CHAPTER 7. TRANSPORTATION

Regional Network

The City of Raytown is strategically located within the metropolitan area. Interstate 435 is located approximately one mile west of Raytown and functions as the interstate highway loop system that encompasses the greater Kansas City metropolitan area. Interstate 470 is located approximately two miles south of Raytown and four and a half miles east of Raytown. Interstate 70 is located one and a half miles north of Raytown.

Existing Street System Characteristics and Conditions

The City's existing street network is shown in Figure 4. This diagram highlights the locations of the freeway, arterial and collector street segments, as they are currently designated by City Ordinance. Figure 5 provides cross-section details of the City's current construction standards for the various street designations. The lane configurations and widths shown in these construction standards meet generally accepted engineering standards for movement of vehicular traffic. Sidewalks are only shown in the standard cross section for a major arterial street. There are no current City standards on the installation of street lights. Lighting levels along most of the arterial routes consist of light fixtures attached to utility-owned poles. Visual inspection of light spacing suggests that nationally recognized lighting standards, as published by the Illumination Engineering Society, are not met on most City streets.

The highest volume street within Raytown is M-350, a maintained state expressway that runs diagonally through the City for approximately three miles. Although designated as an expressway, there are numerous grade intersections along the four divided lanes, many of which are signalized.

The City of Raytown currently has designated approximately nineteen miles of its street system as arterial roadways. Of the roadways designated as arterials, a majority of the mileage conforms to minor arterial standards of four undivided lanes, although auxiliary turn lanes are often provided at major intersections. There are four roadway segments comprising 36 percent of the arterial street mileage that do not conform to current City standards for minor arterials. Each is discussed below:

- The first of these is a 1.5 mile section of Blue Ridge Boulevard from the northern City limits to 59th Street, which is three lanes in width. There is one lane for each direction of travel, and a continuous two-way center turn lane for turning movements.

FIGURE 4
Current Street Pattern

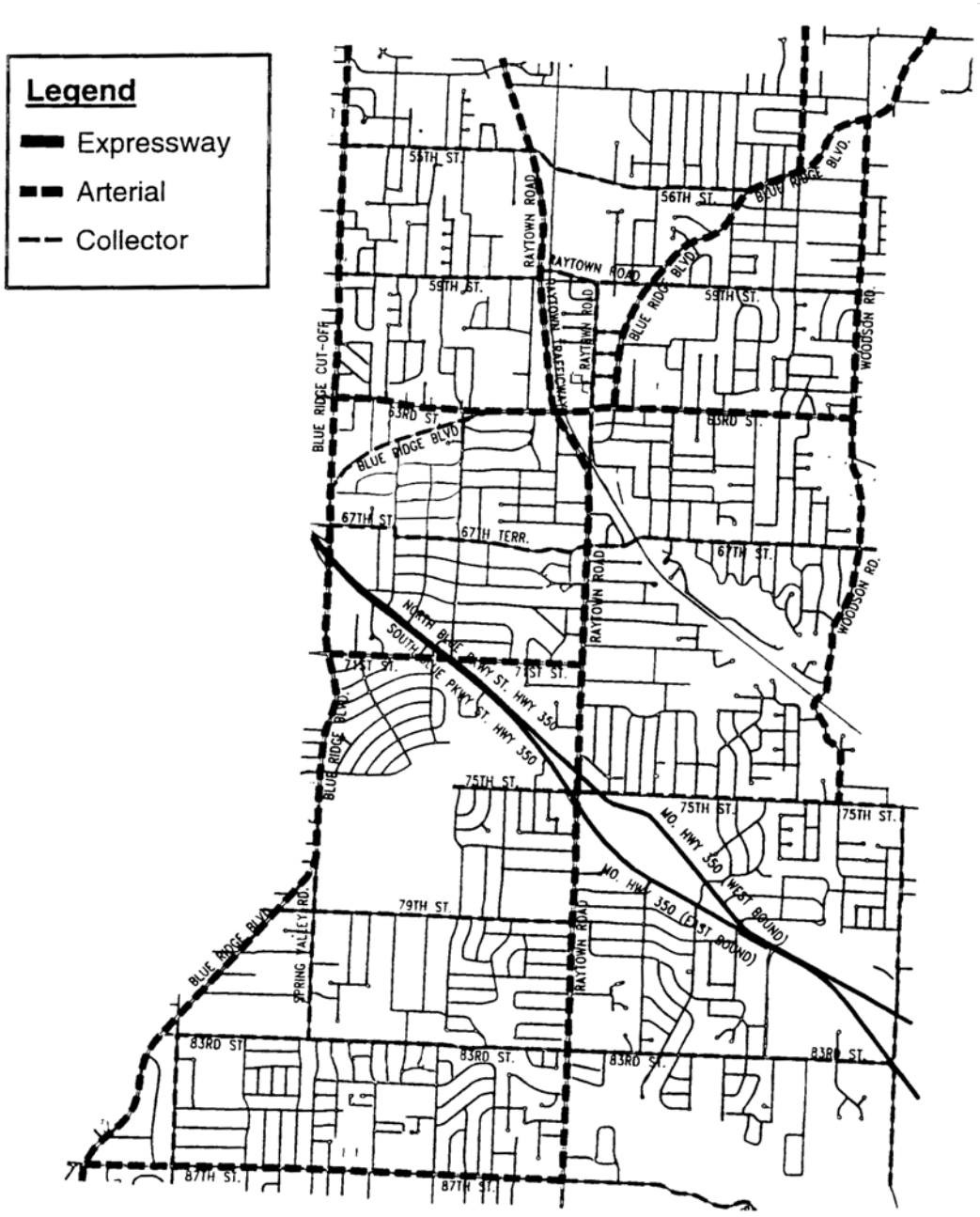
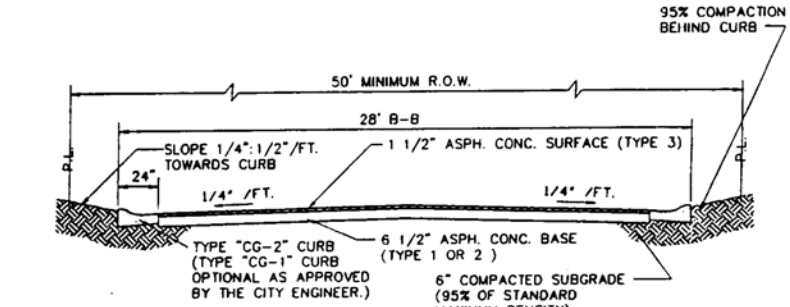
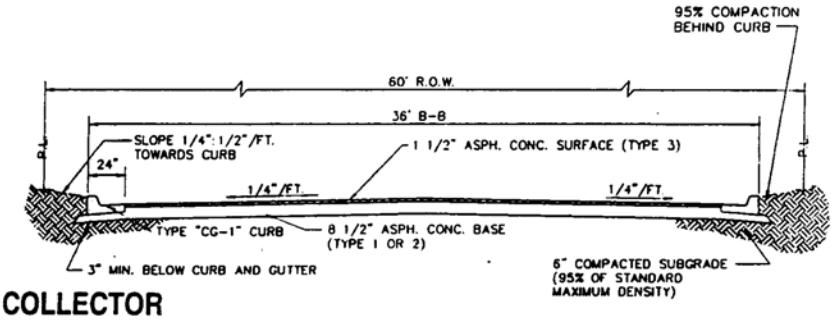


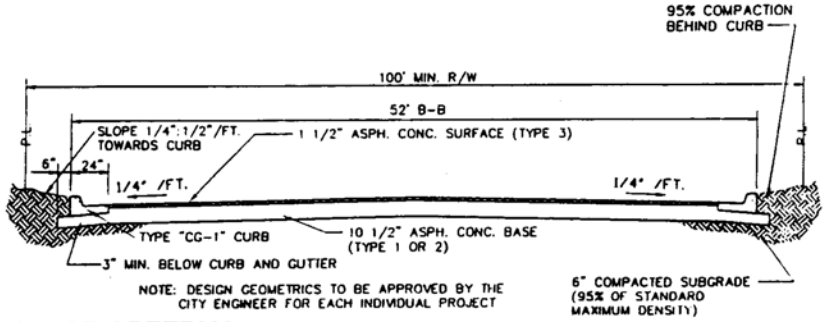
FIGURE 5
Street Cross Sections



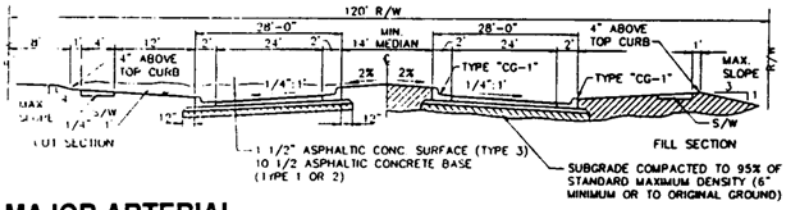
LOCAL STREET



COLLECTOR



MINOR ARTERIAL



MAJOR ARTERIAL

*** Courtesy Department of Public Works, Raytown, Missouri**

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- A 1.8 mile section of 87th Street, between Blue Ridge Boulevard and Raytown Road, is only two lanes in width. In addition, this section of roadway lacks curbing and the pavement is showing considerable cracking. There are currently plans to improve this section of 87th Street.
- A 2.8 mile segment of Woodson Road between Blue Ridge Boulevard and 75th Street is only two lanes in width. There is very little curb and gutter along this segment and the section between 67th and 75th has several severe alignment deficiencies.
- The final nonconforming arterial segment is 0.7 miles of Sterling Avenue from the northern City limits to Blue Ridge Boulevard. This roadway segment is two lanes in width and has no curbs and gutters north of 53rd Terrace.

The City currently has 16.5 miles of streets designated as collectors. There are numerous areas within the City that lack collector streets at the typical half mile spacing. In one case, the area between Raytown Road and Westridge, there is a spacing of 1.25 miles where there is no intersection of collector streets. Many of the streets that are designated as collectors have numerous residential driveways with direct access. This decreases the traffic carrying capability of the collector streets.

Traffic Volumes

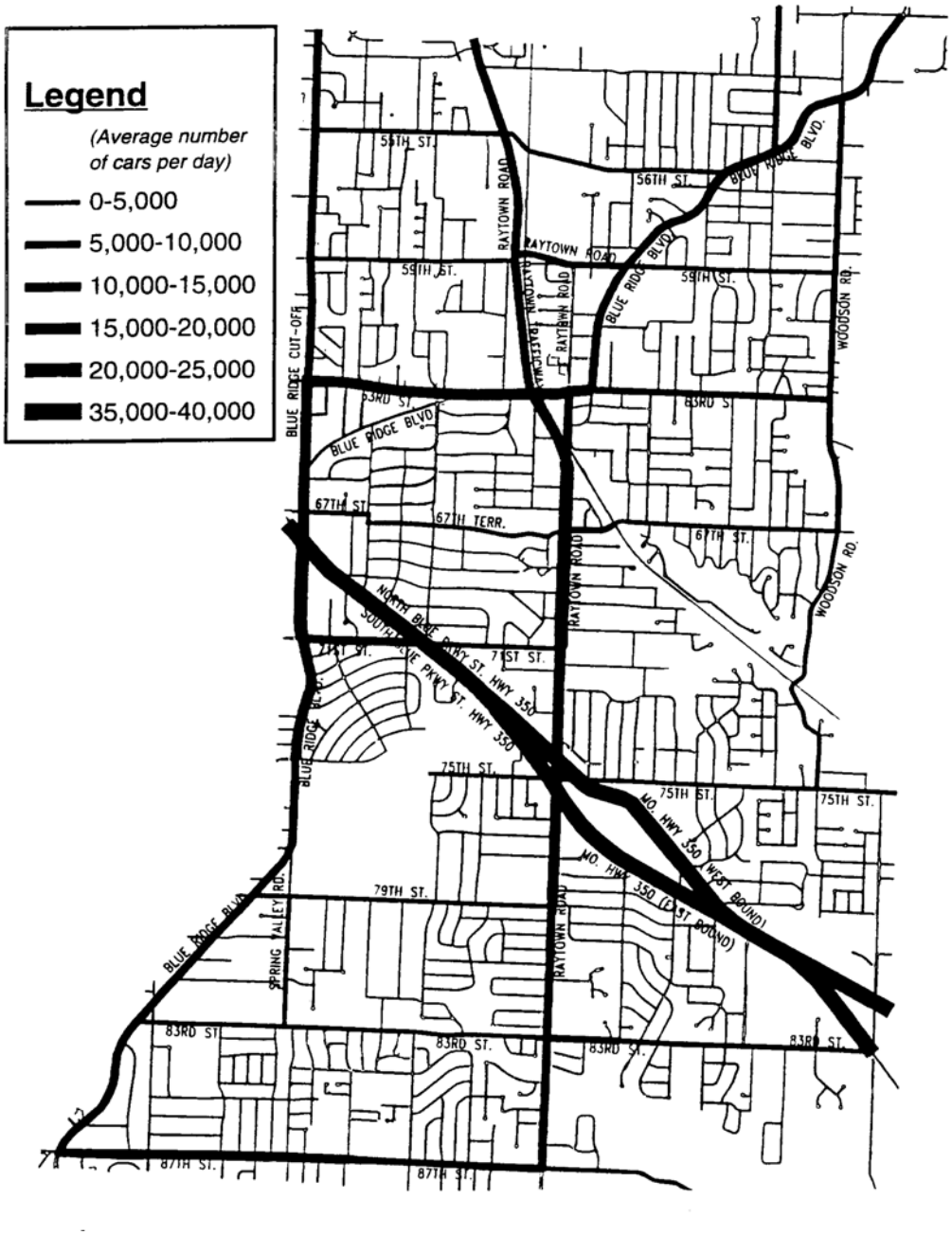
Traffic volumes are the primary basis for evaluating traffic conditions on a street. A summary of current ADT (average daily traffic) volumes for many of the City's arterial and collector streets is shown in Figure 6. The ADTs are useful in that they indicate high traffic volume locations where more detailed studies should be conducted and where segments of the roadway system may be approaching capacity based on the current number of traffic lanes present.

Current volumes in Raytown were compared to historical count information of twenty years ago. The comparison showed the largest percentage increases in traffic is occurring along the north/south routes that are on the City's borders: Blue Ridge Cutoff (24.7 percent increase), Blue Ridge Boulevard south of Blue Ridge Cutoff (92 percent increase), and Woodson Road (13.4 percent increase). Changes in volume in the interior of Raytown reflect the expectations associated with a city that has been almost entirely developed for a considerable period of time.

Currently, road segments in Raytown that are overloaded in terms of traffic volumes include:

- 87th Street from Blue Ridge Boulevard to Raytown Road,
- Blue Ridge Boulevard from Gregory Boulevard to M-350,
- 63rd Street from Blue Ridge Boulevard to Raytown Road,
- Woodson Road at 63rd Street and
- Raytown Road from M-350 north to the railroad.

FIGURE 6
Current Traffic Volumes



Public Transportation Systems

The only public transportation currently serving the Raytown area is provided by "The Metro" bus service, which is operated by the Kansas City Area Transportation Authority. The Metro bus routes within Raytown are limited to service along Blue Ridge Boulevard and Blue Ridge Cutoff. Since both of these streets run along the western City limits, the City of Raytown is not served by any form of public transportation.

Bikeways, as a transportation system for commuters, are not currently available in the City of Raytown. The Mid America Regional Council (MARC), a metropolitan planning organization, is in the process of planning and developing integrated bikeway facilities to serve the entire metropolitan area.

Transportation Plans and Projects

The City of Raytown proposes three upcoming transportation capital improvement projects. Each is discussed below:

The first project proposes to upgrade 87th Street from Blue Ridge Boulevard to Raytown Road to a three-lane arterial. City Ordinance designates 87th Street as an arterial, although currently, it is a two-lane roadway that lacks continuous curb and gutter and is showing signs of pavement distress. The second project, like the first, proposes to upgrade an existing two-lane street section to a four-lane arterial. The Woodson Road project extends north from 75th Street to Blue Ridge Boulevard. The southern portion of this roadway has several severe alignment deficiencies and is non-conforming in terms of its current arterial classification. The third project involves widening Cedar Street from 63rd Street to Raytown Road, to two-lanes with turn bays at intersections.

The City of Raytown has identified, as an unfunded need, the following collector streets to be upgraded to current collector standards:

- James A. Reed Road from 87th to 83rd Street,
- 55th-56th Street from Blue Ridge Cutoff to Blue Ridge Boulevard,
- 67th, 75th, 79th and 83rd Streets for their designated collector length as set by City Ordinance, and
- Spring Valley Road from 83rd Street to Blue Ridge Boulevard.

The Missouri Highway and Transportation Department (MHTD) recently completed some transportation improvement projects in Raytown and has others planned. In 1995, MHTD completed a geometric improvement project to the intersection of M-350 and Gregory Boulevard. This intersection is currently listed as a high hazard location and alignment modifications are planned to address the deficiencies. A study of the 350 Highway Corridor is currently under way examining access management issues and travel safety along 350 Highway.

Another project being planned is a storm water detention project that would utilize the widened median areas along M-350 for detention basins. MHTD is concerned that detention basins in the widened medians would severely limit any future lane additions to M-350. Without the ability to expand the number of lanes, the capacity of the roadway is limited to current values.

The Public Works Department has successfully completed many projects over the past several years, including the 59th Street improvement at a cost of over $1 Million, Phase 1 and 2 of the 83rd Street improvement at a cost of almost $500,000, and the 67th Street widening at a cost of over $100,000. There are many more projects currently under way.

Planning Implications

The transportation and roadway system is a critical component of the future development of Raytown. Access to community activity nodes, shopping opportunities and employment centers will enhance the residential aspects of Raytown. Also, improvements can protect neighborhoods while serving the needs of people driving through Raytown or to destinations in Raytown. A logical system of transportation opportunities can provide physical, social and aesthetic enhancements to the community and should be linked to development / redevelopment efforts in a coordinated fashion.

The rapid onslaught of new technology and progress in telecommunications is already beginning to impact traditional work-home relationships and daily commuting patterns across the country. With the Service Sector becoming increasingly predominant among other industries, occurrence of telecommuting is likely to accelerate through the next decade. At this point, it would be difficult to predict its actual impact on transportation needs and demands, though a gradual reduction in peak commuter