

ADAMS COUNTY

Transit Oriented Development and Rail Station Area Planning Guidelines



ADAMS COUNTY
COLORADO

ADOPTED AS AN AMENDMENT TO THE COMPREHENSIVE PLAN BY THE
ADAMS COUNTY PLANNING COMMISSION
DECEMBER 14, 2006

RATIFIED BY THE BOARD OF COUNTY COMMISSIONERS
JANUARY 8, 2007.

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Introduction

A challenge facing Adams County is how to maintain our high quality of life while at the same time accommodating the growth necessary to remain economically viable. Transit oriented development reduces urban sprawl and maximizes land usage by building more infill and dense developments. The redevelopment of declining areas helps to revitalize communities, fostering the development of new tax revenue and reducing governmental service costs. Although the primary goal of any transit system investment is to improve mobility, the economic and fiscal impact is of equal importance. Activities involving construction, operation and maintenance of a transit system create jobs, spending and tax revenues. New transportation infrastructure typically leads to new development and redevelopment activity, introducing shifts in development patterns and governmental service costs. Generally, travel time, air quality, business transportation costs and quality of life are positively affected by transit investments. Regional competitiveness also improves, thus affecting the location decisions of individuals and businesses.

Adams County has been anticipating the arrival of improved transit through the Regional Transportation District (RTD) FasTracks Plan for more than a Decade. The Long Range Transit Element of the 1996 Adams County Transportation Plan conceptually incorporated the future build out of fixed guideway, high occupancy vehicle (HOV) lanes and bus enhancements, as well as park-n-ride facilities throughout the county, in anticipation of the completion of the Major Investment Studies (MIS) along what would eventually evolve into the FasTracks corridors. The guidelines and policies set forth in this document provide specific updates to the Transportation Plan and the Adams County Comprehensive Plan, and naturally evolved from the following 1996 Long Range Transit policies:

1. Provide alternative travel modes to serve suburb-to-suburb travel needs;
2. Implement rapid transit to reduce vehicle miles traveled and the need for additional roadway capacity;
3. Select rapid transit corridors which have potential for densities sufficient to support rapid transit service. Additionally, local governments should be encouraged to use zoning and land development techniques, including infill and redevelopment, to create higher density mixed-uses around committed rapid transit stations and to give priority to rapid transit projects where local actions such as land development agreements and zoning actions encourage transit-supportive development patterns; and
4. Encourage local governments to consider alternative modes of transportation when making development approvals.

RTD FasTracks is a 12-year transportation program to build 119 miles of new commuter and light rail transit, 18 miles of bus rapid transit, add 21,000 new parking spaces at transit stations and expand bus service throughout the eight-county Denver region. FasTracks was approved in the November 2004 general election. It was the culmination of several Major Investment Studies and Scoping Studies conducted by RTD and other agencies to address future transportation needs. FasTracks has three major goals:

- 1. Provide Improved Transportation Choices and Options to the Citizens of the District,*
- 2. Increase transit mode share during peak travel times, and*
- 3. Establish a proactive plan that balances transit needs with future regional growth.*

Environmental Impact Statements (EIS) are required for each transit corridor designated in FasTracks and are built on the Locally Preferred Alternative (LPA) identified in each corridor's respective MIS and scoping study. An EIS is a formal process required under the National Environmental Policy Act of 1969 (NEPA) for projects with the potential to significantly affect the quality of the environment and particularly those requesting federal money. The purpose of the EIS is to evaluate the potential environmental impacts of the project; investigate potential mitigation measures to address environmental impacts, and analyze reasonable alternatives to the proposed project, and their significant impacts, including the "no build" alternative.

The preferred alternative for each transit corridor and placement of rail stations will be subject to the EIS process and ultimately the Record of Decision (ROD) given by the Lead-Federal Agency for each EIS.

The guidelines provided here constitute Adams County's policies toward transit and Transit Oriented Development (TOD) and form the basis on which future transit station plans will be formed. Through direction provided by the Board of County Commissioners, staff and others will use these guidelines to:

1. Set priorities for where county resources should be directed in the short, mid and long-term;
2. Identify effective implementation tools, policies and strategies to facilitate TOD where appropriate; and
3. Ensure close coordination among county departments, staff and others as planning and implementation activities unfold.

This document, and ultimately all TOD-related plans will provide guidance for elected and appointed officials, developers and community leaders seeking answers to what kinds of change can be expected in their communities and the likely timeframe for these changes.

Purpose

The purpose of these guidelines is to outline a strategy for the development of Transit Oriented Development (TOD) projects near rail stations that will be built through RTD FasTracks. Development of TODs and the associated redevelopment in transit corridors has the potential to provide Adams County with signature gateway projects serving as prominent entryways to the county along three of its major transportation corridors.

This document outlines Adams County's overall strategy for Transit Oriented Development. It consists of the following elements:

1. Define and designate rail station areas and transit corridors;
2. Create a set of policies to guide Transit Oriented Development;
3. Establish a standardized process and format for Station Area Plans.

Transit Oriented Development Defined

Transit Oriented Development (TOD) is a planning approach that calls for high-density, mixed-use business/residential neighborhood centers to be clustered around transit stations and corridors. TOD is considered a "smart growth" strategy, because it addresses the issue of where growth should occur from a sustainability perspective and it coordinates land use and transportation such that both land and infrastructure are used efficiently. As its name implies, Transit Oriented Development is designed to be served by transit rather than or in addition to the automobile. Networks of streets and multi-use paths are also created to provide a walkable and bikeable environment that is conducive to living, working, and shopping in the same area. TOD is focused within a one-half mile radius of transit stops, with the highest intensity and mix of land uses concentrated within one-quarter mile or adjacent to the station. Land use intensities and densities decrease away from the core area, with transitions included in development plans to ensure compatibility with existing neighborhoods.

There are many benefits associated with Transit Oriented Development, including

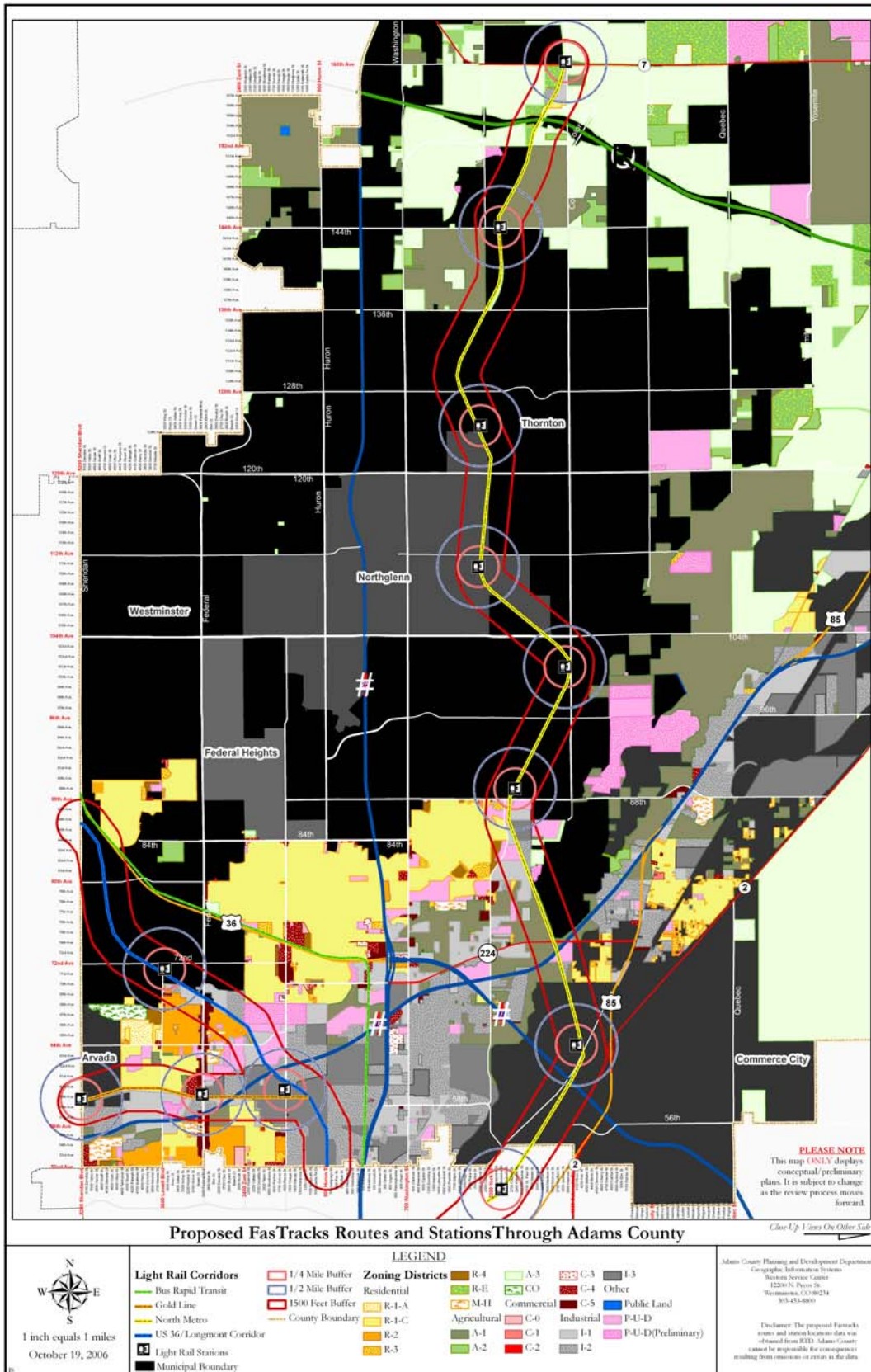
- reducing vehicle miles traveled;
- decreasing air pollution;
- absorbing population growth;
- constraining sprawl and conserving open space;
- lowering infrastructure costs;
- economic growth and increased land values;
- leveling the Jobs vs. Housing balance;
- promoting a healthier, more active lifestyle;
- providing new housing for seniors, singles, and first-time homebuyers;
- creating vibrant new public places, and
- reducing the demand for land dedicated to parking.

Rail Corridor and Station Area Definition and Designation

Currently, the Adams County Comprehensive Plan does not address Transit Oriented Development. The Station Area designations provided in this document identify specific areas surrounding transit stations as a distinct type of place in Adams County. This designation applies generally to those areas within a five to fifteen minute walk, or one-half mile of a transit station. Actual boundaries will vary based upon the unique physical characteristics of each Station Area. Final boundaries will be determined through the development of Station Area Plans.

To further define the form of TODs, a Station Area Core boundary will apply generally to those areas within one-quarter mile of a transit station. As with Station Area boundaries, actual boundaries of the Station Area Core will be determined through a Station Area planning process. Although the one-quarter mile boundary serves as a general guide, the highest intensity and greatest mix of uses will typically occur within a much more concentrated area immediately surrounding the transit station. These definitions, along with the Station Area designation, will ensure that the space surrounding transit stations are recognized as distinct planning areas, creating a clear frame of reference for the TOD policies and helping to guide future planning efforts for the Station Areas.

As fixed transit will bring countless travelers through Adams County, providing a pleasant visual experience to riders is critical to promoting the image of the County. The Transit Corridor designation will apply to all unincorporated lands within 1,500 feet of transit lines. In order to enhance the quality of transit corridors, certain measures need to be taken. New entitlements which do not meet the intent of this Comprehensive Plan Amendment will not be granted by the County in these areas until permanent Overlay District zoning is in place. This essential policy is necessary to discourage land use patterns that may preclude Transit Oriented Development and the promotion of the area as Adams County's Gateway. A map depicting key station locations, Station Areas, Station Area Cores, and Transit Corridors in unincorporated Adams County is provided on the following page.



FasTracks will bring fixed-guideway transit to Adams County via the Gold Line, US 36, and the North Metro Line. Twelve of the stations serving these lines are to be built in or adjacent to Adams County. The following text and maps describe the individual corridors in more detail.

Gold Line

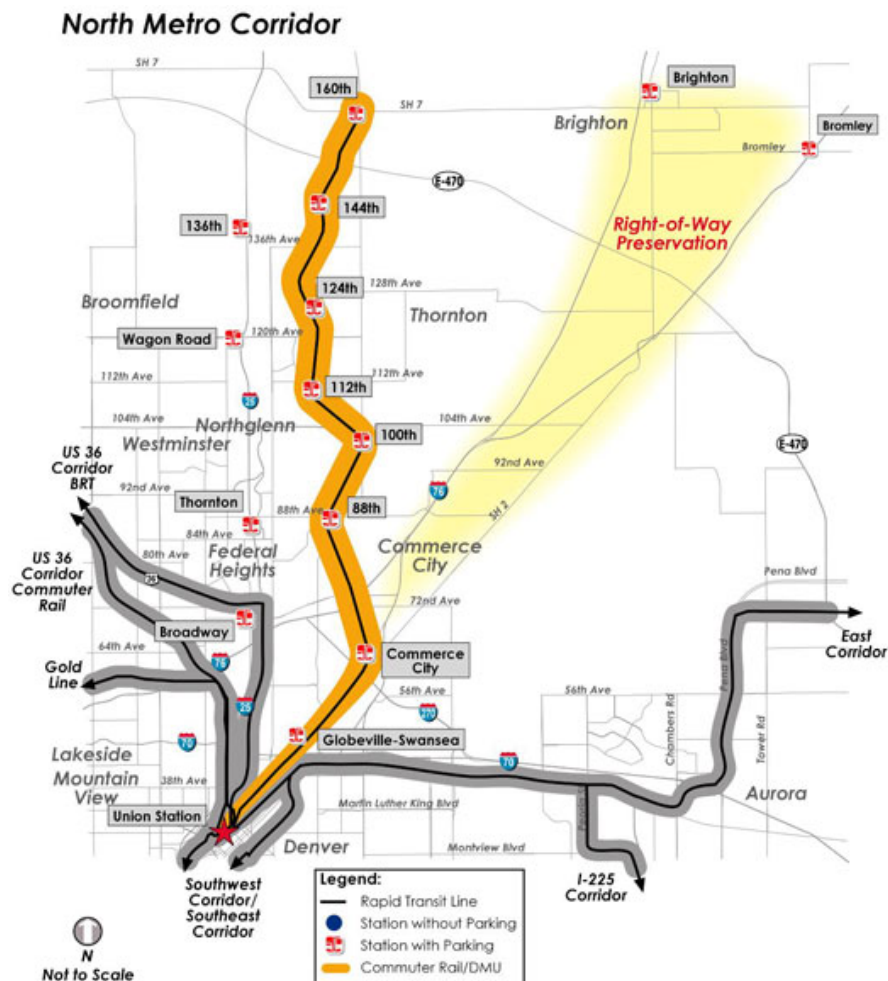
The Gold Line is an 11.2-mile fixed guideway project that extends from Denver Union Station in downtown Denver to Wheat Ridge. The alignment generally follows the railroad right-of-way north from Denver Union Station to Pecos Boulevard and continues west to the intersection of I-70 and Ward Road. Two stations on the Gold Line will be developed exclusively in unincorporated Adams County – Clear Creek at Federal Boulevard and Pecos Junction. Station Area Planning will begin for these stops in 2007. Adams County Planning staff is already participating in the Station Area planning process for the Sheridan station headed by the City of Arvada.



North Metro Corridor

The North Metro Corridor is an 18-mile fixed guideway line that extends from Denver Union Station in Downtown Denver north to 160th Avenue (SH7). The rail line generally follows the railroad right-of-way to the east of I-25. FasTracks also includes right-of-way preservation for future transit and the addition of new park-n-Rides at 136th and I-25, and at Bromley Lane on I-76. North Metro stations are located in the cities of Commerce City (1), Denver (1), Northglenn (1) and Thornton (5). These Cities will be responsible for Station Area planning. Adams County Planning and Development anticipates little direct participation in the development of these stations except for 88th Avenue, as we foresee some degree of redevelopment in unincorporated Adams County south of this station. The County will encourage coordination throughout the corridor to ensure individual station area planning does not occur in a vacuum. The implementation of TOD principles elsewhere in this corridor is strongly encouraged, as are coordinated, corridor-wide analysis and planning efforts.

The county will also be looking long-term for the planning of 'FasTracks II'. A separate effort is currently underway through the North Metro EIS to determine the conceptual alignment of a future rail corridor through Commerce City and Brighton. The area shaded in yellow on the below FasTracks map is the area being evaluated.



US 36 Corridor

Subject to the results of the EIS in progress, the US 36 Corridor and Longmont Extension include a 38.1-mile fixed guideway line along the existing railroad right-of-way between Denver Union Station in Downtown Denver and Longmont (through Boulder). In addition to commuter rail, 18 miles of BRT/HOV lanes are proposed in the median of US 36 between I-25 and the Table Mesa park-n-Ride in Boulder. The two Adams County stations on this line are both located in the City of Westminster and will be planned entirely by the municipality. Adams County Planning and Development has advocated for the addition of a transfer stop on this line at Pecos Junction to provide convenient access to and from the Gold Line.

US 36 Corridor/Longmont Extension



Transit Oriented Development Policies

These policies are intended to provide general direction for the development of the county's Station Area planning efforts. Specific Station Area plans will further define the overall vision, densities, land uses, site layout and design, parking strategies, circulation, urban form, open space, and implementation tools based on the unique features of each station.

Planning in Context with Local Communities

Policy: Ensure that development patterns are compatible with both the established character of the county and the new framework provided in Station Area Plans.

Strategies:

1. Each Station Area's identity, in terms of its mix of uses, development intensity and character, should largely be informed by and relate to the surrounding development.
2. Station Area Plans should use an assessment of surrounding development context, in conjunction with the Station Area's identifying characteristics, to develop refined policies for the area.
3. Transition areas should be identified in Station Area Plans to soften the impact of high-intensity Core Area uses on existing neighborhoods.
4. The County will discourage land use patterns in transit corridors and around transit stations that may preclude future Transit Oriented Development.

Policy: TOD should provide benefits to the local community. Through consultation with local communities, TOD should provide a range of supporting benefits for local communities including increased uses and services, a variety of housing, increased transportation options, and more walkable environments.

Strategies:

1. Invite local land owners and communities to participate in the Station Area planning process. Information and opportunities to be consulted should be made available at appropriate times.
2. New development in Station Areas should provide services and amenities needed by local communities. These might include new housing forms, safe places for social activities, outdoor recreation, retail and personal services.
3. Transitions between developed areas and new Station Areas should be provided.

Infrastructure

Policy: Focus public infrastructure investments where development is most desirable to correct existing deficiencies and ensure capacity for high-intensity TOD.

Strategies:

1. Ensure that adequate public facilities, including streets, drainage, pedestrian and bicycle amenities, are in place in advance of or can be completed concurrent with development in Station Areas.
2. Relocate or reconstruct existing facilities that are incompatible with desired Station Area development, such as utility sub-stations, abandoned freight rail spurs, overhead utility lines, or oversized streets or street layouts.
3. Coordinate capital improvement plans by the County, Metropolitan Districts and private developers to facilitate TOD development.
4. Document baseline infrastructure conditions.
5. Ensure that developers and agencies comply with County requirements for road and intersection improvements.

Policy: Maximize smart growth planning techniques and opportunities as a mechanism to promote the practical preservation of the floodplain/floodway and to reduce potential runoff into Clear Creek.

The environmental, community and economic benefits of compact, mixed-use development go hand-in-hand with policies and strategies to protect our waterways by preserving floodplain areas and reducing stormwater run-off. In fact, under the federal regulations known as the National Pollutant Discharge Elimination System (NPDES) Stormwater Program, there are many parallels between required stormwater management programs and associated ‘Best Management Practices’ (BMPs) that local jurisdictions are mandated to create, and the water quality benefits associated with smart growth techniques.

Strategies:

1. Implement the findings and recommendation of the Clear Creek Master Drainage Study and other floodplain and drainage studies done by the County or the Urban Drainage and Flood Control District.
2. Comply with federal, state and local stormwater programs by using ‘Best Management Practices’ (BMPs) to manage stormwater runoff over the life of development and redevelopment projects within the overlay district.

3. Encourage a ‘fix it first’ rule where funds for repair and replacement of existing water infrastructure have priority.
4. Consider various strategies to reduce the amount of impervious surfaces such as higher density development combined with maximum setback rules and reduced parking spaces within the overlay district.

Mix of Uses

Station Area Plans should define an appropriate mix of uses. Typically, this should include a minimum percentage of employment, retail, and residential uses for the overall planning area. These percentages will vary depending on the individual characteristics of each Station Area, and would be established by a development phasing and land use mix schedule.

Policy: Create an environment that meets a wide variety of needs within a compact space to increase transit use, extend hours of activity, and reduce traffic.

Strategies:

1. Promote a mix of complementary and transit-supportive residential, employment, and retail uses within Station Areas.
2. Utilize a vertical mix of uses within the Station Area Core to facilitate higher development intensities.
3. Encourage the development of transit-supportive uses that provide a balance of service, entertainment, employment, and housing options that will make the Station Area a safe, inviting place to live, play and work.
4. Target uses towards an existing market demand within the context of the transit corridor and adjoining neighborhoods, rather than a pre-defined formula.
5. Concentrate mixed uses in centrally located, high-visibility areas.
6. Encourage active uses at the street level, such as shops and restaurants, where they can be easily viewed and accessed by pedestrians and transit patrons.
7. Facilitate the incorporation of public facilities, such as schools, libraries, government service centers, recreation centers, and police substations in the Station Area.

Policy: Discourage auto-oriented uses.

Strategies:

1. Discourage auto-oriented uses such as auto repair and service shops, “big box” retail, and drive-thru fast food within the Station Area.
2. Promote transit supportive design including smaller commercial footprints, reduced parking areas, and smaller building setbacks.
3. Give priority to pedestrians and bicycles in building design and street layout.

Policy: Incorporate a variety of housing types within Station Area Plans.

Incorporating housing as a prominent use within Station Areas not only helps meet existing demand for homes, but also provides a built-in population base that supports shops and restaurants, utilizes transit, and will help establish the Station Area as a self-sufficient neighborhood.

Strategies:

1. Incorporate a diversity of housing choices that includes a mixture of densities, styles, and price ranges.
2. Vary housing mixtures according to the context of the greater Station Area.
3. Define the appropriate variety of housing types based on existing and desired development patterns within the context of adjoining neighborhoods.

Development Intensity/Density

Policy: Development intensity and density should be significantly higher in Station Areas to provide a base for a variety of housing, employment, local services and amenities that promote transit usage, encourage pedestrian activity and support a vibrant station area community.

Strategies:

1. Establish residential density targets in Station Area Plans to provide flexibility and encourage a variety of development intensities and heights.
2. Enact minimum non-residential density and height requirements in Station Area Plans to ensure that development intensities in the Core Areas are transit-supportive and that early phases of development are not built at exceedingly low densities.
3. The highest intensity of development should be concentrated within the Core Area and adjacent to the transit station.

4. Surface parking lots should be strongly discouraged adjacent to the transit station, except as a temporary or transitional use.
5. Provide a transition between the Core Area and the surrounding area by stepping down the height of structures, reducing lot coverage, increasing open space, increasing architectural detailing, reducing permitted maximum densities, changes in use, or a combination of these methods.
6. Encourage infill and redevelopment to achieve higher densities and a greater mix of uses.
7. Discourage low-intensity, land-consumptive uses related to agriculture or heavy industry such as outdoor storage or construction staging.

Provide an Integrated Public Transportation System

Policy: Establish a fully integrated system of functional street networks, pedestrian and bicycle paths, bus stops, sidewalks and station locations that accommodate and encourage the use of non-vehicular modes as preferred methods of travel within and between Station Areas.

Strategies:

1. An interconnected hierarchy of streets should be established to clearly define primary pedestrian, bicycle and vehicular travel routes between Station Area uses and to uses adjoining the Station Area.
2. Streets shall be designed and traffic signals timed to accommodate all modes of travel comfortably, but with an emphasis primarily for the convenience of walkers and bicyclists.
3. Cul-de-sacs or other dead end streets should be strongly discouraged.
4. Limit driveway access points along major thoroughfares and primary bicycle and pedestrian paths.
5. Encourage shared parking and driveway access wherever possible.
6. Provide clear, direct linkages between transportation modes.

Pedestrian and Bicycle Friendly Design

Policy: Create safe, convenient, connected, and inviting pedestrian and bicycle linkages to and from transit stations to provide walkable and bikable areas and to promote the use of transit.

Strategies:

1. Station Area block lengths should range between 400 and 660 feet to facilitate connectivity and pedestrian accessibility.
2. Develop primary and secondary bike and pedestrian paths connecting to the Station Area.
 - a. Primary paths attract high pedestrian and bike volumes, associated pedestrian and bike oriented services, and act as the major connections to the station. Primary routes should provide direct access between the station and major pedestrian and bike destinations in the surrounding community. Primary paths should be designed as continuous, convenient, safe and barrier-free routes.
 - b. Secondary paths do not provide direct links to the station, but feed into the primary routes.
3. Utilize sidewalk widths adequate for social use (six to twelve feet depending on location and use).
4. Provide pedestrian plazas to create social places and to tie buildings and uses together.
5. Install direct, continuous, buffered sidewalks across any large parking areas.
6. Utilize canopies, awnings, and arcades to provide pedestrian shelter.
7. Establish a coordinated and unified palate of street furniture, lighting, way-finding and signage throughout each Station Area.
8. Install clear directional signs and safety warnings for bicycle traffic.
9. Provide sufficient bicycle security facilities where appropriate.
10. Utilize traffic calming techniques and pavement markings where appropriate.
11. Ensure adequate planning for ADA compatibility.

Site Layout and Design

Policy: Each Station Area should be designed as a distinct neighborhood center that is compatible with and well integrated into the existing neighborhood fabric. They should be unique, vibrant places that invite pedestrian and bicycle activity and maximize transit ridership, while acting as gateways into the surrounding communities.

Strategies:

1. Development in the Station Area should provide a destination for both transit and local residents.
2. Elements of site layout and design should include local gathering places, shopping, services and transit connections.
3. A variety of building heights are encouraged to create visual interest and establish a unique identity.
4. Concentrations of mass and height are desirable at key intersections, along transit corridors or major thoroughfares, and at the Station Core.
5. Away from the Station Core, building heights should transition to existing neighborhoods to increase compatibility.
6. Building access and windows within Station Areas should be oriented towards the primary street frontage so that entrances are inviting and accessible to pedestrians from the sidewalk.
7. Encourage bicycle parking facilities for each building.
8. Incorporate generous architectural detailing, including the articulation of building facades, use of stone and other masonry materials, and incorporation of fenestration, awnings, balconies, and other details to provide a high level of interest at the street level.
9. Blank walls, absent of architectural detail should not be permitted.
10. Build-to lines that anchor buildings at the sidewalk edge should be established for the Station Area Core to achieve more intense, compact patterns of development. Selective variation in build-to lines should be allowed in key areas to allow for outdoor restaurants or plazas and to add visual interest to the streetscape.
11. Investigate utilizing forms-based zoning or other new zone district categories as tools for implementing Overlay Zone Districts.

Parking

Policy: Allow lower parking ratios within Station Areas as well as alternative parking solutions to achieve more intense development patterns.

Strategies:

1. Discourage surface parking within the Station Area, except as an interim use to “land bank” property should immediate development of the parcel not be feasible.
2. Parking management strategies should be developed to ensure efficient use of limited Station Area parking facilities.
3. Parking structures should be located near or adjacent to the transit station, and developed with street level retail and service uses where possible.
4. Surface parking should be located to the side or rear of buildings wherever possible, and broken into smaller areas through the use of landscaping and non-conflicting secondary bike and pedestrian paths.
5. On larger sites, or where site layout permits, consider allowing installation of parking in increments according to demand.
6. Utilize shared parking, trip reduction strategies, and transportation management to reduce off-street parking requirements between 25-50% where it is plausible that residents, employees, customers, or visitors will utilize alternative modes.
7. Encourage shared parking for multiple-use developments or adjacent uses with different peak parking demands.
8. Explore the use of parking districts or other financing tools to fund strategically located parking structures.
9. Minimize adverse impacts to pedestrian and bicycle movements from Park and Ride facilities through thoughtful location, size and design.
10. Where major parking areas are planned, access should be from collector and arterial roads around the station areas, without impacting existing communities or the pedestrian environment closest to the station. Primary bike and pedestrian paths should lead from these parking areas to primary destinations such as the station, major office areas, high-density residential, etc.

Development Phasing

Policy: Appropriate phasing procedures should be developed to ensure the desired mix of uses will be achieved in Station Areas.

Strategies:

1. Station Area Plans should define an appropriate ratio of uses and include a phasing plan that identifies a targeted use ratio for each phase of development.
2. Foster partnerships between Adams County, the development community, financial providers, RTD, and other local jurisdictions and agencies to promote a common understanding of project phasing and build-out goals and to encourage the implementation of Station Area development opportunities that are both flexible and coordinated.

Parks and Public Spaces

Policy: Provide adequate parks or public spaces to encourage community interaction, provide recreation opportunities, and create space for civic activities.

Strategies:

1. Public spaces, such as parks, natural features, and plazas, should be utilized as an organizing feature for Station Area development and as a focal point for the Station Area neighborhood.
2. Public spaces should be incorporated into the design of transit stations when feasible to increase the functionality and visibility of the space.
3. Station Areas should contain a hierarchy of open spaces that range from public parks to smaller outdoor rooms and plazas
4. Public spaces should transition from smaller urban parks and plazas near the Core Area to larger parks on the fringe of the Station Area.
5. Community amenities, such as fountains, sculpture and other public artwork, seating, and other features that help create identifiable gathering spaces, should be incorporated as part of the public open space hierarchy.
6. Clear pedestrian and bicycle linkages should be provided within public spaces and along primary corridors as urban greenways.
7. To implement multiple-uses throughout the station planning area, utilize existing floodplain and floodway areas as amenities while complying with all floodplain regulations.

Station Area Plan Framework

Station Area Plans should be used as the primary means of articulation and implementing the County's vision for each of the Station Areas. While the actual contents of each Station Area Plan will vary, each plan should contain policies and development standards that provide specific details about how the area is to be developed. A TOD Overlay District should then be used to implement the Station Area Plan by providing the policy and regulatory framework to allow the implementation of a broad mix of transit supportive uses. A standardized process and framework for Station Area Plans is provided below.

It is recommended that each Station Area Plan include the following:

Inventory of Existing Conditions

An inventory of existing conditions within and adjacent to the Station Area will help define opportunities and constraints that will need to be addressed with the Station Area Plan. It will also serve as a tool for the identification of priority development areas and infrastructure improvements for the entire transit corridor.

1. *Identification of Station Area and Station Area Core Boundaries* – Although a Station Area has already been defined as a one-half mile radius from a transit station, a more tailored boundary will need to be determined as part of the Station Area Plan. The boundary may expand or contract according to the specific physical characteristics and key elements of the Station Area. The one-quarter mile radius of the Station Area Core may be similarly refined.
2. *Identification of Station Area Influence Zone* - While the focus of the Plan will be within the Station Area, an appropriate area of influence outside the station Area should be identified as part of the inventory to provide context. This zone of influence should be incorporated as part of all analysis and should be visible on all mapping provided as part of the Plan.
3. *Current Ownership* – Ownership patterns will play an important role in the development of policies and implementation strategies for the Station Area Plan and must be considered early in the planning process. Potential hurdles such as non-participating property owners, large tracts of public land, Brownfields, or the need for extensive property assemblage are several potential issues that may arise from this analysis.
4. *Environmental Features* – Environmental features such as creeks, lakes, drainages, wildlife corridors, floodplains, landfills, contaminated sites, and flammable gas hazards should be identified and evaluated as potential opportunities or constraints to guide the planning process.

5. *Infrastructure Assessment* – An inventory and assessment of existing infrastructure conditions should be conducted to identify necessary participating agencies and short- and long-term needs to be addressed by the Plan.
6. *Existing and Planned Transit Facilities* – The location and frequency of transit service within the Station Area will help shape land use patterns, mix of land uses, and development intensities with the Station Area Plan. The inventory will serve as a valuable tool for discussing ongoing coordination issues related to transit and feeder transit services.
7. *Population and Employment Projections* - Demographics including, but not limited to, population, areas of poverty or minority concentrations, employment, commuting patterns, and income should be provided to add to the context for the Plan and to provide a baseline for future analysis. Analysis based on anticipated land use patterns and area growth should be provided as guiding factors for Station Area development.
8. *Review and Synthesize Existing Plans, Studies and Documents* – The underlying assumptions, policies, and implementation measures from all applicable existing plans and studies should be reviewed to provide guidance on existing and future government efforts in the area.

Market Analysis

A market analysis should be completed to determine viable development forms, as well as key parameters such as achievable rent levels and market characteristics for the Station Area. This analysis will help address economically viable uses today that are consistent with the future vision, and to help lead the development community toward TOD-consistent planning for current projects.

1. *Market Analysis* - Using projected ridership information, this analysis should accommodate various market-driven uses at each Station after the fixed guideway and related improvements are completed. Analysis will include mapping of market viability of uses with fixed guideway against the current market conditions, to help guide land use decisions for the area proximate to future rail stations.
2. *Complete a housing market analysis of the Station Area.* This analysis shall include at a minimum the number and type of existing housing units and population, the number of expected housing units and population, the distribution of proposed housing units by type
3. *Identify Strategic Development Opportunities* - Using the data collected, identify:
 - Sub-market areas for development opportunities,
 - Strategic sites within the Station Area where redevelopment will spur broader area revitalization,

- Housing, office, retail, recreational, institutional development opportunities,
- Number of existing jobs, number of new jobs anticipated, and square feet of current and future commercial and industrial development,
- The financial viability of these opportunities, and
- Potential strategies for overcoming any barriers identified.

Land Use Plan

A key component of Station Area Plans should be a concept plan that defines the desired land use pattern, mix and intensity of uses for the area. The land use plan should include:

1. *Station Area Identity* – A description of the planned development concept through the use of narrative, illustrations, photographs, and maps. The narrative should also describe the relationship of the Station Area with the surrounding neighborhood.
2. *Land Use Concept* – A vision of the desired Station Area land uses and their relationship to each other, the surrounding development, and the Station Area as a whole. This should be conveyed through narrative, illustrations, and a land use map that illustrates proposed land uses at the block level.
3. *Street Hierarchy and Circulation Concept* – A street hierarchy and circulation concept delineating primary transit, auto, bicycle and pedestrian corridors and linkages to parking areas. This concept should be based on analysis of existing and predicted traffic levels and transit demand to ensure safe access to all transportation modes.
4. *Open Space and Gateway Concept* – Identification of Station Area open space, greenways, parks, trails, wildlife corridors, watersheds, and important gateways. This concept should identify the size, location, and designation (public vs. private) of spaces and linkages to the countywide parks and trails system.

Design and Development Standards

Station Area Plans should contain detailed policies and design standards that detail how the policies outlined above will be applied within each Station Area. Detailed policies and design standards should address the following:

- *Identity* – Key characteristics of the Station Area and/or surrounding development as they apply to the overall Land Use Plan.
- *Infrastructure* – Unique infrastructure requirements or specifications.
- *Mix of Uses* – Overall and block level land use mix; relationship between uses.
- *Development Intensity/Density* – Appropriate densities and height; ranges of proposed densities by use expressed as Floor Area Ratio for non-residential uses and as units per acre for residential uses, density changes or transitions necessary

- at the edge of the Station Area to achieve compatibility with surrounding neighborhoods.
- *Street Patterns/Connectivity* – Recommended block lengths; recommended street widths and cross sections, potential traffic calming techniques, specifications for pedestrian and bicycle travel routes, way-finding and signage programs.
 - *Site Layout and Design* – Build-to lines and setbacks for the Station Area and Station Area Core by use, Station Area specific design standards, including architectural character and detail, building widths, wall articulation, and roof forms.
 - *Parking* – Provide detailed parking reduction and parking management strategies.
 - *Development Phasing* – Based on proposed land use patterns, a Phasing Plan should be prepared that identifies specific strategies for meeting the targeted mix of uses over time. It should identify priority development areas and the anticipated timing of each phase of development. Key public/private partnerships and ongoing coordination that will need to occur at each phase should also be identified, as well as any infrastructure or other requirements on which development would be contingent.
 - *Public Spaces and Greenways* – Provide Station Area specific locations and design standards for formal and informal public gathering spaces, plazas, parks, trails, and greenways.

Implementation Strategies

Station Area Plans should include an implementation schedule outlining future actions. Recommended actions to implement include:

- *Application of an Overlay Zone* – An Overlay Zone District shall be established to implement the specific recommendations from the Station Area Plan. The Overlay Zone should contain parking and parking structure standards, landscaping and signage standards, and transportation layout and access control measures. It should also utilize form-based zoning or include a specific set of Design Standards addressing prohibited uses, permitted uses, minimum residential densities, minimum Floor Area Ratios, and site layout and design standards including area, density, bulk, height, orientation, setback, and open space requirements.
- *Required Infrastructure Improvements* – A coordinated plan for installation of necessary capital improvements and relocation of incompatible facilities should be in place. This will accommodate desired development in priority development areas according to the Development Phasing plan.
- *Other Government Actions and Initiatives* – Necessary actions by local, state, and federal agencies should be outlined and prioritized. This should include interagency coordination and joint development initiative.
- *Land Assembly and Acquisition Strategies* – Identify key parcels necessary to successful implementation of Station Area Plan. Provide various acquisition strategies that will minimize acquisition cost and displacement of existing businesses.