City Wide Occurrences
b	The Lewis & Clark Elementary School population is ~300 students. About half of the children take the bus daily. A total of 7 buses arrive at the school each day with only 4 at a time on the premises.	Elementary Schools Area
c	School foot traffic begins at 7:40 AM, with children walking from the trails and adjacent neighborhoods and continues until just after the 8:00 AM bell with late drop offs.	Elementary Schools Area
d	The presence of law enforcement making rounds during morning and afternoon school drop-off periods assists in safety.	Schools Area
e	Additional road hazards are present during winter months due to snow storage issues. Currently snow is bermed in the center of the Lower Airport Rd near the Birch St stop sign, and children must step over the snow berm at times to cross the road.	Elementary Schools Area
f	There is some interest in short-term solutions such as bulb-outs, temporary pinned curbing, and other traffic calming ideas to improve safety while long-term improvements are pursued.	Elementary Schools Area

## NEXT STEPS AND ACTION ITEMS

- After field reviews and data digitization, a summary of recorded input will be sent to the stakeholder team for review and an opportunity for additional comments.
- RPA will process traffic count data recorded from cameras installed at study intersections and begin to analyze existing and projected transportation conditions in more detail.

# MAP LEGEND | Future Land Use

*\*Map adopted from 8.14.24 Lewistown Plan*

## Boundaries

Lewistown Urban Boundary

## Transportation Elements & Features

On System Routes

Off System Routes

Reference Post

## Tier 1: Current Urbanizing Tier

Downtown  
 Built Up Neighborhoods  
 Medium Commercial  
 Airport  
 Mixed Use Corridor

## Tier 2: Planned Urbanizing Tier

Urban Residential  
 Suburban Residential  
 Rural Residential Node

## Tier 3: Future Urbanizing Tier

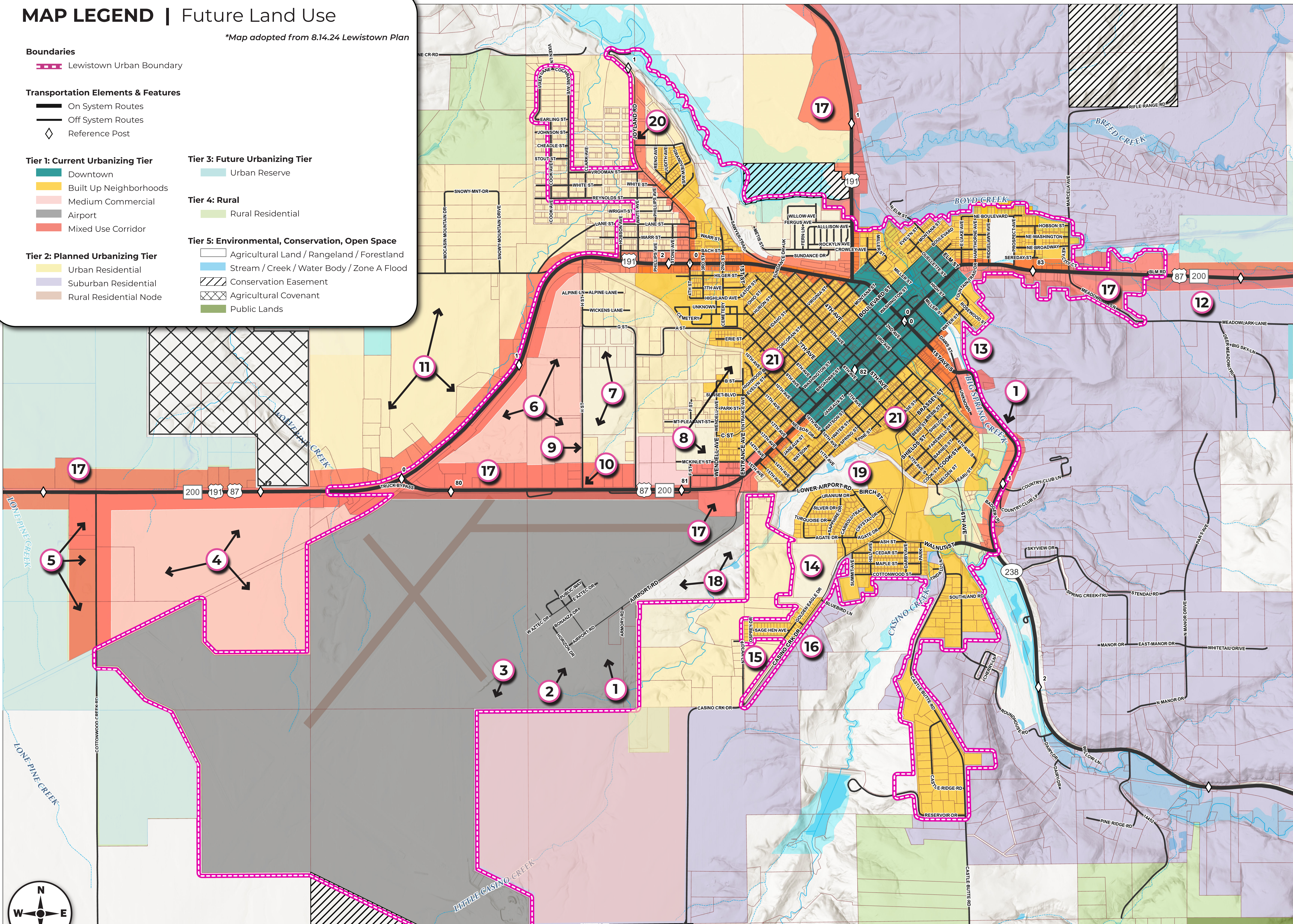
Urban Reserve

## Tier 4: Rural

Rural Residential

## Tier 5: Environmental, Conservation, Open Space

Agricultural Land / Rangeland / Forestland  
 Stream / Creek / Water Body / Zone A Flood  
 Conservation Easement  
 Agricultural Covenant  
 Public Lands



MAP LEGEND

Boundaries & Map Features

- Lewistown Urban Boundary
- Stream / Creek / Water Body
- Intersection Data Collection Sites

Transportation Elements & Features

- Off System Routes
- National Highway System
- Secondary
- Urban
- Reference Post

