



Appendix D—Transportation Existing Conditions

Introduction

This appendix describes the City’s existing transportation system, national and regional factors that affect its development, and other local transportation issues. The relationship between transportation, land use, and air quality creates complex considerations that affects Arvada’s transportation planning process.

National and Regional Transportation Perspective

Although the local transportation system in Arvada is primarily a result of planning, decision-making, and funding at the local level, there are some items of note at the national and regional levels that also affect the City. Many of these programs are administered at the regional levels by either the Denver Regional Council of Governments (DRCOG) or the Regional Transportation District (RTD). The Colorado Department of Transportation plays a major role in the state and federal transportation programs.

A summary of the national and regional issues follows.

TEA-21

The Transportation Equity Act for the 21st Century (TEA-21) is the existing federal transportation legislation that provides direction and funding for transportation systems using federal gas tax revenues. TEA-21 outlines a rigorous regional planning process that emphasizes consideration of safety, multi-modal and intermodal systems, economic vitality, accessibility, mobility, quality of life, environment, maintenance of the existing system, and others. In this manner, the regional transportation planning process was forced to look beyond the vehicle carrying capacity of roadways. These changes have a direct effect on Arvada’s transportation system and now appear to

more closely resemble priorities at the local level such as those reflected in Arvada’s recent planning experience.

Clean Air Act Amendments of 1990

Revisions to the Clean Air Act preceded TEA-21 and have had a significant impact on the transportation planning process ever since. The strong relationships among land use, transportation, and air quality are reflected in the Clean Air Act and pose specific requirements for those areas across the country that have air quality problems such as the Denver region.

Although Denver was recently designated “attainment” for all EPA air quality criteria pollutants, the region has exceeded allowable pollution levels for the new 8-hour ozone standard primarily due to high recordings at several monitors across the metro area in the summer of 2003. Although technically not in “attainment” for the 8-hour ozone standard, the Denver region has been given a “deferred nonattainment status” to allow time for pollution controls in the Ozone Early Action Compact to take effect. The Compact is a voluntary effort of state and local agencies to reduce ozone pollution by accelerating required emission controls in lieu of a “nonattainment” designation from EPA.

At the regional level, this will have implications with regard to transportation priorities and expenditures because roadway projects generally become more difficult to implement due to increased emphasis on alternative modes and air quality solutions. On the other hand, the renewed attention on air quality could accelerate transportation control measures that reduce congestion and lead to better air quality regionwide.

DRCOG Metro Vision 2030 – Regional Transportation Plan

The Denver Regional Council of Governments recently adopted the Metro Vision 2030 Regional Transportation Plan (RTP). The RTP is part of the Metro Vision 2030 Plan, which combines land use, air quality, and transportation into a comprehensive planning process. The regional plan must be limited to available financial resources. With the stumbling national and local economies over the last few years, revenues are down and transportation-related needs continue to significantly exceed available funding. This situation further reduces the limited federal and state funds available locally to Arvada and the rest of the region and state. This will likely result in elimination of or delays for needed roadway improvements to the

regional highway and arterial system, causing increased congestion that could impact Arvada’s streets.

Regional Transportation District (RTD) FasTracks Program

The Regional Transportation District has developed a detailed plan for transit improvements in the Denver region. The FasTracks program includes rail transit in the Gold Line corridor. In Arvada, this corridor would run along the existing Burlington Northern Santa Fe railroad and provide stations at Ward Road, Arvada Ridge, Olde Town, and Sheridan. Stops are also planned for Federal and Pecos before connecting to Denver Union Station. FasTracks, which will be funded by a 0.4% sales tax increase, was approved by the voters in November 2004.



These national and regional programs have significant implications for the future of Arvada’s transportation system. Arvada has been and must continue to be involved in these regional and national programs to keep pace with the increased demand for transportation capacity.

Arvada’s Multi-modal Transportation System

The City of Arvada and other agencies currently provide transportation facilities and services for several different travel modes to, from, and within Arvada. The two terms, multi-modal and intermodal, were defined in Chapter 6. Arvada’s past planning efforts have facilitated the development of the current system of

multi-modal and intermodal options, but work still needs to be done, especially as the City continues to mature.

Trucking and Railroad Considerations

Arvada’s multi-modal and intermodal transportation system includes trucking and railroad considerations. The provision of these transportation services and facilities generally only involves the City to the extent streets should accommodate trucking operations, provide for the efficient movement of goods, and include safe interfaces between modes (*e.g.*, railroad crossings). While Arvada does not have an airport, access to general aviation and commercial airports is also another intermodal consideration for travelers to and from Arvada.

Each of the primary transportation modes are described in more detail in the following sections.

Bicycle and Trails Network

Bicycles are accommodated on or along all roadway types. The City has added several new bicycle corridors and has been involved in a project to update the signing and striping of all bike routes. In addition, the City provides cyclists with a system of off-street trails, and cyclists can look forward to more, as planned in the *Arvada Parks and Open Space Master Plan (2001)*. The master plan identifies a network of community and regional trail facilities that serve bicycle travel within Arvada and connect with other local and regional trails in adjacent communities. RTD’s buses have bike racks that allow bike riders to use their bicycle at both ends of their transit trip.

Pedestrian

Pedestrians are provided with a number of opportunities to travel within the city. The City’s design standards for streets include sidewalks. The trail system also accommodates pedestrians and other uses.

Transit

Arvada is part of the Regional Transportation District’s (RTD) service area, which provides fixed route bus and paratransit service for Arvada. The fixed route system includes approximately 16 local bus routes, seven (7) express routes, and two (2) regional routes that serve the City. Complementing the fixed route service is a series of park-n-Ride lots in or near Arvada that provide convenient locations for parking and bus access/transfers. The Park-n-Ride lots include Ward

Road at I-70, Olde Town Arvada, and the Coal Creek lot at State Highway 93.

Paratransit and special ride services are also available to Arvada travelers through RTD’s SeniorRide, Access-a-Ride programs, RockiesRide, BroncosRide, Ski-n-Ride, the A-line airport service and others. The Access-a-Ride service provides transportation for passengers with disabilities who are unable to use regular buses and who qualify for certification under the guidelines established by the Americans with Disabilities Act (ADA).

Roadway System

Roadway Functional Classifications

In the 2003 Arvada Citizen Survey, residents ranked growth and congestion as the biggest problems in the City. Past surveys have indicated similar concerns.

An extensive network of roadways-provides traffic circulation within Arvada and connections between Arvada and the Denver region. While these local roadways primarily serve automobile users, many of them are also multi-modal corridors for pedestrians, cyclists, and buses.

Two freeways Interstates 70 and 76, serve the City to the south and east. Another freeway, US36 linking the Cities of Boulder and Denver, lies northeast of the City and provides additional regional highway access.

These freeways are augmented by a series of state highways, including:

- SH72 – Ward Road/64th Avenue/Indiana Street;
- SH93;
- SH121 – Wadsworth Boulevard; and
- SH95 – Sheridan Boulevard.

The freeways and state highways fall under the authority of the Colorado Department of Transportation (CDOT). Jefferson County is responsible for roads within unincorporated areas. The remainder of the street network falls under the City’s jurisdiction. Table D-1 contains a summary of roadway characteristics for the existing system. (The year 2001 is presented since it is the most recent year for

which detailed network data is available.) The number of lanes and the roadway functional classification for each facility in the network database are shown in Figure D-1.

Table D-1: 2001 Roadway Characteristics in the Arvada Planning Area

	Lane-Miles	Centerline-Miles	Daily Vehicle Miles of Travel
Freeways	21.9	7.3	328,000
Major Regional Arterials	30.7	5.1	246,000
Major Arterials	108.1	34.9	861,900
Minor Arterials	59.7	26.8	211,600
Collector Streets	158.8	79.5	181,800
Total	379.2	153.6	1,829,300

Roadway Level of Service

One of the more common roadway performance measures is roadway Level-of-Service (LOS). In its simplest form, Level-of-Service can be compared to a grading scale from “A” to “F”, where “A” represents good level of service and “F” indicates failure. For simplification and mapping purposes:

- Green = LOS “A” through “C,” uncongested facility;
- Orange = LOS “D,” facility that is becoming congested; and
- Red = LOS “E” and “F,” congested facility.

Level-of-Service is a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed, travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. It is usually reported for the PM peak hour because that tends to be the most congested period of the day.

Figure D-2 shows Roadway Level-of-Service and traffic volumes for the year 2001. Traffic volumes are also represented by the bandwidth (thickness) of each roadway segment.

ROADWAY FUNCTIONAL CLASSIFICATION AND NUMBER OF LANES 2001

- Legend**
- Comprehensive Plan Boundary
 - Number of Lanes**
 - 2 lane
 - 4 lane
 - 6 lane
 - Facility Type**
 - Freeway
 - Principal Arterial
 - Minor Arterial
 - Collector
 - Local Street

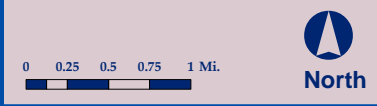
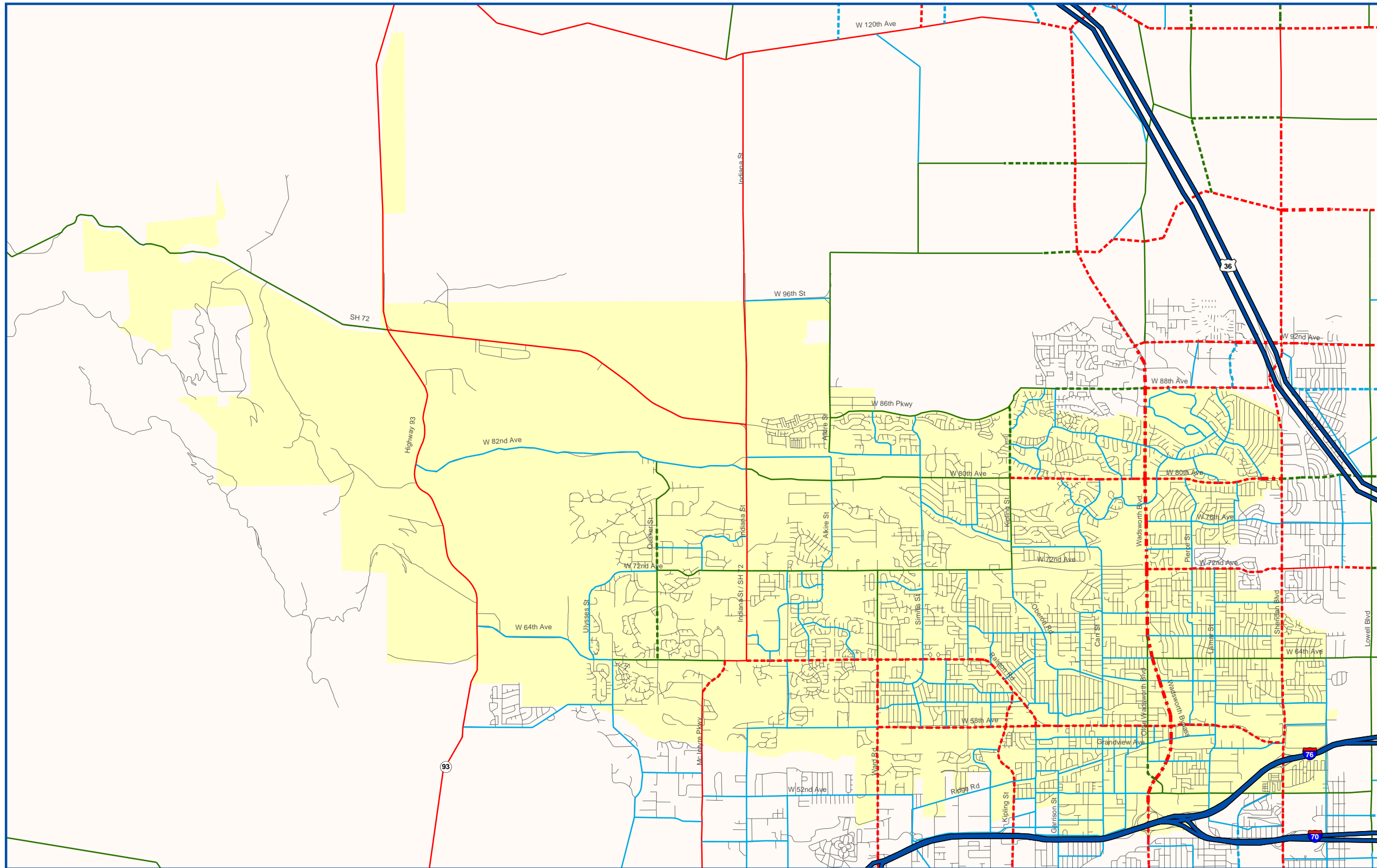


FIGURE D.1



Roadway Functional Classification and Number of Lanes 2001
ARVADA COMPREHENSIVE PLAN

ROADWAY LEVEL OF SERVICE AND TRAFFIC VOLUMES 2001

Legend

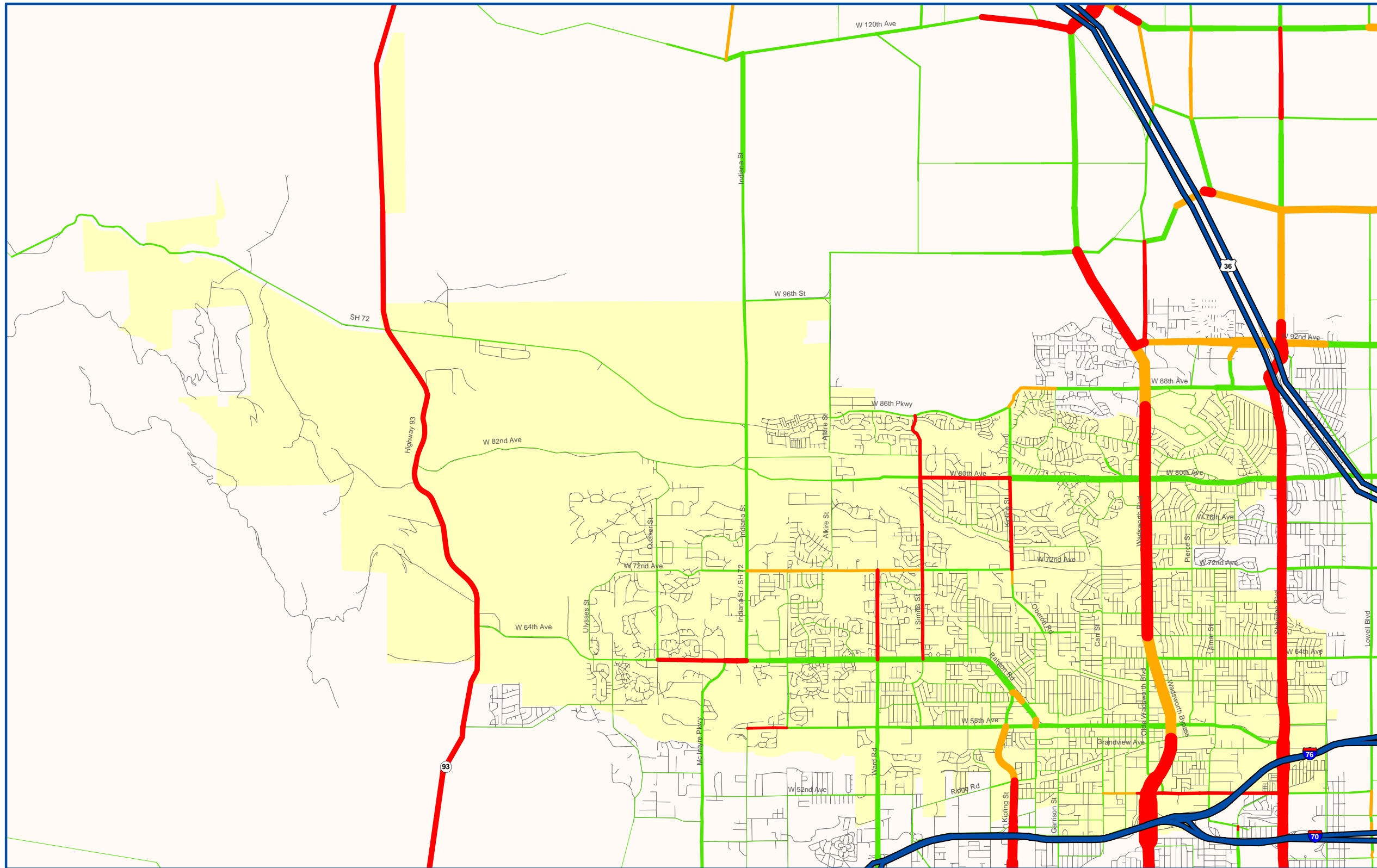
- Comprehensive Plan Boundary
- Local Streets

Level of Service

- A - C (Uncongested)
- D (Congesting)
- E - F (Congested)

Volume

- 10,000
- 25,000
- 50,000



0 0.25 0.5 0.75 1 Mi.

North

FIGURE D.2



Roadway Level of Service and Traffic Volumes 2001
ARVADA COMPREHENSIVE PLAN

