

SECTION 6 - TRANSPORTATION

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KEY FOCUS AREAS

See Figure 6-1 for the Smithfield City Transportation Master Plan.

Since the 1998 General Plan was prepared, steps have been taken to improve Main Street, including new traffic signalization and development of roadway and driveway standards. This update to the transportation element of the General Plan focuses on the following three key areas:

■ Identifying new corridors to expanding development areas

Development is expanding rapidly with undefined access corridors to the center of the city. The east and northeast benches are experiencing significant pressure from development. This will result in increased traffic on the main east-west roadways such as 300 South and 600 South. The transportation component of the General Plan addresses the following important questions for the future development of Smithfield.

- ? Do the existing roads have adequate capacity to handle the additional traffic?
- ? Where is the best location for future corridors to collect and distribute the new traffic?

■ Identifying key north-south and east-west corridors

Significant growth is occurring, particularly to the south. New corridors are being planned as part of the recent Long-range Transportation Plan developed by the Cache Metropolitan Planning Organization (CMPO). The Hyde Park/North Logan 200 East corridor is in the environmental phase and expected to be constructed in 2008. Future plans are to extend the 200 East corridor into Smithfield City and connect with 600 South. The location has not been clearly defined at this point, while development is continuing in the vicinity. Additionally, a corridor further east (in the vicinity of 800 to 1000 East connecting to Hyde Park) is anticipated. Development of the east bench may have a significant effect on the ability to accomplish this future corridor. The plan update identifies these long range key corridor needs and defines their location for future development compatibility.

INSERT FIGURE 6-1 HERE – TRANSPORTATION MASTER PLAN

- **Developing access-management strategies**

As additional development occurs along Main Street (US-91) and future key corridors, access-management strategies need to be developed. Access-management strategies are managed differently than local street standards. In order to maintain higher speed limits and functional characteristics of key corridors, reduced or limited access onto them is necessary.

Results of a city-wide questionnaire, open houses, and Smithfield City General Plan Advisory Committee input identified recognized that Smithfield City is a growing community and that with that growth comes additional traffic and transportation concerns. The following concerns were highlighted as critical to the future development of a sound transportation system in Smithfield City:

- Access to Main Street will only get more difficult as traffic increases. Residents will need alternative routes for travel across Smithfield City and south to the Logan area. Alternate routes to the west side are needed, as well as clear routes to Hyde Park.
- 1000 East is not well defined, but is expected to experience significant increase in traffic as development grows. Discussions have ensued about using 1000 East as a truck route for gravel haulers. The questions about where this future road will go and what its characteristics will be are being discussed with other east bench communities.
- Upper Canyon Road is expected to see the same significant traffic from growing developments in the northeast area. Canyon Road and Center Street are limited in their capacity and function. How will they accommodate future traffic needs to the northeast? Adequate distribution of traffic with a defined road network is needed.
- Traffic-calming techniques are needed to improve neighborhood and pedestrian safety, as well as areas around school zones. Sidewalks are needed to safely transport pedestrians.

FUNCTIONAL CLASSIFICATION OF ROADWAYS

There are four main classifications of roadways in Smithfield City (see Table 6-1).

Table 6-1. Classifications of Roadways in Smithfield City

Classification	Description
Local	Used primarily for movement of vehicles onto and off the street system from land parcels (land access).
Collector	The intermediate type of facility, intended to serve both through-traffic and land-access functions equally.
Major Collector	Used for through-traffic and land-access functions, although it serves to make through-traffic more efficient.
Arterial	Used mainly to provide through-traffic movement in the most efficient manner.

The transportation master plan in Figure 6-1 identifies future functional classifications for roadways in Smithfield City through the year 2030 and provides a blueprint for managing and handling the expected increase in traffic. This plan identifies the future north-south and east-west corridors, which must be protected to maintain a reasonable flow of traffic, safety, and mobility within the Smithfield City community. The plan is based on the important components discussed below.

EXPANDING DEVELOPMENT AREAS

Land-use Projections

Land-use projections show an increase in of approximately 2,098 new dwelling units and 450,000 square feet of new commercial and light industrial development by the year 2030. This new development will create an additional 26,000 vehicle trips per day on the Smithfield City roadway network. The future developments east of 1000 East are projected to create 6,500 vehicle trips per day, while those in the northeast area are projected to create 5,250 vehicle trips per day on the adjacent roadway network.

East Bench Area

To accommodate increased traffic in the east bench area, a system of local and collector roads should be constructed as development occurs. The road network should follow the classic grid system where practical, although topographical challenges on the east bench may require creative alignments. Three key east-west collector roads should be established to connect into 1000 East at a spacing of approximately 2,250 feet. A system of local roads should be constructed to connect into these three collector roads. No additional road connections onto 1000 East are recommended, to maintain its functionality as a collector roadway. The intersections of 300 South and 600 South are expected to require improved traffic control (such as signalization or roundabouts). These two intersections are prime candidates for roundabouts because of their evenly distributed traffic.

Northeast Bench Area

To accommodate increased traffic in the northeast bench area, a system of local and collector roads should be constructed to direct traffic west to US-91 through collector roads at 800 North and 400 North/Upper Canyon Road. A system of local roads should be constructed to connect into these collector roads. No additional road connections onto US-91 are recommended, as they will be difficult to access in the future. A connection at approximately 700 North is under construction to access some multi-family dwelling units. This access location will be used until 800 North can be developed. The main intersections at 800 North and 400 North/Upper Canyon Road are spaced adequately for installation of future traffic signals on US-91.

KEY NORTH-SOUTH AND EAST-WEST CORRIDORS

Main Street

Main Street (US-91) is expected to experience significant increase in traffic through the year 2030. The section is at its maximum width and the Utah Department of Transportation does not have plans to widen it in the future. A series of traffic signals spaced from 800 North to 1000 South will provide the backbone of east-west connectivity in Smithfield City. Even with the signalized corridor, traffic volumes will be in excess of 30,000 vehicles per day. Particularly in the southern end of town, it will be critical for the city to develop parallel road corridors to provide mobility on properties adjacent to US-91. 200 West and 200 East on each side of Main Street will be important roadways to distribute commercial and light industrial traffic to the signalized intersection on Main Street. An additional traffic signal at 1000 South and Main Street is recommended in the future.

200/250 East Corridor

Hyde Park and North Logan are in the planning and design stages for construction of a five-lane and three-lane north-south roadway, which is intended to connect to Smithfield City in the future. This roadway will generally follow the 250 East alignment. For the most part, this roadway is intended to be constructed as development occurs along its corridor. Adequate width should be provided for a future 99 feet right-of-way. Although it may take some time for sufficient traffic to use 200/250 East, it is anticipated that this corridor will be a critical link to the south for Smithfield City and residents who wish to bypass the congestion on US-91. The 200/250 East roadway should be constructed and classified as a minor arterial with access control following the Utah Department of Transportation and CMPO access-management policy for Category 5 (these policies are described under "Access-management Strategies," ahead).

North-south Corridors

In addition to 200/250 East, roadway corridors should be planned and set aside for 200 / 400 West, 455 East, 1000 East, and 1200 East. These roadways should all be classified as collectors with access controlled as explained for 1000 East above. The location and connection of these corridors should be closely coordinated with Hyde Park planning officials.

200 West south of 400 South and 400 West north of 1000 South will be a key north-south corridor for traffic west of Main Street. These roadways overlap at the light industrial use area. This corridor will need an adequate bypass connection at the north end at 800 North, with planning to extend to 200 West south into Logan. The 455 East roadway should be classified as a collector and afforded the same access-management requirements as explained for 200/250 East above.

City should continue to work with Cache County and Hyde Park to develop the 1000 East Corridor.

East-west Corridors

300 South and 600 South will be significant corridors for the future expanding development areas to the east. 300 South and 600 South are the only two east-west roadways able to accommodate this increased traffic. Both will need widening to accommodate at least three lanes of traffic. While the traffic is not expected to reach levels that require four lanes, there will be sufficient traffic to cause some difficulty in the mobility of adjacent accesses and intersections. Traffic signals or roundabouts are likely to be needed in the future at 455 East.

ACCESS-MANAGEMENT STRATEGIES

In recent years, access management has become an important tool in transportation planning. Access management is the planning, design, and implementation of land-use and transportation strategies that maintain a safe flow of traffic while accommodating the access needs of adjacent developments. The concept involves maximizing the efficiency of arterial corridors (and even collector roadway corridors) through limiting or consolidating driveways or access points. By requiring adjacent land to be accessed from lower functionally classified facilities, traffic conflicts caused by turn movements on and off key roadways are consolidated and reduced, thereby making it more feasible to address such conflicts by providing turn lanes and fewer traffic signals.

The benefits of access management include:

- Increased capacity
- Maintenance of traffic flow and speed
- Improved safety and reduction in accidents
- Preservation of infrastructure investment

In other words, using access-management techniques for roadways can help them better fulfill their intended function for a longer period of time—thus maximizing capacity and reducing the need for expensive infrastructure investment in the future through the addition of travel lanes.

Where practical, the future collectors and arterials identified in the transportation master plan should be managed with coordinated access control using the following Category 5 access management policies:

- Speed limits of 35-mph or higher
- Signals spaced at 2,650 feet
- Street intersections spaced at 660 feet
- Access spaced at 330 feet
- Parking limited or none
- Separated pathways or sidewalks
- Separated bike paths adjacent to the travel lanes

PEDESTRIAN SAFETY

Pedestrian safety is a priority for Smithfield City because of the emphasis placed on recreation, trails, and school safety. Sidewalks and dedicated crosswalks for pedestrians should be a priority when any improvement project is undertaken (specifically near school zones). Along with sidewalks, continued installation of street lighting improvements should be undertaken (specifically on the west side of the community).

Pedestrian Safety Policy

- Sidewalks should be encouraged at all areas in the community for pedestrian safety.