ADAMS COUNTY
COLORADO

Transportation Plan

Imagine
ADAMS COUNTY

Adopted December 2012

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TRANSPORTATION PLAN

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ADAMS COUNTY COLORADO

Acknowledgement

Board of County Commissioners

W.R. “Skip” Fischer
Alice J. Nichol
Erik Hansen

Planning and Zoning Commission

Paul Tochtrop
Sharon Richardson
Ken Ciancio
Ken Conright
Nick DiTirro
Michael DeMatte
Steward Mosko
Harry Gibney
Douglas Gustin

County Project Team

Abel Montoya, Planning and Development Director
Kristin Sullivan, Planning Manager
Stacey Nerger, Long Range Planner
Jeanne Shreve, Transportation Coordinator
Yvonne Castandea, Workforce & Business Center, Lead Worker
Liz Espinoza, Community Development, Grants Technician
Sue Bozinovski, Aging & Adult Services Manager
Scott Lawson, Veterans Service Officer
Besharah Najjar, Director of Public Works
Russ Nelson, Engineering Manager
Rene Valdez, Construction Manager
John Wolken, Rights-of-Way Superintendent
Greg LaBrie, Civil Engineer III
Heather McDermott, Emergency Management Director

Consultant Team

Felsburg, Holt & Ullevig
Clarion Associates
Dewberry Consultants, LLC
Economics and Planning Systems

Local Agencies

City of Arvada:	John Firouzi, Transportation Engineer
City of Aurora:	Huiliang Liu, Principal Transportation Planner
Aurora Commission for Seniors	Douglas Bowen, Chair
Town of Bennett:	Dave Ruble, Traffic Engineer Consultant
City of Brighton:	Joe K. Smith, Director of Streets & Fleet
	Annette Marquez, Traffic Engineer
	Sue Corbett, Senior Center Director
City of Commerce City:	Glenn Ellis, Interim City Engineer
City of Federal Heights:	Steve Durian, Director of Community Services
City of Northglenn:	Brook Svoboda, Director of Planning & Development
	Michael Stricker, Cultural Programs Supervisor
City of Thornton:	Gene Putman, Transportation & Emergency Mgmt Manager
	Lisa Ranalli, Senior Citizen Program Manager
City of Westminster:	Mike Normandin, Transportation Engineer
	Rachel Harlow-Schalk, Environmental & Admin Services Officer
City & County of Denver:	Emily Silverman, Associate City Planner
Smart Commute Metro North TMO:	Karen Stuart, Executive Director
Denver Regional Council of Governments:	Fred Sandal, Planner IV
Regional Transportation District	Mike Turner, Manager of Planning Department
	Brian Matthews, Special Services Manager
Colorado Dept. of Transportation	Danny Hermann, Region 6 Planner
	Darin Stavish, Region 1 Planner
Seniors' Resource Center	Hank Braaksma, Director of Transportation Services
Christensen Consulting, LLC	Cindy Christensen, Facilitator
Denver Regional Moblity & Access Council	Angela Schreffler, Executive Director
	Matthew Cunningham, Mobility Manager
Via Mobility Services	Lenna Kottke, Executive Director
Senior Hub	Howard Yeoman, Executive Director
TransitPlus	Ralph Power, Project Manager

Steering Committee

Tricia Allen, ACED
Maxine Seyforth, Adams County Aging
Nate Lucero, Adams County Attorney
Jacqueline Pickett, Adams County Community Development
Ben Dahlman, Adams County Finance
Eric Weis, Adams County Floodplain
Heather McDermott, Adams County Office of Emergency Management
Shannon McDowell, Adams County Parks
Abel Montoya, Adams County Planning
Kristin Sullivan, Adams County Planning
Stacey Nerger, Adams County Planning
Jeanne Shreve, Adams County Planning
Mark Omoto, Adams County Public Works
Adrienne Dorsey, Adams County Sustainability
Lisa Schott, Community Enterprise
Tareq Wafaie, DOLA
Nolan Donley, Metro Housing Coalition
Joy Gerdom, School District 27J
Dan Micek, United Neighborhoods

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I. Introduction

A. OVERVIEW OF ADAMS COUNTY STUDY AREA

Adams County is uniquely characterized by its political boundaries which extend 72 miles in an east-west direction and 18 miles north-to-south. Within this nearly 1,300 square mile rectangle, the City and County of Denver occupies approximately 90 square miles in the southwesterly corner including Denver International Airport (DIA). The County is a major component of the greater Denver metropolitan area with approximately the western 1/3 of the county developed at urban and suburban densities.

The study area is generally traversed by numerous north-south drainageways, the most notable of which is the South Platte River. In addition, several drainageways exist in the eastern portion of the county which affect future network planning in terms of location and cost of implementation.

East of State Highway (SH) 79 the terrain is generally flat to rolling and distinctly rural in character and use with Comanche Creek, Mudd Creek and Badger Creek representative of the numerous north-south drainages traversing the county.

The incorporated cities within the primary transportation planning area consist of all or portions of the following communities:

- Arvada
- Aurora
- Bennett
- Brighton
- Commerce City
- Federal Heights
- Northglenn
- Thornton
- Westminster

In addition, the communities of Strasburg and Watkins are important locations along the I-70 corridor.

B. STUDY PURPOSE

The purpose of the Adams County Transportation Study is to update the multi-modal transportation plan of 1996 to continue guiding the implementation of transportation expansions and upgrades through the year 2035. A key objective of the Plan is, therefore, to coordinate the independently produced transportation plans of the participating cities to ensure compatibility and a coordinated implementation strategy on regional improvements. Adams County has completed and adopted several corridor and sub-area transportation plans prior to preparing this Transportation Plan. Those previous plans are assumed to remain in place unless they are superseded by elements of this county-wide transportation plan or subsequent corridor or sub-area plans.

Toward this end the Plan documents and provides technical support for:

- Updated transportation-related policies and strategies which will be used as the philosophical basis for future transportation planning.
- An ultimate multimodal transportation vision which identifies key road, transit, bike, pedestrian and travel demand management needs consistent with the potential buildout of Adams County and its cities.

- A 2035 Transportation Plan element that identifies those multimodal improvements needed to serve the travel demand projections in the short-range (2018), mid-range (2025) and long-range (2035) planning horizons.
- Updated implementation and management strategies to assist the County and its cities in coordinating funding requests for key regional priorities.

II. Vision, Policies & Strategies

A. VISION STATEMENT

Provide an environmentally and fiscally sustainable and integrated transportation system that promotes the economic competitiveness of the County and enhances the quality of life for its residents and businesses by providing safe, multi-modal options, including roadway capacity, transit and bike options, and increasing system efficiency.

B. POLICIES & STRATEGIES

 = County led activity

 = Joint activity (with cities and/or other agencies)

 = Support activity (led by cities and/or other agencies)

Policy 1	Maintain a spirit of cooperation to coordinate the update and amendment process for the County Transportation Plan with adjacent cities' and counties' transportation plans and regional and statewide transportation planning efforts.	Responsibility
Emphasis/Focus Area: PLANNING	1.1 Review and update the County Transportation Plan every three years (network and land use)	
	1.2 Coordinate a referral system for the transportation elements of land use cases between the county and cities	
	1.3 Provide input and comment on local, regional, and statewide transportation planning activities and studies	
	1.4 Coordinate planning-level roadway functions with cities and adjacent counties	
	1.5 Discuss resolution of proposed transportation plan changes that are inconsistent with the County's Transportation Plan	
	1.6 Organize and facilitate regular coordination meetings with citizens, businesses, other local jurisdictions and agencies on identifying County-only, cross-jurisdictional and regional transportation priorities	
	1.7 Develop strategies with other local jurisdictions to participate in regional and statewide transportation planning activities	
	1.8 Facilitate the update to the County's regional transportation priorities	

Policy 2	Develop Countywide transportation priorities and cross-jurisdictional projects using a thorough and transparent project prioritization process.	Responsibility
Emphasis/Focus Area: PRIORITIZATION	2.1 Maintain the Capital Improvement Program (CIP) process as part of budgeting process	
	2.2 Develop and implement a project prioritization process for county-only and regional transportation priorities	
Policy 3	**The County and the cities will work cooperatively to pursue methods to finance transportation improvements identified in the Adams County Transportation Plan and ensure that private development pays its fair share of improvements to the transportation network.**	**Responsibility**
Emphasis/Focus Area: FUNDING	3.1 Work with transportation planning partners at the municipal, regional, state, and federal levels to pursue transportation funding	
	3.2 Conduct a review of the County's Traffic Impact Fee program including updating the number of benefit districts, scaled fees based on location, indexing unit costs to inflation and other modifications based on this review	
	3.3 Conduct updates of the County's Transportation Impact Fee program every three years to reflect expected growth and implement appropriate modifications	
	3.4 The County will explore alternative mechanisms for funding needed transportation improvements including special improvement districts and public-private partnerships	
Policy 4	**Coordinate County submittals to the regional Transportation Improvement Program (TIP), Regional Transportation Plans (RTP), the Statewide Transportation Improvement Program with other local jurisdictions and work as a coalition to obtain regional, statewide and national funding.**	**Responsibility**
Emphasis/Focus Area: PROJECT SUBMITTALS	4.1 Jointly identify top priorities for inclusion in the Denver Regional Council of Governments' (DRCOG) vision and fiscally constrained Regional Transportation Plans	
	4.2 Meet to develop coordinated recommendations for TIP policy revisions	
	4.3 Meet to develop coordinated TIP request submittals	
	4.4 Jointly prioritize TIP projects based on established criteria for regional transportation priorities	

Policy 5	Coordinate with adjacent cities and counties, the Regional Transportation District (RTD) and other transit providers to improve public transportation in Adams County, including rail transit, enhanced bus services and improved multi-modal connections to the transit system.	Responsibility
Emphasis/Focus Area: TRANSIT SERVICES	5.1 Obtain or reserve right-of-way for regional transit corridors	
	5.2 Work closely with RTD to implement the FasTracks system, with a specific focus on advancing construction of the North Metro corridor	
	5.3 Work with RTD to improve transit service, including FasTracks feeder routes and bus service to developing parts of the County	
	5.4 Work with RTD, cities, and developers to enhance bike/pedestrian connections to transit stations	
	5.5 Implement multi-modal transportation infrastructure strategies identified in Adams County TOD and Rail Station Area Planning Guidelines in appropriate areas	
	5.6 Coordinate input for RTD's annual base system operations plan	
Policy 6	**Coordinate human services transportation so it is more efficient and provides countywide coverage for people with mobility challenges such as older adults, people with disabilities and individuals with low income that is convenient, affordable for users and cost effective for service providers.**	**Responsibility**
Emphasis/Focus Area: HUMAN SERVICES	6.1 Identify and analyze human services transportation and develop opportunities for efficiency	
	6.2 Develop methods for increasing awareness among users of existing transportation options and resources	
	6.3 Identify financial and personnel needs to enhance the work of the Local Coordinating Council (LCC) in coordinating human services transportation	
	6.4 Develop short and long term priorities and implementation plan to improve human services transportation in Adams County	

Policy 7	**Coordinate County, city, and regional commuter and recreational bicycle and pedestrian travel through a comprehensive Adams County trail system and accommodations on the County's road network.**		**Responsibility**
Emphasis/Focus Area: BIKE & PEDESTRIAN	7.1	Support implementation of the trail system identified in the Adams County Open Space, Parks and Trails Master Plan	
	7.2	Develop and designate a bike route network on the County road and trail system	
	7.3	Coordinate with DRCOG on additions or changes to bike/pedestrian plan	
	7.4	Implement 4E strategy (education, encouragement, engineering, and enforcement) to increase bike/pedestrian awareness	
	7.5	Develop coordinated funding requests to DRCOG and State Trails Program	
	7.6	Review/coordinate County and cities' bike/pedestrian plans to ensure compatibility	
Policy 8	**Establish and implement County design standards including "complete streets" that accommodate multiple travel modes and user types in urbanized areas and other appropriate areas, and coordinate design standards with those of the cities.**		**Responsibility**
Emphasis/Focus Area: DESIGN STANDARDS	8.1	Develop and implement complete streets in urbanized areas and other appropriate areas	
	8.2	Consider bike and pedestrian facilities on all roadway construction projects by incorporating shoulders, on-street bike lanes and sidewalks, as appropriate in a context-sensitive manner	
	8.3	Coordinate with cities to effectively transition roadway cross-sections at boundaries	
	8.4	Coordinate with cities on cross sections and design standards for roadway improvements within their growth boundaries	
	8.5	Adhere to the Americans with Disabilities Act requirements on all bike and pedestrian facilities and roadway projects	
Policy 9	**Preserve the unique character of selected scenic roadways that have special aesthetic, environmental, or historic qualities through intergovernmental agreements between the County and affected cities.**		**Responsibility**
Emphasis/Focus Area: SCENIC BYWAYS	9.1	Designate appropriate roads as County Scenic Byways	
	9.2	Limit type and density of development along Scenic Byways	
	9.3	Develop and enforce Scenic Byway Policy	
	9.4	Implement recommendations of the Riverdale Road Corridor Plan and the Imboden Road Alignment Study	

Policy 10	Coordinate land use and transportation planning that supports regional sustainability initiatives and promotes reduced travel demand and use of alternatives to single occupant vehicle use in Adams County and the surrounding region.	Responsibility
Emphasis/Focus Area: SUSTAINABILITY	10.1 Cooperate in regional travel reduction programs	
	10.2 Develop appropriate incentives for reducing single occupant vehicle travel	
	10.3 Work with the North Area Transportation Alliance to implement Transportation Demand Management programs	
	10.4 Coordinate land use and transportation planning to reduce travel demands	
	10.5 Seek transportation solutions that create economic, environmental and social benefits	
	10.6 Implement roadway cross-sections and construction materials that promote sustainable infrastructure and maintenance	
Policy 11	**Preserve the functional integrity of the County roadway system through coordinated right-of-way, access and cross-section guidelines. Acquire right-of-way and regulate access to implement the transportation system established in the County Transportation Plan.**	**Responsibility**
Emphasis/Focus Area: FUNCTIONAL INTEGRITY	11.1 Implement recommendations of the County Transportation Plan, except where approved design takes precedence	
	11.2 Preserve right-of-way in undeveloped and developing areas consistent with the County Transportation Plan	
	11.3 Adhere to design standards that promote safe transportation facilities	
	11.4 Maintain transportation infrastructure to acceptable County maintenance standards	
	11.5 Maintain traffic operations at acceptable levels of service (LOS)	
	11.6 Maintain access control consistent with functional classifications	
	11.7 Ensure that the County roadway system efficiently accommodates freight movement within, to, and from the County	

III. Transportation System Profile

The following sections provide a description of Adams County's existing transportation system, including the roadway, rail, transit, bicycle, and pedestrian travel modes. The transportation system profile maps are included in **Appendix A**.

A. ROADWAY NETWORK

All modes of surface travel (automobiles, trucks, transit, bicyclists, and pedestrians) rely on the roadway network to varying degrees for basic mobility. A number of major travel routes serve the residents and businesses of Adams County. Major interstate highways, including I-25, I-70, I-76, I-225, and I-270, provide regional and statewide connections. Within Adams County, the northeast quadrant of the Denver metropolitan area's beltway exists as a tollway (E-470). Other major travel routes include US 36, which extends from I-25 in Adams County to the City of Boulder, and US 85 which travels north-south through Adams County providing connections from Denver on the south to Greeley on the north. The County's major roadway network generally follows the one-mile section lines that bound residential neighborhoods and commercial areas in the urbanized western part of the County. The eastern part of the County currently has a sparse roadway network predominantly consisting of unpaved roads.

FUNCTIONAL CLASSIFICATION: MOBILITY AND ACCESS

Within a roadway system, each road can be classified by the relative functional levels of mobility and access it provides. These two functions, mobility (where higher speeds occur and direct land access is limited) and accessibility (where speeds are lower and direct land access is allowed), must be weighed in determining the proper classification for each individual roadway. The more access allowed by a facility, the more its capability to provide mobility is reduced. The primary determinants of functional classification are length of trip, average travel speed, frequency of access points, and continuity.

Freeways and tollways have the highest levels of mobility and as a result, have the greatest restrictions on access. The primary function of major and minor arterials is mobility, with access provided via intersecting collector and local streets. Collectors and local streets better serve access needs and have less capability for traffic movement. The existing roadway functional classifications are shown on **Figure A-1** (in **Appendix A**).

LANES

As shown on **Figure A-1**, the County's freeways and E-470 tollway provide four to ten lanes for through traffic. Arterials in the urbanized western part of the County generally have four to six through lanes, while arterials in less urbanized areas and collector streets typically are limited to two through lanes.

ROADWAY SURFACE

In the urbanized portion of Adams County (generally west of I-76 and E-470), most of the roads are paved. In the rural portion of the County, approximately 25 percent of section-line County roads are currently paved, and the remaining 75 percent are unpaved. The roadway surfaces in the County are shown on **Figure A-2**.

TRAFFIC CHARACTERISTICS

Current daily traffic volumes are shown on **Figure A-3**. The freeways carry the highest level of traffic volumes, with daily traffic volumes exceeding 100,000 vehicles per day (vpd) on sections of I-25, I-225, I-270, and US 36. Arterial streets in the urbanized portion of the county carry anywhere from 10,000 to 40,000 vpd. In eastern Adams County, the traffic volumes drop off significantly, with most of the county roads carrying less than 1,000 vpd.

The combination of roadway classifications, laneage, and daily volumes can be analyzed to determine the general status of traffic operations on the major street and highway facilities in Adams County. The roadways that are currently above capacity represent deficiencies in the existing roadway network. As shown on **Figure A-4**, roadway segments where the current volume to capacity (v/c) ratio exceeds 1.0 are found on:

- Freeways including I-25, I-70, I-225, I-270 and US 36
- Major Arterials including US 85, 120th Avenue, 104th Avenue, SH 7, Colfax Avenue, Sheridan Boulevard, Federal Boulevard, and Tower Road

Several other roadway segments in the urbanized portions of the County are nearing capacity (v/c ratio between 0.8 and 1.0). The remainder of the county and municipal street systems, particularly in the rural portions of the County, generally provide adequate levels of service (v/c ratio less than 0.8). This evaluation is based upon a general comparison of daily traffic volumes (**Figure A-3**) to typical planning level capacity thresholds for different classifications of roadway as defined in **Table 1**.

Table 1. Planning Level Roadway Capacities

Facility	Lanes	Planning Capacity
Freeway	4-Lane	80,000
	6-Lane	120,000
	8-Lane	160,000
Tollway	4-Lane	60,000
	6-Lane	90,000
	8-Lane	120,000
Major Arterial	2-Lane	16,000
	4-Lane	32,000
	6-Lane	48,000
Minor Arterial	2-Lane	12,000
	4-Lane	24,000
	6-Lane	36,000

SAFETY

Adams County crash data for the three and a half year period through June 2012 were reviewed to identify the intersections in the unincorporated County with the greatest number of crashes and highest crash rates, as shown on **Figures A-5 and A-6**, respectively. Intersections with more than 100 crashes during that period include I-25/58th Avenue and US 36/Pecos Street. Intersections with more than two accidents per million entering vehicles include 120th Avenue/Imboden Road, Riverdale Road/Quebec Street, and 96th Avenue/I-76.

Realizing safety considerations do not stop at the unincorporated borders, the County will continue to work with the local jurisdictions and CDOT to develop a countywide compilation of crash history in order to inform future transportation planning. The County will endeavor to work with the local jurisdictions to compile data that is consistent on a three year period.

HAZARDOUS MATERIAL ROUTES

Transport of hazardous and nuclear materials is restricted to certain highways in Colorado. As shown on **Figure A-7**, hazardous materials in Adams County can be transported on the interstate system (I-25, I-70, I-76, I-225, and I-270), as well as US 36, US 85, US 36, and SH 79. Nuclear materials can only be transported on the interstate system.

Because the majority of hazardous materials transported through the Denver metro area has the potential to travel through Adams County, the county's exposure to hazardous material spills is comparably greater than most other metro area counties.

B. FREIGHT RAIL

Both the Union Pacific Railroad (UPRR) and Burlington Northern Santa Fe Railway (BNSF) have mainline tracks that run through Adams County. The railroad system through the County is shown on **Figure A-8**. The UPRR mainline track generally parallels US 85 and averages 11 to 15 trains per day. The UPRR also has a line that runs generally parallel to Smith Road/Colfax Avenue through Adams County and averages 6 to 8 trains per day. The track that extends in a general north/south was recently purchased by RTD and will be used for the planned North Metro commuter rail line. The BNSF mainline track is adjacent to SH 2 and then I-76 north of their interchange, and averages 28 to 30 trains per day. The BNSF also has a railroad line in the southwest corner of Adams County, which travels from Denver to Boulder and averages 1 to 3 trains per day. The UPRR Moffat Tunnel subdivision also traverses southwest Adams County to Denver Union Station and includes operations for UPRR, BNSF and AMTRAK. UPRR runs 12-15 trains per day and AMTRAK runs 2 trains per day along the Moffat Tunnel Subdivision. Coal is the top commodity transported by rail through Adams County.

C. TRANSIT SERVICE

EXISTING TRANSIT SERVICE

The existing and planned transit service in Adams County is shown on **Figure A-9**. The portion of Adams County generally west of Hutchison Road is currently served by the Regional Transportation District (RTD), and transit service is funded by a one cent sales tax collected throughout the District. There are numerous express, regional, and local bus routes that serve Adams County, anchored by a number of

park-n-Rides in the County that support transit parking as well as carpooling. There are four call-n-Ride areas that provide demand responsive bus service within Adams County:

- Brighton
- Federal Heights
- South Thornton/Northglenn
- Thornton/Northglenn

RTD also provides Access-a-Ride, their local bus transportation for individuals who cannot access the District's fixed-route bus and rail systems. Qualified transit riders can schedule a trip as long as the origin and destination of the trip are within 3/4 mile of RTD's Local fixed-route transit system.

In addition to RTD's Access-a-Ride, Adams County and communities in the county jointly sponsor A-Lift, providing mobility services to senior citizens and people with disabilities. In the more rural areas of the county, Via Mobility Services provides transportation for elderly and disabled customers. Additionally, Special Transit offers targeted service to Medicaid-eligible patrons.

FUTURE TRANSIT SERVICE

As a part of RTD's FasTracks program, five rail lines are planned in Adams County. The North Metro commuter rail line will extend from Denver Union Station through Commerce City, Thornton, and Northglenn, terminating at SH 7. The Northwest rail line will provide service between downtown Denver and Boulder, and eventually to Longmont. The Gold Line is currently under construction and will provide rail service from downtown Denver through Arvada and to Wheat Ridge, with two stations within unincorporated Adams County (the Federal Station and the Pecos Station). The East Corridor is also under construction and will provide service between downtown Denver and Denver International Airport (DIA). The I-225 light rail line will extend from its current terminus at Nine Mile Station in Aurora up to the Peoria Station just south of I-70. The FasTracks program represents a substantial investment in transit infrastructure in the region and will significantly increase the opportunities for Adams County residents and visitors to travel by rail transit. In addition to the FasTracks rail corridors, Bus Rapid Transit (BRT) is also planned for on us 36, and RTD plans to reconfigure bus service to be integrated with the developing rail and BRT services.

D. BICYCLE AND PEDESTRIAN FACILITIES

Adams County's existing bicycle facilities include both on street accommodation (e.g., bike lanes) and off-street trails (see **Figure A-10**). There are regional trails along the South Platte River and Sand Creek, and portions of the perimeter trail around the Rocky Mountain Arsenal National Wildlife Refuge. There are many short trail segments within developed portions of the County, primarily within municipal boundaries.

Many areas of the County generate or attract substantial pedestrian activity, including schools and major commercial/retail areas (see **Figure A-11**). As the FasTracks rail lines come to fruition, there are great opportunities for transit oriented development (TOD) in the vicinity of the rail stations, which will become high pedestrian activity centers. While pedestrian accommodation does not exist, nor is it appropriate in all portions of the County, these areas are the focus for providing enhanced pedestrian accommodation.

E. CONSTRAINTS AND BARRIERS FOR TRANSPORTATION

Adam County's transportation network includes a number of freeways and mainline railroads. These are positive assets to the community in that they provide regional mobility for residents, businesses, and commodities. However, these systems also present barriers to free movement, since crossings and interchanges are generally limited to major roadways. The South Platte River, and the numerous creeks and ditches create natural barriers, since expensive bridges must be provided at all crossings. The Rocky Mountain Arsenal National Wildlife Refuge (RMANWR) and DIA represent significant barriers to transportation in Adams County. There are no continuous east-west streets between 56th Avenue and 120th Avenue, a distance of nine miles. Likewise, Tower Road, and E-470 are currently the only roadways that provide north-south connections between the RMANWR and DIA. The constraints and barriers in Adams County are shown on **Figure A-12**.

IV. Travel Demand Forecasts

A. TRAVEL DEMAND MODEL SUMMARY

In its role as the designated metropolitan planning organization (MPO) for the Denver region, the Denver Regional Council of Governments (DRCOG) maintains a travel demand model to assess and forecast travel demands. The most current model available for use by jurisdictions within DRCOG is the COMPASS model which forecasts travel demand to a 2035 horizon year. This DRCOG regional model was used as a basis for travel demand forecasting to support the Adams County Transportation Plan.

Refinements were made to the regional model to provide an improved focus on Adams County. Refinements included splitting transportation analysis zones, modifying zone connections to the major roadway system, and adding several existing or planned arterial and collector level roads that are not included in the regional model.

The DRCOG demographic forecasts for 2035 were used as the basis for 2035 travel demand forecasts without modifications. Detailed demographic data and forecasts by transportation analysis zone are provided in Appendix B. It should be noted, however, that DRCOG's forecasting of 2035 regional demographics took place in 2006. Thus the forecasts of households and employment growth took place prior to the economic downtown that affected the U.S. and the Denver region beginning late in the decade of the 2000's. Since these 2035 forecasts did not account for the economic downtown, the growth rates, particularly with respect to employment, are widely viewed as being aggressive. DRCOG is currently preparing demographic forecasts for the new long-range horizon year of 2040 and will develop new 2035 and interim year forecasts to accompany the 2040 projection. DRCOG planners have indicated that they expect revised 2035 forecasts to be substantially lower than current 2035 forecasts.

Table 2 provides summary statistics comparing the current year model with 2035 forecasts for Adams County. It shows projected household growth of 85% between 2010 and 2035 and more than a doubling of employment (110% growth) in that same period.

Table 2. Adams County Growth Forecasts

Measure	2010	2035	Change 2010 to 2035
Households	165,000	306,000	85%
Employment	174,000	365,000	110%

Table 3 provides a comparison of household and employment growth projections for Adams County and the entire Denver region. It shows that growth projections for Adams County are considerably higher than projections for the regional as a whole, with County employment projected to grow at twice the regional rate. If these employment growth rates are realized, in 2035 the jobs/housing balance in Adams County would nearly mirror the balance for the region as a whole, with approximately 1.2 jobs in Adams County for every household in the County.

Table 3. Jobs/Housing

Measure	Adams County	DRCOG Region
Household Growth (2010 to 2035)	85%	57%
Employment Growth (2010 to 2035)	110%	55%
2010 Jobs / Household	1.05	1.24
2035 Jobs / Household	1.19	1.23

Table 4 shows the current and projected share of all trips in the County using public transit. Adams County's share of trips using transit (1.8%) is lower than the percent for the region as a whole, which is consistent with all suburban counties due to the higher transit percentages in Denver, particularly downtown. However the transit share is projected to increase to 2.7% in Adams County in 2035, largely due to the improved transit service anticipated with the Denver Regional Transportation District (RTD) FasTracks program being implemented. Transit shares for home-work commuter trips are approximately double the shares for all trips.

Table 4. Transit Mode Share

Measure	Adams County	DRCOG Region
Transit Share (All Trips) - 2010	1.8%	2.1%
Transit Share (All Trips) - 2035	2.7%	3.1%
Transit Share (Commute Trips) - 2010	3.0%	4.4%
Transit Share (Commute Trips) - 2035	4.2%	6.6%

Table 5 shows that the amount of travel per capita is anticipated to be reduced by approximately 5% in Adams County, from 19.5 vehicle miles of travel (VMT) per day in 2010 to 18.7 VMT in 2035. This reduction is likely due to the improved jobs/housing balance and the increased transit shares discussed above.

Table 5. VMT/Capita

Measure	Adams County	DRCOG Region
Vehicle Miles of Travel (VMT) / Capita (Pop & Emp) - 2010	19.5	17.4
Vehicle Miles of Travel (VMT) / Capita (Pop & Emp) - 2035	18.7	17.8

The 2035 travel demand model described in the previous sections was used to develop traffic forecasts for Adams County roads. Forecasts assume all roadway and transit system improvements that are contained in the Denver Regional Transportation Plan or in adopted transportation plans of Adams County and municipalities in the County. **Figure 1** depicts the roadway network and laneage used as a basis for 2035 forecasting. Using a standard transportation planning practice to increase forecast reliability, traffic forecasts produced by the 2035 travel model were adjusted based on a comparison of 2010 model volumes with actual traffic counts.

Figure 2 shows screenline analysis for the western part of the County. Screenlines are an imaginary line drawn across a part of the County that includes a number of major roads. The screenline analysis is used to measure the forecasted traffic growth among a group of parallel roads and to compare those traffic levels to the existing and planned traffic carrying capacity for those roads.

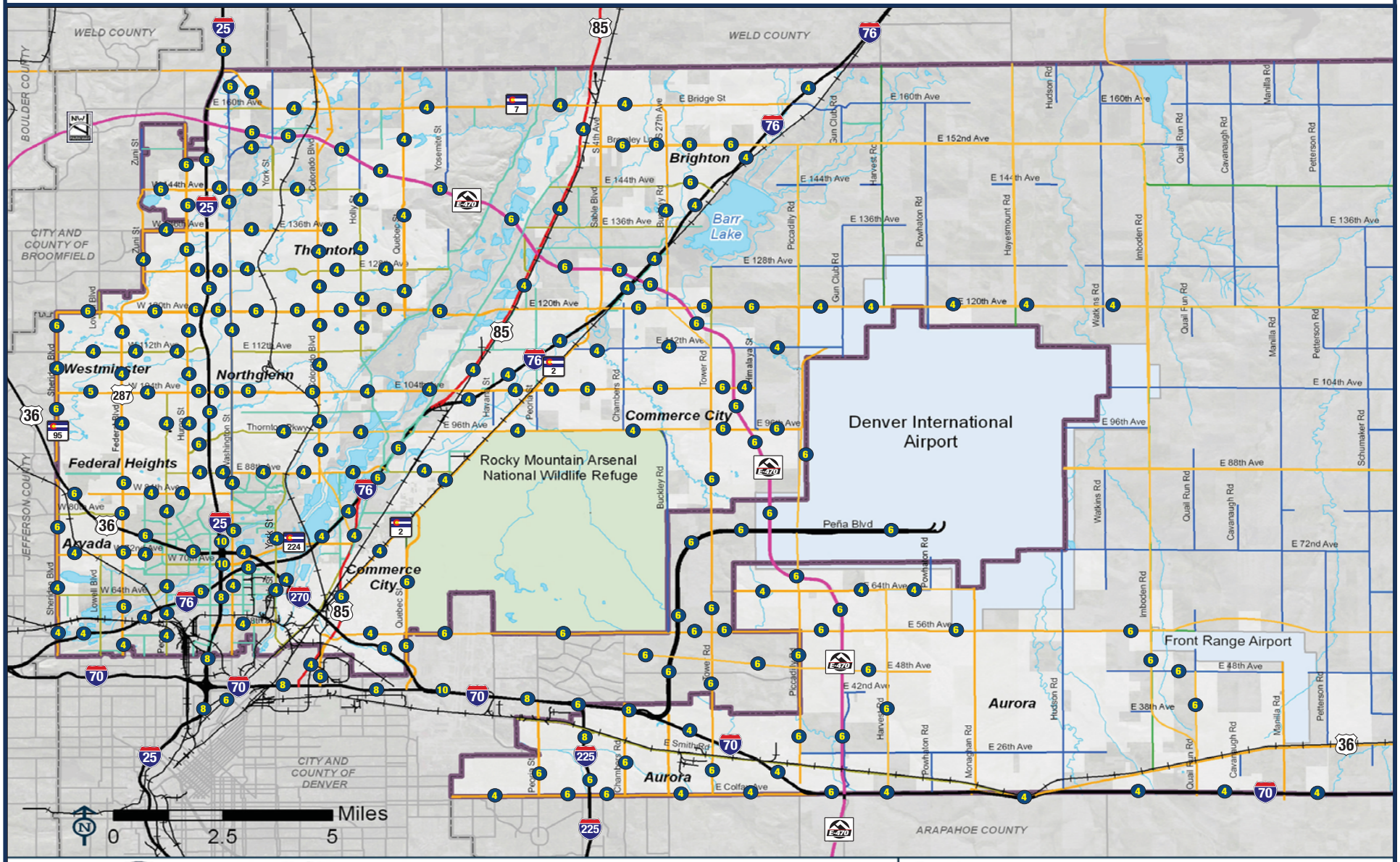
For example, Screenline #1 on **Figure 2** measures north-south travel north of 120th Avenue on major roadways between Pecos Street and Quebec Street, including Huron Street, I-25, Washington Street, Colorado Boulevard, and Holly Street. The Screeline #1 graph shows that the existing daily traffic volumes on these roads totals approximately 170,000 vehicles per day (vpd) while existing capacity of those roads is approximately 280,000 vpd. However, traffic volumes are forecast to grow to 350,000 vpd, outpacing the capacity expansion to approximately 320,000 for these roads. The forecasts show that traffic for north-south travel north of 88th Avenue across Screenline #2 are also expected to exceed capacity in 2035.

In contrast, total roadway capacity across the South Platte River north of I-270 (Screenline #3) is anticipated to be sufficient to accommodate forecasted traffic growth. Similarly north-south roadway capacity between the Rocky Mountain Arsenal National Wildlife Refuge and Denver International Airport is expected to exceed traffic forecasts (Screenline #4). For both Screenlines #3 and #4 it should be noted that much of the capacity that is needed to accommodate travel demand is on the E-470 tollway.

Figure 3 shows 2035 forecasts on individual roadways throughout Adams County. A comparison of 2035 forecasts with existing traffic volumes (shown in Appendix A, Figures A-3a and A-3b) shows that forecasted traffic growth ranges from relatively small increases on some of the arterial roads in the well developed western part of the County to two-fold or greater growth projected on many of the developing corridors in the eastern and northern parts of the County.

A roadway's capacity depends on several factors particular to that individual roadway, including numbers of lanes, road type, level of access control, traffic control such as signal and stop signs, topography and the mix of vehicle types. To provide a sense of the how forecasted traffic volumes compare with the capacity of the baseline future roadway system (as shown on **Figure 1**), typical capacity thresholds shown in **Table 1** were used.

Figure 1. Baseline 2035 Roadway Network (West)



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Legend

- Adams County Boundary
- Municipal Area
- X — Lanes Used for Modeling Baseline (if >2)

Roads

- Freeway
- Expressway
- Tollway
- Principal Arterial
- Minor Arterial
- Rural Arterial
- Collector
- Section Line Arterial

Figure 2. 2035 Screenlines

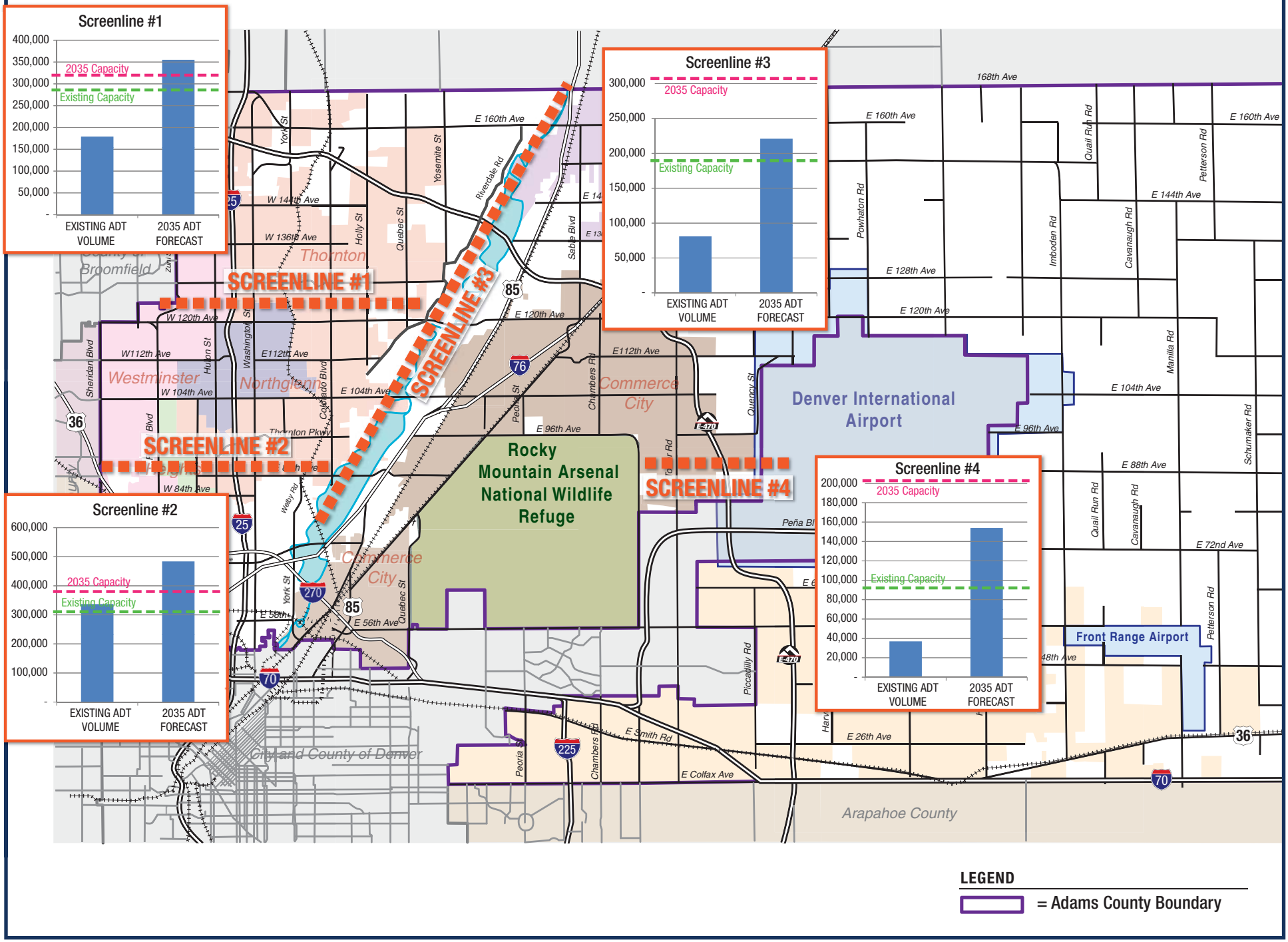
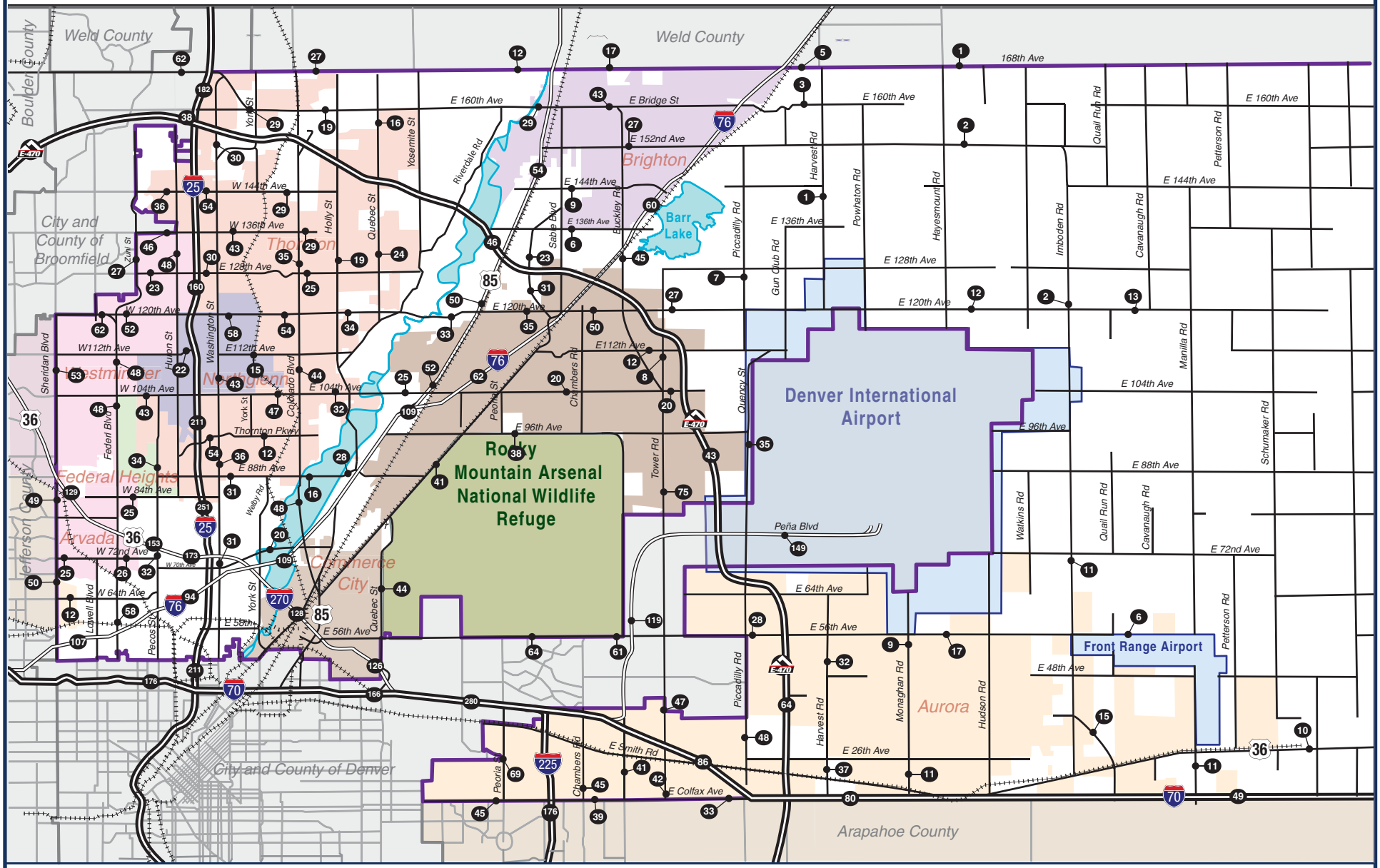


Figure 3. 2035 Traffic Forecasts (West)



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LEGEND

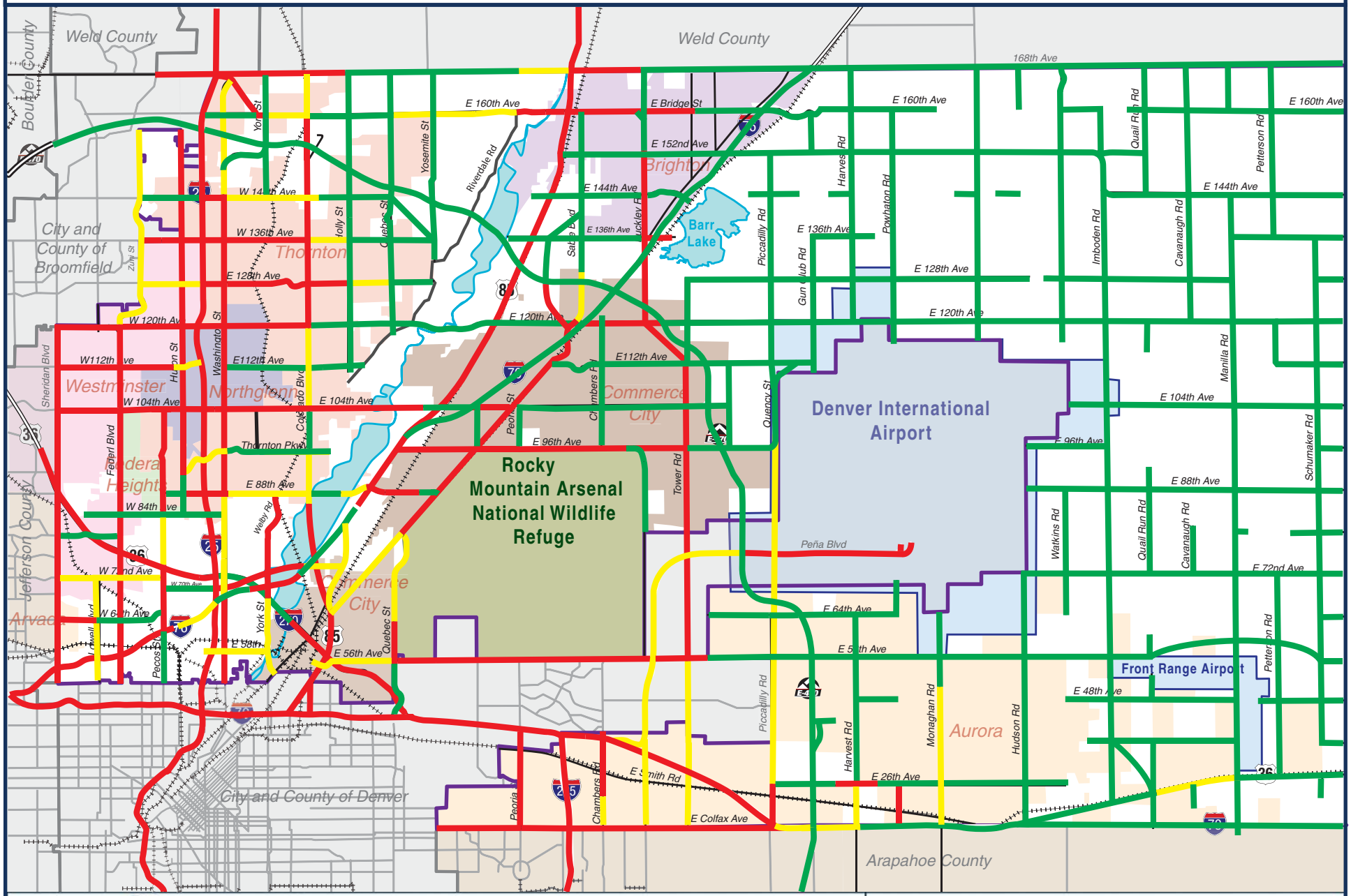
Adams County Boundary

2035 Traffic Volume Forecasts (x1000)

Using these capacity thresholds, the baseline roadway system and 2035 traffic forecasts, volume/capacity ratios were calculated for 2035. Volume/capacity ratios (V/C) provide a measure of the level of congestion anticipated on a roadway. **Figure 4** shows ranges of forecasted 2035 V/C ratios for major road segments in Adams County. Roads where 2035 traffic forecasts exceed the typical capacity for that roadway (or V/C greater than 1.0) are shown in red. The figure shows that most of the freeway system in and around Adams County would be over capacity in 2035 with only baseline improvements. In addition, several of the major arterials are shown with V/C greater than 1.0 in the western part of Adams County. The arterial roadway segments with projected V/C greater than 1.0 are predominantly within municipalities or municipal planning areas.

Roadways in the eastern part of the County are generally expected to continue to carry relatively low volumes of traffic and to remain uncongested. Due to the sporadic and low density development in the east, traffic forecasts cannot be reliably developed and are not shown. However, actual traffic conditions should be monitored and accompanying roadway needs identified. The growing oil and gas exploration and production in the middle and eastern part of the County has the potential to generate truck traffic which would require appropriate improvements to the roadway network.

Figure 4: 2035 Volume to Capacity Ratio with Planned Improvements (West)



V. Long Range Transportation Plan

As a community's Comprehensive Plan is the 'blueprint' for future land use, the Long Range Transportation Plan element helps to address the traffic and transportation needs of this vision. Adams County has both constraints and opportunities when it comes to providing good transportation for its residents, businesses, commuters and visitors now, and in the future. As outlined in the previous Plan Sections on Policies & Strategies, Existing Conditions and Future Travel Forecast, the focus of the Transportation Plan (Plan) shifts to the long range multimodal opportunities and infrastructure investment needs of the County.

Toward this end the long range multimodal transportation plan documents the following:

- Identification of the County's Strategic Corridors
- Vision Plans
    - Roadway Element
    - Transit Element
    - Bike Element
    - Pedestrian Element
    - Transportation Demand Management (TDM) Element
- Phasing and Implementation

A. STRATEGIC CORRIDORS

The Strategic Corridors map (**Figure 5**) shows the highest level framework of the existing and planned Adams County transportation network at the regional and county-wide level. The primary purpose for indentifying the Strategic Corridors is to focus on the multimodal mobility needs of the County, particularly in light of the physical constraints that impede continuity through the County (refer to 'Constraints' under Section III of the Plan). Five types of Strategic Corridors are identified:

- FREEWAYS, MANAGED LANES, AND TOLLWAYS are the highest speed and highest capacity roadways that are part of the U.S. Interstate Highway system (I-70, I-25, I-225, I-76, I-270 and US 36) or the Denver region's beltway system (including E-470 and the Northwest Parkway). The County's Bus Rapid Transit (BRT) and regional bus service typically utilize these high capacity roadways as well. Because these facilities are maintained by the Colorado Department of Transportation (CDOT), regional toll authorities and the High Performance Transportation Enterprise, the county will need to continue working jointly with other jurisdictions and stakeholders for future improvements along these corridors.
- REGIONAL RAIL TRANSIT CORRIDORS include the five passenger rail corridors in Adams County that are being implemented as part of the Denver Regional Transportation District (RTD) FasTracks system (East Corridor, I-225 Corridor, North Metro, Northwest Rail and Gold Line). Also included are corridor preservation efforts for a future RTD rail corridor between Commerce City and Brighton (refer to the NATE study), and CDOT's long-term vision to build out inter-regional high speed rail between Fort Collins and Pueblo; and DIA and the mountain communities. Adams County's North Metro station at 72nd in Commerce City, as well as the

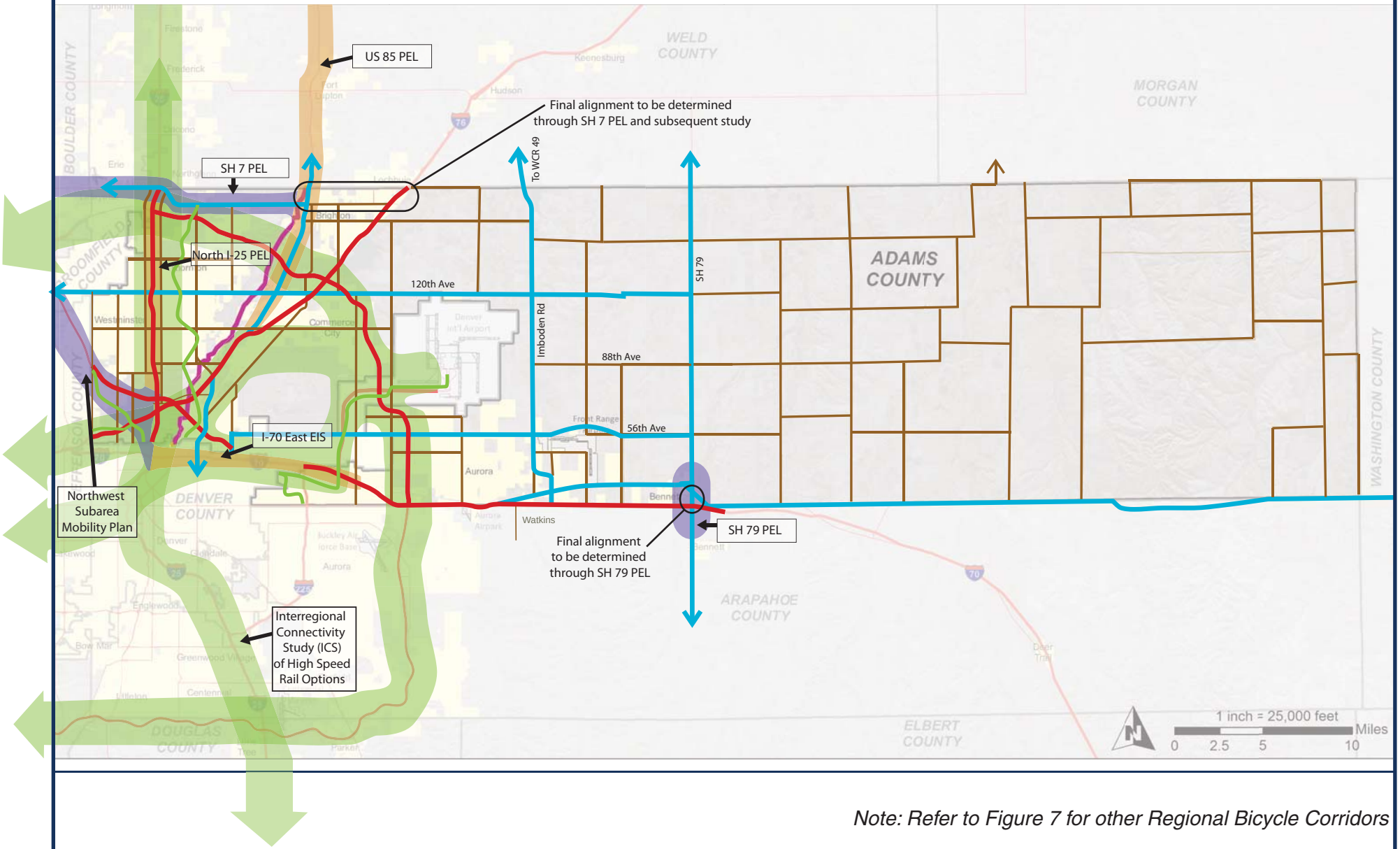
Pecos station along the Gold Line, have been identified as potential locations to transfer between RTD's FasTracks commuter rail and CDOT's future high speed rail technologies.

- REGIONAL STRATEGIC ROAD CORRIDORS are the arterial roadways that have the greatest regional continuity to facilitate mobility and provide connectivity between communities both within and outside Adams County (including State Highway [SH] 7, 120th Avenue, 56th Avenue, US 85, Imboden Road, and SH 79). Mobility is the predominant function for these corridors; access will be limited in order to provide safe and efficient through travel.
- STRATEGIC ROAD CORRIDORS are other urban major arterials and rural arterials that also satisfy longer distance mobility needs but have less regional continuity within and outside the County compared with Regional Strategic. In the urban areas of the County, many of these corridors have the characteristic of being built as commercial corridors; therefore, while mobility is also important on these strategic corridors, the County will be deliberate, but less restrictive than along the regional strategic corridors.
- STRATEGIC TRAIL CORRIDORS includes the South Platte River Trail, which is also the alignment for the Colorado Front Range Trail connecting to Wyoming and New Mexico. Also included as strategic trail connections are the routes designated as regional bike corridors in the DRCOG Metrovision Plan, as well as the on-street regional bikeways designated in the Bicycle Element. These trail corridors continue to serve recreational needs, but are further acknowledged for regional commuter bike connectivity.

Several multi-jurisdictional corridor studies or are currently underway that affect Adams County's strategic corridors. These corridor studies are identified on **Figure 5** and briefly described below:

- I-70 EAST ENVIRONMENTAL IMPACT STATEMENT (EIS) is an ongoing study of I-70 highway improvements from I-25 to Tower Road.
- NORTH I-25 PLANNING ENVIRONMENTAL LINKAGE (PEL) STUDY is a corridor study to look at improving conditions on I-25 from US 36 to SH 7.
- RTD NORTHWEST SUBAREA MOBILITY PLAN is an upcoming study to analyze mobility improvement needs and develop a plan for moving forward with the Northwest Rail Line.
- INTERREGIONAL CONNECTIVITY STUDY is currently underway and is examining the feasibility and potential alignments for high speed rail from Fort Collins to Pueblo, and from DIA to the mountain communities.
- SH 7 PEL STUDY is looking at ways to improve the conditions on SH 7 from US 287 in Lafayette to US 85 in Brighton. Potential realignments and supplemental connections are being considered at both the east and west ends of the corridor. The recommendations on the east end of the corridor near US 85 may affect the configuration of Bridge Street and/or Baseline Road to the east of US 85 through Brighton.
- US 85 PEL STUDY is an upcoming study of the US 85 corridor through Adams and Weld Counties from I-76 to Ault to refresh the US 85 Access Control Plan and establish a vision for the corridor.
- SH 79 AND KIOWA BENNETT ROAD CORRIDORS PEL STUDY is addressing the alignment of SH 79 through the Town of Bennett, including a potential grade separated crossing of the UPRR Railroad and connection to Kiowa Bennett Road south of I-70 in Arapahoe County.

Figure 5. Strategic Corridors



Note: Refer to Figure 7 for other Regional Bicycle Corridors

Imagine ADAMS COUNTY

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LEGEND

- Freeways / Tollways
- Regional Strategic Corridors
- Corridor Study Underway
- Regional Transit Corridors
- Strategic Corridors
- Colorado Front Range Trail

ADAMS COUNTY

The County's transportation system must provide multi-modal options for travel to, from and within Adams County. The following sections provide the vision plan maps and descriptions of the five primary modal elements of the transportation plan, including the Roadway Element, Transit Element, Bicycle Element, Pedestrian Element, and Transportation Demand Management (TDM) Element. Each of these modal elements builds upon previously completed plans including subarea studies, corridor studies, and municipal transportation plans.

B. ROADWAY ELEMENT

The Roadway Element is depicted in **Figure 6** and documents the functional classification of the roadway network and new interchanges proposed to be implemented along freeways, toll roads and US 85.

FUNCTIONAL CLASSIFICATION

The primary function of a roadway is to provide either a high level of mobility (where higher speeds occur and direct land access is restricted) or provide a high level of accessibility (where speeds are lower and direct access is emphasized). In addition, there are intermediate roadway facilities whose function is to provide a transition between mobility and accessibility function. The primary determinants of functional classification are length of trip, average travel speed, frequency of access points, and continuity.

Mobility is the predominant function for the Regional Strategic Corridors with access limited to intersections at ½-to-1-mile spacing in order to provide safe and efficient through travel. Reasonable access from less functional roadways (E.g., minor arterials and below) that connect to a regional strategic corridor at the ½-to-1-mile access spacing will be identified and encouraged for access to local development. For the purposes of rights-of-way dedications, the typical cross section for the regional strategic corridors is 140-feet.

The access spacing for Major Arterials will be deliberate, but may be less restrictive than the ½ to 1-mile access spacing on a case-by-case basis. For rural arterials, access spacing will generally be allowed at ¼ to ½-mile spacing, with shared access between parcels encouraged on a case-by-case basis. For purposes of rights-of-way dedications, the typical cross sections for urban Major Arterials and Rural Arterials is 140-feet and 120-feet respectively.

Maintaining mobility and access on the arterial network in the more suburban and rural areas of the county may include the need for interim access, with the vision to maintain the integrity of properly spaced access for the build out condition of a roadway. Adams County will develop an interim access permit policy and process where a temporary access (time frame to be determined on a case-by-case basis) shall be allowed provided it does not impede mobility or cause a safety issue. Possible criteria to be used to develop the policy and process are MUTCD Signal Warrants using accidents and volumes).

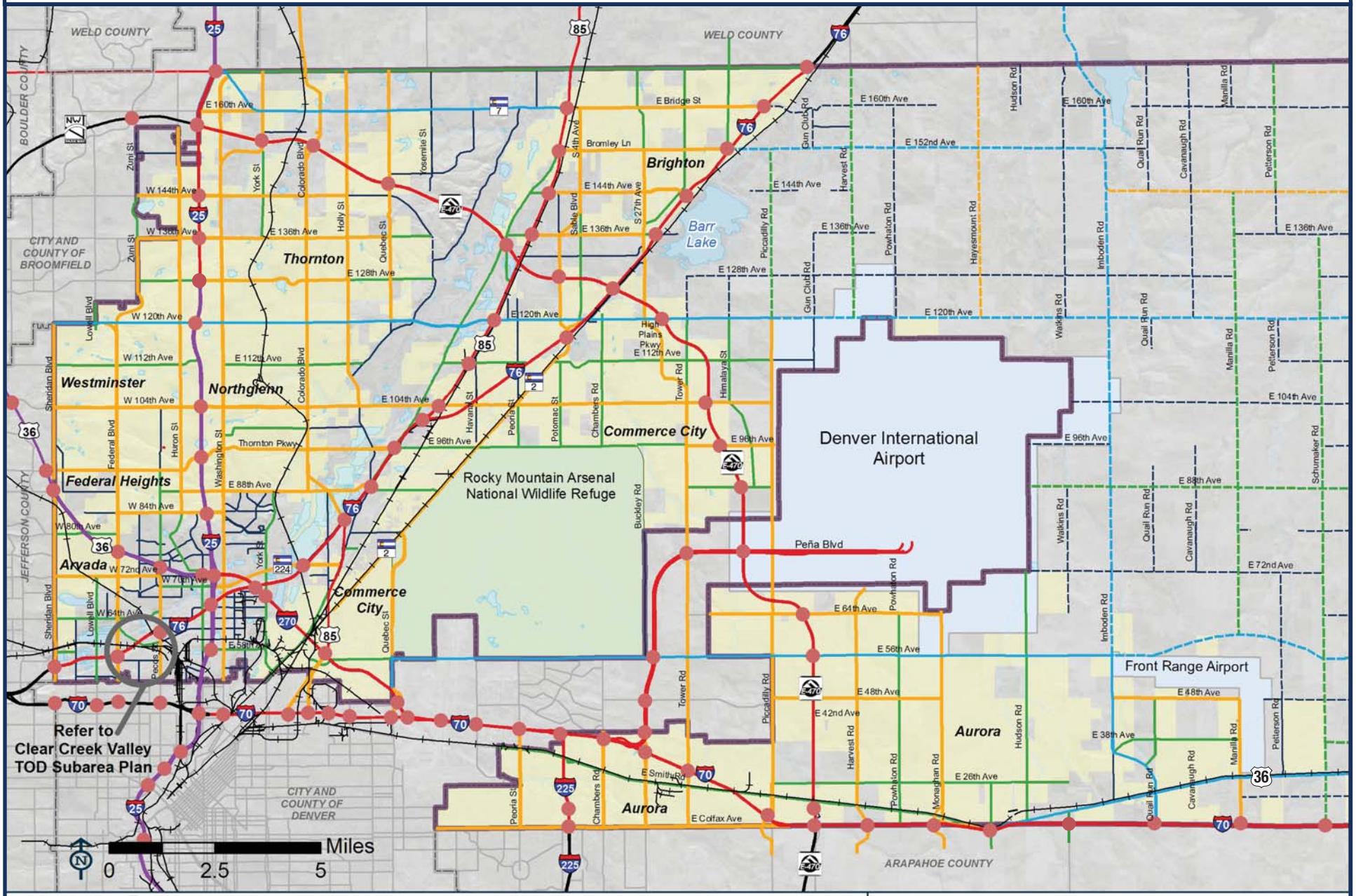
Table 6 presents the general characteristics for the types of roadway function in the roadway element.

Table 6. Roadway Characteristics by Functional Classification

Characteristic	Freeways & Tollways	Regional "Strategic" Arterials	Major Arterials	Minor Arterials	Rural Arterials	Collectors	Locals
Functional Priority	Mobility Only	Mobility Only	Mobility Primary	Mobility Primary Access Secondary	Mobility Primary Access Secondary	Access Primary Mobility Secondary	Access Only
Service Performed	Highest level of traffic movement, unimpeded high speed & high volume	High speed, unimpeded regional connections	Relatively high speed, unimpeded connections	Traffic movement, relatively high speed	Traffic movement, relatively high speed	More frequent land access, relatively low speeds	Direct land access, lowest speeds
Typical Trip Lengths	Interstate & between major regions	Between multiple counties	Between communities and areas in the urban and suburban parts of the county.	Between and within major communities	Between communities and areas in the rural to suburban parts of the county	Within communities	Within neighborhoods & business centers
Continuity	Totally interconnected and continuous between states, inter-regionally and between metro areas	Totally interconnected and continuous between counties and over an entire metro area	Inter-connected & continuous within major regions & metro area	Inter-connected & continuous within metro area.	Inter-connected & continuous between & within rural areas	Interconnected & continuous within communities	No continuity required

Characteristic	Freeways & Tollways	Regional "Strategic" Arterials	Major Arterials	Minor Arterials	Rural Arterials	Collectors	Locals
Access Type and Spacing	Interchanges at 1-to-1-1/2 mile spacing. No direct land/private access.	½-to-1-mile spacing. No direct land/private access.	½-to-1-mile spacing. Direct access may be considered provided if no other reasonable form of access exists. Shared access encouraged.	¼-1/2 mile spacing. Direct access provided if no other reasonable form of access exists. Shared access encouraged.	¼-1/2 mile spacing. Shared access encouraged.	1/8-mile spacing Some restrictions on private access.	Unrestricted private access.
Facility Spacing							
Urban		1-3 miles	1-3 miles	½-1 Mile		¼-1/2 Mile	As needed
Rural		5+/- Miles	5+/- Miles	2 +/- Miles	2 +/- Miles	1 +/- Miles	As needed
Right-of-way Width		140 feet	140 feet	120 feet	120 feet	80 feet	Varies up to 60' depending on roadway function
Traffic Controls	Free Flow Merge/diverge	Signals, interchanges (U.S. 85) as warranted	Signals	Signal typical, stop signs in special circumstances	Stop signs (primarily on side streets)	Signalized & stop controlled intersections as warranted	Stop signed controlled or uncontrolled, as warranted

Figure 6a. Roadway Plan (West)



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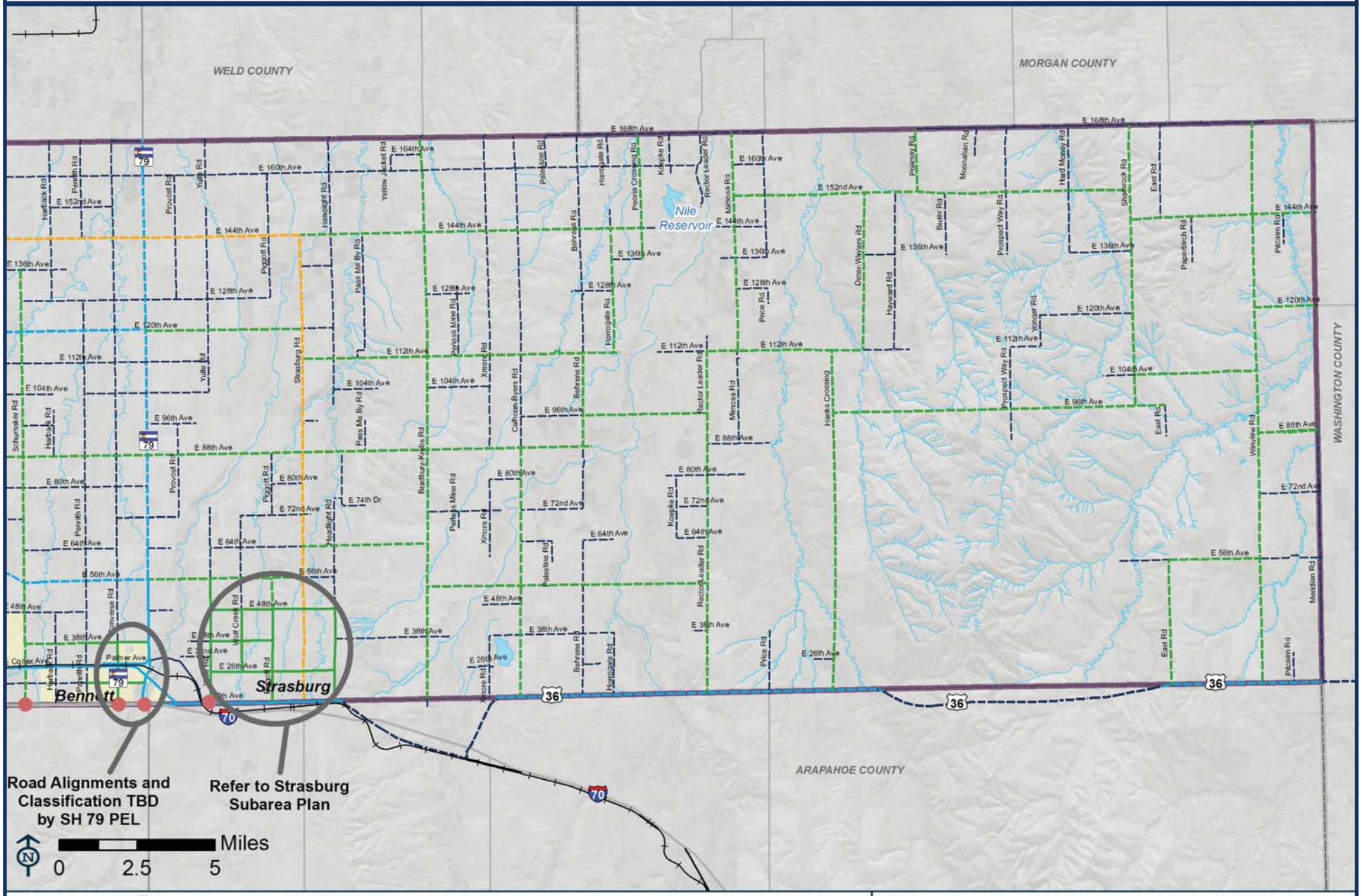
Legend

- Interchange
- Freeway/Tollway
- Freeway with Managed Lanes
- Regional Arterial
- Rural Regional Arterial
- Major Arterial
- Rural Major Arterial
- Minor Arterial
- Rural Arterial
- Collector
- Rural Collector

Figure 6b. Roadway Plan (East)



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Legend

- Interchange
- Freeway/Tollway
- Freeway with Managed Lanes
- Regional Arterial
- Rural Regional Arterial
- Major Arterial
- Rural Major Arterial
- Minor Arterial
- Rural Arterial
- Collector
- Rural Collector

C. BICYCLE ELEMENT

The accommodation of bicycle travel is integral to Adams County's vitality and quality of life. The primary goal of this Bicycle Plan is to present a framework for a practical and comprehensive bicycle network throughout the County that promotes safe, sustainable, and healthy travel options for residents, employees, and visitors.

TYPES OF BICYCLISTS

The characteristics of bicyclists, and the preference for different types of bicycle facilities, can vary greatly. The most common factors that are used to classify different types of bicyclists include trip purpose, comfort level, and physical ability. The characteristics of bicyclists described below can help to identify appropriate bicycle facilities based on adjacent land uses and likely types of riders, and to ensure that the County's bicycle network considers and accommodates all different types of bicyclists.

The purpose for making a bicycle trip can be utilitarian or recreational. Utilitarian trips are those that get a person to a designated location such as work, school, or shopping, by bicycle. Bicyclists making utilitarian trips can vary greatly in skill level and desired facility type. Children riding to school may not have the same understanding of the rules of the road as adults, and therefore may need special accommodation for their trips. Many commuter cyclists prefer the most direct route between their origin and destination. Others may use bicycles for utilitarian trips because they do not have access to an automobile.

Recreational trips include those bicycle trips made for exercise and/or leisure. Recreational bicyclists often prefer loop trips, and visual interest typically takes priority over the directness of the route.

Experienced and confident bicyclists are comfortable riding on most types of bicycle facilities, including roads with no specific bicycle treatments. This group can include both utilitarian and recreational riders who are confident enough to ride on busy roads. They often prefer to ride adjacent to automobile traffic rather than on shared use paths where pedestrians and recreational bicyclists are traveling at slower speeds.

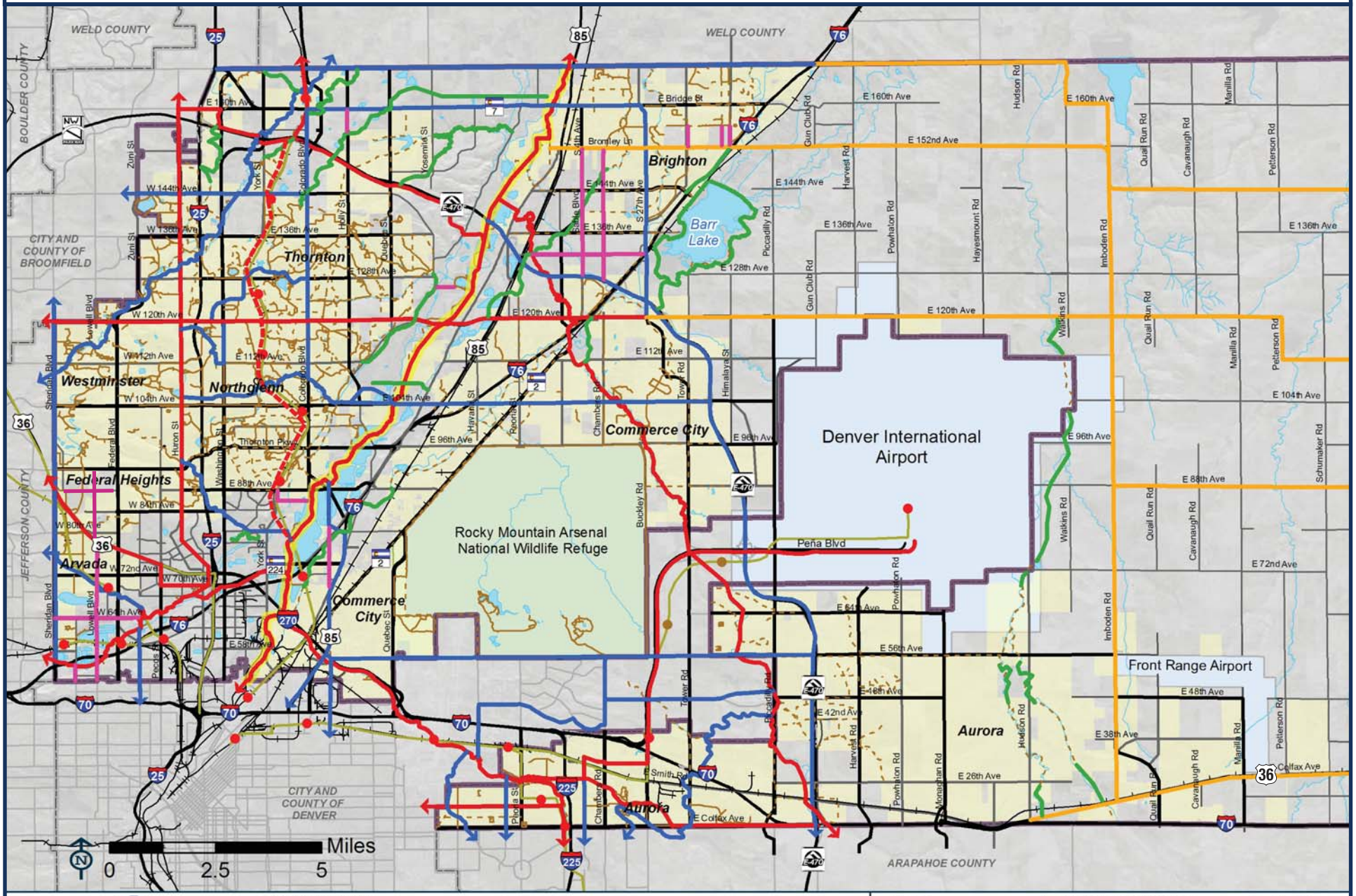
Casual and less confident bicyclists make up the majority of the population. These bicyclists typically ride at slower speeds, prefer shared use paths, and may be willing to use a less direct route to avoid busy streets.

BICYCLE PLAN MAP

The recommended bicycle system for Adams County is an interconnected network of regional bicycle corridors, shared use paths and on-street bikeways that aim to accommodate all types of bicyclists. The system connects residents and employees to transit stations, commercial centers, activity centers, schools and recreational areas.

The Bicycle Plan map (**Figure 7**) depicts the Regional Bicycle Corridors and the Community Bicycle Corridors that are recognized by DRCOG as a part of the regional bicycle system. Bicycle projects on these corridors receive more emphasis in DRCOG's funding allocation process. The Bicycle Plan also identifies regional on-street bikeways in the more rural portions of the County; this network builds upon the County's Open Space, Parks, and Trails Master Plan (OSPTMP), providing recreational loop routes and connections between communities. Many of the trails included in the OSPTMP also are planned to accommodate or consider accommodation of equestrian activities. The Colorado Front

Figure 7a. Bicycle Plan (West)



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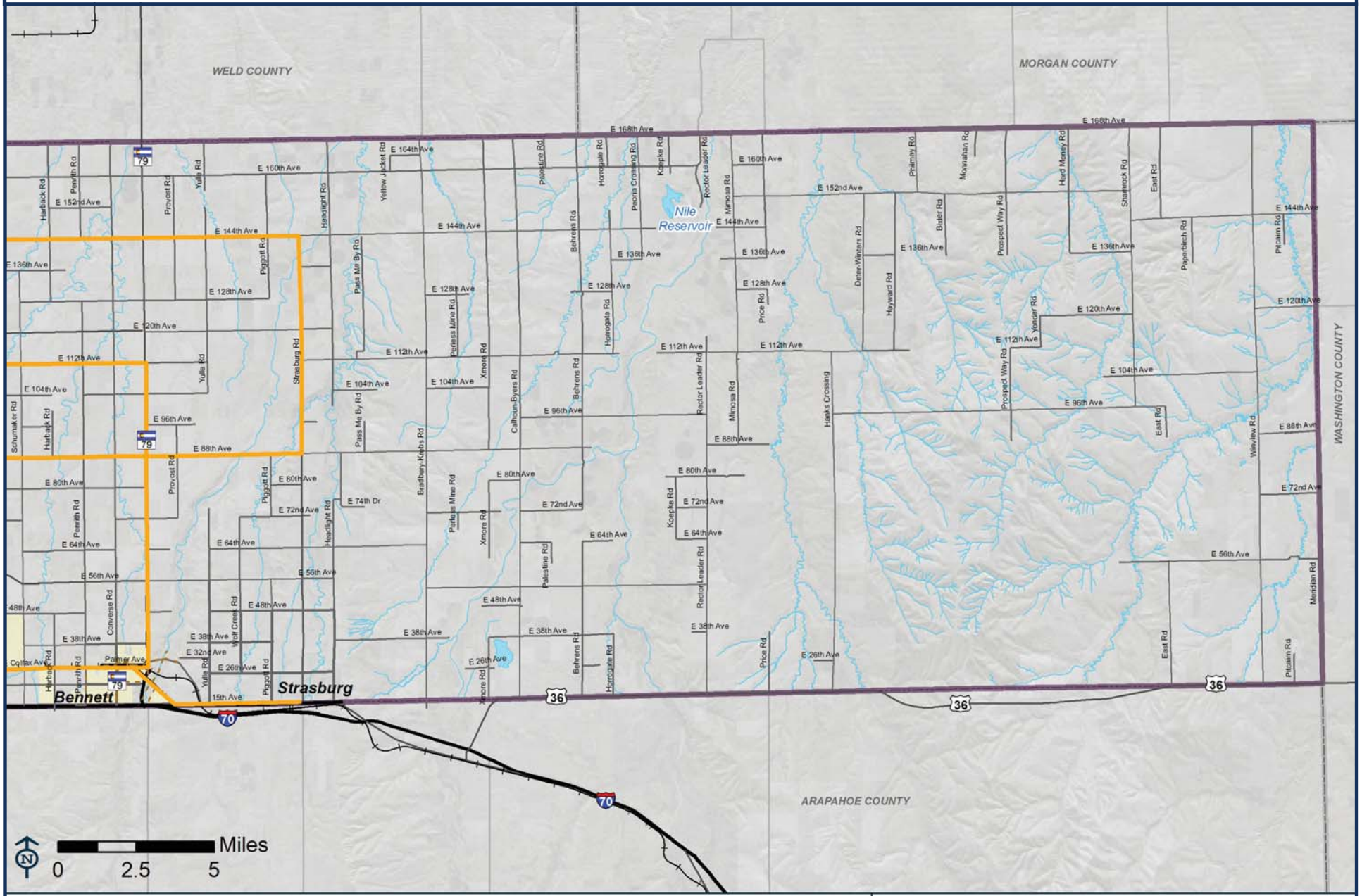
Legend

- Adams County Boundary
- Municipal Area
- FasTracks Station
  - Planned
  - Proposed
- Planned FasTrack Route
- DRCOG Regional Bicycle Corridors
- Other Regional Bicycle Corridor
- DRCOG Community Bicycle Corridors
- Regional On-street Bikeways
- Adams County On-street Bikeway
- Adams County Off-Street Trail
- Colorado Front Range Trail
- Municipal Bikeways (Existing / Proposed)

Figure 7b. Bicycle Plan (East)



Miles
0 2.5 5

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Legend

- Adams County Boundary
- Municipal Area
- **FasTracks Station**
  - Planned
  - Proposed
- Planned FasTrack Route

Type of Trail/Bikeway

- DRCOG Regional Bicycle Corridors
- DRCOG Community Bicycle Corridors
- Regional On-street Bikeways
- Adams County On-street Bikeway
- Adams County Off-Street Trail
- Municipal Bikeways (Existing / Proposed)

Range Trail (CFRT) extends through Adams County along the South Platte River Trail. Colorado State Parks, with the support of many communities, citizens and stakeholders, is in the process of creating this multi-purpose trail from Wyoming to New Mexico along Colorado's Front Range.

Implementation of much of the bicycle network in the urbanized portion of the County will be the responsibility of the local municipalities. However, it is important to provide connections between the planned municipal bikeways and those in unincorporated Adams County, as well as to provide adequate connections to the regional bicycle facilities. The on-street and off-street bikeways in unincorporated Adams County are shown on the Bicycle Plan map; implementation of these facilities is primarily the responsibility of Adams County.

THE 4-E APPROACH

Successful implementation of the County's Bicycle Plan will require a combination of strategies that are commonly referred to as the "4-E" approach. This comprehensive approach combines engineering and planning with enforcement, education, and encouragement.

ENGINEERING – The first step of the planning and engineering is the identification of bicycle destinations and routing, which is depicted on the Bicycle Plan map. The Adams County Transportation Plan contains typical roadway cross-sections that are bike friendly, including on-street bike lanes, wide shoulders, and shared use paths for certain area types and roadway functional classifications. Implementation of the Adams County bikeways should adhere to these cross-sections, along with the guidance provided in the American Association of State Highway and Transportation Officials' (AASHTO) *Guide to the Development of Bicycle Facilities* (2012).

ENFORCEMENT – Local law enforcement can play an important role in providing a safe bicycle system. Enforcement can include such efforts as:

- Enforcing laws that impact bicycle safety by ticketing cyclists and motorists who violate the law
- Developing strategies to reduce bike theft and increasing the proportion of recovered bikes returned
- Developing strategies for reducing assaults on bicyclists
- Implementing bicycle patrols

EDUCATION – A joint education program between the County and the municipalities in Adams County should be developed and implemented to instruct community members in lawful and responsible behavior for both bicyclists and motorists. Effective delivery of a bicycle education program can include:

- Working with school administrators and teachers to integrate bicycle safety into the curricula
- Providing adult cycling courses through local community colleges or other appropriate venues
- Including share the road concepts in drivers' education programs
- Providing safety messages (e.g., share the road, helmet use, etc.) via print and electronic media
- Installing share the road signing along certain bicycle routes

ENCOURAGEMENT – Provision of incentives for bicycling can increase the use of the bicycle system. Encouragement programs can include:

- Initiating bicycle library or bike sharing programs

- Requiring companies and agencies to provide amenities that encourage bicycling such as secure bicycle storage, showers, and lockers
- Providing entry-level bicycling activities in recreational programming
- Participating in and encouraging regional programs such as bike month and bike to work day
- Collaborating with non-profit agencies (e.g., Bicycle Colorado, LiveWell Colorado) to encourage active travel

D. TRANSIT ELEMENT

High quality public transit provides a vital service for the County's transit dependent population and also provides a key element in a sustainable multimodal transportation system for all of the County's residents and workers.

EXISTING SYSTEM

Roughly the western third of Adams County is currently part of the RTD area (see **Figure 8**). This area is served by an extensive network of local and express route RTD buses. In addition there are four call-n-Ride areas where RTD provides bus service in response to calls in the Thornton/Northglenn, Federal Heights and Brighton areas. RTD also provides seven park-n-Ride lots within the County.

RTD also provides Access-a-Ride, their local bus transportation for individuals who cannot access the District's fixed-route bus and rail systems. Qualified transit riders can schedule a trip as long as the origin and destination of the trip are within 3/4 mile of RTD's Local fixed-route transit system.

In addition to RTD's Access-a-Ride, Adams County and communities in the county jointly sponsor A-Lift, providing mobility services to senior citizens and people with disabilities. In the more rural areas of the county, Via Mobility Services provides transportation for elderly and disabled customers. Additionally, Special Transit offers targeted service to Medicaid-eligible patrons.

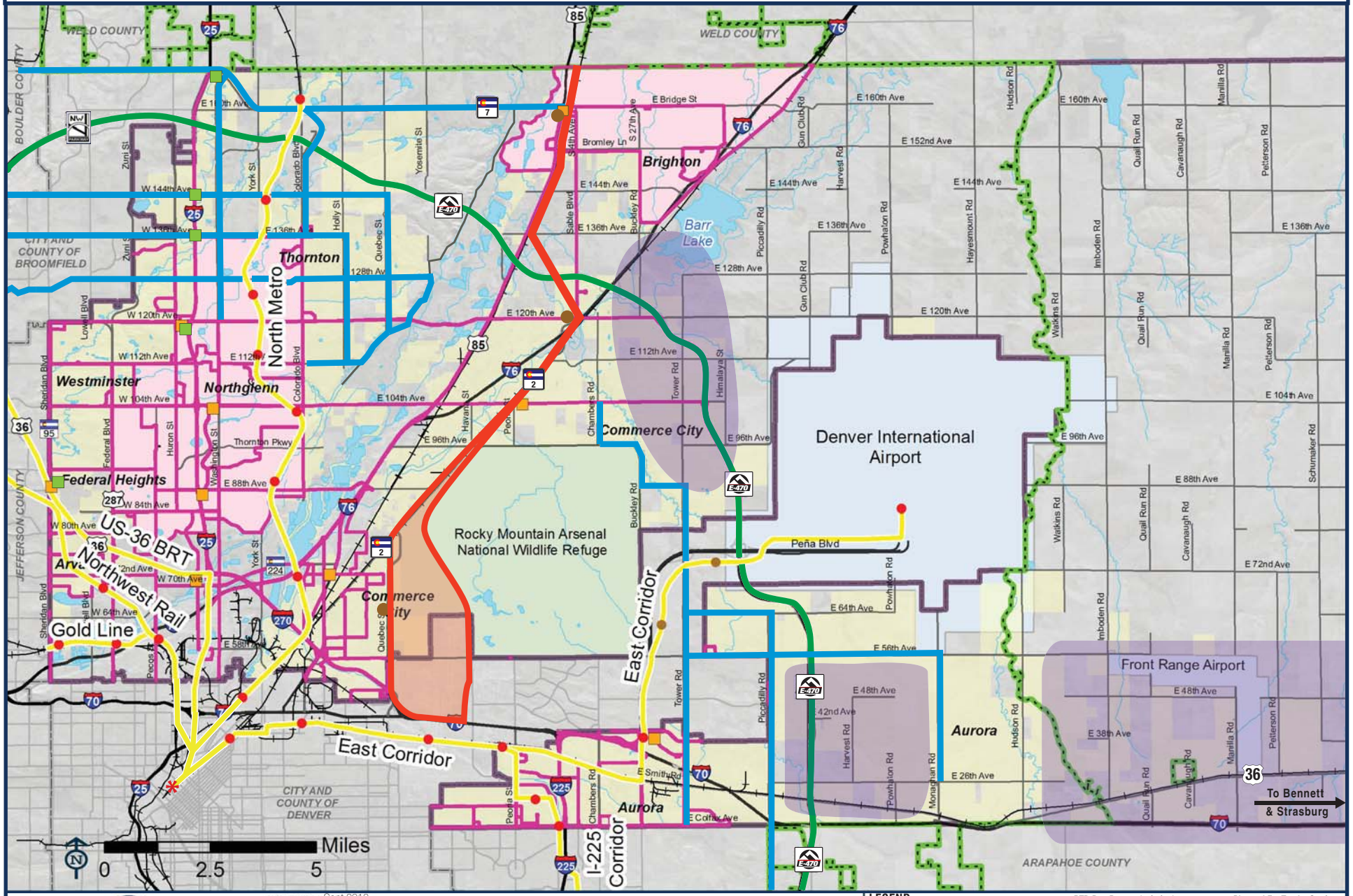
PLANNED SERVICE

RTD FasTracks

The RTD FasTracks program is a regional rapid transit expansion plan to build 122 miles of new commuter and light rail corridors and 18 miles of bus rapid transit (BRT), in addition to new parking and enhanced bus service to accompany the rail and BRT service. Five of the FasTracks rail transit corridors (see **Figure 8**) will serve Adams County, including:

- NORTH METRO – from Denver Union Station to 162nd Avenue at the northern Adams County border, with stations in Commerce City, Thornton and Northglenn
- EAST CORRIDOR – from Denver Union Station to Denver International Airport, with stations in Aurora
- GOLD LINE – from Denver Union Station to Ward Road, with stations in unincorporated Adams County and in Arvada
- NORTHWEST RAIL – from Denver Union Station to Longmont, with a station in Westminster
- I-225 CORRIDOR – Connecting the South I-25 corridor with the East Corridor, with stations in Aurora.

Figure 8. Transit Plan



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LEGEND

- = Adams County Boundary
- = Municipal Area
- = RTD Boundary
- = Call-n-Ride Area (existing)
- = Park-n-Ride (existing)
- = RTD Bus Routes (existing)
- = FasTracks Rail (Planned)
- = RTD Bus Routes (Planned)
- = Future Transit Corridor Preservation
- = Potential Transit Expansion Area
- = Future Park-n-Ride
- = Northeast area Transit Evaluation
- = Planned FasTracks Station
- = Future Transit Station

These planned rail corridors will provide Adams County with substantial upgrades in speed, efficiency, and reliability of transit service. Additionally, the planned transit stations, including the two Gold Line stations in unincorporated Adams County and the several stations planned for Adams County municipalities, will provide opportunities for transit oriented development (TOD). RTD plans to reconfigure bus routes to focus on the FasTracks rail corridor. In addition to the commuter rail corridors, the US 36 Bus Rapid Transit (BRT) from Denver to Boulder also serves the County with the closest stop at Westminster Center.

The schedule for completion of different FasTracks corridors varies widely. The East Corridor, Gold Line, I-225 and the Northwest Rail line to the South Westminster Station at 71st and Lowell are currently or soon to be under construction and are planned to be completed in 2016. Additionally, the US 36 BRT is scheduled for completion in 2015. The other two FasTracks corridors in Adams County, North Metro and Northwest Rail, do not currently have a firm phasing or completion schedule. An important Adams County transportation planning policy is to work closely with RTD to advance the implementation of these FasTracks corridors. A particularly important focus for Adams County is the implementation of the North Metro corridor due the high number of County residents and land uses that it will serve and its TOD potential.

Additional bus routes that are planned by RTD to accompany FasTracks rail corridors are shown on **Figure 8** in blue. Several of these bus route enhancements are needed to serve existing and developing communities and are recommended to be considered for implementation prior to FasTracks rail corridor completion.

The transit element of the Adams County transportation plan also includes transit corridor preservation on two additional corridors that are not part of the FasTracks system (shown in green on **Figure 8**). These preservation corridors include:

- E-470 Corridor - the right-of-way that was included with E-470 construction to accommodate a future passenger rail system
- NATE - the FasTracks initiative also includes purchase of right-of-way through Commerce City to Brighton for a future rail corridor referred to as the Northeast Area Transit Evaluation (NATE) corridor which will provide an additional connection from either the East or North Metro Corridor to Commerce City and Brighton with a potential station adjacent to the Adams County Government Center.

Finally, three Potential Transit Expansion Areas are included in the Transit Plan element and are shown on **Figure 8**. Two of these expansion areas are parts of the Commerce City and Aurora planning areas that are anticipated to have transit supportive development densities but are not served by the existing or planned transit enhancements described above. The third area is the east I-70 corridor, including the Front Range Airport area and the communities of Watkins, Bennett and Strasburg. This area is not currently in the RTD and does not have transit service with the exception of limited weekly Humans Services transportation provided to these three rural communities. It is recommended that these communities work together in coordination with the Adams County local Coordinating Council on Human Services transportation to assess the desirability of expanding rural transit service in the corridor.

Human Services Transportation

Human services transportation in Adams County provides services to transportation disadvantaged residents including those with varying mobility challenges such as the ever increasing number of senior citizens, people with disabilities, lower income families and those with workforce transportation challenges. Currently, there are close to 20 different providers that deliver service to the county,

although many of the services are currently restricted to specific populations such as cancer patients, Medicaid-eligible customers, senior citizens and/or persons with disabilities.

Both fixed route services and demand responsive services are available and costs vary from free trips to donations to the cost of a taxi ride. In many instances previous studies have found duplication of services does exist, but there are regulatory and financial barriers to efficiently coordinating these services. Most of the services are accessible and provide driver assistance to elderly customers and those with disabilities. Costs per trip range greatly and fluctuate from around $20 per trip to $45 per trip.

In the urban area Adams County and communities in the county jointly sponsor A-Lift, providing mobility services to senior citizens and people with disabilities. In Brighton and the Tri-Valley communities of Bennett, Strasburg and Watkins, Via Mobility Services provides transportation for elderly and disabled customers as part of its services available to the general public.

These are just a few of the providers serving an ever-expanding universe of needs. Funding for these services comes from a variety of programs -- federal state and regional sources. Adams County recognized the need for collaboration among service providers, customers, agencies and organization serving elderly and disabled patrons and took advantage of state funding to form a Local Coordinating Council (LCC) to help bring more efficiency to county services.

State funding for Local Coordination Council (LCC) formation

In order to promote coordination of particular transportation programs they fund, the Federal Transit Administration (FTA) and Department of Health and Human Services (HHS) formed a federal level coordinating council, the Interagency Transportation Coordinating Council (CCAM) and launched United We Ride in 2004. United We Ride intends to overcome barriers between programs to create state and local partnerships for common-sense problem-solving. States are encouraged to form similar coordinating councils at the state level. United We Ride offers numerous resources to assist states and localities in this effort. Colorado responded to the national effort by creating the State Coordinating Council (officially the Colorado Interagency Coordinating Council for Transportation Access and Mobility).

In response to United We Ride, the State Coordinating Council developed policies, funding mechanisms and resources to help develop statewide local/regional coordinating councils (LCCs) The coordinating councils are intended to improve communication and collaboration, build coordinated transportation programs, promote coordination among local human service and transportation agencies, and provide feedback to the State Coordinating Council on what's working and what problems need to be addressed. To initiate this effort in 2011 the Colorado Department of Transportation requested proposals from counties, regional agencies and other jurisdictions to create Local Coordinating Councils (LCCs). The grants of $5,000 to $15,000 for one year are designed to allow jurisdictions to contract with a facilitator or other staff to form and implement an LCC. Adams County obtained an implementation grant in 2011 to facilitate the formation of the Adams County LCC.

What is an LCC and what can it accomplish?

An LCC is an entity that works to coordinate human services transportation in order to:

- Make the most efficient use of limited transportation resources
- Avoid duplication of overlapping individual programs
- Encourage the use an sharing of resources

- Increase resources for human services transportation
- Serve all populations in the county that need services with more extensive service, lower costs and easier access
- Improve overall county mobility

Local coordinating councils consist of stakeholders with an interest in improving mobility or providing transportation services. Local coordinating councils may undertake a variety of activities. Such activities will reflect the specific needs of the area, the location of services and jobs, options for mobility improvements, and existing services and available resources.

One local council may primarily serve as a forum to exchange information and/or perform an information and referral function; another may contract for services; and still another may serve as a broker for non-emergency medical transportation and other transportation services. An effective strategy is to start small with limited activities and achieve successes before taking on more complex activities.

The Adams County LCC:

With facilitation expertise provided by Christensen Consulting Adams County service providers, nonprofits, social service agencies and other stakeholders have been meeting since June 2012 to formulate the makeup, structure, mission and goals of the Adams County LCC. The first goal of the LCC was to get as many stakeholders to the table as possible in order to provide an inclusive and comprehensive discussion of the state of human services transportation in the county, and to understand the needs of the different populations and service providers involved. To date the LCC includes a list of 25 stakeholders, including:

Service Providers

- A-Lift
- Adams County School Districts
- Careful Wheels Transportation
- RTD
- Via Mobility Services
- Yellow Cab

Local Jurisdictions

- Adams County
- City of Aurora
- City of Northglenn
- City of Thornton
- City of Westminster

Nonprofits (Care providers)

- Aurora Commission for Senior
- Brighton Senior Center
- Jurisdictions/Departments
- Adams County Adult Services
- Adams County Community Development
- Adams County Head Start
- Adams County Veterans Services
- Adams County Workforce
- Denver Mobility and Access Council (DRMAC)
- Easter Seals
- North Metro Center for People with Disabilities
- North Metro Community Service
- Senior Hub
- Seniors' Resource Center

Additional groups are being added as the LCC continues to reach out to potential stakeholders. Additional stakeholders include: chambers of commerce, economic development agencies, hospitals, assisted living centers, recreation centers, shopping centers and government and service buildings.

The LCC has two primary tasks in its formation stage:

1. Apply for second year funding from CDOT to continue to organize, and
2. Develop a strategic plan for coordinating Adams County human services transportation

An early action item for the LCC includes participation in the Adams County Long Range Transportation Plan update. The LCC members agreed to recommend the following Policy and Strategies to ensure human services transportation is prominent in the plan update:

Human Services Transportation Policy:

> Coordinate human services transportation so it is more efficient and provides countywide coverage for people with mobility challenges such as older adults, people with disabilities and individuals with low income that is convenient, affordable for users and cost effective for service providers.

Implementation strategies:

Through the Adams County Local Coordinating Council (LCC), working with providers, social service agencies, government and the private sector, develop and implement the following strategies for improving human services transportation:

STRATEGY 1: Identify and analyze human services transportation and develop opportunities for efficiency.

A. Identify unmet service needs
B. Identify gaps in service, and in funding
C. Identify regulatory and policy constraints to coordination of trips; develop strategies to eliminate barriers to coordinated service

STRATEGY 2: Develop methods for increasing awareness among users of existing transportation options and resources.

A. Working with social services agencies, agencies serving targeted audiences, providers, and existing information resources such as DRMAC, develop means for increased marketing.

STRATEGY 3: Identify financial and personnel needs to enhance the work of the LCC in coordinating human services transportation.

A. Identify appropriate entity(ies) to "champion" the work of the LCC and determine personnel needs for implementing strategies
B. Document existing and identify new or additional funding opportunities.
C. Identify opportunities for collaborating on funding applications, including private sector employers, other not-for-profit entities.

STRATEGY 4: Develop short and long term priorities and implementation plan to improve human services transportation in Adams County.

A. Identify future coordination strategies to blend, enhance and increase service delivery and efficiency

E. PEDESTRIAN ELEMENT

The Pedestrian Plan for Adams County focuses on providing high quality pedestrian accommodation in key areas of the County where pedestrian activity is currently high or is expected to be high in the future. The Pedestrian Activity Centers on **Figure 9** include the planned and proposed FasTracks stations. Quarter-mile and half-mile buffers are shown around each station; while a quarter-mile is the distance a typical person is willing to walk to access a bus, the walkable distance for rail transit can be up to a half-mile. The streets within the half-mile buffer of the transit stations should include provision of high quality pedestrian facilities including sidewalks and crossing treatments at intersections. The maps also identify schools and retail centers in Adams County. Sidewalks and intersection crossing treatments should be provided along routes that provide access to these land uses. Within retail centers, pedestrian circulation should be attractive and safe to encourage walking within the centers.

In addition to the pedestrian activity centers, the Adams County Transportation Plan includes typical roadway cross-sections for different area types (urban vs. rural) and roadway functional classification. These multi-modal street standards include the sidewalks in the urban areas of the County.

F. TRAVEL DEMAND MANAGEMENT ELEMENT

In the past, the solution to rising levels of congestion was to build new and bigger roads. This encouraged still more growth to occur in these areas of now higher and better accessibility, which once again resulted in increased congestion. Although road improvements will continue to be an important strategy for providing mobility, many communities no longer have the financial resources to build all the necessary roads. In addition, they would likely face serious environmental problems and could encounter strong public opposition. Also, for urban areas such as Denver which are not in attainment with federal clean air standards, federal law places substantial constraints on the type and magnitude of road expansion that can be undertaken.

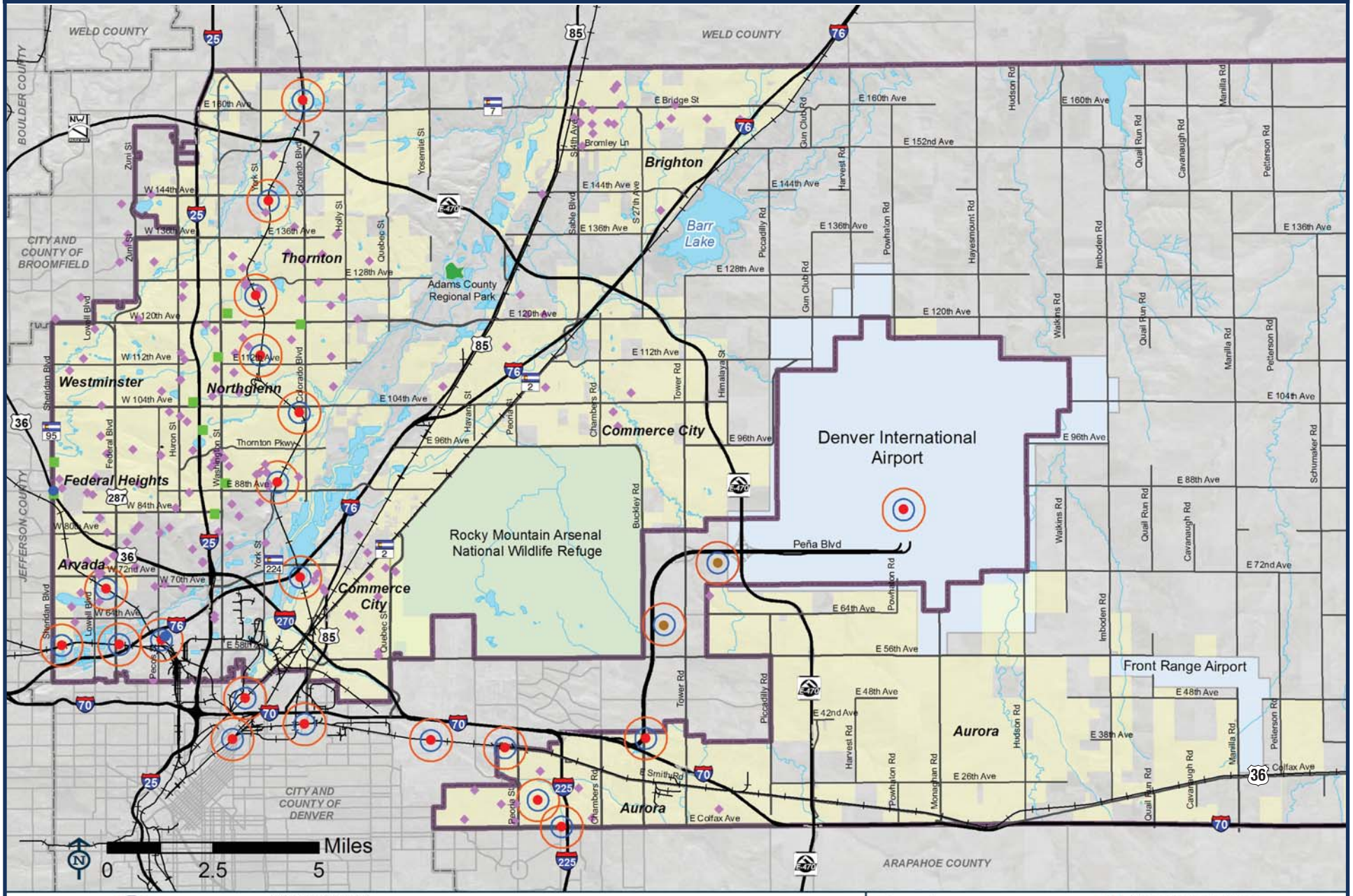
Since neither Adams County, its cities nor the Denver metropolitan area as a whole will be able to "build its way out of congestion", measures that manage the capacity of existing facilities and preserve the utility of new ones will be necessary in the future. Reducing travel demand on the road system is a good first step in the right direction. The challenge is to make better use of capacity that is already in place by redistributing demand: either by mode, by time or over space.

Increasing attention has been paid to complementary measures that can reduce the demand on the road network by changing the choices made by drivers. A further motivation to explore such measures comes with the Federal Clean Air Act Amendments of 1990 (CAAA), which mandates reductions in vehicle miles of travel and increases passenger car occupancy in areas with poor air quality.

Transportation Demand Management (TDM) describes a set of strategies that result in more efficient use of transportation resources. Strategies that reduce travel, improve operational efficiency, and help air quality have been grouped into the following categories:

1. Transportation System Management (TSM) policies improve traffic flow – for example, through better signal synchronization – or otherwise make more efficient use of the existing transportation network. DRCOG actively pursues signal timing improvements to major arterials across the metro area.

Figure 9a. Pedestrian Activity Centers (West)



Map Date: Sep 2012
Map Created By: Felsburg, Holt & Ullevig
Data Source: Adams County GIS

Adams County Planning and Development Department
4430 South Adams County Parkway 1st Floor, Suite W2000A
Brighton, CO 80601
720.523.6800

Disclaimer: Although every reasonable effort has been made to ensure the accuracy of the information provided on this map, Adams County cannot be responsible for consequences resulting from omissions or errors in the information and graphic representations made herein. Users should consult with the Adams County Planning Department to ascertain whether any modifications have been made since the publication of this material.

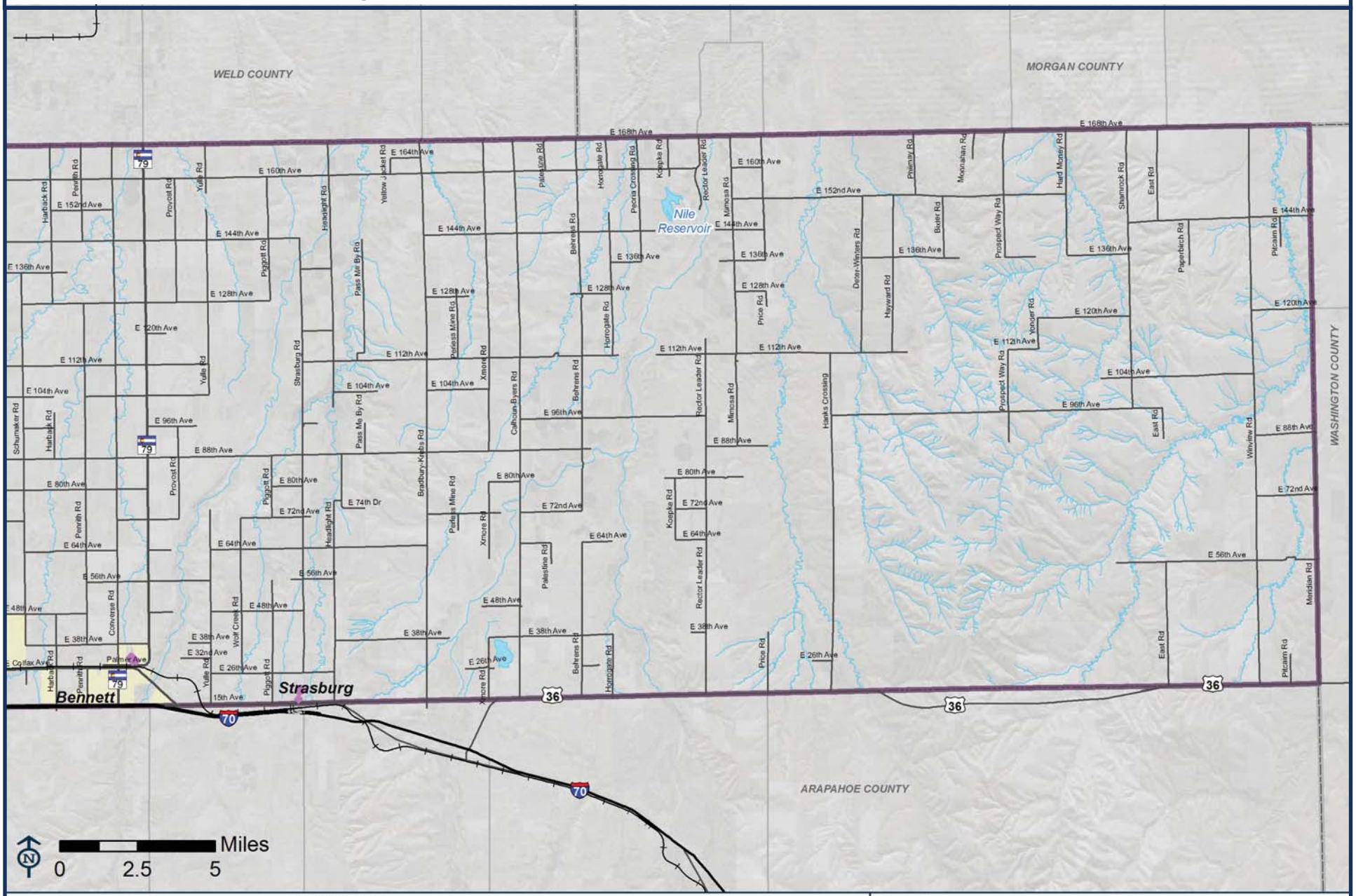
Legend

- Adams County Boundary
- Municipal Area
- Schools
- Retail Centers
- Planned FasTracks Station
- Future Transit Station
- Multi-modal Activity Center

Station Area

- 1/2 Mile
- 1/4 Mile

Figure 9b. Pedestrian Activity Centers (East)



Imagine ADAMS COUNTY

Map Date: Sep 2012
Map Created By: Felsburg, Holt & Ullevig
Data Source: Adams County GIS

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Legend

- Adams County Boundary
- Municipal Area
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- Future Transit Station
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Station Area

- 1/2 Mile
- 1/4 Mile

ADAMS COUNTY

The use of TDM in construction mitigation is emerging throughout the United States and has significant benefits such as:

- Reducing the need to accommodate vehicle traffic during construction
- Offering options and information to travelers
- Engaging local partners in promoting transportation alternatives
- Decreasing construction- related traffic delays

2. "Nonrestrictive" Transportation Demand Management (TDM) measures reduce peak hour traffic volumes by changing the time when trips are made or changing the way they are made. There are a number of alternative work schedule measures which fall in the first group. . A second group of measures includes reducing single-occupant vehicle travel by promoting, improving, or increasing the supply of alternative means of transportation. This can include investments in mass transit, construction of high-occupancy vehicle (HOV) lanes and bike paths, as well as voluntary carpooling, trip reduction, and telecommuting programs. DRCOG and RTD sponsor a number of programs with employers to make alternative modes more attractive. RTD's EcoPass program provides a free bus pass to employees with the cost being paid by the employer. DRCOG's RideArrangers works with employers to create carpool, vanpool, transit and telecommuting opportunities which are supported by a guaranteed ride home program.
3. "Restrictive" TDM policies are financial disincentives or regulatory constraints. This category includes transportation pricing controls, restrictions on parking, exclusion of SOVs from existing highway lanes, and mandatory trip reduction, carpooling, telecommuting and land use regulation. This category is widely advocated for by many transportation economists and planners.

In order to be successful, travel reduction programs must include carrots, sticks and employer participation. Travel reduction programs have been implemented around the nation and several general conclusions can be drawn:

- No single measure by itself can solve traffic congestion problems. Even the full range of TDM strategies can only be partly successful in reducing congestion.
- Long term, a conscious effort to reduce automobile dependence by clustering new development and providing incentives to shift existing development to make transit, walking and biking more reasonable choices for more people is needed.
- Locally targeted strategies could relieve congestion in spot locations such as entrance to developments, but their impact on wider congestion problems is difficult to measure and thought to be small.
- Area-wide TDM programs, rather than those covering specific companies or with narrowly drawn geographically, have the most potential for congestion relief.
- Establishment of performance objectives rather than a prescriptive set of actions inspire greater innovation and success.
- Voluntary actions were much less likely to lead to success than mandated actions.
- Economic self-interest inspires successful actions.
- Realistic alternatives to the SOV must be present for changes to occur.

- No legal area wide mechanisms have yet been devised in the absence of success through voluntary actions.

It is becoming increasingly important in these days of reducing funding capability for local communities to become actively involved in reducing travel, while realizing that not all TDM techniques are applicable to all communities. However, there are several elements of a management program which should be considered and evaluated over time within each community. Three major elements of TMD are recommended for Adams County:

1. **Continued review and regulation of land uses.** This process can typically affect such items as limiting the magnitude of development, encouraging different combinations of development in mixed use projects, and implementing alternative travel mode facilities such as bikeways and pedestrian paths within major development projects. The design of new neighborhoods is one way which Adams County and its cities can reduce the need for travel. Creating "activity nodes" linked by transit provides important mobility options for young people, the elderly, people who prefer not to drive, and those who don't own cars. A number of design elements can be combined to reduce the level of automobile use in the community. One of the most influential long-term factors in transportation choice is the physical environment. How comfortable and safe it is to walk to a transit station, a bus stop, to shops or for work? How far is it to a mix of services? Is the area designed for people or for vehicles? Are there barriors that impede access to transit services?
2. **Adding land use development patterns that are socially diverse and environmentally stable and that contributes both to economic development and quality of life and should consider the following elements:**
    a. an appropriate mix and intensity of land uses
    b. interconnected street network that will accommodate pedestrians and bicyclists as well as vehicles
    c. Using effective site design and street patterns that facilitate the operation and use of transit.
    d. Creation of an interesting commercial, entertainment, civic and residential core that encourages vibrant community life for residents and employers.
    e. Use of quality site planning, landscape and architectural design.
    f. Place a variety of commercial uses adjacent to transit facilities to increase convenient shopping opportunities for residents.

    Locating work and shopping opportunities close to homes encourages the use of alternative modes of transportation.
3. **Transit Corridor Preservation and Transit Service Improvements.** The county and cities should review major development projects and major public works projects for the potential to preserve corridors and rights-of-way for future mass transit use whether it be for regional rapid transit or local circulator transit services.

    Transit services must be more flexible, demand-responsive, and suitable to serving dispersed origins and destinations. Additionally, there are a number of measures and design features which can improve the attractiveness and accessibility of transit service. Adams County should

encourage development near major transit corridors and stops to incorporate transit-friendly design elements.

4. **Promote Alternative Commute Options to County Employees and throughout the Region.** The third general area of TDM involves participating in a variety of rideshare incentives. These incentives can range from general promotional activities to actual zoning incentives and development credits for projects which provide a real and significant rideshare component to their project. , Working collaboratively with the multi-jurisdictional regional transportation management organization (TMO) will assist in promoting alternative transportation opportunities.

VI. Phasing and Implementation

A. TRANSPORTATION SYSTEM IMPROVEMENTS

This section presents listings of the transportation system improvements that are needed to implement the multi-modal transportation plan for Adams County, including Roadway System, Transit, and Bicycle and Pedestrian improvements.

Improvements are listed in **Tables 7, 8 and 9** for parts of the transportation network that are partially or wholly within unincorporated parts of the County. Implementation of projects that are wholly within municipal boundaries or municipal growth management areas are the responsibility of those municipalities and are not included in these County project compilations.

In addition to locations and identification of the improvement types, the lead stakeholders and estimated time frame for each improvement are provided. In many cases, frequently in the rural parts of the County, the improvement is listed with Adams County as the lead stakeholder. For many of the projects, particularly ones that are of a regional scale or are in urbanized parts of the County, there are multiple lead stakeholders, including Adams County and state, regional, or municipal partners.

The approximate time frame is also listed for each improvement based on the estimated timing and relative priority of the need. These time frames are only estimates, since the precise timing for the projects will depend upon factors such as the pace of development and funding availability. Three time frames are listed, defined generally as follows:

- Short-Range: 2013 to 2018
- Mid-Range: 2019 to 2025
- Long-Range: 2026 to 2035

ROADWAY IMPROVEMENTS

Improvement Needs

The roadway improvements needed to achieve the long-range roadway plan (see **Figure 6**) and to accommodate the forecasted travel demand are listed in **Table 7**. The Recommended Improvements listed in **Table 7** are of two general types:

- STUDY RECOMMENDATION: Most of the freeways, tollways and regional arterials are owned and maintained by CDOT or public authorities. In addition, many of the regional arterials and major arterials in the urbanized part of the County pass through and provide mobility for municipalities and adjacent counties along with unincorporated Adams County. Improvements on these roads need to be planned by Adams County in conjunction with other affected jurisdiction. In addition, the needs for some new connections and improvements to existing roads are closely related to one another, for example the need for additional capacity across the South Platte River. In all of these cases, the recommendation in **Table 7** is for a study through which the affected stakeholders would focus on the need, evaluate alternatives and identify specific improvements for implementation.

- SPECIFIC IMPROVEMENT RECOMMENDATION: For most of the roads in the rural parts of the County and some in urbanized unincorporated parts of the County, improvement needs can be clearly identified to accommodate the forecasted travel demand and to fully develop the County's major roadway network. Specific improvement recommendations include new roadway connections, widening of existing roads, and paving of gravel roads.

The need for additional lanes on major roadways in the urbanized part of the County was determined by comparing the forecasted traffic volumes to capacity, as displayed on **Figure 4**. Where additional capacity is needed on roads within unincorporated parts of Adams County, **Table 7** includes a recommendation for widening or for a focused corridor study to evaluate alternative improvements. The time frame for the recommended improvements or focused study is based on the predicted immediacy of the needs: existing deficiencies are recommended to be addressed in the short-range, deficiencies that are projected to arise within approximately ten years are listed for the mid-range time frame, and additional needs based on 2035 forecasts are listed for the long-range.

A majority of the improvement needs identified are constructing or paving of rural arterial or rural collector roadways. **Table 7** lists all of the rural arterial roadway projects needed to complete the desired roadway network. These needs are closely related to development in the currently undeveloped parts of the County, which may include residential, oil and gas production or a variety of other development types. In most cases these roads are listed as long-range projects, but the needs for specific roads may arise in the short- or mid-range future. Gravel roads on which daily traffic volumes reach approximately 500 vehicles per day should be considered for paving to improve the serviceability of the roads and to manage dust from traffic on unpaved roads.

Table 7. Recommended Roadway System Improvements

Road	From - To	Existing Roadway	Recommended Improvements	Lead Stakeholders	Time Frame	Comment
Freeway/Tollway						
I-25	52nd Ave to SH 7	6 to 10 Lane Freeway	Add Managed Lanes and Other Improvements	CDOT w/ Other Agencies	Short Range	Managed lanes under design in 2012; PEL underway for general purpose improvements
I-76	Sheridan Blvd to SH 7	4 to 6 Lane Freeway	Study Improvement Needs I-70 to US 85 Split	CDOT w/ Other Agencies	Mid Range	
I-270	I-25 to Quebec St	4 Lane Freeway	Study Improvement Needs I-25 to I-70	CDOT w/ Other Agencies	Short Range	
US 36	Sheridan Blvd to I-25	4 to 6 Lane Freeway	Add Managed Lanes/Bus Rapid Transit Sheridan to I-25	CDOT, RTD and US 36 Coalition	Short Range	Design and Construction Underway
I-225	Colfax Ave to I-70	5 to 6 Lane Freeway	Widen to 6 to 8 Lanes; Complete 17th Pkwy/Colfax Interchange Improvements	CDOT and Aurora	Short Range	Design and Construction Underway
I-70	I-225 to Tower Road	4 to 6 Lane Freeway	Widen to 6 to 8 Lanes I-225 to Tower Rd	CDOT w/ Other agencies	To Be Determined	Time Frame to be Identified with I-70 East EIS/ROD
E-470	I-25 to I-70	4 Lane Tollway	Widen to 6 Lanes; Add Interchanges at Quebec St, Potomac St	E-470 Authority w/ Thornton, Adams Co., Brighton and Private	To Be Determined	

Road	From - To	Existing Roadway	Recommended Improvements	Lead Stakeholders	Time Frame	Comment
Urban Arterials						
Sheridan Blvd (SH 95)	52nd to 72nd Ave	4 Lane Major Arterial	Study Improvement Needs	CDOT, Adams Co and Arvada	Short Range	
Federal Blvd (US 287)	52nd to 72nd Ave	4 to 6 Lane Major Arterial	Study Improvement Needs (primarily access and aesthetics)	CDOT, Adams Co and Arvada	Short Range	Build out to 6-lanes
Pecos St	52nd to 58th Ave	2 Lane Minor Arterial	Widen to 4 Lanes	Adams Co, Denver	Short Range	
Pecos St	I-76 to 84th Ave	4 Lane Minor Arterial	Study Improvement Needs	Adams Co	Mid Range	
Washington St	52nd Ave to 58th Ave	2 Lane Major Arterial	Widen to add center turn lane (interim improvement)	Adams Co	Short Range	Long term: coordinate with Denver to determine ultimate cross section.
*York St	58th Ave to 88th Ave	2 to 4 Lane Minor Arterial	Study Improvement Needs	Adams Co	Short Range	Needs Tied to Potential Colorado Blvd Extension
*Colorado Blvd Extension	88th Ave to I-76	None		Adams Co, Thornton and Commerce City	Short Range	Evaluate in Conjunction with Other S. Platte River Crossings
*McKay/Monaco Sts	104th Ave to 88th Ave	2 Lane Major Arterial	Alternatives Analysis/ Planning/Environmental Study	Adams Co and Thornton	Short Range	Evaluate in Conjunction with Other S. Platte River Crossings

Road	From - To	Existing Roadway	Recommended Improvements	Lead Stakeholders	Time Frame	Comment
US 85/104th Ave		At-grade intersection	Interchange	CDOT, Adams Co, Commerce City	Mid Range	US 85 PEL to refine recommendations
US 85/112th Ave		At-grade intersection	Interchange	CDOT, Adams Co, Commerce City	Long Range	US 85 PEL to refine recommendations
US 85/120th Ave	Brantner Ditch to Oakland	2-lane at-grade intersection	Interchange	CDOT, Adams Co, Brighton, Commerce City	Mid Range	US 85 PEL to refine recommendations
US 85/136th Ave		At-grade intersection	Interchange	CDOT, Adams Co, Brighton, Commerce City	Long Range	US 85 PEL to refine recommendations
US 85/144th Ave		At-grade intersection	Interchange	CDOT, Adams Co, Brighton	Long Range	US 85 PEL to refine recommendations
Buckley Rd	120th Ave to 136th Ave	2 Lane Rd	4-Lane Major Arterial	Commerce City and Brighton	Mid Range	Project to be Led by Commerce City and Brighton
Himalaya Rd	96th Ave to 120th Ave	Partial 2-lane Rd	2-Lane Minor Arterial	Commerce City and Adams Co	Long Range	
Piccadilly Rd	96th Ave to 120th Ave	None	4-Lane Major Arterial	Adams Co and Commerce City	Mid Range	Coordinate Corridor Improvements with Denver and Aurora
Hudson Rd	US 36 to 72nd Ave	Unpaved Rd and Paved Rd	2-Lane Minor Arterial	Aurora and Adams Co	Long Range	

Road	From - To	Existing Roadway	Recommended Improvements	Lead Stakeholders	Time Frame	Comment
Imboden/Quail Run Rds	I-70/Quail Run Rd to 56th Avenue	Partial paved Rd.	4-Lane Regional Arterial	Aurora and Adams Co	Mid Range	Includes New I-70/Quail Run Interchange
Manilla Rd	I-70 to 48th Ave	Partial Unpaved Rd	2-Lane Major Arterial	Aurora and Adams Co	Mid Range	May Include I-70 Interchange Reconstruction
48th Ave	Imboden Rd to Manilla Rd	Partial Unpaved Rd	2-Lane Major Arterial	Aurora and Adams Co	Mid Range	
56th Ave	E-470 to Imboden Rd	2 Lane Paved Rd	Widen to 6 Lanes	Aurora and Adams Co	Long Range	
SH 224 (70th/72nd Aves.)	Broadway St to US 85	2 to 4 Lane Paved Rd	Widen to 4 Lanes	CDOT and Adams Co	Short Range	Provides Access to Future Commerce City North Metro station
*96th Ave Extension	Colorado Blvd to I-76	None	Alternatives Analysis/ Planning/Environmental Study	Adams Co, Thornton and Commerce City	Short Range	Evaluate in Conjunction with Other S. Platte River Crossings
SH 44 (104th Ave)	Colorado Blvd to I-76	2 Lane Major Arterial	Widen to 4 Lanes	CDOT, Adams Co, Thornton and Commerce City	Short Range	
120th Ave	Holly St to US 85	4 Lane Major Arterial	Widen to 6 lanes	Adams Co, Thornton and Commerce City	Long Range	South Platte Bridges can accommodate 6-lanes

Road	From - To	Existing Roadway	Recommended Improvements	Lead Stakeholders	Time Frame	Comment
120th Ave	US 85 to Imboden Rd	2 Lane Major Arterial	Widen to 4 to 6 Lanes	Adams Co, Commerce City, Denver	Mid Range West of E-470, Long Range East of E-470	
SH 7	I-25 to US 85	2 to 4 Lane Paved Rd	TBD	CDOT, Adams Co, Brighton, Thornton	TBD	Improvement needs and timing to be Determined by Current PEL
Baseline Rd (168th Ave)	I-25 to Quebec St	2 Lane Paved Rd	Widen to 4 Lanes Implement recommended alignment improvements identified in Crossroads Study	Adams Co, Weld Co, Thornton, Northglenn	Mid Range Short Range	
Rural Arterials						
Piccadilly Rd	120th Ave to 152nd Ave	Partially paved	Paved 2-Lane Rural Arterial	Adams Co with Brighton and Commerce City	Mid Range	
Harvest Rd	120th Ave to 168th Ave	Unpaved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
Imboden Rd	56th Avenue to 160th	Partially paved	Paved 2-Lane Rural Regional Arterial	Adams Co, Aurora and Denver	Mid Range	
Imboden Rd Extension	160th to 168th		2-lane paved Rural Regional Arterial	Adams Co, Weld Co.	Mid Range	Refer to Imboden Realignment Study, 2009
Manila Rd	56th Ave to 144th Ave	Unpaved Rd and Paved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	

Road	From - To	Existing Roadway	Recommended Improvements	Lead Stakeholders	Time Frame	Comment
Petterson Rd	144th Ave to 168th Ave	Unpaved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
Schumacker Rd	I-70 to 136th Ave	Unpaved Rd and New Connection	Paved 2-Lane Rural Arterial	Adams Co and Aurora	Long Range	Includes future interchange
SH 79	I-70 to 168th Ave	Unpaved and Paved Rd	Paved 2-Lane Rural Regional Arterial	CDOT, Bennett Adams Co,	Mid Range	Alignment in Bennett to be Determined by Current Bennett Study
Yulle Rd	I-70 to 56th Ave	Unpaved Rd	2-Lane Minor Arterial	Adams Co	Mid Range	Includes future interchange
Wolf Creek Rd	26th Ave to 48th Ave	Unpaved Rd	2-Lane Minor Arterial	Adams Co	Mid Range	
Piggott Rd	US 36 to 48th Ave	Unpaved Rd and Paved Rd	2-Lane Arterial	Adams Co	Mid Range	Refer to Strasburg Subarea Plan
Piggott Rd	48th Ave to 56th Ave	Unpaved Rd	Paved 2-Lane Rural Arterial	Adams Co and Strasburg	Mid Range	
Strasburg Rd	US 36 to 48th Ave	Partial Paved Rd	2-Lane Arterial	Adams Co and Strasburg	Mid Range	Refer to Strasburg Subarea Plan
Strasburg Rd	48th Ave to 144th Ave	Unpaved Rd and Unpaved Road	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
Headlight Rd	US 36 to 48th Ave	Unpaved Rd and Paved Rd	2-Lane Arterial	Adams Co and Strasburg	Mid Range	Refer to Strasburg Subarea Plan

Road	From - To	Existing Roadway	Recommended Improvements	Lead Stakeholders	Time Frame	Comment
Bradbury-Krebs Rd	US 36 to 168th Ave	Unpaved Rd and Paved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
Calhoun-Byers Rd	US 36 to 88th Ave	Unpaved Rd and Paved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
Behrens Rd	88th Ave to 112th Ave	Unpaved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
Horrogate Rd	112th Ave to 148th Ave	Unpaved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
Peoria Crossing Rd	136th Ave to 168th Ave	Unpaved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
Rector Leader Rd	US 36 to 112th Ave	Unpaved Rd and Paved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
Mimosa Rd	112th Ave to 168th Ave	Unpaved Rd and Paved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
Hanks Crossing	US 36 to 112th Ave	Unpaved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
Deter Winters Rd	112th Ave to 152nd Ave	Unpaved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
Phimay Rd	152nd Ave to 168th Ave	Unpaved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	

Road	From - To	Existing Roadway	Recommended Improvements	Lead Stakeholders	Time Frame	Comment
Shamrock Rd	96th Ave to 168th Ave	Unpaved Rd and Unpaved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
East Rd	US 36 to 56th Ave	Unpaved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
Winview Rd	US 36 to 168th Ave	Unpaved Rd and Paved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
SH 36 (Colfax Ave)	Schumaker Rd to Washington County	Unpaved Rd and Paved Rd	Paved 2-Lane Rural Regional Arterial	Adams Co, Arapahoe Co, CDOT, Bennett and Strasburg	Mid Range – Long Range	
56th Ave	Imboden to SH 79	Partial Unpaved Rd	Paved 2-Lane Rural Regional Arterial	Adams Co	Mid Range - Long Range	
56th Ave	Imboden to Headlight, Bradbury to Rector, East Rd to Winview	Partial Unpaved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
64th Ave	Strasburg to Bradbury	Unpaved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
88th Ave	DIA to Behrens Rd	Unpaved Rd and Paved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	

Road	From - To	Existing Roadway	Recommended Improvements	Lead Stakeholders	Time Frame	Comment
96th Ave	Behrens to Rector, Hanks to East Rd	Unpaved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
104th Ave	Shamrock to Winview	Unpaved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
112th Ave	Strasburg to Horrogate, Rector to Deter	Unpaved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
120th Ave	Imboden to SH 79	Partial Unpaved Rd	Paved 2-Lane Rural Regional Arterial	Adams Co	Mid Range - Long Range	
120th Ave	SH 79 to Strasburg	Partial Unpaved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
136th Ave	Deter to Shamrock	Unpaved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
144th Ave	Imboden to Peoria Crossing	Partial Unpaved Rd and Paved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	
152nd Ave	I-76 to Imboden, Mimosa to Phimay	Unpaved Rd and Paved Rd	Paved 2-Lane Rural Arterial	Adams Co	Long Range	

Road	From - To	Existing Roadway	Recommended Improvements	Lead Stakeholders	Time Frame	Comment
Studies/Processes						
Adams County Interim Access Permit policy and process				Adams Co, local jurisdictions within the County	Short Range	
Adams County Crash Data Collection on arterial and higher roadways				Adams Co, local jurisdictions within the County	Short Range	

*= Coordinate projects/ studies

= Adams County Top 10 Regional Priorities

Typical Cross-Sections

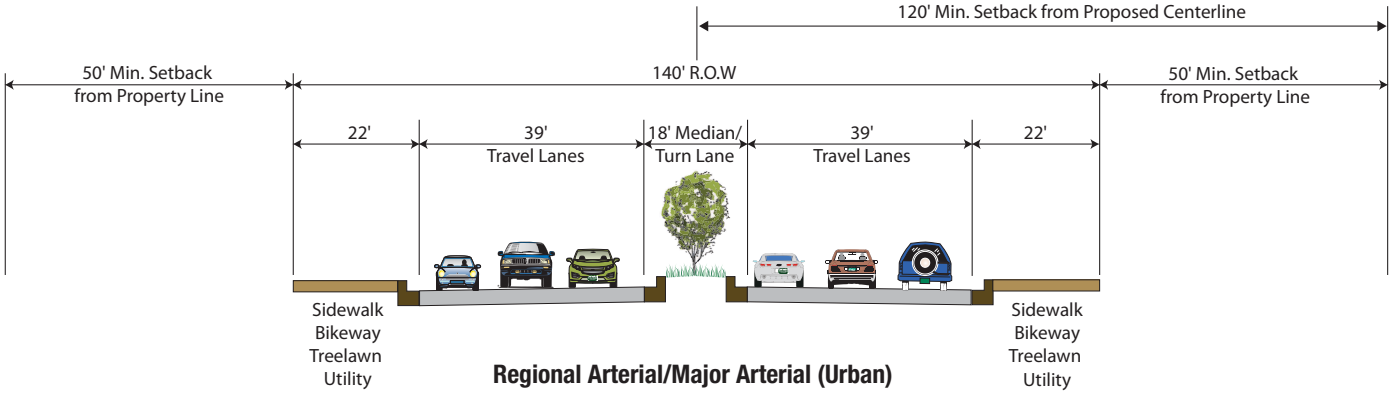
Figure 10 shows typical cross-sections for each road classification that comprises the County's major roadway system (see **Figure 6**). The cross-sections on **Figure 10a** apply to roadways in urban or urbanizing areas of the County and include curb, gutter and sidewalks. **Figure 10b** shows cross-sections for rural areas.

The specific cross-sections elements and dimensions represent typical standards for the associated road classifications; however, each specific roadway needs to be designed to reflect its specific requirements and context. There may be locations where wider cross-sections are needed, for example to accommodate additional turn lanes at major intersections or to accommodate an important on-street bicycle route. Conversely, there may be locations where corridor constraints dictate narrower cross-sections. These variations will be considered on a case-by-case basis. It should be noted that specific roadway design elements on state highways within the County, including cross-sections and access control, must adhere to CDOT codes.

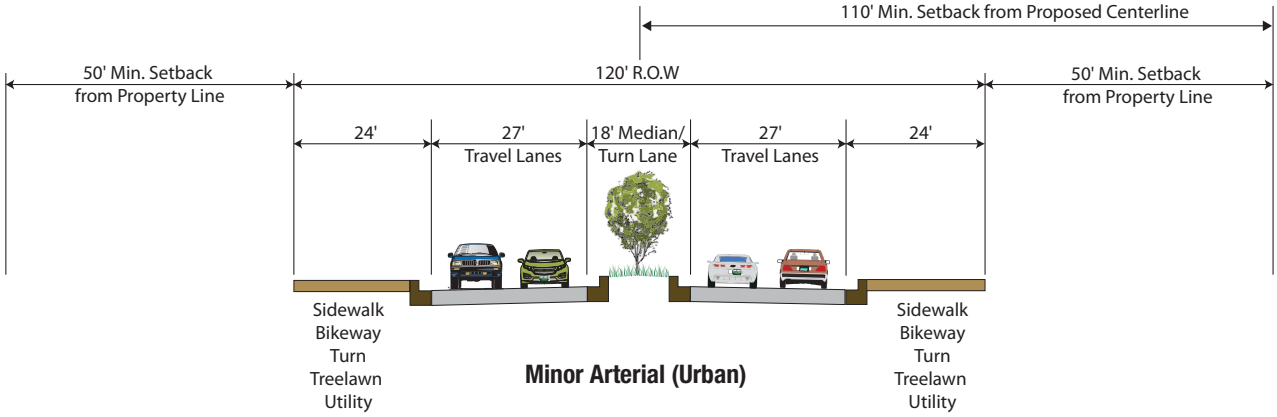
The typical cross-sections represent the ultimate configuration for each roadway type. Where possible, the right-of-way to accommodate these ultimate cross-sections should be preserved to allow for completion of the roadway as warranted by development and traffic demands. In addition, access to each roadway should be carefully considered to allow for the road to provide mobility to satisfy its future functional role in the County's road system. However, roads are frequently constructed in phases as needs grow. Decisions on interim through lanes and other cross-sectional elements should also be made on a case-by-case basis with consideration of traffic volumes, continuity with adjacent road segments, development patterns and sustainable road maintenance.

Figure 11 shows two examples of special road cross-sections in transit oriented development (TOD) areas or other appropriate locations. These sections were developed for the Clear Creek Valley TOD Plan and reflect complete street designs that emphasize pedestrian and bicycle movements. This type of cross-section should be considered in designing streets in TOD areas and other appropriate neighborhoods.

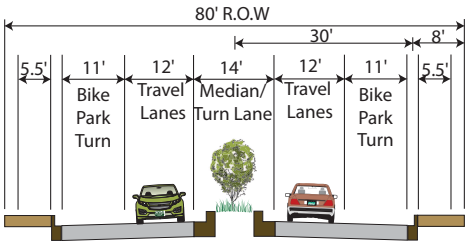
Figure 10a. Urban Typical Cross Sections



Regional Arterial/Major Arterial (Urban)

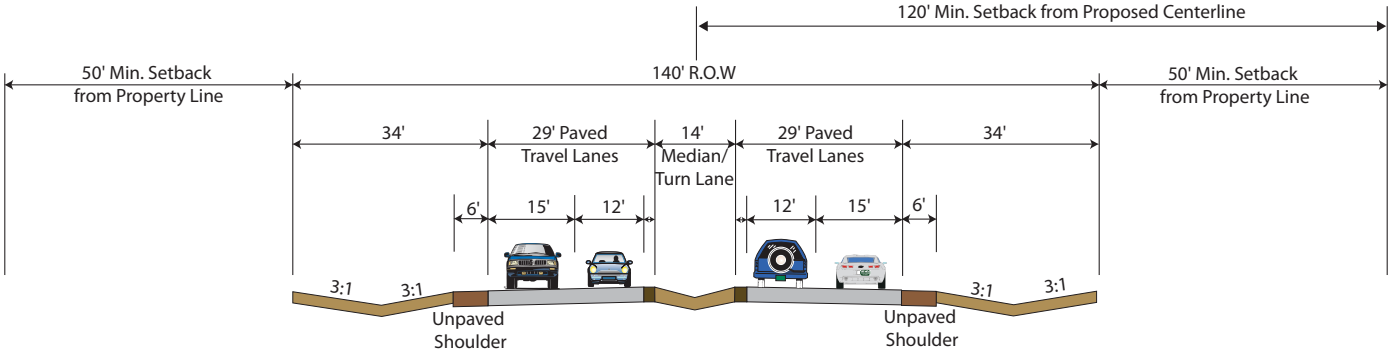


Minor Arterial (Urban)

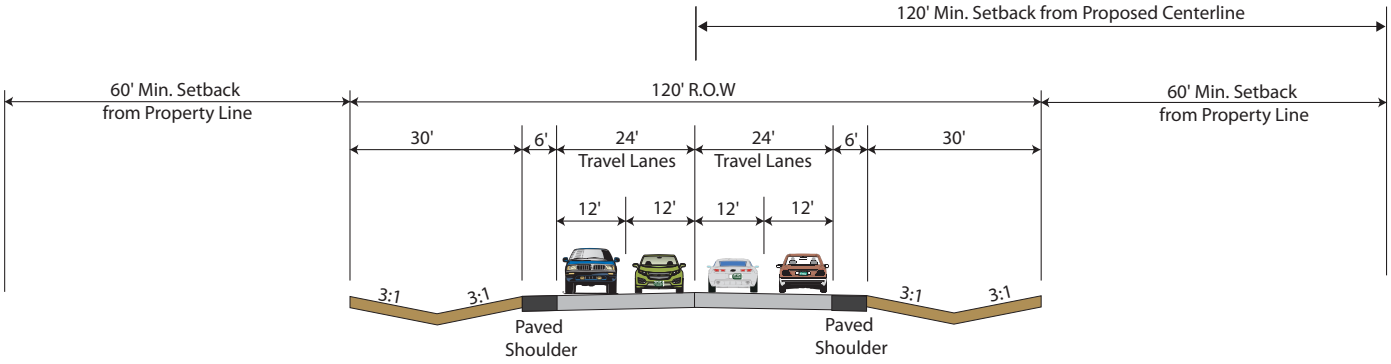


Major Collector (Urban)

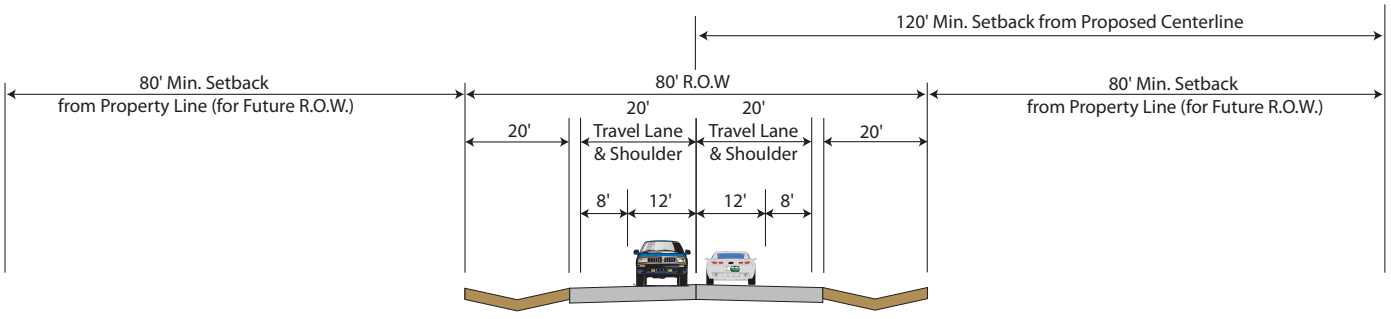
Figure 10b. Rural Typical Cross Sections



Regional Arterial/Major Arterial (Rural)

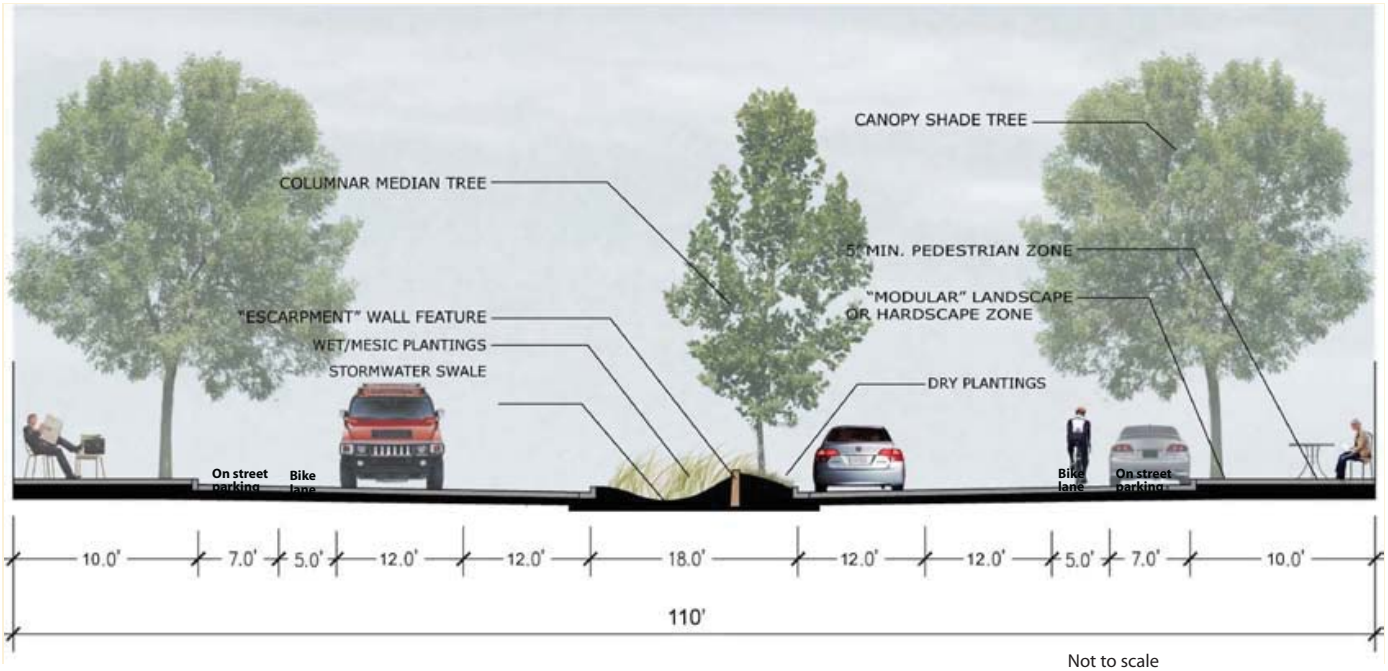


Arterial (Rural)



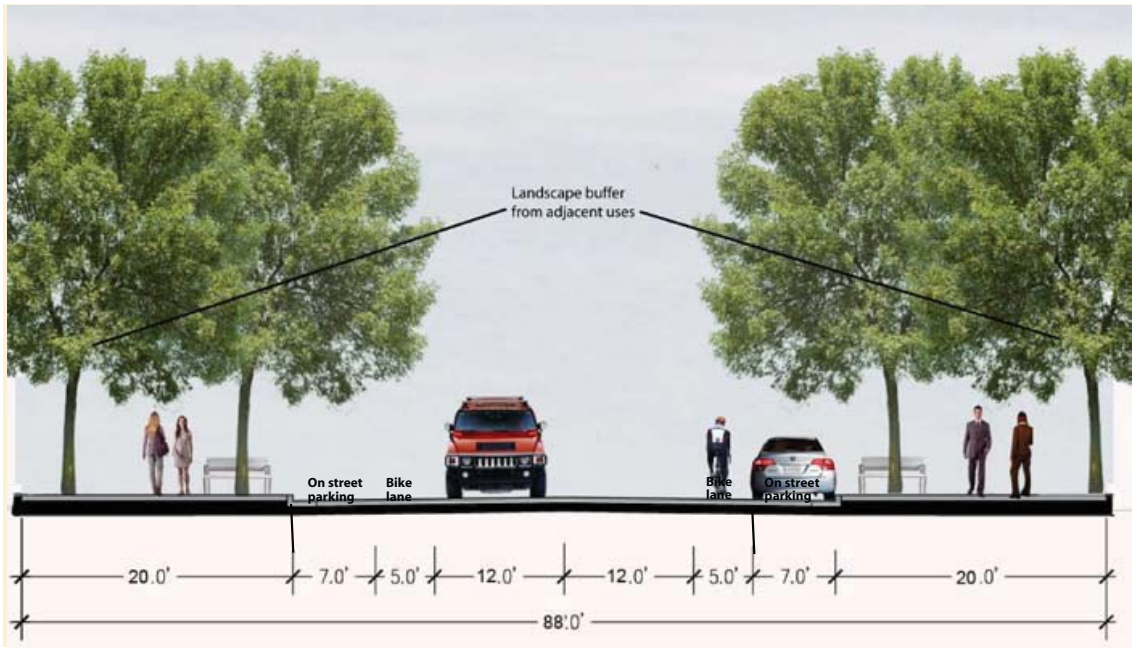
Collector (Rural)

Figure 11. TOD Cross-Sections



TOD Parkway†

Not to scale
For illustrative purposes only
Subject to discussion and final design



TOD Collector†

Not to scale
For illustrative purposes only
Subject to discussion and final design

†*Source: Adams County Clear Creek Valley TOD Plan, June 30, 2008*

TRANSIT IMPROVEMENTS

Table 8 shows the improvements that comprise the transit element of the transportation plan. The first part of the table lists the six FasTracks corridors planned by RTD to serve Adams County. Four of the six corridors and the southern part of the Northwest Rail corridor are scheduled by RTD to be completed in the short-range, by 2016. For the other two corridors, North Metro and the Northwest Rail north of the Westminster Station, the time frame is not currently certain and Adams County and other northern metro communities are working with RTD to expedite implementation.

The next section of **Table 8** lists RTD's planned bus route expansions. They include a set of bus routes tied to the North Metro and East FasTracks Corridors. For the bus route expansions in the North Metro area, the recommended time frames are listed as short-range, mid-range and long-range. These bus route expansions will provide transit service to developed and developing parts of Adams County, Thornton, Westminster, Northglenn, and Broomfield and are recommended for implementation as transit needs warrant them and may precede the completion of the North Metro rail corridor.

The final two parts of **Table 8** show corridor preservation and potential transit expansion area recommendations. Continued coordination to identify and preserve right-of-way for a future Northeast Area Transit Expansion and to coordinate transit planning for the east I-70 corridor are recommended for the short range.

TRANSPORTATION DEMAND MANAGEMENT PROGRAMS

The Transportation Demand Management (TDM) programs that are recommended for implementation are described in **Table 9**. These programs include the efforts of the Smart Commute Metro North Transportation Management Organization (TMO), regional efforts, and employer-based outreach and incentives.

BICYCLE AND PEDESTRIAN IMPROVEMENTS

The bicycle and pedestrian improvements are shown in **Table 10**. The table focuses on those projects that are partially or wholly within unincorporated parts of the County. In many cases, the regional trail projects extend through multiple jurisdictions and will require coordination between these entities to pursue funding and complete design and construction of the trails. Those projects that are along a corridor designated by DRCOG as a Regional Bikeway Corridor or a Community Bikeway Corridor receive more emphasis in DRCOG's funding allocation process.

For those bikeway corridors that follow a roadway alignment, **Table 10** identifies the type of facility. On-street bikeways are identified as bike lanes, wide shoulders (in the rural parts of the County), or shared lanes. In some cases, a multi-use trail is identified as the bicycle and pedestrian facility adjacent to a roadway facility (also referred to as a sidepath).

The on-street bikeway improvements should be considered for implementation in conjunction with roadway capital improvement projects or with roadway maintenance projects. For example, if an overlay is being done on one of the identified regional on-street bikeways, particularly in the eastern part of the County, consideration should be given to widening the shoulders at that time.

Projects that are wholly within municipalities are excluded from **Table 10**, as implementation of these facilities will be the primary responsibility of the municipality. Likewise, the Adams County trail connections that have not been identified as Regional or Community bikeways are not detailed in

Table 10. The Adams County *Parks Open Space and Trails Master Plan* provides phasing and implementation recommendations for these trail corridors.

The County's roadway typical cross sections presented in **Figures 10 and 11** were developed to include bicycle and pedestrian accommodation that is compatible with the surrounding land uses. During all roadway construction projects, consideration should be given to bicycle and pedestrian accommodation in support of Policies 7 and 8 and consistent with the typical cross sections. Provision of safe and convenient pedestrian access is especially important in the pedestrian activity centers (transit stations, schools, mixed use and commercial areas).

Table 8. Recommended Transit Improvements

Improvements	Lead Stakeholders	Time Frame	Comment
FasTracks Corridors			
North Metro	RTD	To 72nd Short Range To 104th (Mid Range) To 162nd (Long Range)	Prioritize segment to Commerce City and work to expedite schedule for full corridor.
East Corridor	RTD	Short Range (2016)	
Gold Line	RTD	Short Range (2016)	
Northwest Rail	RTD	Short Range to Westminster (2016); Schedule not currently firm for remainder of corridor	RTD's Northwest Subarea Mobility Study will evaluate Northwest Rail as a phased project.
I-225 Corridor	RTD	Short Range (2016)	
US 36 Bus Rapid Transit	RTD, CDOT and US 36 Coalition	Short Range (2015)	

Improvements	Lead Stakeholders	Time Frame	Comment
Bus Route Expansions			
New routes in and around North Metro corridor serving Adams Co, Broomfield, Thornton and Westminster, using: • SH 7 (Boulder to I-76) • 144th Ave • 136th Ave • 128th Ave (out to park) • 112th Ave (Huron to Holly) • Washington St (120th to SH 7) • Colorado Blvd • Holly St • Quebec St	RTD in coordination with local agencies	Short Range: • SH 7 (Boulder to I-76) • 112th Ave (Huron to Holly) • Washington St (120th to SH 7) Mid Range: • 144th Ave • 136th Ave • 128th Ave (out to park) • Colorado Blvd • Holly St • Quebec St	Coordination to determine appropriate implantation schedules prior to North Metro and coinciding with North Metro
New routes connecting to East Corridor serving Adams Co, Denver, Aurora and Commerce City, using: • Tower Rd • Piccadilly Rd • Monaghan Rd • Chambers Rd • 56th Ave • 88th Ave • 96th Ave	RTD in coordination with local agencies	Short Range	
Park-n-Rides			
New park-n-Rides: • 144th Avenue and I-25 • SH 7 and I-25	RTD in coordination with local agencies	Mid Range Short Range	2012: Thornton to apply for FASTER Transit funds for I-25/SH 7 park-n-Ride

Improvements	Lead Stakeholders	Time Frame	Comment
Corridor Preservation			
Northeast Area Transit Expansion (NATE)	Adams Co, Commerce City, Brighton, RTD	Short Range - Identify corridor and right-of-way preservation Long Range - Implementation	2004: $7.4 million approved as part of FasTracks vote for corridor preservation 2012: Corridor preservation fund is $9.5 million.
E-470 Corridor Preservation	E-470 Authority and local agencies	Long Range – Implementation	
Potential Transit Expansion Areas			
East I-70 Corridor Transit	Adams Co, Arapahoe Co, Aurora, Bennett, Front Range Airport	Short Range – Coordination Process Mid Range – Implementation if Recommended	Refer to recommended study below
I-70/Piccadilly Rd/56th Ave/Monaghan Rd Area	RTD and local agencies	As warranted by development	Refer to recommended study below
E-470/88th/136th Ave Area	RTD and local agencies	As warranted by development	Refer to recommended study below
Adams County Bus System Optimization Study to define future bus route expansions and transit expansion areas	RTD, Local jurisdictions	Short Range	
Apply for second year funding from CDOT to continue to organize Adams County Local Coordinating Council	Adams County	Short Range	

Table 9. TDM Improvements

Programs		Time Frame	Comment
Smart Commute Metro North TMO	Information, action and advocacy for programs and services supporting transportation improvements and expanding transportation choices that will reduce congestion and improve air quality.	Annually	
I-25 Managed Lanes	Incentives for alternative commute options during construction	Short Range	
	Encourage ridesharing and transit in managed lanes	Mid Range	
Annual Commit to Commute Green Campaign	Employee-based rideshare promotions	Annually	

Table 10. Recommended Bicycle and Pedestrian Improvements

Road/Trail	From - To	Existing Facility	Recommended Improvements	Lead Stakeholders	Time Frame	Comment
DRCOG Regional Bicycle Corridors						
South Platte River Trail	Elaine T. Valente Open Space to County Regional Park (1.5 mi)	Missing segment of multi-use trail	Multi-use trail	Adams County, Commerce City	Short Range	High Priority in OSPTMP
South Platte River Trail	County Regional Park to Ken Mitchell Open Space (1.7 mi)	Missing segment of multi-use trail	Multi-use trail	Adams County, Brighton	Medium Range	Mid-Term Priority in OSPTMP

Road/Trail	From - To	Existing Facility	Recommended Improvements	Lead Stakeholders	Time Frame	Comment
South Platte River Trail	McKay Road crossing	At-grade crossing	Grade separated crossing	Adams County	Short Range	Needs to be a part of the study with McKay and 96th
South Platte River Trail	North of SH 7 to 168th Avenue (<1 mi)	Missing segment of multi-use trail	Multi-use trail	Adams County, CFRT, Brighton	Short Range	High Priority in OSPTMP
Big Dry Creek Trail	I-25 to 144th Avenue (1.8 mi)	Missing segment of multi-use trail	Multi-use trail	Adams County, Thornton	Short Range	High Priority in OSPTMP
Big Dry Creek Trail	Big Dry Creek Open Space to 168th Avenue	Missing segment of multi-use trail	Multi-use trail	Adams County, Thornton	Short Range	High/Mid-Term Priority in OSPTMP
Second Creek Trail	S. Platte River Trail to south Colfax Ave	None (except a one mile segment in Commerce City)	Multi-use trail	Adams County, Brighton, Commerce City, Aurora	Short Range	High/Mid-Term Priority in OSPTMP
E-470 Trail	I-25 to S. Platte River Trail	None	Multi-use trail	Adams County, Thornton, E-470 Private Highway Authority (PHA)	TBD	
US 36 Trail	I-25 to Sheridan	None	Multi-use trail	CDOT, Adams County, Arvada, Westminster	TBD	
Huron Street Trail	US 36 to 160th Avenue	None (except a three mile segment from approx. Thornton Pkwy to 120th)	Multi-use trail (sidepath)	Adams County, Federal Heights, Westminster, Thornton, Northglenn	TBD	

Road/Trail	From - To	Existing Facility	Recommended Improvements	Lead Stakeholders	Time Frame	Comment
120th Avenue	Sheridan Pkwy to Buckley Rd	None	Multi-use trail (sidepath)	Adams County, Thornton, Commerce City, Northglenn, Brighton	TBD	Identified as multi-use path in CCC TP; Not in Thornton TMP
Other Regional Bicycle Corridors						
North Metro Trail	S. Platte River Trail to 168th Ave	None	Multi-use trail (to be built with North Metro rail corridor)	Adams County, Thornton	Short, Mid and Long Range	Purpose designation as DRCOG Regional Bicycle Corridor
DRCOG Community Bicycle Corridors						
E-470 Trail	S. Platte River Trail to I-70	None	Multi-use trail	Adams County, Brighton, Commerce City, Aurora, E-470 PHA	TBD	
Clay Street Trail	Clear Creek Trail to 59th/Zuni	None	Multi-use trail with grade separated crossing of UPRR and RTD Gold Line	Adams County	Short Range	High/Mid-Term Priority in OSPTMP
104th Avenue	McKay St to E-470 Trail	None	Multi-use trail (sidepath)	Adams County, Commerce City	TBD	Identified as multi-use path in CCC TP
Dahlia Street	S. Platte River Trail US 85	None	On street bikeway	Adams County, Commerce City	TBD	Identified as on-street bike route in CCC TP
US 85	O'Brian Canal to 52nd Ave	None	Multi-use trail (sidepath)	Adams County, Commerce City	TBD	Identified as multi-use path in CCC TP

Road/Trail	From - To	Existing Facility	Recommended Improvements	Lead Stakeholders	Time Frame	Comment
144th Avenue	Colorado Blvd to Zuni	None	On street bikeway or multi-use trail (sidepath) TBD	Adams County, Thornton	TBD	Not in Thornton TMP
Colorado Blvd	SH 7 to Grange Hall Creek Trail	None	On street bikeway or multi-use trail (sidepath) TBD	Adams County, Thornton, Northglenn	TBD	Not in Thornton TMP
168th Avenue	I-25 to I-76	None	On street bikeway	Adams County, Weld County, Brighton, Thornton	TBD	
SH 7/Bridge St	Colorado Blvd to Buckley Rd	None	TBD	CDOT, Adams County, Thornton, Brighton	TBD	PEL Study Underway
Buckley Road	120th Avenue to 136th Avenue	None	Multi-use trail (sidepath)	Adams County, Brighton, Commerce City	TBD	Identified as multi-use path in CCC TP
Regional On-Street Bikeways						
168th Avenue	I-76 to Watkins Rd	None	Wide Shoulders	Adams County, Weld County	TBD	
Bromley Lane/ 152nd Avenue	S. Platte River Trail to Imboden Rd	None (except a few segments of multi-use path in Brighton)	Wide Shoulders/Bike Lane	Adams County, Brighton	TBD	Identified in OSPTMP
144th Avenue	Imboden Rd to Strasburg Rd	None	Wide Shoulders	Adams County	TBD	

Road/Trail	From - To	Existing Facility	Recommended Improvements	Lead Stakeholders	Time Frame	Comment
120th Avenue	Buckley Rd to Petterson Rd	None	Wide Shoulders	Adams County, Commerce City	TBD	Identified in OSPTMP
112th Avenue	Petterson Rd to SH 79	None	Wide Shoulders	Adams County	TBD	
88th Avenue	Imboden Rd to Strasburg Rd	None	Wide Shoulders	Adams County	TBD	
Colfax Avenue (US 36)	Hudson Rd to Strasburg Rd	None	Wide Shoulders/Bike Lanes	Adams County, CDOT, Bennett	TBD	Identified in OSPTMP
Imboden Road	168th Ave to Colfax Ave	None	Wide Shoulders	Adams County, Aurora	TBD	Identified in OSPTMP
SH 79	Colfax Ave to 112th Ave	None	Wide Shoulders/Bike Lanes	Adams County, CDOT, Bennett	TBD	OSPTMP identified Converse Rd; recommend SH 79 to be consistent with Bennett plans in light of CDOT Bike/Ped Policy
Strasburg Road	88th Avenue to 144th Avenue	None	Wide Shoulders	Adams County	TBD	
Adams County On-Street Bikeway						
Lowell Blvd	US 36 Trail to 52nd Ave	None	Bike Lanes	Adams County, Arvada	TBD	Extension of Denver's planned bike lanes
Tennyson St	Clear Creek Trail to 52nd Ave	None	On-Street Bikeway (Shared Lanes)	Adams County	TBD	Extension of Denver's planned shared lanes

Road/Trail	From - To	Existing Facility	Recommended Improvements	Lead Stakeholders	Time Frame	Comment
64th Avenue	Sheridan Blvd to Clear Creek Trail	None	On-Street Bikeway	Adams County, Arvada	TBD	
Holly Street	Signal Ditch Trail to SH 7	None	On-Street Bikeway	Adams County, Thornton	TBD	
Sable Blvd	E-470 Trail to Bromley Lane	None	On-Street Bikeway	Adams County, Brighton	TBD	
Chambers Rd	E-470 Trail to Bromley Lane	None	On-Street Bikeway	Adams County, Brighton	TBD	
132nd Avenue	Second Creek Trail to Buckley Rd	None	On-Street Bikeway	Adams County, Brighton	TBD	
Tower Road	152nd Ave to Southern St	None	On-Street Bikeway	Adams County, Brighton	TBD	
50th Avenue	152nd Ave to Southern St	None	On-Street Bikeway	Adams County, Brighton	TBD	

TBD = To be determined

OSPTMP = Adams County *Open Space, Parks and Trails Master Plan*

B. SUPPLEMENTAL TRANSPORTATION FINANCE

The previous section of Chapter VI identifies those roadway, transit, bike, pedestrian and travel demand management elements anticipated to be needed to adequately serve the projected 2035 travel demands.

This section discusses ongoing coordination and provides a sample of funding tools and mechanisms available to the county to fund transportation projects. The intent of this section is to help tie the Policies & Strategies, the Vision Plans and the multi-modal needs of the county together by continuing the necessary coordination and establishing timeframes for Plan updates and the fiscal components needed to implement the Plan.

COORDINATION OF COUNTYWIDE TRANSPORTATION PRIORITIES

Adams County and the following cities executed a Collaborative Transportation Intergovernmental Agreement (IGA) in 2000 for road and bridge projects:

- City of Arvada
- Town of Bennett
- City of Brighton
- City of Commerce City
- City of Federal Heights
- City of Northglenn
- City of Thornton
- City of Westminster

The IGA was then updated in 2010 to reflect the multi-modal needs of the county. The IGAs have established a cooperative understanding and approach among the communities on how transportation planning efforts should be coordinated and identifies a process for developing unified lists of countywide multi-modal transportation priorities.

The current lists of priorities include needed improvements to state-owned roads, transits, and TDM projects. The lists are used primarily to facilitate project and funding recommendations to CDOT, RTD and DRCOG at the Adams County Hearing. The original IGA (2000) and the current IGA (2010), along with the current list of countywide priorities (2010) can be found in **Appendix D**. The re-ranking of the priority projects is anticipated to take place in 2013 and will include priority trail projects.

The priority project ranking process is intended to achieve the following objectives:

- OBJECTIVE 1: To ensure that Adams County communities continue to conduct transportation planning in a collaborative manner, which assists in the maximization of transportation funding allocated for Adams County.
- OBJECTIVE 2: Maintain the designed transportation function of existing and future transportation facilities.
- OBJECTIVE 3: Improve multimodal transportation connectivity between the entire Denver metropolitan area and Adams County communities.

PLANNING UPDATES

To further coordinate, implement and prioritize the Plan's Vision elements, the county will generally follow the schedule shown in **Table 11**.

Table 11. Transportation Planning Update Schedule

	Year 1	Year 2	Year 3
Activities	• Transportation Plan update (Networks and Land use) • DRCOG Initiates MetroVision	• Update Transportation Plan Fiscal Component • County Hearing (Countywide Project Prioritization Process) • County CIP Review internally & w/ other jurisdictions & agencies(~2nd/ 3rd quarter) • MetroVision & RTP updates, including scenario planning analysis. • Initiate TIP Policy Discussions (~ 3rd quarter)	• Anticipate DRCOG to identify MetroVision & RTP projects • 4th Quarter MetroVision & RTP approved • County CIP Review -- internally & w/ other jurisdictions & agencies (~ 2nd 3rd quarter) • Call for projects for TIP
(Denotes completion year)	2012 (Current)	2013	2014

DRCOG MetroVision, RTP and TIP – Current practice:

- Updated Plans are formally approved every four years (from the adoption date)
- Major updates to MetroVision and RTP typically occur when plan ends with a zero and minor updates typically occur when plan ends with a five.
- 2045 (anticipated minor update) to MetroVision and RTP is currently expected to be adopted in 2018

FINANCIAL MECHANISMS

Preliminary costs associated with the projects in Section A were not developed for the 2012 update to the transportation plan; however, **Table 12** identifies broad categories of funding and mechanisms for multi-modal transportation projects to be further discussed in the update to the fiscal component of the transportation plan based on the above schedule.

Table 12. Sample of Current and Potential Funding Sources and Mechanisms

	Governing Body	Formation	Powers/Uses	Ease of Implementation	Revenue Potential	Revenue Flow
Mobility Impact Fees	County/cross jurisdictional lines (road impact fees being implemented)	IGA among agencies	Regulation imposed on property. Not suitable for operations or maintenance. Look at potential corridor-specific benefit areas, etc.	Requires detailed study	Varies w/ development cycle	Varies
Open Space Sales Tax Funds	**County** (Currently being implemented)		Temporary sales tax of one-fifth of one percent (0.2 percent) on sales in the county. Can be used for trail projects. In November 2004, Adams County citizens voted in favor of extending the tax from January 1, 2007 through December 31, 2026 and increasing it to one-quarter of one percent (0.25 percent).			
County Road & Bridge Fund	**County (currently being implemented)**		Currently funds activities related to road and bridge construction, maintenance, and administration. The fund balance is comprised of unexpended property taxes, specific ownership taxes and a temporary sales tax of one-fifth percent. The period of taxation for the temporary sales tax will run from January 1, 2009 through December 31, 2028. Classified as a special revenue fund, all funds received for expenditures on roads and bridges must be accounted for in the road and bridge fund.			

	Governing Body	Formation	Powers/Uses	Ease of Implementation	Revenue Potential	Revenue Flow
Regional Transportation Authority	County or some combination of counties and cities	IGAs filed with state. Requires vote	Finance, construct, operate or maintain regional transportation systems		Varies according to size, revenue type and rate.	Depends on funding method
Association of Metro Districts	Multiple metro districts	IGA	Finance, construct, operate, or maintain all or a portion of a transportation improvement in a metro region.		Highly variable depending on selected revenue source(s)	
Metropolitan Districts	County or some combination of county & cities; governed by elected board of directors	Petition and vote	Eminent domain (limited). Construction, operations and maintenance. Shall provide two or more of: traffic control, safety control devices, street improvements, public transportation. Can levy ad valorem taxes, charge rates, tolls, fees, issue G.O., revenue bonds.	Typically formed in conjunction with large scale development approval	Highly variable depending on selected revenue source(s)	Depends on success of development project
Public Improvement Districts	BoCC – ex officio	Petition & resolution of governing body. Debt or taxes requires vote	Eminent domain (limited). Construction, operations, maintenance. Improve any street, or to provide street lighting or drainage facilities in unincorporated area or in incorporated area with city consent. Levy ad valorem tax, charge rates, tolls, fees, issues G.O. and revenue bonds	Relatively easy to form	Steady	Steady with variations if sales tax is used
Local Improvement Districts	Administrative subdivision of county	Petition & resolution/ ordinance of governing body; requires benefit study; sales tax and issuance of bonds requires a vote	Construction only; charge special levy sales tax, issue bonds.	Relatively easy to form	Varies according to size, revenue types and rate	Steady

	Governing Body	Formation	Powers/Uses	Ease of Implementation	Revenue Potential	Revenue Flow
State or Federal Grants • FASTER Transit • FASTER Safety • Bridge Safety Program • CMAQ • STP-Metro • TIGER • NewStarts • SmallStarts	County	Application for grants on a specific project basis	Use according to purpose approved			
Federal Transportation Infrastructure Finance and Innovation Act (TIFIA) Program		Application for TIFIA on a specific project basis	Credit assistance for qualified large-scale, surface transportation projects - highway, transit, railroad, intermodal freight, and port access - are eligible for assistance. Eligible applicants include state and local governments, transit agencies, railroad companies, special authorities, special districts, and private entities. The TIFIA credit program is designed to fill market gaps and leverage substantial private co-investment by providing supplemental and subordinate capital. Each dollar of Federal funds can provide up to $10 in TIFIA credit assistance and support up to $30 in transportation infrastructure investment.			

Prepared by:

FELSBURG
HOLT &
ULLEVIG

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