

Section 3: Transportation Considerations

Introduction

One of the fundamental factors of community development is the presence of a complete, functional transportation system. Any transportation system must not only provide for the efficient movement of people, goods and services within the city limits, but also connect to larger, regional networks that lead to other communities, employment opportunities, and transportation arteries. From its inception as a stop along the Hannibal & St. Joseph Railroad, Lathrop has benefited as a result of the proximity of transportation assets. This benefit continues today as the 3-mile distance between the city and Interstate 35 becomes increasingly negligible in light of migrating urban-dwellers looking for a place to visit and live.

Transportation in Lathrop Today

To illustrate the current state of transportation in Lathrop, it is most logical to subdivide the issue into two geographic extents: transportation within the corporate limits, and the transportation networks outside of the city that provide connections to the region.

Transportation within the City

One of the first steps in effective transportation management is the categorization of local streets. By classifying Lathrop's local roadways, city leaders can create municipal policies that ensure the transportation network can accommodate future economic and community development. While larger communities with higher population densities and greater average daily traffic counts (ADTs) may have many more subcategories for street classification, the relatively small geographic size and population of Lathrop calls for only three functional categories. For the purposes of this plan, the streets within Lathrop are categorized as follows (see Appendix B, Map 4 for a Lathrop street classification map):

• Primary Arterial: The highest-volume streets, serving as the predominate east/west, north/south routes in the city. Also, primary arterials serve as pass-through routes for motorists traveling through the city, and connect the city proper with the outlying regional transportation network. Primary arterials transverse the entire distance of a community. Lathrop has two primary arterials: Missouri State Highway 116 (North Street), serving as the primary east/west route through the city, and Missouri State Highway 33 (Center Street), serving as the primary north/south route. These two routes serve as the only throughways in the community, and connect Lathrop to the larger regional transportation network. Recent traffic count studies completed by the Missouri Department of Transportation and Mo-Kan Regional Council also support the designation of these routes as primary arterials (see Appendix B, Map 5 for the traffic count map). Three traffic counts along Highway 116 revealed an average daily traffic (ADT) count ranging from 2,478 vehicles per day west of Center Street to 3,424 at the city's eastern

limit. A fourth count, located near the elementary school in southern Lathrop, reported an ADT of 3,714.

- <u>Secondary Arterial</u>: Secondary arterials serve as connections between neighborhoods/collector routes and primary arterials. Many of the streets in Lathrop can be classified as secondary arterials, such as Elm, Park, and Maple, which connect North Street with South Street, and Clinton Street, which runs the entire east/west distance of the city.
- <u>Collector</u>: Collector streets are low-volume routes, primarily used within neighborhoods and housing developments. Collector streets range in length from one to four city blocks, and traditionally have the lowest speed limits of any city streets. Some of the collector streets in Lathrop include Honda and Concha, Whitcomb, and Kay.

Non-motorized and other transport

In most of non-urban America, the automobile remains the primary mode of transportation. However, even in small communities, non-motorized transport can play a small role in addressing transportation needs of its citizens, particularly during the warm weather months. A municipality can promote non-motorized transportation, primarily walking and bicycling, by providing adequate facilities; sidewalks and hike/bike trails.

Lathrop has a piecemeal sidewalk network, primarily encompassing and radiating out from the downtown area. Recently constructed housing subdivisions also feature sidewalks. The city has the ability to construct sidewalks within the municipal right of way, and property owners may construct sidewalks on their lots with the appropriate permitting. The Board of Aldermen has general supervision of the sidewalks within the city (Lathrop City Code 515.180). Hike/bike trails, which are simply wider versions of municipal sidewalks to accommodate increased bicycle traffic, are not generally available as a transportation alternative in Lathrop, although a few areas in the community do feature short trail systems for recreational use.

Due to the geographic size and population of Lathrop, no other transportation is readily available in the community (light rail, community bussing, passenger train). The city, however, is served by a state-supported, regional transit system, OATS Inc.

Transportation outside of Lathrop

While transportation within a city is vital to the completion of everyday tasks for its citizens, the interconnectedness of the city with the outside region is fundamentally important in terms of community growth and development. A safe, efficient transportation system is particularly salient with regards to economic development. One of the most important factors to a business or manufacturer in choosing a new location is the ability for employees and customers to travel to and from the facility using a safe, direct route. Further, manufacturing firms are heavily dependent on access to interstate highways to facilitate the rapid delivery and dissemination of raw materials and finished products.

Lathrop is fortunate with regards to interconnection transportation. Being located only three miles from Interstate 35, the city is in an ideal location to foster future business and residential growth. The

Interstate, which serves as the primary north/south transportation corridor in the Midwest, provides easy access to Kansas City, Des Moines, and Chicago, making the city an attractive location for manufacturers reliant on truck transportation. In addition, being located 32 miles from downtown Kansas City, Lathrop has an increasing population of commuters that travel to the metropolitan area to work and shop each day (see Section 2a: Community Development for more information).



I-35 Interchange East of Lathrop

Missouri State Highway 116 (North Street) connects the city of Lathrop with I-35 to the east. Highway 116 also connects Lathrop's residents and businesses to the Clinton County seat of Plattsburg and eventually U.S. Highway 169 to the west. Highway 169 is used as the primary route to travel to St. Joseph, Missouri, and can be used as an alternative southerly route into the Kansas City metropolitan area. Finally, Missouri State Highway 33 connects Lathrop with points south, including access to Interstate 35 and the City of Holt.

Future Transportation Needs and Recommendations

1. Enhance connection with Interstate 35 to accommodate future growth and commuting patterns.

As the City of Lathrop continues to develop both commercially and residentially, the interchange at Highway 116 and Interstate 35 will become increasingly important. As the primary connector to the interstate and, by extension, the Kansas City metropolitan area, it is essential to ensure that enhancements to Highway 116 are included in any long-range development planning.

Recommendation: Work with the Missouri Department of Transportation to proactively plan for enhancements to Highway 116 and the Interstate 35 interchange to accommodate anticipated future growth. Possible enhancements include widening the roadway, enhancing the shoulders along Highway 116, adding lanes to Highway 116 (driving, turn, acceleration/deceleration, or some combination thereof), and reassessing the Interstate 35 interchange for potential lane additions or construction of traffic signals to alleviate future congestion.

2. Address potential congestion and safety concerns regarding the Lathrop R-2 High School, to be built at the intersection of Highway 116 and Highway 33.

The construction of the new Lathrop R-2 High School building at Lathrop's busiest intersection will require special consideration with regards to future transportation planning. Without question, the intersection will witness an increase in vehicle traffic once the school is completed. Further, the area will likely see increased pedestrian traffic, as students walk to and from school and school-related sports and activities.

Recommendation: Work with the Missouri Department of Transportation and school construction engineers to develop an estimate of the increased traffic at the school location, with particular attention to elevated ADT, pedestrian safety, and curb cuts onto school property. Potential actions at the intersection include traffic signals, pedestrian crosswalks, and land additions.

3. Classify existing and proposed municipal streets using a standardized categorization, and mandate minimum construction and safety requirements based on those classifications. By classifying city streets, Lathrop will be better able to prioritize transportation enhancement projects. Further, a street categorization system will allow the city to set construction and safety standards for future municipal streets, thereby creating a traffic circulation pattern that is both efficient and effective.

Recommendation: Utilize a standard classification system to categorize city streets. Streets should be categorized based on ADT and functionality within the city. A sample classification structure with construction/safety standards is as follows:

Street Type	Number of Lanes	Right-of-Way Width	Pavement Width	Intersection Spacing	Speed Limit
Primary Arterial	2 – 4	80'	68'	½ Mile	35-45 mph
Secondary Arterial	2 – 3	70'	44'	1/4 Mile	35 mph
Collector / Local	2*	60' - 70'	30' – 36'	300 Feet	25 – 35 mph

Table 3.1 Proposed Design Standards for Lathrop Roadways

Source: Adapted from Urban Land Use Planning. Kaiser, Godschalk, and Chapin. Fourth Edition. 1995.

4. Encourage alternative modes of transportation by maintaining and expanding the sidewalk network, and creating a hike/bike trail connecting different points of the community together.

Non-motorized transportation not only reduces congestion on city streets, but also reduces air and noise pollution, lessens street maintenance, and encourages citizens to adopt a more healthful lifestyle.

Recommendation: Develop a sidewalk expansion plan to systematically enlarge the Lathrop sidewalk network, with particular emphasis on connection points of interest in the community (parks, schools, downtown). In addition, pursue funding sources, such as the Missouri Department of Transportation's Transportation Enhancement Grant, to construct a hike/bike trail connecting the new high school with points south of Highway 116.

Assess Lathrop's downtown district to ensure an efficient flow of traffic, while allowing for commercial deliveries and maintaining downtown parking.

Access to the downtown district is vital for Lathrop residents and out-of-town visitors alike. However, the diagonal/inter-street parking scheme can interfere with the flow of traffic through the area, particularly during truck deliveries

Recommendation: Consult with a professional traffic engineer to redesign the parking and traffic flow of the downtown area.