

CHAPTER 5

Introduction

TRANSPORTATION

The transportation system forms the backbone of the community. I-74 provides the community with connections to larger metropolitan areas such as Indianapolis and Cincinnati. US Highway 421 provides non-interstate connections between communities, complemented by State Road 3 for north-south access and State Route 46 for east-west access. The roads and streets serving the community connect into these routes to form a regional transportation system.

Roadways are not the only means of transportation in Greensburg. Pedestrian connections such as sidewalks and trails are expected to play an increasingly important role in the community. The railroad has always served as a focus of industry for the community, and in the future it will again serve as a major industrial transportation system as Honda will use it to move materials.

Transportation Goals & Objectives

Goal

Develop a multi-modal transportation system, including motorized, non-motorized and pedestrian infrastructure in the city of Greensburg to provide for the mobility of all citizens.

Objectives

- Provide a pedestrian network which meets or exceeds standards set forth in the Americans with Disabilities Act (note: design standards/accommodation)
- Require the installation of sidewalks and trail connections in the development of new neighborhoods
- Encourage the development of an appropriate public transportation system to increase the mobility of the city's residents
- Extend public improvements to include infrastructure for bicyclists
- Develop multi-modal infrastructure such as trailheads pedestrian crosswalks, signage, etc. and incorporate design features to reflect the city's character

Goal

Create and maintain an interconnected thoroughfare network for the efficient movement of people, goods and services.

Objectives

- Provide a safe, efficient network for the delivery of emergency services to all areas of the city
- Provide for the safe and efficient movement of farm vehicles within the city
- Review thoroughfare connections to identify new road connections, widening, improvements, etc. that will improve mobility

- Increase safe pedestrian access to destinations such as parks, schools, libraries, and other community facilities and institutions

Goal

Employ the principles of access management and the use of architectural design and site development standards to reduce congestion, increase pedestrian activity and enhance the identity of major corridors.

Objectives

- Increase the use of traffic calming devices (i.e. neckdowns, pavement markings, medians, roundabouts, access lanes, etc.) in appropriate residential locations to limit through traffic
- Require the use of common entrances, shared driveways, shared parking lots, frontage roads etc. along business corridors to reduce traffic congestion
- Encourage the location of parking at the rear of buildings to foster a pedestrian friendly environment
- Promote the use of human scale and other pedestrian friendly elements in the design for new development and redevelopment
- Require commercial centers and subdivisions to provide stub streets and more than two entrances

Functional Classification

Functional Classification refers to the grouping of roadways into systems, or classes, reflecting their role within a larger network of roadways. The process of defining functional classification requires an understanding of the primary purpose served by roadways with respect to mobility (through travel, long distance travel) and access (service to properties, driveways, parking lots). Following are definitions of functional classifications typically used in urban and suburban settings:

Principal (or Major) Arterial. In every community there are roadways that serve to collect trips from large areas and link them with destinations elsewhere within or outside the community. Highways that travel through a community are typically principal arterials. These roadways may provide direct access to some properties (typically discouraged) but their primary role in the hierarchy of streets and highways is to provide mobility for large numbers of travelers.

Minor Arterial. These roadways link principal arterials with roadways of other classifications. They are typically used for trips of moderate length or for lower volume through trips. Minor arterials may provide access to some properties (more than principal arterials), but their primary function is still mobility.

Collector. These roadways provide the bridge between local streets that serve primary access functions of individual properties and the arterial system used for longer trips.

Collector streets serve both a mobility and an access function. Whereas arterials typically do not penetrate residential neighborhoods, collectors are frequently designed as the “main streets” of neighborhoods, linking local streets serving residential properties with the arterial system used to conduct regional travel.

Local. Just as the name implies, local streets and highways are the lowest functional classification. They are intended almost entirely for access. Their mobility function is limited to connecting individual properties to collectors and/or arterials for continuation of trips. Local streets are often defined as those roadways that are not identified as collectors or arterials. Most of the mileage of any urban or suburban system is made up of local roadways, but they have the lowest amount of travel per mile of any of the classes.

The Federal Highway Administration provides a recommended method for classifying a proposed roadway network (FHWA Functional Classification Guidelines, 1989). This method is generally defined below:

1. Identify a “future year” urbanized boundary
2. Prepare road network map
3. Identify future land use patterns
4. Identify interstates and freeways through the area as principal arterials
5. Identify arterials from adjacent areas that pass through the area as principal arterials
6. Identify minor arterials based on spacing and role within the roadway system, considering arterial linkages from adjacent communities
7. Review the arterial system for area coverage
8. Identify the collector street system using the definitions and general criteria provided in the previous table
9. Identify the local street system as the remaining roadways
10. Review the system as a whole for “balance and reasonableness”

The Federal Highway Administration provides guidelines on the typical balance of mileage and travel volumes within each functional class, which are shown in Figure 5.1. A careful review of this table shows that the higher functional class roadways carry greater volumes of traffic despite having less mileage. This highlights the importance of planning for adequate capacity on the arterial network. The functional classification map is shown in Figure 5.2.

Figure 5.1: Recommended Balance of Roadway Network in Urban Areas

System	% of Miles Traveled	% of Road Mileage
Principal Arterials	40-65%	5-10%
Principal Plus Minor Arterials	65-80%	15-25%
Collectors	5-10%	5-10%
Local Roads	10-30%	65-80%

Source: FHWA Functional Classification Guidelines, 1989

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