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Maps:

- Master Street Plan
- Master Street Plan & Trails

Note:

Street Cross Sections are included in the Mapleton City Addendum to APWA Standard Specs and Drawings

Mapleton City Transportation Master Plan

Adoption and Compliance

The Mapleton City Transportation plan is an official document of the City.

After careful development and

recommendation by the Transportation Committee, the City Engineer and the Community Development Director, the plan has been adopted by both the Planning Commission, and the City Council, after public hearing. Upon adoption, the Transportation Plan shall be strictly followed in order to provide the safe and efficient movement of people and vehicles now and in the future. Significant changes or deviations should be rare and only allowed after public hearing and approval by the City Engineer, Planning Commission and City Council.

“Roads will generally remain throughout our history and will be a statue for all to see of our ability to solve present problems and our plans for the future. Houses and businesses will occupy only a small part of that history when compared to the roads we establish.” – Arnold Wilson 1992

Transportation Goals and Policies

The purpose of this Transportation Plan is to guide city staff, the Planning Commission, the City Council, developers, and residents. Well planned streets benefit residents for decades to come. Vigilant attention to maintain these goals and policies will provide a safe and peaceful quality of life for everyone in Mapleton.

Introduction

Mapleton is uniquely situated in a cove type setting next to the Wasatch Range of mountains. With the exception of U.S. Highway 89, Mapleton is out of the way from most other traffic generators frequented by non-Mapleton residences. This situation is a great advantage for a peaceful quality of life to Mapleton residents, because only residents and their guests typically use Mapleton streets. The disadvantage is that low traffic volumes are not as attractive for development of many businesses, except along U.S. Highway 89. This means residents must leave the city for most shopping and other needs.

Most streets in Mapleton were originally developed as part of its agricultural heritage resulting in the advantage of straight alignments and relatively equal spacing between farms. Recently narrower street widths have been designed to meet the needs of a very low density community. Growth within the last few decades has required the city to renew its efforts to plan for the provision of adequate streets to meet the demands of existing, proposed, and future growth. Mapleton City believes it is wise to look ahead. Mapleton has done that very well at times and at times been unable to follow through. For example, in 1969 the Master Plan for Mapleton called for:

- **Maple Street to have an 80-foot right-of-way from 1600 West to the mouth of Maple Canyon;**
- **200 North (now 400 North) to have a 100-foot right-of-way from 1600 West to Center Street (now Main Street) and an 80-foot right-of-way from there to the mouth of Maple Canyon; and**
- **Center Street (now Main Street) was to continue into Springville with a 100-foot right-of-way from Maple Street to Springville and an 80-foot right-of-way from Maple Street to 800 South (now 1600 South**

The benefit to Mapleton residents, had the city followed the 1969 plans, is apparent to the members of the Transportation Committee. Illustrating the need for thoughtful planning and strict adherence to the adopted plans, a June 24, 1992 letter from a former city engineer, Arnold Wilson said:

“When our lack of knowledge and understanding of future needs is added to providing present benefits to a few, we often shortchange future residents and by default decide that they can take care of their own problems.”

Existing Conditions

An inventory and evaluation of existing conditions and proposed subdivisions within the city limits was conducted so that existing transportation problems could be identified and a framework for analysis of future conditions could be accomplished. This included adding to the transportation plan all proposed streets from submitted preliminary subdivision plans.

Functional Street Classification

Balancing the need for the movement of traffic and the need to access land uses is best accomplished by a system of functional classification of streets. The higher the functional street classification, the more the street’s primary function is the movement of traffic like U.S. Highway 89. The higher the functional street classification, the greater the traffic count and thus the greater priority for street maintenance, snow removal, access control, and public safety patrol. The lower the classification, the more the streets primary function is access to land that serves a few homes. Streets are classified by the function that they serve and may be reclassified as conditions change.

Functional street classification is a subjective means to identify how a roadway functions and operates when a combination of the roadway’s characteristics are evaluated. These characteristics include: the configuration, access to and from, right of way, traffic volume, carrying capacity, land use access, speed limit, spacing and length of the roadway. Private streets should meet the same standards as any public street. (ie: right of way, width, curves, sidewalks etc.)

These classifications are: arterials, major and minor collectors, and local access roads.. Arterials operate with higher speeds, higher volume, reduced access, parking restrictions and often-connect into the freeway system. Collectors penetrate neighborhoods to distribute and collect traffic from the local streets and channel that traffic to the arterials. Local streets provide access to private property.

Transportation Guidelines and Policies

A key element in maintaining the integrity of the transportation system in Mapleton City is to provide efficient guidelines and policies for the city. These guidelines are to assist city leaders, planners, engineers and land developers in solutions that reflect the unique characteristics of the city. These guidelines also provide an outline that city leaders and staff can use to make informed recommendations on transportation needs.

A goal to establish and maintain a safe transportation system and street designs can best be accomplished by the following:

Safe Transportation System

- Requiring all developments to provide adequate access.
 - Circulation is of the utmost importance; long blocks and excessive dead-end streets and cul-de-sacs should be avoided.
 - Two points of access are required for any developments over 250 ADT (Average Daily Trips).
- Providing safe pedestrian street crossings, particularly near schools and recreation areas.
- Requiring all roadway standards to meet minimum design standards established by the most recent edition of American Association of State Highway and Transportation Officials (AASHTO).
- All signs and pavement markings must meet standards established by the most recent edition of the Manual of Uniform Control Devices (MUTCD). Exceptions can be granted by the City Engineer on a case by case basis for those designs that demonstrate innovative superiority over the existing standards.
- Maintaining and installing a safe and efficient sidewalk system. Sidewalks shall be installed on both sides of the street unless otherwise established under these guidelines.
- Off site improvements will be required where safety is a concern as determined by the city engineer, unless specifically approved by City council.
 - Sidewalks may be omitted on one side of a new street where that side clearly cannot be developed and where there are not existing or anticipated uses that would generate pedestrian trips on that side.
 - Sidewalks may be deleted on one side of the street if the subdivision has a secondary sidewalk system that connects to the public right of way sidewalk system.
- Providing emergency access and /or turnarounds on all dead-end streets or cul-de-sacs.
- Offset intersections could have negative impacts on traffic flows and create potential accidents.

Mapleton City is committed to establishing and maintaining a safe and efficient transportation system. All streets, sidewalks, and trails should meet applicable safety standards, and all developments should provide adequate access for emergency vehicles. School routing and recreation plans should minimize vehicle/pedestrian conflicts. Clear guidance should be provided for vehicles through street signs, channelization, and pavement striping. Stopping sight distance must be considered at all intersections and curves to ensure the safety of the public, in accordance with AASHTO standards.

- **Traffic Calming.** Mapleton values the quality of life it enjoys and will take necessary steps to preserve the peace and quiet in residential areas through the use of modern traffic calming techniques including a circulation design that slows traffic in strategic locations, encouraging safe driving practices, and providing for a safe and efficient transportation system.

- Developments that create new local roads will incorporate traffic calming design standards into their development plans. Design elements include roadway widths, alignment of streets and connectivity to adjacent streets. These elements encourage the reduction of speeds and vehicle volumes through the manipulation of roadway design elements.
- **Speed limits properly set and enforced.** In accordance with Section 41-6a-603 Utah Code, the speed limit on city streets should be set based on engineering and traffic investigations at the 85th percentile speed. Unless otherwise posted, the speed limit on all local streets in Mapleton is 25 mph and 30 mph for collector streets.

Street Design Standards

As streets are planned, designed, developed, or affected by new development, the streets should be designed and improved to meet the traffic needs of the community far into the future. For example, adding, after-the-fact, the needed right-of-way width to accommodate traffic growth, sidewalks, jogging/biking paths, or even tree planter strips is almost always cost prohibitive. The result may be less than desirable conditions along those streets forever.

Based on functional classification, all new streets and existing streets that are part of a new development must be developed according to the Street Cross-Section Standards for Mapleton City based on an inventory of existing streets, traffic studies, traffic capacity, design speed, projected traffic volume, system continuity, overall safety, population counts, and projections and on other anticipated and planned growth in Mapleton. The fact that certain existing streets do not meet some of these standards should not be used to justify relaxing the standard in the future. Mapleton City is committed to planning ahead and taking advantage of lessons learned from the past.

All streets public or private shall be built to current city standards. New developments may request private streets and site specific street standards. These requests should be discouraged. New street standards may be adopted with approval of the city engineer, planning commission and city council.

Street Development

- **East West Traffic Movement.** East West traffic movement to get residents to and from U.S. Highway 89 is a primary consideration as streets are maintained, plowed, planned, and developed. This is to reduce unnecessary traffic flow through neighborhoods.
- **Collector Spacing.** As new development occurs and connects to existing land uses, functionally classified streets of at least collector or above should be spaced throughout the city at approximately eight block intervals. This spacing shall be maintained and continued from both East to West and from North to South so that no new development is further than 1/2 mile from a collector.
- **Street Alignments.** Collector streets should generally be straight except when flexibility is needed due to topography, soil conditions, and approved engineering

design standards in a given neighborhood. Roads should be designed to lie within existing topographic features without causing unnecessary cuts and fills.

- **Street Connectivity.** Circulation is of the utmost importance; long blocks and excessive dead-end streets should be avoided. The street system of a community should be planned, designed, and maintained to even the flow of traffic from land uses onto residential streets, and then to collectors as residents leave the city and reverse the same flow of traffic as residents return. When traffic is blocked or restricted along these natural routes due to streets that do not go through, traffic must find alternate routes. This results in a heavier traffic burden on narrower streets. In addition, for public safety purposes having streets that do not connect results in an unnecessary impediment for fire, ambulance, and police services.
- **Street Dedication.** All public or private streets shall be dedicated for public use. Private streets shall be discouraged. All public right of way will conform to approved city standards.

Collector streets should always connect to other local or collector streets. The connectivity of collector streets is a higher priority than street width. For example, if necessary, due to topography, soil conditions, and approved engineering design standards in a given neighborhood, a collector street width may be adjusted in order to ensure connectivity.

- **Street Stubs and Cul-de-sacs.** When the possibility of future adjacent developments exists, new developments should include street stubs at logical locations that will allow adjacent properties to connect to the street stub and continue the street as development occurs. Cul-de-sacs should be discouraged in order to provide greater traffic circulation, except in rare cases where the possibility of future adjacent development does not exist due to topography or existing development. While dead-end streets and cul-de-sac configurations are necessary in some circumstances and were even considered desirable to planners in the past, planners now realize street connectivity is preferred.
- **Design Standards.** Mapleton adopts:
 - a. the design standards for roadway features established by the most recent edition of *American Association of State Highway and Transportation Officials* (AASHTO); and
 - b. the standards established by the most recent edition of *Manual of Uniform Traffic Control Devices* (MUTCD).
 - c. the standards established by the most recent edition of *American Public Works Association (APWA) Standard Specifications and Plans*.
 - d. Mapleton City standard cross sections.

The City Engineer may grant exceptions on a case by case basis for those designs that demonstrate innovative superiority over the existing standards.

- **Access Management.** A critical part of balancing the safe flow of traffic and access to land uses is carefully regulating the spacing and number of access (driveways) onto a street. The fewer access points, the greater the flow of traffic

and the fewer the accident conflict points. Access management is a critical part of the functional classification of streets. The higher the traffic volume on a particular street the greater the need to limit the access points on that street. An emphasis on access management provides careful control of the location, design, and operation of all driveways and street connections to a roadway. Driveways and other access points shall be constructed only in approved locations.

Street Maintenance

- **Well-Managed Streets.** City streets are a critical public service for which residents pay through property taxes, fuel taxes, development fees, and other fees. The provision of adequate, well designed, planned, and maintained streets are a constant visual and practical reminder of how well the city is managing the public trust on a day-to-day basis.
- **Good Roads Cost Less.** Good roads which are well-maintained cost less, as proven in numerous engineering studies over the years. The city should use the best available management and maintenance systems available to maintain city streets. The City Engineer shall develop and maintain a Pavement and Traffic Control Management System (a scheduled routine of roadway inspection, repairs, replacement, and continued maintenance) to maximize the life expectancy of roadway investments and to maintain the effectiveness of traffic control devices.
- **Pavements Cuts.** No cuts shall be made in street pavement for at least one year after hard surfacing has been installed unless approved by the city engineer. Minimum 4" asphalt will be required in all roadway cuts. The fee shall be placed in a fund for the yearly overlay program.

Curb, Gutter, and Sidewalk

- **Curb, Gutter, and Sidewalk.** Curb, gutter and sidewalk are required along the street frontage of each lot in all new developments.
 - Sidewalks may be omitted on one side of a new street where that side clearly cannot be developed and where there are not existing or anticipated uses that would generate pedestrian trips on that side
- **Planter Strips.** Planter strips can enhance the beauty of streets when they are properly maintained and include trees, mailboxes and other appropriate ground cover. Narrow planter strips can be difficult to maintain. Planter strips that are narrower than 4 feet wide are not allowed.

Trails and Bicycle Paths

- Mapleton is committed to preserving exercise and recreation opportunities for its residents whenever possible. Trails are an important element to the transportation system and can improve the overall quality of life for the community. Trails may include paths, routes, or actual trails and may allow for walking, jogging, bicycling, roller skating, skate boarding, and horseback riding. These are important facilities for preserving Mapleton's quality of life. Paths and trails are usually separated from other traffic, while routes may be designated along existing streets including street shoulders. The city reserves the right to designate which travel mode is permitted on a given trail.
- The city should designate by proper signage and pavement markings bicycle/jogging routes on streets, especially near schools and parks, and provide for continuous connectivity where possible.
- Currently there are no designated bike routes. There are several roadways where there is an adequate shoulder and a painted white edge line to allow for bicycle use. On these roadways however, bicyclists must mix with motorized traffic resulting in potential conflicts. It is desirable to link future bicycle routes so that bicyclists can safely travel to different areas of the community.
- Pedestrian traffic is heavier in those areas where schools or other activity centers are located. The areas around schools generally provide sidewalks and crosswalks for the safe movement of people.
- The Trails Committee Master Plan may provide additional specific recommendations including showing trails, routes, and paths.

Map #1 Mapleton City Master Street Plan Map



0 0.25 0.5 0.75 1 Miles
1 inch equals 0.25 miles (24 x 36 Paper Size)
1:15,840

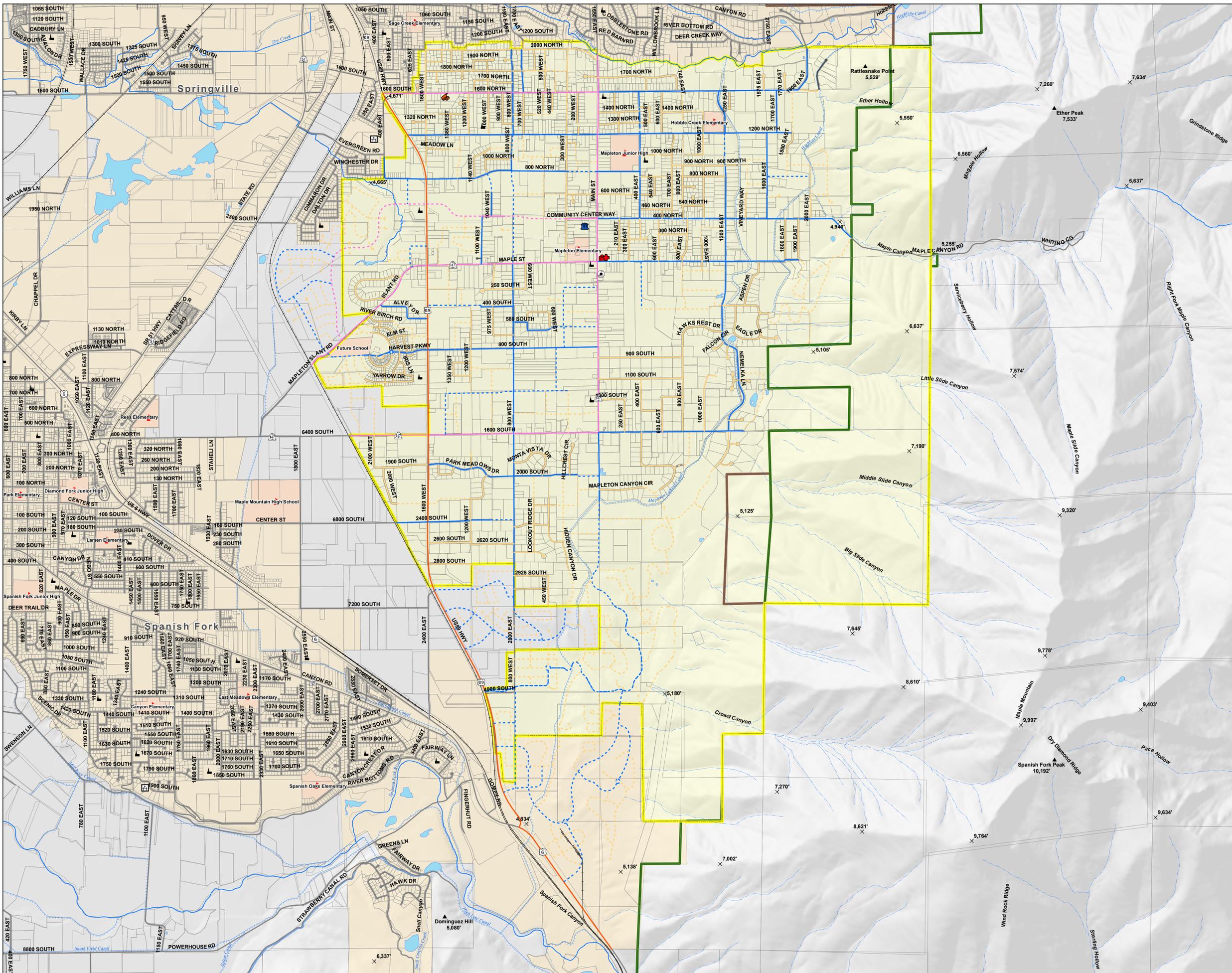
Legend

Master Street Plan

- Existing Arterial Road (UDOT)
- Existing Collector Road - 66'-80' ROW
- Proposed Collector Road - 66'-80' ROW
- Existing Major Local Road - 56'-66' ROW
- Proposed Major Local Road - 56'-66' ROW
- Existing Minor Local Road
- Proposed Minor Local Road
- Existing Private Road

Points of Interest

- Mapleton Ambulance
- Mapleton City Center
- Mapleton City Public Works
- Mapleton Pioneer Heritage Museum
- Mapleton Volunteer Fire Dept.
- Schools
- Churches
- Cemeteries
- Peak
- Spot Elevations
- Other Roads
- Railroads
- Lakes
- Canal or Ditch
- Intermittent Stream
- Stream or River
- Parcels as of 3-25-09
- Mapleton Boundary
- Uinta National Forest
- Hobbie Creek WMA
- Schools Property



MAPLETON CITY CORPORATION

This map is intended to show general locations of proposed improvements, and does not constitute an approved engineering plan or set forth a timeline for improvements.

Mapleton City makes no warranty with respect to the accuracy, completeness, or usefulness of this map. For official Plan verifications, contact the Community Development Department.

Map Adopted: July 20, 2010

Map #2 Mapleton City Master Trails Plan Map



0 0.25 0.5 0.75 1 Miles

1 inch equals 0.25 miles (24 x 36 Paper Size)
1:15,840

Legend

Trail Features

- Existing Trailhead / Parking
- Proposed Trailhead / Parking
- Existing Limited Access Gate
- Proposed Limited Access Gate
- Existing Restrooms
- Proposed Restrooms
- Existing Picnic Benches
- Proposed Picnic Benches
- Existing Trail Bench
- Proposed Trail Bench
- Existing Whiting Campground

Points of Interest

- Mapleton Ambulance
- Mapleton City Center
- Mapleton City Public Works
- Mapleton Pioneer Heritage Museum
- Mapleton Volunteer Fire Dept.
- Schools
- Churches
- Cemeteries
- Peak
- Spot Elevations

Master Bike Routes and Bike Lanes Plan

- Needs Widening or Const. for Shoulder Stripping
- Needs Shoulder Stripping
- Existing Shoulder Stripping Bike Route
- Needs Widening or Construction for Bike Lanes
- Needs Bike Lane Stripping
- Existing Bike Lanes

Master Trails Plan (Non-motorized)

- Existing Sidewalk
- Proposed Sidewalk
- Existing Dirt
- Proposed Dirt
- Existing Dirt - Re-Surface with Gravel
- Existing Gravel
- Proposed Gravel
- Proposed Asphalt & Dirt
- Existing Asphalt
- Proposed Asphalt
- Rehabilitate

Springville & Spanish Fork Trails Plans

- Existing Trails (Various Surfaces)
- Proposed Trails (Various Surfaces)

Master Street Plan

- Existing Arterial Road (UDOT)
- Existing Collector Road - 66'-80' ROW
- Proposed Collector Road - 66'-80' ROW
- Existing Major Local Road - 56'-66' ROW
- Proposed Major Local Road - 56'-66' ROW
- Existing Minor Local Road
- Proposed Minor Local Road
- Existing Private Road
- Other Roads
- Railroads
- Lakes
- Canal or Ditch
- Intermittent Stream
- Stream or River
- Parcels as of 2-3-10
- Mapleton Boundary
- Uinta National Forest
- Hobbie Creek WMA
- Schools Property

Parks

- Public Park
- City-Owned Open Space
- Private Park or Open Space



MAPLETON CITY CORPORATION

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Map Adopted: July 20, 2010

