Traffic Master Plan

City of Fountain
Pure Colorado

ADOPTED OCTOBER 8, 2002

Turner Collie & Braden Inc.

TRAFFIC MASTER PLAN
Fountain, Colorado

prepared for

CITY OF FOUNTAIN, COLORADO

prepared by

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EXECUTIVE SUMMARY

In 1999, the City of Fountain completed an update of the City's Comprehensive Development Plan. This major planning document identified community goals and values, defined the City's planning principles and policies, provided the City with an updated database of community resources, and developed a series of planning maps that defined the City's vision for future land use, transportation and "greenfrastructure" annexation, and growth service areas.

This traffic master plan complements the Comprehensive Plan and provides the City with a major thoroughfare plan for the City and the immediate surrounding area. At the heart of the effort was the development of a computerized traffic model of 2025 peak hour traffic conditions in the City based on the latest Pikes Peak Area Council of Governments (PPACG) traffic model and land uses, supplemented with land use forecasts from traffic impact studies submitted to the City. The forecasted 2025 traffic volumes are based on anticipated growth and development of future planning areas, as well as the potential transportation impact of development in adjacent cities and unincorporated areas. Traffic forecasts from this model were used to develop the recommended proposed street network that defined this plan's Major Thoroughfare Plan.

Construction cost estimates for improvements on the Major Thoroughfare Plan were identified. Prioritization and potential funding sources are also included in this plan.

The PPACG land uses for the model area were updated to reflect current development proposals and other anticipated developments. The land uses assumed in the modeling effort are summarized on a table in the Appendix. The PPACG land uses were updated to reflect changes from the following projects:

- Beckett Bandley Filings # 1, 2 & 3
- Southpark Technological Center
- Cross Creek At Mesa Ridge
- Crescent Heights

The model land use information was checked against the 2010 High Growth – Large Scale Development Scenario in the *Fountain Comprehensive Development Plan.* It was determined that the social-economic forecasts used in this study more than accounted for the expected 2010 increases identified in that Comprehensive Plan scenario.

Depicted on Figure 4-2 of this study is the recommended Major Thoroughfare Plan with forecast 2025 traffic demands. The Major Thoroughfare Plan is based on the Traffic and Circulation Plan in the Comprehensive Plan (Map 2 of the Comprehensive Plan). Several additions to the original Circulation Plan were made in the resulting Major Thoroughfare Plan. These changes include:

- One change to the Major Thoroughfare Plan was made to reflect the access constraints to the commercial area between I-25 and Fountain Creek at SH 16. This was the addition of Bandley as a community arterial connecting SH 16 to US 85 via Crest Drive. The location of the future connection between Bandley and SH 16 is currently being studied by CDOT in their SH 16/I-25 interchange study.

- A connection between Old Pueblo Road and US 85 is included in the Plan. The alignment crosses Fountain Creek the south end of Lilac Lane, and connects with US 85 at the signalized Crest Drive intersection. The purpose of this connection is to serve as a bypass of the downtown area, allowing traffic to access I-25 from Link Road without having to go through downtown.

- It is recommended that the Old Pueblo Road bypass crossing of the BNSF tracks be grade-separated on the same structure that crosses the creek. This grade-separation, coupled with a recommended grade-separation of the UPRR tracks at Link Road also included in the Plan, will provide emergency access across the tracks in the event that there is a railroad incident. Other grade-separated railroad crossings are recommended at Fontaine Boulevard and at a future community arterial connecting Powers Boulevard to I-25 at Exit 126.

- An interchange between Powers Boulevard and Cross Creek Parkway/Mesa Road has been added. Cross Creek Parkway/Mesa Road is now designated as a community arterial. C&S Road has been re-classified as a collector street.

- Marksheffel Boulevard, located between Powers Boulevard and Marksheffel Road, has been added to the plan as a Community Arterial.

- Wilson Road has been re-classified as a collector. Also, the segment of Wilson Road between Jimmy Camp Road and Link Road has been removed from the Plan.

- Several additional interchanges with Powers Boulevard have been identified.

1.0 INTRODUCTION

1.1 Project Purpose and Need

The purpose of this traffic master plan is to develop a plan that reflects current city transportation requirements and anticipates future growth needs. This plan is designed to serve as a guide for city staff, developers and local citizens, and recommends transportation improvements needed to keep up with the growing needs of Fountain.

1.2 Planning Principles and Policies

In 1999, the City of Fountain completed an update of the City's Comprehensive Development Plan. This major planning document identified community goals and values, defined the City's planning principles and policies, provided the City with an updated database of community resources, and developed a series of planning maps that defined the City's vision for future land use, transportation and "greenfrastructure" annexation, and growth service areas.

The transportation framework plan (entitled "Traffic and Circulation") defines a hierarchy of regional and community streets that form the backbone for mobility within the City of Fountain, as well as a broader planning area ("three-mile plan") that includes Fountain's urban service area and the Fountain planning influence area. The traffic and circulation plan is supplemented by multi-modal plans and policies for non-motorized transportation (trails or "greenfrastructure" plan) and mass transit services.

The transportation plan reflected the following major visions of the Fountain community for long-range mobility:

- Development of an "adequate transportation system" was defined as one of the top community concerns (along with protection of open space). This vision was then translated into the specific community goal of "Provide for the safe and convenient circulation of motorists, cyclists, and pedestrians throughout the City of Fountain."

- The community desires strategies to be implemented that emphasize multiple transportation modes, and improve traffic safety and circulation.

- Citizens are concerned that growth pays it's own way, and that developers contribute a fair share toward needed infrastructure improvements. As a planning policy, the Plan suggests that new development make contributions to the overall transportation system based on the type of trips generated.

- Transportation planning must be a cooperative endeavor with other local, regional, and state agencies. The Plan strongly supports Fountain's participation in regional planning endeavors, as well as the development of effective partnerships with other planning agencies, most notably, the Pikes Peak Area Council of Governments, the Colorado Department of Transportation, El Paso County, and the City of Colorado Springs.

- The Plan suggests careful attention to transportation facilities that cross jurisdictional boundaries. Consistent street standards should be implemented by neighboring jurisdictions so that municipal boundary lines are not accentuated.

- Alternative transportation systems should be developed that encourage the use of modes other than the single occupant vehicle. Increased bus service (Colorado Springs Transit), improved bus stops and transfer facilities, path and trail system connections between neighborhoods and destinations, and carpool programs are all preferred strategies of the Plan.

- Critical transportation needs include: east-west connectors, preservation of right-of-way for future roadway widening and interchange improvements, improved entryways from I-25, safer truck routes, signalization of at-grade railroad crossings, and railroad grade separations to allow improved emergency access. From a capital improvements planning perspective, the Plan suggests that priority be given to the maintenance and improvement of existing roads.

In developing the Plan, a number of uncertainties were identified that may significantly affect the planning of transportation facilities within and around Fountain. These include:

- Timing and nature of proposed improvements in the SH 16 corridor.

- Timing of the Powers Boulevard Extension, and potential for new interchanges on I-25.

- Needed improvements to Pueblo Road for a downtown bypass route.

- Long-term plans of major employers in the Fountain area, most notably, Fort Carson.

1.3 Study Process

The major task of this Traffic Master Plan was to develop a major thoroughfare plan for the City and the immediate surrounding area. At the heart of the effort was the development of a computerized traffic model of 2025 peak hour traffic conditions based on the latest Pikes Peak Area Council of Governments (PPACG) traffic model and land uses, supplemented with land use forecasts from traffic impact studies submitted to the City. The forecasted 2025 traffic volumes are based on anticipated growth and development of future planning areas, as well as the potential transportation impact of development in adjacent cities and unincorporated areas. Traffic forecasts from this model were used to develop the recommended proposed street network that defined this plan's Major Thoroughfare Plan.

Construction cost estimates for identified improvements on the Major Thoroughfare Plan were identified. Project prioritization and potential funding sources are also included in this Plan.

2.0 EXISTING CONDITIONS

2.1 Current Land Uses

The City of Fountain in El Paso County, Colorado, lies at the southeasterly edge of the Colorado Springs metro area, and has a population of approximately 15,197 (2000 census). The City has been experiencing rapid population growth, increasing 52.2% from 1990 to 2000. This growth rate is greater than both the statewide growth rate (30.6%) and the rate for El Paso County (30.2%) over the same period.

Much of the recent residential and commercial development is occurring south of Mesa Ridge Parkway and to the east of US 85. This includes the Fountain Heritage residential development and the new Safeway store at the Fountain Mesa Road/Mesa Ridge Parkway intersection. Southeast Fountain has also experienced significant growth within the Countryside development and the new Ft. Carson High School and Sports Complex on Jimmy Camp Road.

Much of the commercial development in Fountain is concentrated along US 85, including the Wal-Mart SuperCenter located north of Plaza Boulevard and south of Southmoor Drive. There is also significant commercial development downtown. In addition, the City has recently moved into a new downtown City Hall at the Main Street/Ohio Street intersection.

Another center of significant commercial activity is the industrial area just west of I-25 along Santa Fe Avenue and Charter Oak Ranch Road. Uses in this area include the Tomahawk Auto Truck Plaza, as well as several warehousing and manufacturing facilities. Aggregate mining is also currently taking place along Charter Oak Ranch Road.

Fountain is also the home of the Pikes Peak International Raceway. This facility is located approximately seven miles south of downtown Fountain on the west side of I-25 at Exit 122.

2.2 Fort Carson

A major Fountain area employer is the US Army's Fort Carson, located west of the City. Fort Carson encompasses 138,523 acres. It is bounded on the east by I-25, on the west by SH 115, and on the north by Academy Boulevard. The southern parameter of the base is just north of the Pueblo West and Primrose communities.

Fort Carson has a diverse military and civilian population. Over 15,000 soldiers are posted to Fort Carson, along with 3,100 civilian employees. 2000 Census figures put the base population at 10,566, which is down somewhat from the 1990 Census figure of 11,309. Major units assigned to the post include a mechanized infantry brigade, a Special Forces group, an armored cavalry regiment, and other smaller units.

The main entrance to the base is off of South Academy Boulevard at Magrath Avenue. Magrath Avenue passes through the base to another major gate just west of I-25 at the SH 16 interchange.

2.3 Existing Roadway Network

Major regional roadways serving the Fountain area include:

- **US 85.** US 85 serves both the function of a business loop paralleling I-25, as well as being the main north-south arterial for the City. As mentioned previously, much of the commercial development within the City is located along US 85. The road begins as Santa Fe Avenue at Charter Oak Ranch Road and crosses I-25 at a diamond interchange with I-25 (Exit 128). There is a two-lane bridge on US 85 across Fountain Creek. The road then continues north, east of and paralleling I-25 and Fountain Creek, and west of the Burlington Northern Santa Fe (BNSF) and Union Pacific (UPRR) railroad tracks.

  US 85 continues north through a grade-separated interchange with SH 16 and another with South Academy Boulevard. North of South Academy Boulevard, US 85 turns to the west crossing Fountain Creek and passes under I-25. Past I-25, US 85 turns north again and becomes Cheyenne Road north of Lake Avenue in Colorado Springs.

  The cross-section of US 85 varies. Between Charter Oak Ranch Road to Ohio Street, US 85 has one lane in each direction including some areas with a two-way left turn lane. The speed limit on this segment of US 85 is 35 mph. North of Ohio, to Comanche Village Drive, there are two through-lanes in each direction with a 35 mph speed limit. Through much of this segment there is no center left-turn lane.

  North of Comanche Village Drive to South Academy Drive, US 85 narrows to one lane in each direction with a center left-turn lane in commercial areas. In the area of the SH 16 and the South Academy Boulevard interchanges, there are two through-lanes in each direction. There is a 45 to 50 mph speed limit posted in this segment. Currently, the segment between Fontaine Boulevard and SH 16 is being widened to two through-lanes per direction.

  Interchange improvements are also currently taking place at the I-25 interchange with US 85 (Exit 128). These improvements will widen the bridge over I-25 to four lanes, and signalize the ramp intersections. More about this project is included in Chapter 3 of this report.

Currently, there are signalized intersections on US 85 at Crest Drive, Ohio Street, westbound SH 16, Fontaine Boulevard, Plaza Boulevard, the Wal-Mart SuperCenter (Center Valley), Main Street, and at both eastbound and westbound South Academy Boulevard. The current Average Daily Traffic (ADT) on US 85 is approximately 10,000 vehicles/day from I-25 to Ohio Street; 12,500 at Comanche Village Drive; 17,000 at SH 16; and 22,000 at Main Street.

- **SH 16/Mesa Ridge Parkway.** SH 16 commences at a diamond interchange with I-25 (Exit 132) proceeding east, and becomes Mesa Ridge Parkway east of the interchange with US 85. East of US 85, the road is no longer a State Highway. At the west end of SH 16 is a major entrance gate into Fort Carson. The grade-separated interchange bridge at SH 16 and US 85 also carries SH 16/Mesa Ridge Parkway over the BNSF and UPRR railroad tracks. All interchange ramps with US 85 are located west of US 85 to avoid conflicts with the railroad tracks. As a result, the ramps to and from the east are loop ramps.

  The SH 16 segment between the I-25 and US 85 interchange has one lane in each direction. The Mesa Ridge Parkway segment has two lanes in each direction. Currently, Mesa Ridge Parkway terminates by turning north and becoming Powers Boulevard.

  There are traffic signals on SH 16/Mesa Ridge Parkway at the two I-25 ramp intersections, at Syracuse Street, and at Fountain Mesa Road. The current ADT on SH 16 is approximately 12,000 vehicles/day between I-25 and US 85.

- **Powers Boulevard.** Powers Boulevard is a new four-lane divided expressway with signalized intersections commencing at Mesa Ridge Parkway and extending north to the Colorado Springs Municipal Airport. CDOT wishes to have Powers Boulevard as a freeway through Fountain and is currently studying the type of facility that will be needed. Powers will serve as a loop road on the east side of the Colorado Springs Metro area with connections to I-25 north of Colorado Springs and south of Fountain. Currently there is a signal on Powers Boulevard at Fountain Boulevard. The current ADT on Powers Boulevard is approximately 6,000 vehicles/day north of Fontaine Boulevard. A 55-mph speed limit is posted on Powers Boulevard.

- **Fontaine Boulevard.** Fontaine Boulevard is a two-lane street extending from US 85 to Marksheffel Road. Fontaine Boulevard has traffic signals at US 85, Security Boulevard, Dartmouth Street, Grinnell Street, Fountain Mesa Road, and Powers Boulevard. The current ADT on Fontaine Boulevard is approximately 3,400 vehicles west of Powers Boulevard. There is also an at-grade crossing of the BNSF and UPRR railroad tracks just east of US 85.

- **Grinnell Street.** Grinnell Street is a four-lane street north of Fontaine Boulevard to Bradley Road. There is a 40 to 50 mph speed limit posted on Grinnell Street.

- **Fountain Mesa Road.** Fountain Mesa is a four-lane street between Fontaine Boulevard and Mesa Ridge Parkway. There is a 40-mph speed limit posted on this segment. South of Mesa Ridge Parkway, Fountain Mesa narrows to one lane in each direction. There is a 25 to 30 mph posted speed limit on this segment. There are residences fronting Fountain Mesa Road south of Lake Avenue. Fountain Mesa's intersection with Mesa Ridge Parkway is signalized.

- **C & S Road.** C & S Road is a two-lane road commencing just west of Fountain Mesa Road and ending at Link Road. C & S Road has a posted speed limit of 30 to 40 mph.

- **Marksheffel Road.** Marksheffel Road is a two-lane rural north-south road from Link Road to south of Bradley Road, where it widens to a four-lane facility. Marksheffel Road continues north on the east side of the Colorado Springs Municipal Airport. Marksheffel Road has a posted speed limit of 45 to 55 mph.

- **Link Road.** Link Road loops through the eastern side of Fountain from Old Pueblo Road to C and S Road. Link Road has one lane per direction and a posted speed limit between 25 and 40 mph. Link Road also has an at-grade crossing of the UPRR rail line.

- **Ohio Street.** Ohio Street is a two-lane east-west roadway between US 85 and R. E. A. Road. Traffic wishing to access Link Road can do so via R. E. A. Road and Kane Road. Ohio Street has on-street parking in the downtown area and a traffic signal at US 85. There is also all-way stop control at Main Street. Ohio Street is posted at 25 mph.

2.4 Transit Service

Transit service to and within Fountain is provided by Springs Transit. Current fixed-route bus service includes:

Route 71. Currently, this route commences at the Citadel Mall, goes south on Academy Boulevard, east on Drennan Road, south on Hancock Expressway, and onto US 85 via Main Street. Once on US 85, it continues south to Fontaine Boulevard, then south on Fountain Mesa Road. At Comanche Village, busses in-bound to Fountain turn west to US 85, then south to the Fountain Creek Regional Park, and loop along Royalty Place and Windsor Lane before continuing to the Ft. Carson High School via Ohio Street and Jimmy Camp Creek Road. The route then heads back to Colorado Springs via Fountain Mesa Road.

In addition to the fixed route service described above, Fountain is also served by Springs Mobility Paratransit Services. Conversations held with Springs Transit indicate no current plans for future service increases or route additions to Fountain.

3.0 FUTURE TRANSPORTATION PLANS AND FACILITIES

3.1 I-25 Interchange with US 85

As part of the I-25 corridor improvements, the Colorado Department of Transportation (CDOT) is currently making interchange improvements to the US 85 interchange with I-25 (Exit 128). These improvements include widening the bridge structure for two though-lanes in each direction, signalization of the ramp intersections, construction of a noise wall along the eastern side of I-25 north and south of the interchange, and the building of a Park & Ride facility near the northeast corner of the interchange off of Royalty Place. The construction is scheduled for completion in the summer of 2003.

3.2 SH 16

CDOT recently selected a consultant for Conceptual, Preliminary, and Final Design of improvements to SH 16 from I-25 to US 85. As part the project's Conceptual Design, a number of interchange alternatives at both I-25 and US 85 will be prepared. In addition to the I-25 and the US 85 interchanges, conceptual designs will also be prepared for the following design elements:

- SH 16
- The connection of Bandley Drive to SH 16
- Fountain Creek Bridge
- Cruise Gulch Bridge
- US 85 and BNSF/UPRR Railroad Bridge(s)
- Landscaping and Aesthetics for roadway and structures

3.3 Powers Boulevard

Powers Boulevard is a partially-completed thoroughfare along the eastern edge of Colorado Springs. When completed, Powers Boulevard will extend 24.5 miles from Interstate 25 at Northgate Road; re-connecting to I-25 south of Fountain. Powers Boulevard is a significant regional route and, along with I-25, is included in the National Highway System.

In November 1998, CDOT, in partnership with El Paso County and the Pikes Peak Area Council of Governments (PPACG), began a Feasibility Study/Environmental Assessment for the extension of approximately 11.5 miles of Powers Boulevard from Fontaine Boulevard to a connection with I-25 near Fountain. A design and construction schedule has yet to be determined.

3.4 Destination 2025

PPACG is continuing the process to develop *Destination 2025: A Mobility Plan for the Pikes Peak Region* to address the Pikes Peak Region's transportation system needs through the next 25 years. A draft of this plan has been published. This venture involves citizens, elected officials, and local, state, and federal planning agencies, and focuses on policies and strategies to guide future development of the transportation system. Destination 2025 addresses a broad spectrum of transportation components as part of the entire integrated system including:

- Safety on roadways
- Springs Transit/bus systems
- Truck routes
- Bicycle and pedestrian trails
- Corridor preservation
- Rail systems
- East-west mobility
- I-25 and Powers Boulevard capacity improvements
- Land use/population and job growth
- Increasing efficiency of existing transportation system/managing congestion
- Maintenance of the existing system
- New roadways and freeways

Participating in the Plan's development are the Cities of Fountain, Colorado Springs, Manitou Springs, and Woodland Park, as well as the Towns of Green Mountain Falls, Monument, and Palmer Lake. El Paso and Teller Counties and the local military bases are also participating in the process.

A total of 308 transportation projects were prioritized in the draft report. Those projects within the Fountain area are listed below, along with their priority ranking:

- #28, Santa Fe Trail from Comanche Drive to Main Street in Security, construction of trail along US 85 between Comanche Drive and Main Street.
- #30, Powers Boulevard, Mesa Ridge Parkway to I-25, construct South Extension, four lanes, Mesa Ridge Parkway to I-25 (Exit 123).
- #71, Link Road to Metcalfe Park Trail Extension, construction of a trail along the railroad tracks between Link Road and Metcalfe Park.
- #80, Trail Connection between the Fort Carson and the County River Trail System along the river.
- #85, Trail Connection between Heritage Park and Fountain Mesa Park.
- #93, Trail Connection between Heritage Park and County Trail Head.
- #95, Cherokee Trail from Old Pueblo to Heritage Road, construction of a trail along the Jimmy Camp Creek from Old Pueblo to Heritage Park.
- #96, Chilcotte Trail from Link Road to Metcalfe, construction of trail between Link Road and Metcalfe Park using existing irrigation ditch.
- #111, Outer Jimmy Camp Creek Trail, Southeast Trail extension.

- #135, US 85, SH 16 to I-25, major widening. Includes Mesa intersection improvements, safety improvements, and expands roadway from one to two lanes in each direction.
- #136, SH 16 Interchange with I-25 improvements.
- #170, Mesa Road and US 85 intersection improvements.
- #186, Carson Avenue and US 85 intersection improvements.
- #191, Comanche and Santa Fe intersection improvements.
- #199, Link Road and Old Pueblo Road intersection improvements.
- #208, Illinois and Santa Fe intersection improvements.
- #218, Bandley Road and SH 16 intersection improvements.
- #224, Squirrel Creek Road extension, Fountain Mesa Road to Link Road.
- #226, Fontaine grade-separated railroad crossing.
- #245, Old Pueblo bypass of Fountain, Link Road and Pueblo to US 85, new roadway to route traffic around the City.
- #249, Bridge expansion on Old Pueblo at Jimmy Camp Creek.
- #268, Bridge expansion on US 85 at Fountain Creek.
- #283, Fountain Mesa Roadway expansion, widening of Fountain Mesa Road from C & S Road to Lake Ave.

3.5 Statewide Transportation Improvement Program (STIP)

The PPACG FY 2002-2007 TIP, adopted on November 14, 2001, has two roadway projects within the study area. They are:

- I-25 Interchange at SH 85/Fountain. Safety-Roadway, $8.4 million FY 2001 (Under Construction).
- SH 85: SH 16 to Academy Boulevard (SH 83). Reconstruction – Added Capacity – Highway. $2 million, FY 2001 (Under Construction), $5 million, FY 2002, $10 million, FY 2004 – 2006.

3.6 Trails Master Plan

The Trails Master Plan, adopted on December 10, 1996, identifies a preliminary network of trails throughout Fountain that can link existing and future residential areas to parks, schools, downtown, and other retail and employment centers to the regional trail system. The purpose of this network is to serve as an alternative mode of transportation throughout the City.

The Plan identifies 17 separate trails on the Trails Master Plan. Trails fall into two generalized categories: 1) paved or unpaved trails utilizing discrete rights of way, such as along a creek or through a park, and 2) marked or otherwise indicated trails sharing other rights of way, such as sidewalks and streets. Some trails are combinations of these two types.

The trails are primarily designated for two modes of transportation: pedestrian and bicycle. Secondary modes are equestrian and multi-use, where practical. The Plan trails selected were determined to be those that best connected existing schools, parks, other existing and proposed trails, and points of interest within the community.

4.0 2025 MAJOR THOROUGHFARE PLAN

4.1 Study Area

The traffic model area is depicted on Figure 4-1, along with the Traffic Analysis Zone (TAZ) structure used in the transportation modeling process. The TAZ boundaries correspond with those in the Pikes Peak Council of Governments (PPACG) regional traffic model, although the numbering is different. Trips to external links were calibrated to the forecasts in the PPACG model on the corresponding links.

4.2 Transportation Modeling Process

Land uses for the transportation modeling process are based on those in the PPACG travel demand model. For each of the TAZ's on Figure 4-1, PPACG provided 2000 and 2025 land uses. Land uses were defined in five residential income categories: low, lower-mid, mid, upper, and high-income housing. Employment was divided into four categories: basic, retail, service, and military employment. Education populations were divided into Elementary-Middle School, High School, and University.

The PPACG land uses for the model area were updated to reflect current development proposals and other anticipated developments. The land uses assumed in the modeling effort are summarized on a table in the Appendix. The PPACG land uses were updated to reflect current plans of the following projects:

- Beckett Bandley Filings # 1, 2 & 3
- Southpark Technological Center
- Cross Creek At Mesa Ridge
- Crescent Heights

The following table below summarizes the population estimates used in the transportation model for the model area depicted on Figure 4-1. The table further divides the data for those zones within the City limits and those zones outside the City limits. As shown on the table, there are significant increases in both population and in employment assumed in the 2025 land use forecasts for the model area.

	2000(1)		**2025**		**% Increase**	
	Population	**Employment**	**Population**	**Employment**	**Population**	**Employment**
Within City Limits	14,822	5,973	37,665	15,466	154%	159%
Outside City Limits	70,947	29,060	100,763	42,676	42%	47%
Total	**85,769**	**35,033**	**138,428**	**58,142**	**61%**	**66%**

(1) Year 2000 population and employment estimates are per the PPACG model land use database.

The model land use information was checked against the 2010 High Growth – Large Scale Development Scenario in the *Fountain Comprehensive Development Plan.* The 2010 Comprehensive Plan population increase for the City under this scenario is 10,000. The increase in the model assumed to occur by 2025 is 22,843. This suggests that if both forecasts are correct, the pace of growth will slow somewhat after 2010.

The Comprehensive Plan's 2010 commercial development forecast is 416,000 additional square feet. The 2025 employment forecasts indicate an increase in retail of approximately 1.2 million square feet within the City limits. The 2010 forecast for new office space is 225,000 square feet, whereas the new service employment in the 2025 model will generate the demand for 2.9 million square feet. From these comparisons, and based on PPACG forecasts, it appears that the social-economic forecasts used in this study account for the expected 2010 increases identified in the Comprehensive Plan for the High Growth – Large Scale Development Scenario.

The traffic-modeling program TMODEL2 was used to develop traffic forecasts on the study area street system based on forecast land uses. Daily and A.M./P.M. peak hour trips were estimated using the trip generation methodology defined in *Colorado Springs Travel Model, Draft Final Report,* prepared for PPACG in September 1996.

Using a modeling process generally referred to as a "Gravity Model Distribution," the travel demand between each pair of traffic analysis zones was computed. The result is a "trip table" that identifies the desired trips between each zone and the "external stations" at the edges of the model area that link the study area to the surrounding urban area. These trips were then assigned to the roadway network in an iterative process that takes into consideration congestion on the various roadway links. The resulting directional trip distribution of model area generated external trips was North 91.8%, South 3.3%, East 1.9%, and Southwest (SH 115) 3.0%.

Models were developed for the A.M. and P.M. peak hours, and daily traffic forecasts were then estimated from these two peak hour models. Capacity evaluations were conducted using the peak hour traffic models of directional traffic flows. Assumed directional roadway capacities for divided and collectors were 900, 1,800, and 2,700 vehicles per hour for one, two, and three lanes per direction respectively. For undivided arterials and three-lane arterials, the per direction capacity was assumed to be 1,500 vehicles per hour. The capacity evaluations were used to test the adequacy of the recommended Fountain roadway network.

Models of year 2000 traffic conditions were developed to calibrate the traffic model to existing conditions. Using the calibrated model, the year 2025 peak hour models were developed using forecast future land uses to iteratively test alternative roadway networks.

4.3 Recommended Major Thoroughfare Plan

Depicted on Figure 4-2 is the recommended Major Thoroughfare Plan with forecast 2025 traffic demand. The Major Thoroughfare Plan is based on the Traffic and Circulation Plan in the Comprehensive Plan (Map 2 of the Comprehensive Plan). Several additions to the original Circulation Plan were made in the resulting Major Thoroughfare Plan. These changes are discussed later in this chapter.

Four street classifications are depicted on the Plan. The following is a discussion of each of these classifications along with their Comprehensive Plan definitions:

- ***Limited Access Regional Highways*** have very restrictive access control. They typically function primarily for traffic and goods movement, and normally have a speed limit ranging from 55 to 75 mph. The right-of-way for Limited Access Regional Highways is roughly 300 feet in width, and often carries traffic volumes around 50,000 vehicles per day on four through-lanes. Critical to the operational success of these roadways is that access is only allowed at grade-separated interchanges. These roads are most effective at moving traffic through the City of Fountain and the Fountain Valley region.

  Powers Boulevard is classified in the Major Thoroughfare Plan as a Limited Access Regional Highway. The Powers Boulevard alignment intersects I-25 at approximately Exit 123.

- ***Regional Arterial Highways*** are continuous highways that carry regional traffic, connect major highways, and are primarily used for traffic and goods movement. About 30,000 to 40,000 vehicles per day use regional arterial highways at speed limits of approximately 40 to 45 mph.

  The Comprehensive Plan indicates that a Regional Arterial Highway in the Fountain Valley is likely to consist of two through-moving lanes in each direction, with turning lanes at key intersections. However, it is recommended that SH 16/Mesa Ridge Parkway be designed to accommodate up to three through-lanes per direction in order to accommodate forecasted travel demands. The other Fountain Regional Arterial Highway is US 85. Two through lanes per direction are sufficient for US 85 to meet forecasted travel demands.

- ***Community Arterial Streets*** serve as a means for the movement of traffic to locations along major highways and to commercial areas. The Community Arterial interconnects and augments the regional arterial system, and provides service for trips of moderate length at a somewhat lower level of traffic mobility. Major intersection spacing along community arterials can occur as frequently as every one-half mile. Community arterials are important to the movement of goods and services from the major highways into the community, and should be maintained for the continued efficiency of that movement. Over the next twenty years, Community Arterials will need to serve between 13,000 to 25,000 trips per day. The ultimate street width

should accommodate either one or two lanes per direction with a center turn lane.

- ***Community Collector Streets*** collect traffic from smaller streets and local neighborhoods, and move that traffic to larger arterials and highways. Collectors should be designed to serve a traffic volume of about 11,000 vehicles per day, with speed limits of approximately 30 to 35 mph. These streets do not necessarily extend into adjoining communities and are typically two-lane roads with a turn lane where necessary.

4.4 SH 16 and Bandley

One change to the Major Thoroughfare Plan was made to reflect the access constraints to the commercial area between I-25 and Fountain Creek at SH 16. This was the addition of Bandley Drive as a community arterial connecting SH 16 to US 85 via Crest Drive. Currently, Bandley Drive and Carson Boulevard intersect SH 116 just east of the I-25 interchange. This spacing is too close to the interchange (less than 100 feet) to allow for smooth traffic operations.

As mentioned previously in Chapter 3, a consultant has been selected to study SH 16 between I-25 and US 85. It is probable that the intersection between Bandley and SH 16 will be re-designed to accommodate needed improvements, and to fix the operational problems associated with this close spacing. In order to maintain adequate access to the commercial area between I-25 and Fountain Creek, a connection between Bandley Drive and SH 16 should be maintained in the final SH 16 design.

4.5 Old Pueblo Road Bypass and Railroad Grade Separations

A connection between Old Pueblo Road and US 85 is included in the Plan. The alignment crosses Fountain Creek south of the end of Lilac Lane, and connects with US 85 at the signalized Crest Drive intersection. The purpose of this connection is to serve as a bypass of the downtown area, allowing traffic to access I-25 from Link Road without going through downtown.

It is assumed that the resulting crossing of the BNSF tracks will be grade-separated on the same structure that crosses the creek. This grade-separation, coupled with a grade-separation of the UPRR tracks at Link Road also included in the Plan, will provide emergency access across the tracks in the event that there is a railroad incident. Another grade-separated railroad crossing is recommended in *Destination 2025* and in this plan at Fontaine Boulevard.

4.6 Other Changes to the Major Thoroughfare Plan

Several other additions and changes to the original Circulation Plan were made in the recommended Major Thoroughfare Plan depicted on Figure 4-2. These include:

- An interchange between Powers Boulevard and Cross Creek Parkway/Mesa Road has been added. Cross Creek Parkway/Mesa Road is now designated as a community arterial. C & S Road has been re-classified as a collector street.

- Marksheffel Boulevard, located between Powers Boulevard and Marksheffel Road, has been added to the plan as a Community Arterial.

- Wilson Road has been re-classified as a collector. Also, the segment of Wilson Road between Jimmy Camp Road and Link Road has been removed from the Plan.

- Several additional interchanges with Powers Boulevard have been identified.

4.7 Truck Routing

Once Powers Boulevard is connected to I-25, it should be designated as the major truck route through Fountain. SH 16/Mesa Ridge Parkway and US 85 are also recommended as the designated truck routes through Fountain, until Powers Boulevard is completed.

5.0 IMPLEMENTATION PLAN

5.1 Cost of Needed Improvements

The recommended transportation improvement plan includes an extensive list of improvements including:

- 13 miles of arterial roadway construction/reconstruction
- Completion of Powers Boulevard to I-25 Exit 123
- Improvements to the 1-25/SH 16 interchange
- Grade-separated railroad crossings at Ohio Street and Fontaine Boulevard
- Bridge widenings across Fountain Creek and Jimmy Camp Creek
- Safety improvements and signalization at five intersections

Concept-level construction cost estimates for these improvements were developed, based on cost estimates included in *Destination 2025*. The aggregate construction cost to implement these improvements is $144 million (year 2001 dollars). This figure is exclusive of local and collector roads that are generally assumed to be constructed as part of the final plats for individual developments. **The figure does, however, include the cost of arterial roadways that developers may be funding.**

A tabular summary of the concept-level construction cost for each individual project is provided in Table 5-1.

5.2 Funding Sources

Funding sources for the individual improvements as identified in *Destination 2025* are also included on Table 5-1. Other sources for transportation funding in Fountain include property owner/developer contributions, city capital improvement funds, state and federal grant funding, and a potential City-administered "fee fund" to mitigate off-site impacts created by new developments in the City. Recent State legislative action now allows cities to implement such fee funds.

Developer contributions through construction of off-site improvements are also an important source of funding. Current City policy is to have developers build all local and collector roads, and half of any adjacent roads, including arterials.

For interchanges on the state highway system, State and Regional funds will typically provide 80 percent of the cost of interchange construction, with the remaining 20 percent coming from local sources. It is not unusual however, for local jurisdictions to exceed the required local match in order to accelerate the development of state projects.

Table 5-1
Project Concept-Level Cost Estimates
Major Thoroughfare Plan

Destination 2025 Priority	Facility	Description	Limits	Length (Miles)	Total Cost (1) ($1,000's)	Destination 2025 Identified Funding Sources
30	Powers Boulevard	New Freeway	Mesa Ridge to I-25 (Exit 123)	8.80	**$30,000.00 (1)**	TRANS/7th Pot, CDOT
135	US 85	Widen from two to four lanes	SH 16 to I-25	3.70	**$35,000.00 (1)**	CDOT
136	SH 16/I-25	Interchange Improvements			**$31,500.00 (1)**	TRANS/7th Pot, CDOT
170	Mesa Road and US 85	Intersection Imp. (Signal and Widening)			**$300.00 (1)**	Local Ballot Issue
186	Carson Avenue and US 85	Intersection Imp. (Signal and Widening)			**$300.00 (1)**	Local Ballot Issue
191	Comanche Village and US 85	Intersection Imp. (Signal and Widening)			**$300.00 (1)**	Local Ballot Issue
199	Link Road and Old Pueblo Road	Safety improvements			**$100.00 (1)**	Local Ballot Issue
208	Illinois and US 85	Intersection Imp. (Signal and Widening)			**$300.00 (1)**	Local Ballot Issue
218	Bandley Road/SH 16	Intersection Widening			**$200.00 (1)**	Local Ballot Issue
224	Squirrel Creek Road Extension	New 3-Lane Community Arterial	Fountain Mesa to Link	1.30	**$3,000.00 (1)**	No Funding Identified
226	Fontaine Boulevard	Grade Separated RR Crossing			**$5,000.00 (1)**	No Funding Identified
245	Old Pueblo Bypass of the City	New 3-Lane Community Arterial	Old Pueblo to US 85 at Crest	0.60	**$3,000.00 (1)**	No Funding Identified
249	Old Pueblo Road	Bridge Expansion at Jimmy Camp Creek			**$2,000.00 (1)**	No Funding Identified
268	US 85	Bridge Expansion at Fountain Creek			**$3,000.00 (1)**	No Funding Identified
283	Fountain Mesa Road	Capacity Enhancements	C & S to Lake	1.00	**$1,500.00 (1)**	No Funding Identified
NA	Fountain Mesa Road	Widen from two to four lanes	Mesa Ridge to C & S	0.80	**$2,400.00 (2)**	No Funding Identified
NA	Bandley Road	Widen from two to four lanes	Durban to SH 16	2.20	**$3,300.00 (2)**	No Funding Identified
NA	Link Road	Grade Separated RR Crossing			**$5,000.00 (2)**	No Funding Identified
NA	Mesa Ridge Parkway	New four-lane Regional Arterial	Powers to Marksheffel	1.50	**$5,100.00 (2)**	No Funding Identified
NA	Marksheffel Boulevard	New four-lane Community Arterial	Marksheffel Road to Fontaine Boulevard	2.00	**$12,600.00 (2)**	No Funding Identified
					$143,900.00	

Cost Estimate Sources:
(1) ***Destination 2025, PPACG***
(2) ***Turner Collie & Braden***

Note:
Traffic signals will only be installed once signal warrants are met.

5.3 Transportation Plan Monitoring and Updating Process

A major goal of this study was to create a dynamic planning tool for the City of Fountain through the creation of the traffic model and capital improvement plan. The study products were structured so that the plan may be periodically updated in order to reflect actual experience in development patterns, funding availability, and the implementation of transportation improvements.

Principal planning activities necessary to maintain the accuracy of the model and integrity of the transportation plan include:

- Maintaining database integrity
- Re-validation of the travel model
- New planning
  - Land use and network forecasts
  - State and local policies
- Project re-programming based on revenue availability

Specifically, the following items should be monitored, evaluated, and documented:

- Actual changes to the existing transportation network, as well as significant (large) changes in population or employment, should be monitored on an on-going basis.

- The base network used for forecasting and planning purposes should be revised to reflect actual changes on no less than a yearly basis.

- Significant changes in current land use should be noted for input to the current land use database, used for re-validation of the travel model. Such land use changes should be assessed for potential impact on model accuracy, and a re-validation of the model should be conducted if a significant change in the traffic forecasts is suspected.

- Reflecting PPACG's update cycle to the long-range plan, the travel model should generally be checked and revalidated as necessary, every three years using then-current, actual land use and road network data.

- Additional planning can be conducted for any horizon year desired. New planning to verify or modify the recommendations in this report should be conducted at roughly two-year intervals to reflect PPACG's cycle for the TIP.

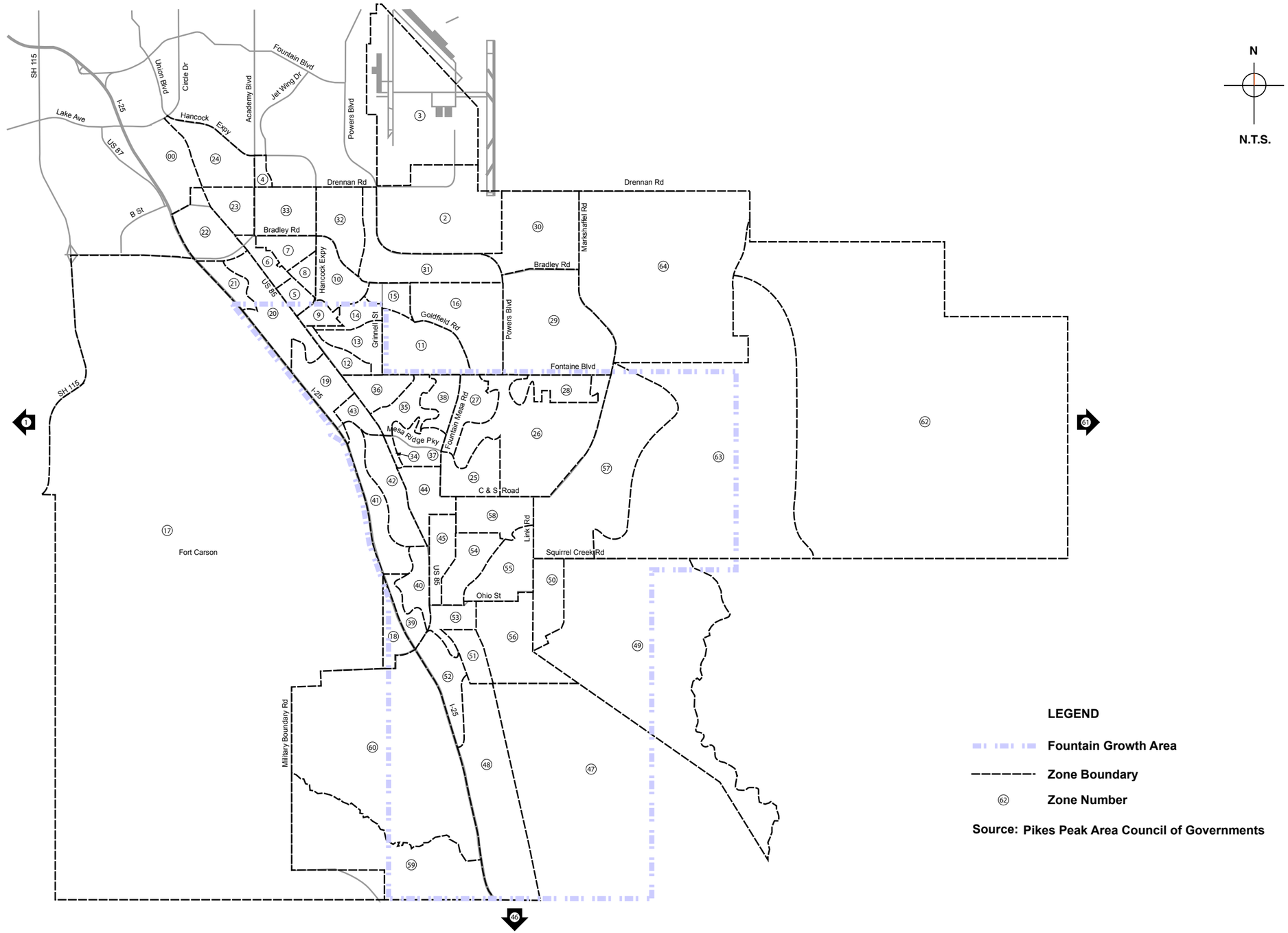
- Changes to the improvement plan may occur if significant changes in projected costs or revenues are identified. Such re-programming may require additional planning analysis to determine if other changes in the nature and timing of recommended improvements are needed. In the absence of significant deviations from cost and revenue forecasts, capital programming should be checked in concert with the five-year planning cycle.

In addition to keeping up-to-date records of land use data, the monitoring of road improvements and traffic count data is an important aspect of the model updates. The facilities on the Major Thoroughfare Plan should be divided into segments for traffic counting. The segments should be bounded by the beginning or ending of a facility, and by intersections with major and minor arterials and freeways. Twenty-four hour counts should be conducted on each major and minor arterial at two-year intervals with counts on collectors conducted every four years. The Colorado Department of Transportation (CDOT) maintains a count program for roadways under CDOT jurisdiction. In addition to the CDOT and City traffic counts, developer-conducted traffic counts submitted to the City should also be included in the database. Periodically, the model forecasted traffic volumes should be compared with the most recent traffic counts.

Additional counts may also be needed in support of the design of new roadway facilities. Turning movement counts may also be needed to determine the need for auxiliary intersection turn lanes and for traffic signal warrant studies.

In some cases, the collection of traffic count data by developers in support of their traffic impact reports will obviate the need for the City to conduct a count.

APPENDIX
Model Land Use Assumptions

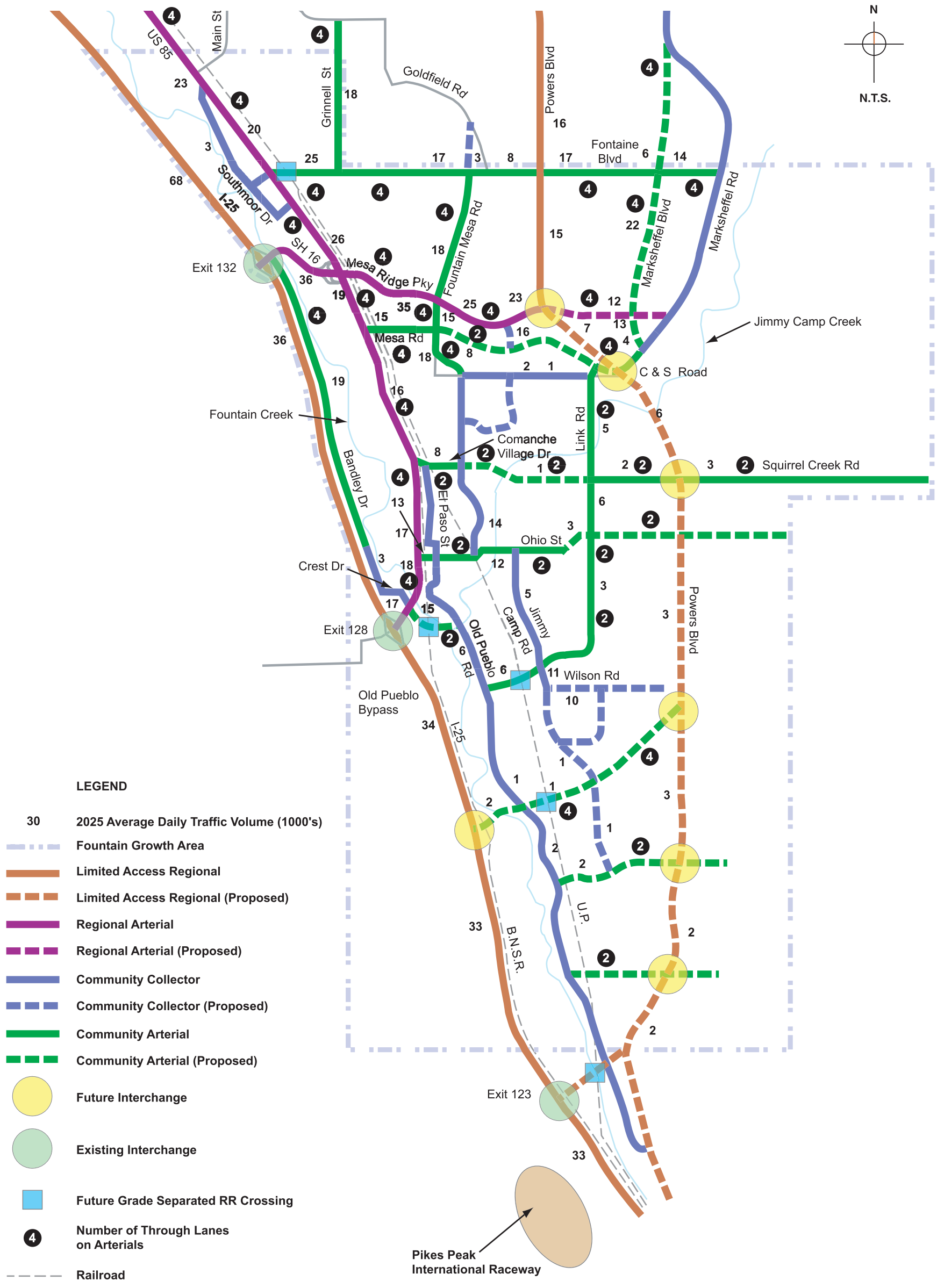


City of Fountain
Pure Colorado

FOUNTAIN TRAFFIC MASTER PLAN

Figure 4-1
Traffic Analysis Zones

TurnerCollie & Braden Inc.
Engineers • Planners • Project Managers



City of Fountain
Pure Colorado

FOUNTAIN TRAFFIC MASTER PLAN

Figure 4-2
Major Thoroughfare Plan

TurnerCollie & Braden Inc.
Engineers • Planners • Project Managers

Traffic Model Land Use Assumptions

			2000 Land Use Data														2025 Land Use Forecasts													
Fountain Model TAZ #	PPACG Model TAZ #	Acres	Population Households	Population Group Housing	<$10,000 Low income Households	<$25,000 Lower-Mid Households	<$35,000 Mid income Households	<$50,000 Upper income Households	>$50,000 High income Households	Basic Employment	Retail Employment	Service Employment	Military Employment	Elementary Students	High School Students	University Students	Population Households	Population Group Housing	<$10,000 Low income Households	<$25,000 Lower-Mid Households	<$35,000 Mid income Households	<$50,000 Upper income Households	>$50,000 High income Households	Basic Employment	Retail Employment	Service Employment	Military Employment	Elementary Students	High School Students	University Students
1	164	3,657	3,099	0	554	179	49	141	334	8	4	8	529	0	0	0	3,084	0	554	179	49	141	334	58	40	89	529	0	0	0
2	277	2,104	0	0	0	0	0	0	0	287	41	0	0	0	0	0	1	0	0	0	0	0	0	439	30	0	0	0	0	0
3	278	2,065	0	0	0	0	0	0	0	0	0	228	0	0	0	0	1	0	0	0	0	0	0	0	3	229	0	0	0	0
4	282	99	1,840	0	398	114	63	81	46	14	8	32	0	0	0	0	1,841	0	398	114	63	81	46	22	38	57	0	0	0	0
5	283	114	992	0	150	122	44	38	31	12	6	27	0	0	0	0	993	0	150	122	44	38	31	56	18	125	0	0	0	0
6	284	164	1,317	0	168	141	58	49	50	30	0	18	0	0	0	0	1,318	0	168	141	58	49	50	91	0	83	0	0	0	0
7	285	239	1,692	0	195	143	74	78	118	96	33	39	0	783	0	0	2,560	0	299	218	112	119	180	181	55	84	0	850	0	0
8	286	124	1,104	0	142	90	53	67	62	18	75	24	0	480	0	0	1,105	0	142	90	53	67	62	61	141	75	0	581	0	0
9	287	137	984	0	202	108	27	33	65	174	301	319	0	0	0	0	985	0	202	108	27	33	65	257	519	669	0	5	0	0
10	288	451	2,700	0	259	291	109	186	140	78	12	18	0	387	1,368	0	4,608	0	449	504	188	321	243	197	11	56	0	712	1,488	0
11	289	758	62	0	7	5	4	3	3	0	0	0	0	0	217	0	108	0	11	9	7	6	5	49	0	25	0	5	339	0
12	290	148	1,031	0	134	162	33	15	48	151	47	119	0	483	0	0	1,032	0	134	162	33	15	48	241	58	231	0	780	0	0
13	291	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	292	326	2,613	0	302	230	181	157	121	6	9	35	0	0	0	0	4,469	0	534	406	320	278	214	66	40	202	0	0	0	0
15	293	219	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	57	0	18	0	0	0	0
16	294	1,115	1,730	0	298	160	40	48	96	59	21	30	0	0	0	0	1,827	0	316	169	43	51	102	59	20	30	0	0	0	0
17	295	6,190	11,309	6,785	1,034	468	112	112	115	132	27	96	17,676	1,853	170	7,000	14,666	10,470	1,335	604	145	145	148	127	15	96	17,676	2,426	478	10,801
18	296	272	3	0	1	0	0	0	0	33	379	69	0	0	0	0	4	0	1	0	0	0	0	114	654	67	0	0	0	0
19	297	482	759	0	131	44	21	23	48	100	123	120	0	0	0	0	760	0	131	44	21	23	48	184	235	247	0	0	0	0
20	298	669	113	0	55	19	9	10	20	33	205	0	0	0	0	0	217	0	104	35	17	18	38	120	358	8	0	0	0	0
21	299	220	618	0	101	34	16	18	37	0	0	199	0	0	0	0	619	0	101	34	16	18	37	57	6	500	0	0	0	0
22	300	469	2,105	0	346	311	55	57	37	90	27	78	0	0	0	0	3,220	0	534	480	84	88	57	227	25	241	0	0	0	0
23	301	341	222	0	0	0	0	0	0	234	104	129	0	0	0	0	184	0	7	6	1	1	1	344	142	324	0	0	0	0
24	303	654	820	0	275	80	7	47	23	2,544	541	0	0	0	0	0	960	0	331	97	8	57	28	2,858	611	0	0	0	0	0
25	304	438	56	0	2	2	2	3	3	0	0	741	0	0	0	0	4,559	0	0	323	1,032	91	182	0	1,394	0	0	0	0	0
26	305	1,815	1,894	0	100	128	68	130	162	50	14	2	0	0	0	0	8,617	0	0	305	611	603	1,307	168	194	1,894	0	0	0	0
27	306	359	3,633	0	189	249	147	239	304	138	14	64	0	612	0	0	3,634	0	189	249	147	239	304	264	513	38	0	835	0	0
28	307	320	185	0	9	11	6	12	15	0	0	0	0	0	0	0	3,304	0	0	0	292	96	792	2,847	732	0	0	0	0	0
29	308	1,717	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	56	11	83	0	0	0	0
30	309	1,166	352	0	9	9	9	9	9	0	63	149	0	0	0	0	716	0	50	50	50	50	50	48	135	349	0	0	0	0
31	310	521	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	82	0	0	0	0	0	0
32	311	552	2,257	0	92	167	118	166	229	161	15	30	0	616	0	0	2,563	0	105	190	134	189	260	314	0	0	0	837	0	0
33	312	508	32	0	1	1	1	1	1	215	6	70	0	0	0	0	68	0	4	4	4	4	4	337	0	82	0	0	0	0
34	313	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	16	8	21	0	0	0	0
35	314	340	2,981	0	171	152	132	127	403	35	20	55	0	0	0	0	3,079	0	177	157	136	131	417	147	15	88	0	0	0	0
36	315	266	2,211	0	281	162	93	125	102	141	401	218	0	913	0	0	2,317	0	294	170	97	131	107	250	716	352	0	932	0	0
37	316	359	678	13	42	36	52	41	46	71	8	6	0	1,015	1,228	0	1,841	19	42	286	52	41	211	170	1,252	5	0	1,041	1,265	0
38	317	267	2,400	0	186	167	99	150	184	12	12	128	0	583	0	0	2,665	0	207	185	110	166	204	92	23	302	0	649	0	0
39	318	172	1,175	0	335	103	21	1	26	12	11	13	0	0	0	0	1,578	0	451	138	28	2	36	80	27	194	0	0	0	0
40	319	308	1,346	14	264	130	45	81	57	50	11	114	0	0	0	0	1,713	21	337	165	57	104	73	266	0	717	0	0	0	0
41	320	512	9	0	1	0	0	0	0	2	29	2,531	0	0	0	0	8	0	1	0	0	0	0	42	282	3,889	0	0	0	0
42	321	505	43	0	7	3	1	2	2	87	0	320	0	0	0	0	44	0	7	3	1	2	2	164	18	724	0	0	0	0
43	322	176	876	0	218	64	35	15	7	33	43	14	0	0	0	0	877	0	218	64	35	15	7	324	136	216	0	0	0	0
44	323	551	1,470	0	187	114	48	77	74	8	69	11	0	318	0	0	4,081	0	529	323	135	219	210	100	145	80	0	635	0	0
45	324	176	789	0	129	67	25	44	35	21	16	0	0	0	0	0	790	0	129	67	25	44	35	80	33	42	0	0	0	0
46	325	4,304	44	0	4	4	1	2	2	0	0	0	0	0	0	0	95	0	8	8	3	5	5	19	11	81	0	0	0	0
47	326	8,764	252	0	18	21	11	14	18	0	0	125	0	0	0	0	520	0	42	48	27	32	42	2	34	340	0	0	0	0
48	327	2,334	251	0	24	26	13	16	24	0	0	0	0	0	0	0	474	0	45	49	24	30	45	23	21	58	0	0	0	0
49	328	4,831	1,981	0	176	184	96	118	171	29	0	28	0	581	955	0	5,318	0	490	511	266	329	476	73	28	119	0	1,339	1,337	0
50	329	444	127	0	11	12	6	8	11	4	0	4	0	0	0	0	303	0	26	30	15	19	26	73	0	20	0	0	0	0
51	330	268	0	0	0	0	0	0	0	58	29	0	0	0	0	0	0	0	0	0	0	0	0	58	29	0	0	0	0	0
52	331	337	544	0	57	59	29	38	55	70	16	33	0	684	0	0	2,231	0	244	253	127	163	235	70	11	33	0	1,442	0	0
53	332	257	449	0	170	7	1	40	8	39	49	162	0	490	0	0	898	0	341	13	3	81	16	40	149	426	0	1,248	0	0
54	333	455	1,184	0	176	97	67	66	83	6	643	21	0	0	45	0	3,198	0	483	266	184	180	229	106	1,186	0	0	0	418	0
55	334	470	45	0	3	2	1	1	1	0	0	0	0	0	0	0	120	0	8	6	3	3	3	70	3	21	0	0	0	0
56	335	475	316	0	27	28	14	18	27	4	0	8	0	0	0	0	871	0	76	80	40	52	76	81	8	47	0	0	0	0
57	336	2,027	257	0	31	17	12	12	14	14	0	4	0	0	0	0	521	0	64	34	24	24	29	53	21	58	0	0	0	0
58	337	499	1,455	0	176	93	65	65	83	0	0	0	0	0	0	0	4,460	0	603	317	222	222	286	89	29	107	0	0	0	0
59	338	16,368	9	0	0	3	0	0	0	23	0	29	0	0	0	0	10	0	0	3	0	0	0	30	8	82	0	0	0	0
60	339	4,303	13	0	0	4	0	0	0	0	0	0	0	0	0	0	14	0	0	4	0	0	0	8	29	61	0	0	0	0
61	340	20,229	117	0	15	10	4	4	9	2	0	4	0	0	0	0	213	0	28	19	8	8	17	6	20	43	0	0	0	0
62	341	14,836	42	0	1	1	1	1	1	0	0	0	0	0	0	0	74	0	2	2	2	2	2	6	20	40	0	0	0	0
63	342	6,133	358	0	20	22	11	15	24	10	2	14	0	0	0	0	732	0	42	48	24	32	50	19	23	69	0	0	0	0
64	343	5,018	2,178	0	171	193	92	132	202	29	8	0	0	0	0	0	6,291	0	522	589	281	401	615	103	48	55	0	0	0	0
65	344	4,799	46	0	4	4	1	3	4	0	0	0	0	0	0	0	95	0	8	8	3	5	8	8	14	44	0	0	0	0
66	347	7,897	93	0	7	8	4	5	8	0	0	12	0	0	0	0	168	0	12	14	7	10	14	8	22	73	0	0	0	0
67	405	369	2,883	0	431	220	127	130	118	121	534	351	0	426	0	0	3,402	0	510	260	150	154	139	179	900	545	0	496	0	0
68	434	264	2,701	0	319	217	106	81	181	75	75	60	0	532	0	0	2,702	0	319	217	106	81	181	111	132	126	0	682	0	0
69	435	155	1,695	0	216	154	60	89	96	6	4	13	10	0	0	0	1,696	0	216	154	60	89	96	6	0	13	10	0	0	0
70	437	646	1,796	0	250	192	56	88	84	95	8	6	0	0	0	0	3,633	0	511	392	114	180	173	242	9	70	0	0	0	0
71	438	217	2,621	0	451	229	80	102	92	16	2	89	0	457	0	0	2,859	0	490	249	86	111	100	40	2	219	0	630	0	0
Totals		**138,784**	**78,957**	**6,812**	**9,733**	**6,073**	**2,715**	**3,434**	**4,369**	**5,736**	**4,065**	**7,017**	**18,215**	**11,213**	**3,983**	**7,000**	**127,918**	**10,510**	**13,731**	**9,775**	**6,014**	**5,889**	**8,801**	**13,235**	**11,410**	**15,282**	**18,215**	**16,125**	**5,325**	**10,801**

Source: Pikes Peak Area Council of Governments. Please refer to Figure 4-1 for the location of these zones.

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