City of Wasilla
OFFICIAL STREETS & HIGHWAYS PLAN
FY 2005 – 2025

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Introduction

Safe and convenient transportation systems play a major role in establishing the quality of life and in the economic development of any community. Since streets and highways are the predominant mode of travel in Wasilla, a workable day-to-day street system is vital in promoting orderly growth and development. The City of Wasilla has developed this update to its previous transportation planning documents to provide a current framework for planning a road network.

The goals of this *Official Streets and Highways Plan* are (1) to provide for a street and highway network that provides mobility, connectivity and access to the City's present and future residents and (2) to develop a street and highway network that supports economic development and growth.

Transportation goals and policies are not rigid rules designed to be enforced in all situations, but are designed to provide the City with coherent transportation planning guidance in a majority of circumstances. Creating policies designed to enhance the transportation system during our City's growth process demands that such policies grow and change over time. There may be instances where the challenges of a particular area present design issues that dictate how the transportation for that area will be developed. It may be necessary to overcome those challenges with innovation and/or alternate designs not yet identified. This may be done through a careful review and balancing of public and private interests to produce a safe and efficient addition to the city street network.

The *Official Streets and Highways Plan* serves as a planning guide for the Planning Commission, City Council, and other agencies to use as the basis for decisions on street development and improvement in Wasilla. The plan is also intended to be used in conjunction with the development of the City's Capital Improvement Plan, and in the preparation of project nominations forwarded to the Alaska Department of Transportation and Public Facilities.

Current Issues

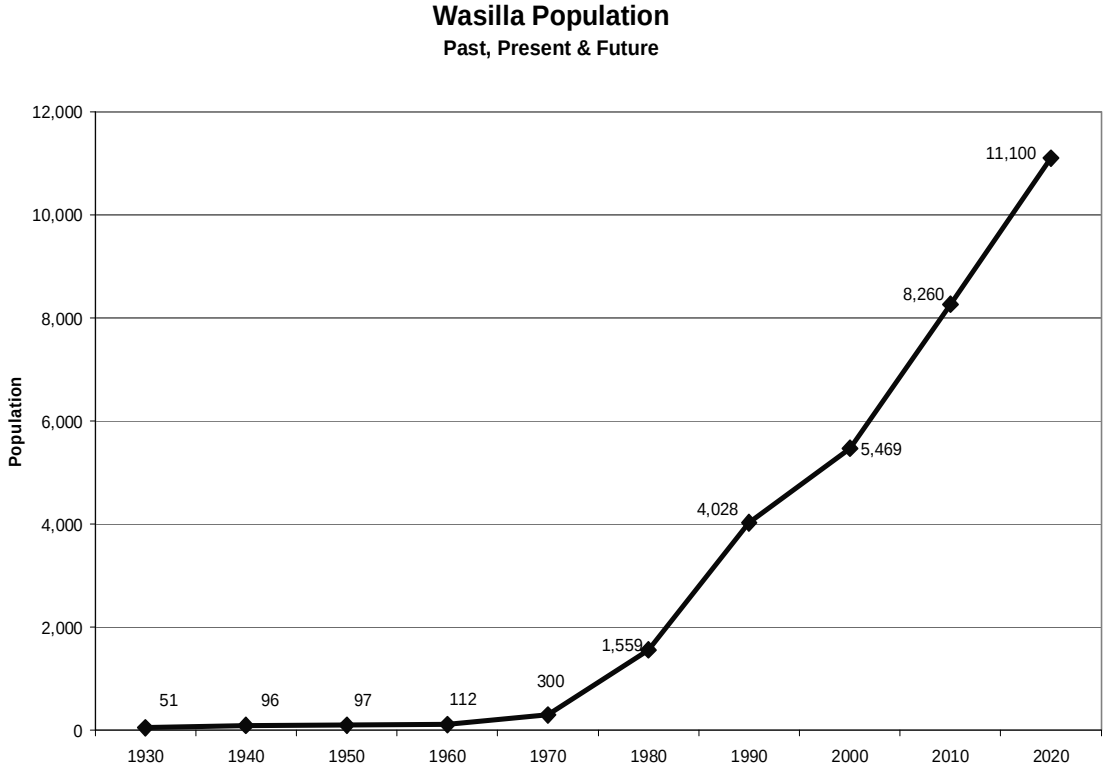
Due to increasing demand for services, the formulation of an *Official Streets and Highways Plan* requires consideration of multiple issues:

Resources:

The service required from the City road network is greater than the amount of resources available for its maintenance and expansion. In order to keep pace with the demand for service, creative means of financing are being sought to make up the difference. Because of limited funds, the highest priority and most efficient projects should be the first ones considered for funding in the future. Priority is based on factors such as present and future Average Daily Traffic (ADT), Level of Service (LOS), crash rates, measurable crash risk, and congestion. (Intermodal transit, pedestrian, and bicycle facilities should also be funded at, or above, some equivalent share of existing and likely public demand. This will provide alternative transportation options to Wasilla residents thereby reducing vehicular traffic congestion on the road system.)

Population Growth:

The growth projected for Wasilla between 2005 and 2025 will impact the volume of traffic on the existing street system through increased land use intensity. The rates and locations of growth in Wasilla require land use decisions to be made that will facilitate transportation improvements in the area.
U. S. Census Bureau data for the year 2000 indicated that the population of Wasilla increased by 35.7 percent from 1990 to 2000, which is more than double Alaska's statewide increase of 14 percent. Also, Wasilla's population is young compared to state and national averages. Census 2000 found that 34 percent of the City's population is younger than 18 as compared to 30 percent for Alaska as a whole and 26 percent for the nation. The median age for Wasilla residents is 29.7 years.



Wasilla's 2003 population was estimated to be 6,715 by the Alaska Department of Community and Economic Development. Wasilla's population growth rate between 2000 and 2003 has been 7.6 percent per year with a sustained annual rate of 5 percent since 1990. During the same time period, the State's population has increased by 1.4 percent per year.

The population density for Wasilla is 516 persons per square mile, up from 310 in 1990. The State of Alaska has a population density of 1.1 persons per square mile while MSB has approximately 2.4 persons per square mile.

Between 1990 and 2000, the number of housing units in the City increased by 22.9% from 1,723 to 2,119 units. A total of 505 housing units were approved for construction between January 2002 and July 2005, an increase of 24% in three and a half years. According to the Matanuska-Susitna Borough Assessor's Office, in January 2005 there were 3,511 properties with improvements in the City of Wasilla, with a total value of $697,654,800.

Land is available within the current Wasilla city limits to accommodate future growth as approximately 34% of the privately owned property within the City remains undeveloped. Additionally, since the City's sewer treatment plant and water distribution system are currently only operating at 50% to 60% capacity, both residential and commercial growth is expected to continue which will increase the demands on the City's transportation systems.

Census Designated Places (CDP's) adjacent to the Wasilla City limits are among the fastest growing areas of the Borough and in Alaska. Therefore, growth in the area surrounding Wasilla also needs to be considered in the development of the City's transportation system. Additionally, people from across the region and across the state travel to and through Wasilla creating a significant portion of traffic on specific arterials in the City which must be accounted for in the planning process.

Current and Projected Population in the Greater Wasilla Area:

	City of Wasilla	*Gateway CDP*	*Knik-Fairview CDP*	*Lakes CDP*	*Meadow Lakes CDP*	*Tanaina CDP*	Greater Wasilla Area
2000 Census	5,469	2,952	7,049	6,706	4,819	4,993	32,101
2005 *est.*	7,780	3,550	,9695	7,180	5,920	6,557	40,082
2025 *est.*	13,399	6,331	17,432	12,795	10,586	11,670	77,399

Land Use and Increased Road Mileage:

Land uses diversify and increase as roadways are extended and/or expanded. The diversity and distribution of land uses in the City affect the distance and purpose of travel. Wasilla is growing to the south and the east along its two main transportation corridors, the Parks Highway and the Palmer-Wasilla Highway. In 2004, a new 135,000 square foot *Lowe's Home Improvement Store* opened on the Parks Highway and a 123,116 square foot *Home Depot Store* opened on the Palmer-Wasilla Highway Extension. Growth along the Parks corridor to the east has intensified following the start of construction of the new *Mat-Su Regional Hospital* off of Trunk Road. This, along with growth caused by the recent utility service area agreement with the City of Palmer extending Wasilla's potential expansion area four miles east to the vicinity of Trunk Road. The extension of city utility service along these corridors will increase interest in urban density development along these two major transportation routes.
Local travel patterns change directly with changes in land use density. For example, roads are built to a developing area and the area fills with commercial or residential activity. People come to shop and live in the area and as more people travel to the area, it becomes even more attractive for development. Development continues until traffic congestion occurs. Since more people desire to travel there than the road system was originally designed to handle, roads must be widened to alleviate the traffic congestion. New, even larger, commercial or residential development is attracted to this new major traffic link.

1996 Comprehensive Plan - Land Use and Transportation Goals:

The transportation and land use policies of the City of Wasilla are directly related to each other and equally contribute to the development of the road system. The City of Wasilla actively manages land use and is guided by the Future Land Use Element of the *1996 Comprehensive Plan*. Land use decisions help determine the size and location of the transportation system.

Land Use goals identified in the *1996 Comprehensive Plan*:

- Encourage growth and development that promotes the economy, protects the environment and improves the quality of life. The City should do everything it can to encourage economic development, while protecting and enhancing the small town atmosphere and semi-rural way of life.
- Encourage growth and development in appropriate areas south of the Alaska Railroad to create geographic balance in the downtown area.
- Carry out land use regulations and planning that is equitable, cost effective and responsive to the needs of the public.
- Improve the appearance of Wasilla for the benefit of residents and visitors.
- Expand municipal boundaries cautiously as required to provide cost effective government services to the maximum number of people.

Transportation goals identified in the *1996 Comprehensive Plan*:

- Develop and maintain a transportation system that meets the current and future needs of Wasilla and the Matanuska Valley.
- Improve the safety and traffic carrying capacity of the area's arterial and major collector systems.
- Maintain and improve the system of collectors and local streets to serve present and future needs.
- Create a citywide and regional system of pathways and trails to provide for alternative methods of transportation, improve public safety and enhance quality of life for residents and visitors.

Trip Type and Mode Split:

Wasilla, like most communities in Alaska, relies mostly on Single Occupant Vehicles (SOV's) for nearly all transportation. Road travel includes trips from home to shopping; from shopping to shopping; from home to work and back again. The intensity of travel between home and work has the greatest affect on the Wasilla's transportation system. Therefore, this traffic is a primary consideration in planning and construction of major road projects.

The following table represents data for trips between home and work and how those trips are made from the 2000 Census Commuting to Work information.

WASILLA COMMUTING TO WORK INFORMATION/Mode Split	Volume	Percent
Car, truck, or van:		
Drove alone (SOV)	1,695	70.5%
Carpooled	368	15.3%
Other means –Motorcycle, Bicycle	155	6.5%
Walked	35	1.5%
Public Transportation: Bus	-	-
Worked at home	147	6.1%
Total	2,400	100%

Transit: Mat-Su Community Transit, MASCOT, a private non-profit corporation, has been in operation since March 1999 and provides opportunities for non-SOV trips to destinations around Wasilla, and to other communities such as Palmer and Anchorage. MASCOT provides a variety of transportation options such as a Fixed Route System for point to point service, a Demand Response System to lower density population areas such as Big Lake or Houston, and Door to Door Paratransit for seniors and disabled persons. MASCOT's commuter service links with the *PeopleMover* bus system in Anchorage with shared daily or monthly passes that allow free movement between both systems. At present, MASCOT has a ridership of almost 65,000 rides a year. Current ridership demographics show there is a one-third split between elderly, children, and adult patrons of the MASCOT services.

Background

General location:

The City of Wasilla is located midway between the Matanuska and Susitna Valleys in south central Alaska on the George Parks Highway at 61º 58' North Latitude and 149º 43' West Longitude. The City lies south of the Talkeetna Mountains and about 12 miles north of the Knik Arm on the Cook Inlet and is located along the Alaska Railroad main line from Anchorage to Fairbanks. Wasilla is approximately 43 miles north of Anchorage, about one hour's drive depending on the time of year and weather conditions. The City boundaries encompass approximately 13 square miles of land and 0.7 square miles of water.

Natural Environment:

Wasilla is surrounded by the mountains in the Talkeetna and Chugach ranges. The area owes its varied setting to the glacial forces that shaped the area during the end of the last Ice Age. Several glacial advances and retreats left a complex system of hills, ridges, glades and lowlands that define the topography. Landforms in and around Wasilla consist of undulating ridges of glacial till and flat benches of sand and gravel. Elevation varies from 300 feet to 500 feet above sea level within the city boundaries. Generally, terrain gradually rises from south to north. The downtown area is relatively flat. The most prominent water features are Wasilla Lake and Lucille Lake. Cottonwood Creek, Lucille Creek and several smaller streams traverse the area.

History of the City of Wasilla

The town site of Wasilla is named after Chief Wasilla, a local Dena'ina chief and shaman who died in 1907. The numerous lakes and streams in the area provided ample fishing for indigenous populations and the area became a popular wintering ground for small semi-permanent native villages. Trails connected these villages to hunting grounds in the Susitna Valley and the Talkeetna Mountains, while others linked the villages to the Ahtna people north of the Matanuska River.

Wasilla's history as a community dates back to 1916 when the Alaska Engineering Commission constructed a work camp at the intersection of the Alaska Railroad and the Carle Wagon trail (now known as Wasilla-Fishhook Road) which linked the coastal community of Knik with the Willow Creek Mining District. After platting the town site in June 1917, the Alaska Engineering Commission auctioned off town site lots from the railroad platform in Wasilla. This new community lead to the demise of the older settlement at Knik. Once established, Wasilla became the most important distribution point in the Valley.

Construction of the George Parks Highway through Wasilla in the early 1970's provided direct road access to and from Anchorage. This enabled workers and their families to live in the Wasilla area and commute to jobs in Anchorage. Support and service industries began to develop in the area to meet the needs of these new residents. The Parks Highway is also heavily used throughout the year by tourist and resident Alaskans traveling between Anchorage and Fairbanks and to Denali National Park. Prior to the construction of the Parks Highway, vehicles traveled to the Wasilla area by way of the Butte on the Glenn Highway constructed in 1936, and later by way of a semi-direct route from the new Glenn Highway across the Hay Flats to the Palmer-Wasilla Highway.

The City of Wasilla was incorporated in 1974 as a second class city under Alaska statutes, and has continued to develop as the retail and commercial hub of the central Matanuska-Susitna Valley. Wasilla became a first class city in 1984.

Wasilla Official Streets and Highways Plan

In a rapidly developing community such as the City of Wasilla where streets and highways are the predominate mode of travel, a workable transportation system is vital to promote orderly growth. Because of its early geographic settlement pattern and the natural constraints of lakes, creeks and wetlands, Wasilla's transportation network was developed primarily on an east-west alignment along the railroad line and intervening lakes. As a result of this early linear development, Wasilla has a poor traffic circulation grid. Current traffic congestion is the result of the limited number of north-south and east-west through streets. The *Official Streets and Highways Plan* is one component of the overall transportation system for Wasilla. Since streets and highways are how people and goods move in and around Wasilla, an official plan for the development of the street and highway network will assist in providing efficient, safe, and convenient vehicular movement and reduce traffic congestion.

An *Official Streets and Highway Plan* should:

1. Ensure efficient traffic flow;
2. Improve traffic safety; and
3. Keep pace with population growth.

This streets and highways plan serves as a tool by which Wasilla can prepare for current and future development by identifying the location and minimum design characteristics of major streets that will be required to accommodate future traffic volumes. The *Streets and Highways Plan* is a major planning guide and a tool for the City Council, Planning Commission, the Borough, and the Alaska Department of Transportation and Public Facilities (DOT) to use as the basis for the location and design of present and future streets within the City. It also will provide for optimum spacing of higher level traffic control devices such as signals, beacons, turning pockets, and acceleration and deceleration lanes.

Since Wasilla's current streets and highways have developed primarily on an east-west alignment along the railroad line and lakes, the plan encourages the broadening Wasilla's current road network into a more traditional arterial grid. Historically, most cities develop a north-south and east-west arterial grid with major arterial streets approximately one mile apart and minor arterials at half-mile intervals. Local roads infill between these major and minor arterial streets. During the 1960s through the 1990s, roadway design practices favored a poorly connected "hierarchal" infilling of local roads with numerous cul-de-sacs. This pattern increases the amount of travel required to reach destinations, concentrates traffic onto fewer roads, and creates barriers to non-motorized travel. Current roadway design emphasizes connectivity of these infill local roads. Connectivity can provide a variety of benefits to the residents of Wasilla by:

- improving accessibility, particularly for non-drivers
- increasing route options by reducing vehicle travel time
- providing two points of access for emergency services and school bus routes
- improving trip distribution
- providing alternative routes during road construction
- reducing the risk that an area will become inaccessible if a particular part of the roadway is blocked by a traffic accident or a fallen object.

At present, the City of Wasilla has approximately 30 miles of paved streets and 30 miles of gravel roads. The City is responsible for maintenance of these roads. DOT is responsible for the remaining 18 miles of state roads and highways within the City limits. A map showing which streets are maintained by the City and which streets are maintained by DOT appears as Appendix A.

The Streets and Highways Plan is composed of five major sections:

1. Street Classifications – the Existing and Future Circulation System
2. Status of 1996 Transportation Plan Recommended Projects
3. Short Range Recommendations – 2005 to 2010
4. Long Range Recommendations – 2010 to 2025
5. Implementation

Street Classification System

The street circulation system of Wasilla consists of five major street classifications. Each of these types of facility has a unique role or purpose in the overall circulation of traffic. Streets within Wasilla are classified primary by function or frequency of use. Different sections of the same street may serve different functions. When this happens, the street will be classified according to its primary function.

All streets serve to balance dual and sometimes competing functions - providing as safe access as practicable while still providing mobility. Mobility is the ease with which a person can move throughout a community. For example, a person stuck in grid-lock traffic would define their inability to move as an unacceptable level of mobility. In contrast, a person moving along a road in free-flow conditions would regard their mobility as excellent. The key to balancing access and mobility is to match access

spacing to the speed and volume of traffic. The degree to which a street performs each of these two functions helps determine the street classification.

Arterial streets emphasize mobility. Although an arterial can provide access to individual lots, an arterial street is designed to carry high volumes of traffic at higher rates of speed which usually conflicts with their use for safe access. There are several types of arterials. Principal, or major, arterials emphasize through movements while minor arterials emphasize local access and local movement. Both major and minor arterials can be busy and large streets.

Local streets emphasize access and penalize mobility. Local streets serve to provide direct access to individual lots or parcels of land. They have frequently spaced driveways, may have a high degree of pedestrian or bicycle use, and are designed for low speeds and low traffic volumes.

Collectors can provide both access and mobility as they typically provide a link between local streets and arterials.

Local/Residential Streets: A local or residential street provides movement of limited traffic from individual properties to the collector or arterial street systems. Residential streets are typified by subdivision roads, subdivision feeder streets, and cul-de-sacs. Direct access to adjacent private property by individual driveways is the norm and works because of the lower traffic speeds and traffic volumes. Alternatives to driving, such as walking or bicycling, are a more likely mode of transportation adjacent to this class of street where local trips are most feasible.

Examples: Lee Trevino Avenue and Pinion Drive

Commercial Streets: Commercial streets provide access to, and movement through, the business, industrial, retail and other commercial areas of the City.

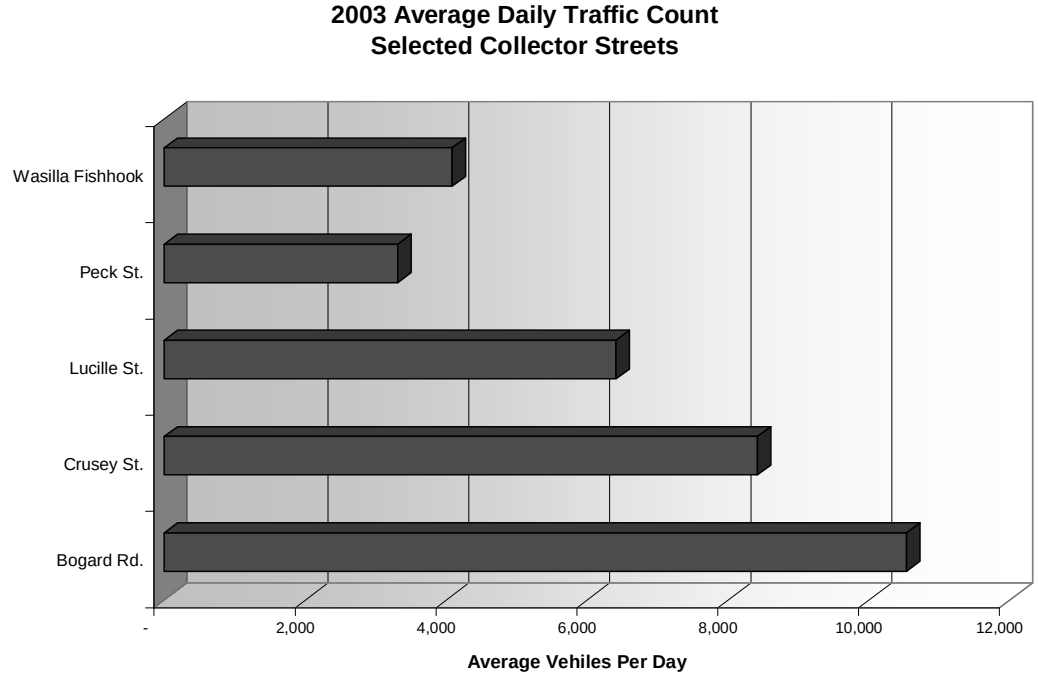
Examples: Herning Avenue and Commercial Drive

Minor Collector Streets: A minor collector street is a road which collects traffic from residential streets and large residential areas and moves it to major collectors, arterials or highways. Minor collectors also carry traffic from one neighborhood to another or from one neighborhood to other areas of the City. Collector streets together with their connecting local/residential streets constitute a hierarchical branching road system having a well defined tributary area where the volume of traffic increases with proximity to the arterial. Direct access to private property should be limited to intervals that do not inhibit the flow of traffic and maximize safety. However, direct access to private property is acceptable when other access is not available.

Examples: Crestwood Avenue and Melanie Avenue

Major Collector Streets: Major collector streets provide for inter-city movement and access to arterial and interstate roads as well as moving traffic to and from residential areas. Non-commercial access should be limited to other collector streets and commercial streets. Direct access from low density and local/residential streets should be discouraged.

Examples: Spruce Avenue, Lucille Street

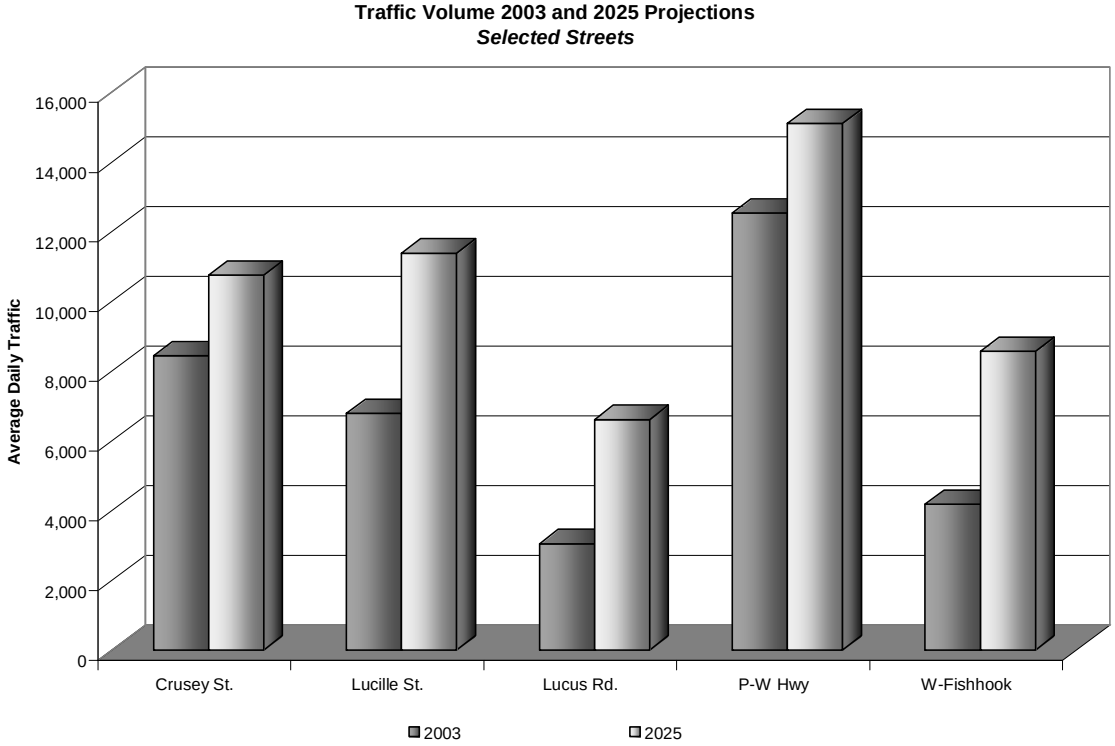


Arterial Streets. The main function of a major arterial street is to meet the demand for movement of large volumes of vehicles between neighboring communities, large residential areas, major employment centers and other major activity centers at intermediate to high speeds. Movement of thru-traffic is the primary purpose of an arterial road. Generally, arterials do not go through neighborhoods and access to adjacent lands should be a secondary consideration for an arterial. Arterial routes create logical boundaries for self contained areas such as residential neighborhoods, industrial districts, and commercial centers. Minor arterial streets focus on the movement of large volumes of local city traffic between neighborhoods, businesses, etc.

Examples: Palmer-Wasilla Highway and the Knik-Goose Bay Road

Traffic Volumes

Traffic volumes have increased steadily throughout the City over the last six years and are predicted to increase further as the population and economy continue to grow. The graph below compares the annual average daily traffic volumes for the year 2003 as compiled by the Alaska Department of Transportation & Public Facilities, and the predicted annual average daily traffic volumes for the year 2025 as modeled by the Matanuska Susitna Borough.



A March 2005 transportation model draft report prepared for the Matanuska-Susitna Borough Long Range Transportation Plan update projects that without well thought out planning and major road improvement investments, several Wasilla streets will drop to a Level-of Service D by the year 2025, and the Parks Highway will reach a Level-of Service (LOS) F. Level of Service is a term used to describe the amount of congestion on a section of roadway. LOS is based on factors such as speed, travel time, freedom to maneuver, traffic interruptions, comfort, convenience, and safety. Level of service designations range from A to F. "A" is the highest level of driver comfort, while "F" is the lowest. Each LOS is defined below*:

LOS A, B, and C are all considered “under capacity” or as having reserve space to serve growth. LOS E and F are considered “over capacity”.

LOS A. Traffic is the most free flowing. Vehicles are unaffected by other traffic. The driver is free to change lanes at will with little or no consideration to speed, local weather conditions, or other considerations. The level of comfort and convenience to the traveler, including pedestrians, is excellent.

LOS B. Traffic flow is stable. The presence of other traffic users becomes noticeable. The driver may still select any speed but the ability to maneuver begins to decline. The presence of other vehicles begins to affect a driver's behavior. The driver does not have a totally open road.

LOS C. The range of traffic flow is stable. However, the driver's range of choices are beginning to be significantly affected by the volume of traffic. Maneuvering is only accomplished by an alert driver.

LOS D. (At capacity) Traffic flow is still stable, but on the fringe of breaking down. The driver is in a high density of vehicles where both speed and freedom to maneuver are severely restricted. Drivers experience a poor level of driving comfort. The slightest increase of traffic volume will cause a break down in traffic flow. This LOS is the transition zone between acceptable and unacceptable levels of traffic.

LOS E. The street is at capacity or slightly over. Speeds are low but consistent. Maneuvering is accomplished by forcing into another lane. Driver frustration is high. Minute increases in traffic volume or the slightest traffic incident cause the street to fail in its ability to carry the maximum number of vehicles. Several motorists complain to local officials. Traffic at signalized intersection may have to wait through one green light cycle or more, for a short period during the day, before they can get through the intersection.

LOS F. The amount of traffic approaching a point is beyond the amount that can get past. Long lines form. There is stop and go traffic. Drivers experience extreme frustration. Complaints pour into city, state, and federal transportation offices. Traffic at signalized intersections wait through multiple green light cycles before they get an opportunity to move through the intersection. Traffic can gridlock and back-up through other major intersections for a short periods during the day, before they can get through the intersection.

*Transportation Engineering and Planning (Second Edition) by C.S. Papacostas and P.D. Prevendouros, published by Prentice-Hall. As commented by Alfred R. Pagan in Better Roads, November 1995, page 38)

Intersections

Intersections play an important role in the circulation pattern of the City by providing access points to other streets, controlling the regularity of traffic flow, and by controlling traffic congestion at the junction of arterials, collectors and local roads. The main objective of good intersection design is to increase traffic flow and to reduce the severity of potential conflicts between vehicles and pedestrians.

Alaska Department of Transportation and Public Facilities and the City Engineering Department study collision data, comparing frequency, traffic volume, severity of crashes and contributing factors. Engineers search for problems they can correct with design improvements or other changes, such as more signs, traffic signals, timing adjustments, or left-turn lanes. Data gathered by AK DOT & PF from 1999 to 2003 demonstrates the traffic engineer’s adage that the higher the number of vehicles there are moving through an intersection, the higher the potential is for collusions to occur.

1999 TO 2003 High Accident Intersections

EAST/WEST ROAD	NORTH/SOUTH ROAD	5 year AVERAGE	
		Accidents	Acc/MEV
Parks Highway	Knik-Goose Bay Road	29.8	2.26
Parks Highway	Crusey Street	18.0	1.37
Parks Highway	Seward Meridian Road	16.6	2.00
Parks Highway	Lucille Road	6.8	0.82
Parks Highway	Lucus Road	6.0	n/a
Bogard Road	Crusey Street	4.6	1.05
Fred Nelson Avenue	Lucille Road	4.4	n/a
Swanson Avenue	Main Street	4.4	n/a
Swanson Avenue	Lucille Road	4.2	n/a
Seldon Road	Lucille Road	4.0	n/a
Bogard Road	Peck Street	3.6	n/a
Spruce Avenue	Lucille Road	3.6	n/a
Swanson Avenue	Crusey Street	3.4	n/a
Parks Highway	Hermon Street/Old Matanuska	3.2	0.45
Westpoint Drive (Lakeview)	Crusey Street	3.2	n/a
Spruce Avenue	Wasilla-Fishhook Road	3.0	n/a
Parks Highway	Swanson Avenue	2.8	n/a
Parks Highway	Church Road	2.6	0.41
Bogard Road	Wasilla-Fishhook Road	1.8	0.53
Fred Nelson Avenue	Lucus Road	0.6	n/a

Acc/MEV = Accidents per million entering vehicles

Use of crash data to identify crash-prone locations that need work and improved geometric design and lighting of intersections are two ways of improving intersection safety. Other methods include use of best practices for selection, design and installation, operation, and maintenance of traffic control devices, upgraded signal phasing, timing, and coordination to smooth traffic flow, and use of intelligent controllers and detectors, as well as audible pedestrian signals.

Streets should normally intersect at 90º; drivers are then more able to see other cars approaching from both the left and right. The minimum angle of pavement intersection should be 80º for non-arterial streets. Deviations from a 90º intersection can result in the following problems:

1. Visibility restrictions
2. Larger areas of potential conflict
3. Longer crossing distances
4. More dangerous collision angles
5. More difficult turning radii
6. Awkward turning movements

Traffic Signals

The placement of traffic signals at key intersections allows the flow traffic along streets carrying high volumes of traffic to be controlled and regulated. As the number of vehicles traveling to and through Wasilla increases, a comprehensive signal

improvement program is essential to avoid the problems caused by traffic congestion. In response to this increase in traffic, the City Council adopted Resolution 05-11 on March 7, 2005 establishing an *Official 2005-2025 Traffic Signal Map* which is amended with the inclusion of new signals identified in this Official streets and Highway Plan. In addition to showing the identified potential signalized intersections in City, the map shows intersections that may need signals in the near future. These intersections will be closely monitored to determine when a traffic control device is warranted.

The Alaska Department of Transportation and Public Facilities is currently designing traffic signals for the intersection of Lucille Street and the Parks Highway and Lucille Street and Nelson Avenue through the Highway Safety Improvement Program. Because of the rapid residential and commercial development taking place in the City at this time, additional traffic signal locations may be identified through formal Traffic Impact Analysis (TIA) studies.

As new signals are identified as being warranted, they will be accepted as part of the City's comprehensive signal improvement program provided that they optimize spacing and progression of traffic in the City. Future signals will need to meet the criteria of the Manual of Uniform Traffic Control Devices (MUTCD) to ensure uniformity and consistency. See Appendix for the *Official 2005-2025 Traffic Signal Map.*

The Alaska Department of Transportation and Public Facilities is designing the Parks Highway for future signal coordination. The state will provide hardware for this signal coordination project, however, Wasilla will need to work with the Borough and with Palmer to provide a stable flow of annual funding for the support staff to keep this program functional. Best practices require one signal technician for 25 signals and one part time engineer to support this program.

Design Standards

The City's primary method of establishing an efficient street and highway system is the adoption of regulations which govern the minimum right-of way, paving width, and overall design of streets based on their identified functional classification. These recommended design standards should be incorporated into the City's subdivision construction manual and other regulations governing the construction of roads. The following table lists City Road Design Standards by Functional Classification.

Characteristics	Principal Arterial	Minor Arterial	Collector	Commercial	Local/ Residential
Street spacing	1 to 5 miles	1 to 1½ mile	¼ to ½ mile	> 300'	> 300'
Length	Continuous	Continuous	½ mile	½ mile	500' or 1000' for a cul de sac
Lanes	2 - 6	2 - 5	2 - 4	2 - 4	2
Min. pavement width	40'	32'	24'	12' lanes (max)	20'
R-O-W width (level ground)	200'	100'	60' - 100'	60' – 100'	60'
Cross Street spacing	2640'-1 mile	660-1500'	330'	330'	660'
Volume (Max./vehicle/day)	N/A	30,000	12,000	12,000	200 - 500
				Required at	

Striping	Center line & lanes	Center line & lanes	Center line at ≥ 4,000	Center line >6,000	None
Median	Yes	Yes	No	No	No
Turn lane	Yes	Yes	No	No	No
Traffic signal	Yes	Yes	No	No	No
Residential access	Limited or Prohibited	Limited or Prohibited	Indirect Desired	Indirect Desired	Direct
Maximum grade	5%	6%	8%	8%	10%
Minimum radius curve	1,065-1660'	660'	185' - 510'	115' – 510'	115' – 500'
Pedestrian crossings	Limited or Prohibited	Intersections, Signals	Intersections, Signals	Intersections, Signals	Unrestricted
Typical Speed Limit	55-65 mph	45 mph	25 – 40 mph	20 – 40 mph	25 mph
Commercial Access	Limited or Prohibited	*Yes	MSB/City	MSB/City	Limited only by zoning
Two Points of Access	Yes	Yes	Yes	No	No
LOS Goal	C**	D	D	D	D
ADOT&PF Comparable F.C.	Class 1,2,11,12	Class 6,14,16	Class 7,8,17	Class 9,19	Class 9,19

* See ADOT&PF Highway Reconstruction Manual Spacing Tables 1190-9 & 10.
** Exceptions in urban downtown districts.

1996 Transportation Plan Recommendations.

Table 1: Status of 1996 Transportation Plan Recommended Projects

Project	Status as of September 2005			
	Complete	Construction	Design	No Action
Main Street - Bogard Road Intersection	x			
Parks Highway				
Crusey Street to Seward Meridian		x		
Fairview Loop/Hyer Road interchange	x			
Glenn Highway/Parks Highway interchange	x			
Lucus Road to Crusey Street			x	
Seward Meridian to Church Street	x			
Seward Meridian Interchange		x		
Trunk Road interchange	x			
Palmer-Wasilla Highway Extension to Glenwood Ave.	x			
Wasilla Bypass (Alternate Multimodal Corridor)			x	
Bogard Road Extension, Lakeview to Wasilla Fishhook	x			
Seward Meridian Extension to Seldon Road			x	
Church Road Upgrade	x			

Project	Status as of September 2005			
	Complete	Construction	Design	No Action
Edlund Road Upgrade	x			
Seward Meridian Upgrade			x	
Seldon Road Upgrade, Wasilla-Fishhook to Lucille St.				x
Vine Road Upgrade, Knik Goose Bay to Parks Hwy.	x			
Wasilla-Fishhook Road Upgrade, Parks Hwy. to Schrock			x	
Hollywood Boulevard Upgrade	x			
Provide Park and Ride Lots				
Seward Meridian/Parks Highway				x
Palmer-Wasilla Highway/Parks Highway				x
Knik-Goose Bay Road/Parks Highway				x
Peck Street Extension and Paving	x			
Church Road South Extension to Airport			x	
Mystery Ave. Extension to Lucas Road	x			
Mack Road Extension to South Church				x
Thomas St. Connection to Togiak St.				x
Yenlo St. Extension			x	
Spruce Street Upgrades, Peck Street to Church Road	x			
Misc. Subdivision Paving LID	x			

2005 – 2025 Street and Highway Plan Recommendations

After reviewing the current and future traffic volumes, traffic circulation, State and Borough planning documents, previous recommendations and needs lists, the following transportation improvements are recommended. Recommendations have been broken out into short range and long range projects within the City of Wasilla, and improvements within the Matanuska Susitna Borough that would directly benefit the City. Short range recommendations are limited to those projects that (1) have committed construction funds through the State Transportation Improvement Program (STIP), (2) are on either the Borough's or the City's Capital Improvement Program (CIP) within the next 5 years, or (3) are part of projects identified by the City as needed and anticipated to be constructed by the private sector.

Short Range Recommendations (2005-2010) *Streets are listed in alphabetic order. List does not reflect a priority ranking.*

Alternative Parks Highway Corridor – **Arterial/Interstate** – Route selection and Design future transportation corridor will provide alternate route around Wasilla city center for through highway traffic and potentially a new railroad route around the city.

Aviation Avenue (formally Church Road South Extension) – **New Minor Collector** – Future corridor from S. Mack Drive to Wasilla Airport will provide access to existing airport, the intermodal rail facility, and the Museum of Alaska Transportation and Industry and other future development.

Boundary Street Extension – **Commercial Street** -New link provided by the extension of Boundary from Swanson Avenue to Bogard Road will provide alternate route for local internal traffic now using Main Street.

Crusey Street Improvements – **Major Collector** - Reconstruct to accommodate a five lane facility between the Parks Highway and Bogard Road, including pathway, landscaping, and lighting. Improved connection to the high school will create smoother major generator flow with fewer turning conflicts.

Gateway Loop and Frontage Road Connection– **Major Collector** – New link to be constructed as part of large commercial development proposed for northwest corner of Parks Highway and Seward Meridian Parkway. Project will provide an internal loop road connecting Seward Meridian with the Parks Highway at signalized intersections and connect the existing frontage road system links on the east and west sides of Seward Meridian.

Lucus Road Improvements – **Major Collector** – Improvements between Parks Highway and Spruce Avenue to an upgraded two lane facility with shoulders, turn lanes, pedestrian facilities, landscaping, and drainage improvements.

Lucille Street Improvements – **Major Collector** –Improvements include widening existing road to a four lane facility with turn pockets, shoulders, landscaping, and separated pathway.

Parks Highway, Crusey Street to Lucus Road – **Interstate or Arterial** – Improvements include rehabilitation of the existing five lane facility, including eliminating Snyder RR crossing, connect Selina Lane, consolidating driveways, enhancing pedestrian facilities, and landscaping.

Riley Avenue Extension – Major Collector – New link provided by extending Riley Avenue west from just west of the current signalized intersection at Knik-Goose Bay Road to connect with S. Mack Drive.

Seward Meridian Road Improvements - **Arterial** – Improvements will upgrade the existing road to four lanes from Parks Highway to Seldon Road and includes an improved intersection at Gateway Drive, located northeast of Sears, and installation of a signal at this intersection.

S. Mack Drive Extension South – **Major Collector** – Future improvements will extend S. Mack Drive from Multi Use Sports Complex to Knik-Goose Bay Road; project includes stream crossing.

Susitna Avenue Extension – **Minor Collector** – Improvements will extend existing road east and south along City easements and right-of-way to a signalized intersection on the Palmer-Wasilla Highway Extension to accommodate future development between the Palmer-Wasilla Extension, the Parks Highway and Knik-Goose Bay Road.

Upper Road Extension – new link provided by extending existing Upper Road to the west to S. Mack Drive will provide secondary access to homes south and west of Lake Lucille.

Wasilla Fishhook Rehabilitation – **Major Collector** –Improvements be done in two phases. Phase one includes selective realignment and widening, curb, gutter, and sidewalks and rehabilitation and resurfacing the existing road beginning at the Bogard Road intersection and progressing to Seldon Road. Phase two includes a traffic study, design and construction of improvements to enhance the flow of traffic along Main Street and one other north-south street.

Yenlo Street Extension – **Major Collector** -New link transportation provided by the extension of Yenlo from Swanson Avenue to Bogard Road will provide alternate route for traffic now using Main Street and serve new high density mixed-use development.

Signalized Intersections

- Maney Way, Foundry Way and Parks Highway – signalized intersection to serve current and anticipated major commercial development in Wasilla, as well as providing a connection through this commercial area to Herman Road. Construction costs to be borne by the private sector.
- Gateway Drive and Parks Highway – Signalized intersection to serve a large commercial shopping project in Wasilla, as well as a connection to the Gateway intersection on Seward Meridian Parkway. Construction costs to be borne by the private sector.

Road System Related Projects

- Wasilla Depot/Station – Intermodal passenger terminal and parking area near the Wasilla Airport.
- Park and Ride Lots – Parks Highway and Seward Meridian, Palmer Wasilla Highway, and Knik Goose Bay Road.

Long Range Recommendations (2008-2025) *Streets are listed in alphabetic order. List does not reflect a priority ranking.*

Alternative Parks Highway Corridor – **Arterial/Interstate** – Construction of transportation corridor providing alternate route around Wasilla city center for through highway traffic and potentially a new railroad route around the city.

Crusey Street Extension – **Major Collector** – Improvements will extend south to connect to a signalized intersection on the Palmer-Wasilla Highway Extension to accommodate future development between the Palmer-Wasilla Extension, the Parks Highway and Knik-Goose Bay Road.

Main Street Improvements – **Major Collector** -Widen to a four or five lane facility or a one-way couplet with Talkeetna/Yenlo Street.

Old Matanuska Road Rehabilitation – **Minor Collector** –Improvements will upgrade corridor between Palmer Wasilla Highway and Fairview Loop.

Palmer Wasilla Highway Expansion – **Arterial** – Future improvements will widen existing road to a four or five lane facility to relieve congestion on existing route. Project will eventually include coordinated signals and realigned intersections where feasible.

Parks Highway, Lucus Road to Big Lake Road – **Interstate/Arterial** –Improvements will widen existing road to four lanes to accommodate increasing through traffic volume.

Seward Meridian/Carson Street Extension – **Arterial** – New link will extend arterial south from Old Matanuska Road to Fairview Loop.

Sun Mountain Avenue Realignment – **New Major Collector** – Realign existing Sun Mountain (frontage road) to provide safer stacking distances for vehicles at the Herman Road intersection. New transportation corridor would extend from Hermon Road to Palmer-Wasilla Highway intersection at Cottonwood Mall serving as an alternate route for the Parks Highway and the Palmer-Wasilla Highway.

Thomas Street Connection – New link would connect Thomas Street to Togiak Street providing an alternate route for traffic moving from Fairview Loop to the Palmer-Wasilla Extension via Glenwood Avenue.

Road System Related Projects

- Signal System Interconnect – Interconnect signals along Parks Highway and in the central business district.

Recommended Projects in the Matanuska-Susitna Borough *Streets are listed in alphabetic order. List does not reflect a priority ranking.*

Fairview Loop Road Upgrades – Upgrade to current standards

Fern Street Extension – Extend to Edlund Street

Hermon Road Extension – Extend north from Whispering Woods Drive to Palmer Wasilla Highway and south to Fairview Loop

Leota Street Extension – Connect to Fairview Loop

Seldon Road Extension East – Extend Seldon/Bogard Road east to the Glenn Highway

Seldon Road Upgrade – Upgrade between Wasilla-Fishhook to Wards Road

Seldon Road Extension West – Extend from Wards Road to Church Road

Seldon Road Extension West – Extend Seldon Rd. west from Church Road to Beverly Lakes Road, Pittman Road and eventually to King Arthur Drive

Seward Meridian Extension North – Extend from Bogard Road to Seldon Road

Spruce Avenue Extension – Extend from Peck Street to Seward Meridian

Current and Future Arterial and Collector Street System

Existing		Future (2005 – 2025)	
INTERSTATE		**INTERSTATE**	
Parks Highway		Alt. Parks Corridor	
ARTERIALS		**ARTERIALS**	
Knik-Goose Bay		Parks Highway	Palmer-Wasilla Hwy
Palmer-Wasilla Highway		Bogard/Seldon Rd.	Seward Meridian
Wasilla Fishhook Rd.		Knik-Goose Bay	
MAJOR COLLECTORS		**MAJOR COLLECTORS**	
Bogard Rd.	Peck St.	Bogard Rd.	S. Mack Dr.
Crusey St.	Rainier Dr.	Church Rd.	Spruce Ave.
Glenwood Ave.	Rocky Ridge Rd.	Crusey St.	Sun Mountain Ave.

Existing		Future (2005 – 2025)	
		Gateway Dr.	Realignment
Lucille St.	Spruce Ave.	Hermon Rd. Extension	Swanson Ave.
Lucus Rd.		Lucille St.	Wasilla Fishhook Rd.
Main St.		Lucus Rd.	
Bogard Rd.		Main St.	Yenlo St.
Neuser Dr.		Peck St.	
MINOR COLLECTORS		**MINOR COLLECTORS**	
Aspen Dr.	Minnetonka Dr.	Aspen Dr.	Melanie Ave.
Bay View Dr.	Nicola Ave.	Aviation Ave.	Minnetonka Dr.
Broadview Ave.	Old Matanuska Rd.	Bay View Dr.	Mystery Ave.
Cache Dr.	Ravenswood Lp.	Broadview Ave.	Nelson Ave.
Church Rd.	S. Mack Dr.	Cache Dr.	Nicola Ave.
Crestwood Ave.	Snowbird Dr.	Crestwood Ave.	Old Matanuska Rd.
Deskas St.	Success Dr.	Deskas St.	Ravenswood Lp.
Eden St.	Vaunda Dr.	Eden St.	Riley Ave.
Fanciful Dr.	Vixen St.	Endeavor St.	Snohomish Dr.
Fern St.	Whispering Woods Dr.	Fanciful Dr.	Susitna Ave.
Forest Ave.		Fern St.	Snowbird Dr.
Holiday Dr.		Forest Ave.	Success Dr.
Lake Lucille Dr.		Glenwood Ave.	Vaunda Dr.
Melanie Ave.		Holiday Dr.	Vixen St.
		Lake Lucille Dr.	Whispering Woods Dr.

Public roads in Wasilla that are not classified as either Interstate, Arterial, Commercial, Major or Minor Collector are designated as local streets.

Existing		Future	
COMMERCIAL STREETS		**COMMERCIAL STREETS**	
Aviation Ave.	Knik St.	Beacon St.	Lakeside Plaza Dr.
Beacon St.	Lakeshore Dr.	Broadview Ave.	Lakeview Ave.
Broadview Ave.	Lakeside Plaza Dr.	Boundary St.	Patagonia St.
Boundary St.	Lakeview Ave.	Centaur Ave.	Patricia Ave.
Centaur Ave.	Nelson Ave.	Centime Way	Paulson Ave.
Centime Way	Patagonia St.	Check Dr.	Railroad Ave.
Check Dr.	Patricia Ave.	Commercial Dr.	Stormy Ct.
Commercial Dr.	Paulson Ave.	Crosswind Ct.	Talkeetna St.
Crosswind Ct.	Railroad Ave.	Dana Ave.	Terminal Ct.
Dana Ave.	Stormy Ct.	Deskas St.	Tommy Moe Dr.
Deskas St.	Susitna Ave.	Enter Way	USA Cir.
Endeavor St.	Swanson Ave.	Enterprise St.	Weber Dr.
Enter Way	Talkeetna St.	Financial Dr.	Westpoint Dr.
Enterprise St.	Terminal Ct.	Foundry Way	Willow St.
Financial Dr.	Tommy Moe Dr.	Hallea Dr.	

Foundry Way	USA Cir.	Herning Ave.
Hallea Dr.	Weber Dr.	Industrial Dr.
Herning Ave.	Westpoint Dr.	Jude Ave.
Industrial Dr.	Willow St.	Knik St.
Jude Ave.	Yenlo St.	Lakeshore Dr.

Implementation of the *Official Streets and Highways Plan*

The Wasilla *Streets and Highways Plan* describes the existing and future street network serving Wasilla. The plan has been developed to identify improvements needed to improve both access and mobility of vehicular traffic. Implementation of the plan will provide guidance to planners, developers and decision makers who will be living and working in Wasilla.

Policy:

The *Official Street Classification Map* adopted in Resolution WR94-12 by the Wasilla City Council on July 25, 1994 should be replaced. A new *Official Street Classification Map* incorporating street improvement projects completed since 1994 along with the recommended improvements described in this plan should be adopted. This action would establish the hierarchy of streets comprising the road network for Wasilla. Copies of the *2005 – 2025 Official Street Classification Map* should be available on the City web site as well as at City Offices once it is adopted.

Capital Improvement Plan (CIP):

The CIP for the City of Wasilla is a community plan for short- and long-range physical development. It is intended to link Wasilla's fiscal plan and comprehensive plan to physical development, and provide a mechanism for:

- Estimating capital requirements
- Planning, prioritizing, scheduling and implementing projects during the next five years
- Developing funding policy for proposed projects
- Budgeting high priority projects
- Informing the public of planned capital projects.

At least once a year, the City Council will develop and approve a Capital Improvements Program (CIP) which is a list of projects that will be executed during the next fiscal year, along with a tentative list of projects anticipated to be undertaken in the following four years.

In September 2004, the City adopted a CIP process that begins in June of each year with project nominations. Nominated projects are reviewed and scored during October and November and presented to the Planning Commission in December. The Planning Commission is responsible for recommending CIP projects to the City Council for adoption of a CIP on or before January 25 of each year. This allows the City Council to identify capital projects and possible funding sources in February. This schedule allows

the City Council to develop a reasonable relationship between the City's draft Capital Budget and the draft Operating Budget during the annual budget preparation process.

There are several potential sources of funding for CIP projects:

- City of Wasilla General Fund - this is an unrestricted fund used to support city operations, including City Council, Administrative Services, Finance, General Services, Police, non-Departmental and capital projects. General Fund revenue sources include: 0.3 mill property tax; 2% sales tax; franchise fees; business license; permits and fees; and interest earnings. [Note - an additional 0.5% in sales tax is collected in the City. These funds are earmarked for debt service on bonds used to build the Multi-Use Sports Complex. The additional 0.5% sales tax will go away after the bond is paid off.]
- City of Wasilla Capital Project Funds - these are funds set aside from the City's General Fund for the acquisition and/or construction of major capital facilities and equipment.
- City of Wasilla Enterprise Funds – these funds are used to account for operations that are financed and operated similar to private businesses – where costs of providing goods or services is financed or recovered through user charges. City Enterprise funds have been established for Utilities, the Wasilla Airport, and the Multi-Use Sports Complex.
- Voter approved Bonds – Wasilla property owners may, in the future, support sale of bonds to make specific improvements to the City street system.
- Grant Funding - grant applications for CIP project funds are submitted each year from the State, private foundations [for example the Rasmussen Foundation], and from various federal agencies such as the Environmental Protection Agency (EPA).
- State Transportation Improvement Program (STIP) - the Alaska Department of Transportation and Public facilities creates the State Transportation Improvement Program (STIP) on a three-year cycle. The STIP funds projects in four categories:
  - National Highway System (NHS), *current project - Parks Highway*
  - State Highway System (SHS), *for example - Palmer-Wasilla Highway*
  - Community Transportation and Economic Development Program (CTP), *current example - Crusey Street*
  - Trails and Recreational Access for Alaska (TRAAK)

Some of the projects listed in the 2005 – 2025 *Official Streets and Highway Plan* recommendations require the involvement of the private sector. The City recognizes that an alternative way to achieve plan implementation is to involve private funding, and shall work aggressively with appropriate state and federal transportation agencies and private parties to accomplish these privately funded projects. In doing so, the City encourages cooperation between government agencies and these private sector partners, including entering into land exchanges for transportation corridors and adopting creative financing techniques.

Streets and Highways Plan Updates and Maintenance:

Once adopted, the Streets and Highways Plan will be evaluated and updated at a minimum every five years. The City Public Works Department is responsible for ensuring that reviews are completed. The City will notify the general public of the opportunity to review the proposed updates to the adopted street plan by newspaper advertisements.

The Planning Commission will review the Wasilla Streets and Highways Plan in December of each year to determine if projects identified on the Short Range or Long Range Recommendations lists have been completed and to insure that new projects are reflected in the Plan. Upon a finding that changes are necessary, the Commission will forward a list of the recommended changes to the City Council requesting that the changes be incorporated into the Plan.

CITY OF WASILLA OFFICIAL STREET & HIGHWAY PLAN 2005-2025

Street Classification

Existing Roads

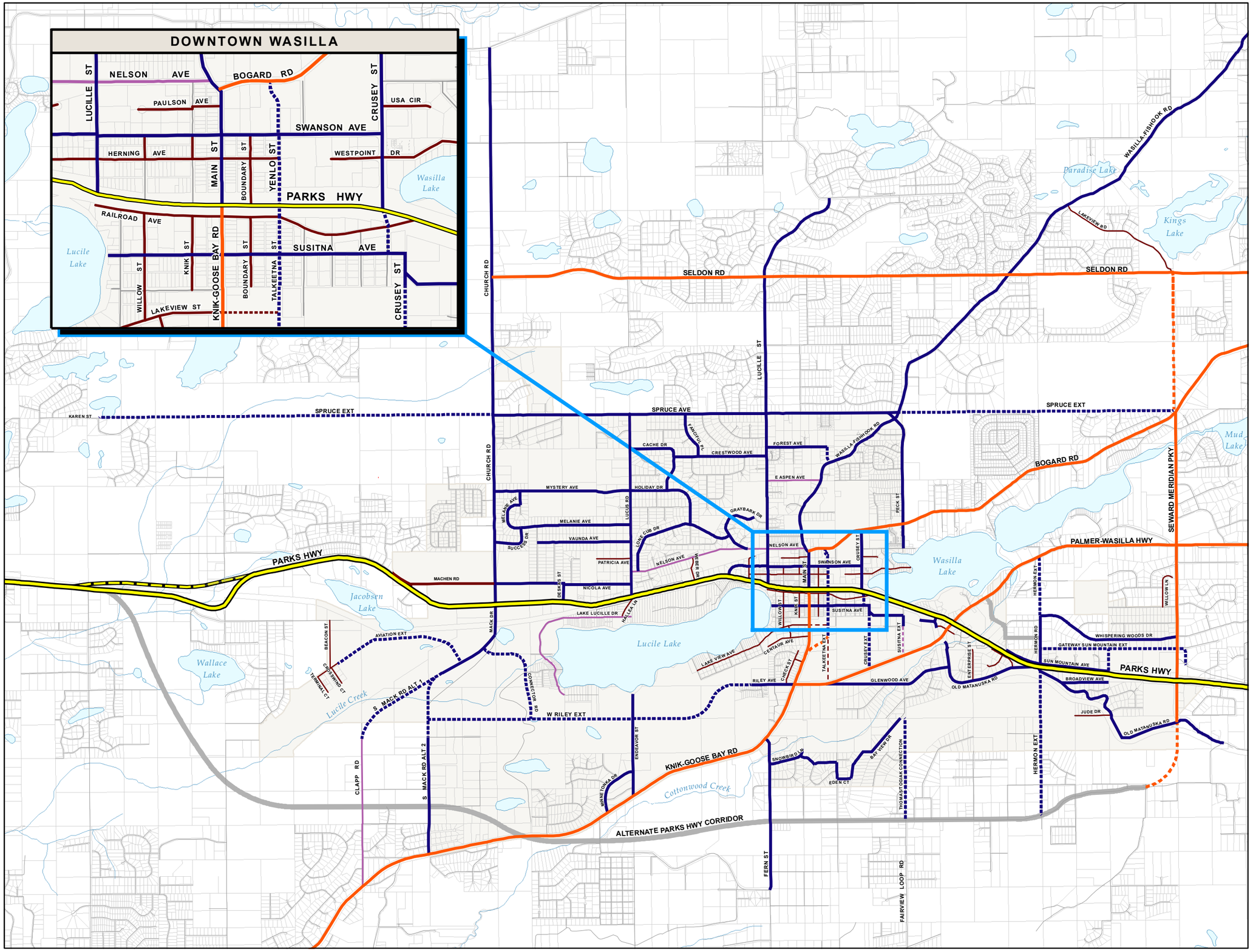
- Interstate
- Arterial
- Commercial
- Major Collector
- Minor Collector
- Local

Potential Future Road or Extension

- Interstate
- Corridor
- Arterial
- Commercial
- Major Collector
- Minor Collector

Existing Features

- City of Wasilla
- Parcel
- Lake
- Stream



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0 2,500 5,000 Feet

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