



## **I-225 Corridor TOD Workshop Summary**

**PB PlaceMaking**

**December 2008**

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## 1.0 INTRODUCTION

As part of the FasTracks program, RTD has embarked on a series of corridorwide workshops to evaluate the opportunities and challenges for transit-oriented development (TOD) along each transit corridor, coordinate planning efforts among local government jurisdictions, and recommend how to better integrate transit with the surrounding community. This process has occurred separate from the corridor environmental documentation process, but helps inform the latter by considering TOD concerns that might not ordinarily be part of the environmental process scope.

RTD retained PB PlaceMaking to conduct a one-day workshop for the I-225 Corridor held May 20<sup>th</sup>, 2008, with assistance from Strategic Economics, a national real estate market consulting firm specializing in TOD. The planned 11-mile light-rail corridor will parallel an interstate highway with the exception of two segments: one that will serve Aurora's retail and civic center, and the other a major medical employment center (Fitzsimons). The corridor will connect the I-225 spur of the Southeast Corridor light rail to the planned East Corridor commuter rail, which will serve Denver International Airport, downtown Denver, and portions of Aurora. The predominantly highway context creates challenges for TOD at a few locations, but provides increased access and visibility at others.

The corridor is almost entirely located within the City of Aurora, which provides a unique opportunity within the FasTracks program to plan for supportive station area development along an entire rail line and use this infrastructure to create a unified sense of identity in the communities it serves. (A small portion of the corridor lies within the City and County of Denver at the northern and southern-most stations (Peoria/Smith and Nine Mile). RTD began an Environmental Evaluation (EE) for the I-225 Corridor in the fall of 2007. The Draft EE is anticipated to be completed in April of 2009 and a Final EE in August of 2009. Final design and construction are expected to begin in mid-2011 with construction to be completed by 2015. All of these dates are subject to change pending resolution of FasTracks funding issues.

Participants in the workshop included staff from the City of Aurora, City and County of Denver, RTD, the I-225 EE project team, and Aurora's station area planning consultant, Crandall Arambula. The corridor project managers and their environmental consultants from Michael Baker Corp. presented the preliminary platform locations, bus transfer stops, and park-n-Ride site options under consideration in the EE. Representatives from Aurora and their station area planning consultant presented their preliminary vision for each station area. Opportunities for potential design changes to better integrate the transit facilities into the surrounding communities were explored within the constraints identified by the environmental process and City staff knowledge of the area, including development opportunities.

### 1.1 TOD and Development-Oriented Transit

Successful TOD starts with the earliest decisions on the shape and design of transit systems. However, in this transit design, communities and developers are beginning to ask: if TOD is expected to take a transit system into account, why shouldn't transit systems be designed with potential development in mind? The query brings a new and valuable perspective to some of the most fundamental aspects of transit alignment, and public needs and preferences in relation to system operations. It is also important to understand that not every station is suited for TOD. With

over 50 new FasTracks stations coming on line, there will be tremendous competition regionally for TOD. It is critical for local jurisdictions to establish priorities for TOD that consider immediate versus long-term opportunities. It will also be critical to try to create station areas that are friendly to pedestrians and bikes to maximize accessibility in places where TOD is not likely or is a long-term opportunity.

In many cases, transit system design assumes that vehicles, especially automobiles and buses, are the only significant means of passenger access to the system. As a result, stations tend to be surrounded by “mega” parking lots, and feature drop-off locations as close as possible to station platforms. This design approach actually encourages vehicle use and automobile-oriented development within the community—the opposite of TOD goals. Moreover, it increases driver convenience but does little for pedestrians or cyclists, and the huge parking lots have the practical effect of separating the stations from the communities they serve.

In contrast, a “DOT” design perspective might eliminate parking at some stations or establish multiple parking areas dispersed through the area around the station, at a distance that is convenient for driving commuters but not close enough to dominate the station landscape. (See Exhibit 1-1.) This would allow for complementary design strategies that incorporate pedestrian and bicycle pathways. This approach does not sacrifice the need for convenient vehicle access—it simply accommodates other needs at the same time while supporting the principles of sustainability.

#### Exhibit 1-1: Auto-Oriented Design vs. Transit Oriented Design

The development to the right of the tracks represents Transit Oriented Principles; the development to the left represents auto-centric design.



The approach has successfully played itself out with modern and established systems. Several stations on the Metra commuter rail system in the Chicago area provide excellent illustrations of this approach—the Elmhurst, La Grange Road and Arlington Heights stations disperse parking between 6 to 18 lots. Portland’s TriMet and DART in Dallas have moved parking away from the platform at some stations to accommodate TOD. This addresses the need for vehicle access while maintaining an interesting and attractive environment and inviting pedestrian and bicycle movement. At each of these stations, this approach to station design reciprocates the TOD that has been occurring around the station through higher-density, mixed-use development and TOD-friendly zoning.

It’s surprising how many transit systems, including newly developed ones, have stations in areas where there is little potential for sustainable land-use development. A “DOT” approach would incorporate an analysis of potential TOD in the area during the planning stage. What is the community’s vision for how it wants to grow? Is the real estate market and political climate receptive to TOD? What are the probable changes in the community’s makeup and infrastructure, and how might system elements, including stations, be designed in response?

The “Development-Oriented Transit” design perspective is by no means incompatible with an approach that focuses on conventional transit system and passenger requirements. On the contrary, it enhances that approach. It assumes that it is possible to meet user requirements and maintain cost-effective service—while seeking synergies with TOD, encouraging environmentally friendly practices, and creating lively community spaces.

A simple DOT checklist might look something like this:

- Are stations located in areas with TOD potential?
- Do the facilities allow for convenient pedestrian and bicycle access while balancing parking requirements?
- Are the facilities integrated into the surrounding community, rather than separated from it by dividers such as giant parking lots?
- Has the design actively taken into account the likely needs and outcomes of TOD in the area?

A DOT design perspective is a logical accompaniment to TOD. If transit systems and adjacent communities are to exist together, then they should complement and enhance each other. Ultimately, DOT makes a transit system an integral element of the community—useful, attractive, and environmentally sensitive—rather than a visitor making a brief stop on the way to some other place.

A “DOT” perspective takes into account concerns directly linked to the goals of livable communities and sustainable development. The design specifically explores ways to integrate stations into community spaces, instead of separating them by vehicle buffer zones. Stations are designed to respond to the community’s social, economic and cultural makeup in a way that identifies the stations as community elements, not just functional structures that might exist anywhere but be at home nowhere.

The seven principles of DOT below are intended to help guide the design and implementation of rail and along the I-225 Corridor in a manner that maximizes the effectiveness of the project as an investment in both people moving and community building.

- 1. Stations as the Heart of the Community**—Design transit stations to serve as the hub of a community and provide a local identity (see Exhibit 1-2). In places where there is an established downtown or center, stations should serve to support and enrich the area. A mix of land uses promotes activity around the clock, either within the TOD or easily accessible from the TOD. This in turn promotes the most efficient use of the transit system: travel in both directions, throughout the day. A mix of employment, residential, and recreational uses that provide services during the day, evenings, and weekends expands transit ridership beyond the morning and evening commute

**Exhibit 1-2: Pearl District, Portland, Oregon**

The streetcar serves as the heart of Portland’s Pearl District, whose unique mix of uses – live/work, residential, office and retail creates 24 hours of activity.



to encourage transit use for shopping and entertainment purposes.

2. **Connect Neighborhoods with Transit**—Link neighborhoods along the corridor together with transit and transit stations to the community through a well-connected street, bus, bicycle and pedestrian network.
3. **Create a Pedestrian Environment**—Within a TOD, non-auto trips increase when a mix of uses is easily accessible and arranged in a way that emphasizes travel on foot rather than car. Provide lively, safe and convenient sidewalks and paths connecting stations to homes, jobs, schools, parks and shopping. Buildings should face those connections.
4. **Manage Traffic**—The streets surrounding stations need to be better connected and multimodal to allow for multiple modes of travel. Parking lots and associated street improvements may be designed so that traffic operates at speeds compatible with a more pedestrian-oriented environment.
5. **Balance Parking**—Parking must not separate transit from the community. Move, share, wrap and deck parking to provide the right balance of parking to support the economic viability of the station area and make the area pedestrian friendly. A strategy should be developed to balance the parking needs of retail and commercial uses, existing and proposed residential uses, and transit parking.
6. **Create Partnerships**—Secure public-private partnerships and intergovernmental partnerships that will maintain the success of the corridor and the communities it will serve to capture and enhance the public investment made in transit improvements.
7. **Complement Community Objectives**—Help realize the vision and economic and social vitality of each community with quality development that provides a mix of uses close to transit. The center must create a destination: a sense of place and community. Each station center along the corridor should be distinctive and unique to the neighborhood or area.

**Exhibit 1-3: Clarendon Neighborhood,  
Arlington, Virginia**

Development surrounding the Clarendon Metro station in Arlington, Virginia creates an environment oriented to—and scaled for—the pedestrian



## 1.2 Parameters for Project Changes

While station area plans adopted by local jurisdictions provide input into the environmental evaluation, community and economic development are only one of more than 20 criteria that have to be evaluated and potentially mitigated for in the environmental documentation process, and as a result have to be weighed against other factors including engineering feasibility, environmental impacts, and project cost.

The matrix in Exhibit 1-4 below identifies cost and schedule implications of changes to the current

design (the design as of the date of the TOD workshop, May 2008) for transit-oriented development purposes. Changes such as reconfiguring proposed park-n-Ride locations and moving station platforms will impact the design and construction process. The matrix identifies project milestones related to design and construction and the associated impacts to cost and schedule if changes are proposed during that phase. Responsibility for design and construction changes associated with TOD will primarily be the responsibility of local jurisdictions and developers beyond the initial phase of design. The costs for any proposed design changes after the environmental process is complete would be borne by parties other than RTD. These could include additional costs for environmental evaluation, design and engineering, construction materials and labor, and related costs. Cost saving measures proposed as part of a TOD project will be considered when evaluating the cost implications for design.

**Exhibit 1-4 Cost/Schedule Impacts**

Project Milestone	Cost/Schedule Impact (Responsible Party)	Schedule
Draft EE	<ul style="list-style-type: none"> <li>•Potential for cost/schedule impact for design changes (RTD)</li> <li>•Potential for additional construction costs beyond established RTD budget (Aurora/developer)</li> </ul>	April 2009
Completion of environmental documentation process	<ul style="list-style-type: none"> <li>•High likelihood for cost/schedule impacts for design changes (RTD/Aurora/developer)</li> <li>•Potential for additional construction costs beyond established RTD budget (Aurora/developer)</li> <li>•FHWA required approval within I-225 ROW</li> </ul>	August 2009
Notice to Proceed with design-build contractor	<ul style="list-style-type: none"> <li>•Cost/schedule impacts for design changes (Aurora/developer)</li> <li>•Potential for additional construction costs beyond established RTD budget (Aurora/developer)</li> <li>•FHWA required approval within I-225 ROW</li> </ul>	Beginning 2011
Begin design/construction	<ul style="list-style-type: none"> <li>•High probability for additional costs to be several million dollars including change order with contractor (Aurora/developer)</li> <li>•High probability of delaying schedule</li> <li>•FHWA required approval within I-225 ROW</li> </ul>	Mid-2011



## 2.0 CORRIDORWIDE SUMMARY

The real estate market and present development context along the I-225 corridor (see Exhibit 2-1) is predominantly characterized by automobile-oriented retail such as grocery-anchored shopping centers and big-box stores, fast/casual food pads, motels, and other uses typically found adjacent to highway interchanges in suburban locations. The notable exception is the Fitzsimons/Anschutz Medical Campus. The City of Aurora envisions the future rail service as a catalyst to encourage new pedestrian-oriented development around the stations that would accommodate a mix of office, retail and residential at transit-supportive densities. The City has begun to prepare for this transformation with revisions to their Comprehensive Plan, the creation of station area plans, transportation studies and new zoning implementation tools that will result in pedestrian-scale development.

Unique to other suburban FasTracks corridors, the I-225 line will serve a major employment center with the redevelopment of the 578-acre former Fitzsimons Army Medical Center, which closed in 1995 and has already resulted in 16,000 jobs—with a total of 32,000 employees expected at full build out in 2030:

**Exhibit 2-1: I-225 Light Rail Corridor**



- Construction has begun on the \$1.3 billion first phase of the 227-acre University of Colorado Anschutz Medical Campus—seven new educational facilities will be completed by 2009, and the entire campus is expected to be operational by 2010.
- The \$567 million Children’s Hospital, a 1.4 million square-foot, 270-bed facility that is part of the Anschutz Center, was completed in 2007. The 116-bed first phase of the \$548 million VA Hospital, a 1.5 million square-foot facility planned for 31 acres, may begin construction in 2009.
- The Pauls Corp. has begun construction on 21 Fitzsimons, a \$57 million, 15-acre, mixed-use project with 550 apartments and 16,000 square feet of ground-floor retail.
- The \$2 billion Colorado Bioscience Park Aurora, being developed by Forest City, will include 3.5 million square feet of bio-research laboratories on 160 acres when completed in 2030.
- Spurred by this investment, several private redevelopment projects are also underway or planned south of the campus.

## 2.1 Aurora Planning Efforts

The City of Aurora has initiated two additional transportation-related studies in the corridor: the Aurora Strategic Parking Study and the Fitzsimons Multimodal Transportation Study. The purpose of the Aurora Strategic Parking Study is to develop a corridor-wide strategic parking plan and program to address current and anticipated parking demand and management needs generated by light rail and commuter rail transit, and transit-oriented developments around the stations from the City's perspective. The Fitzsimons Multimodal Transportation Study is evaluating roadway improvements, pedestrian and bicycle accessibility, intersection improvements and travel demand management (TDM) strategies at the Fitzsimons campus.

Aurora is currently revising their Comprehensive Plan, creating a base TOD zoning district and developing station area plans. The TOD ordinance will address parking ratios required for development around stations. The TOD zoning district will address parking requirements to go into effect 18 months in advance of station opening. Three sub-districts will be implemented within the overarching TOD zoning: core, general and transition zones. Parking in the core area would have a minimum requirement and all parking would be required to be in structures. Shared parking would be required with maximum caps in the core and general areas. Finally, the City in 2007 adopted Urban Street standards for TOD areas and urban centers to allow for multi-modal access needed to support pedestrian-scale development, which are among the most innovative in the region.

The City has implemented a 1% public art requirement in the TOD zone district to strengthen a sense of identity at each station. This is intended to create stations that are unique from other corridors in the FasTracks program, and that they reflect the values of the larger City. The City will need to lead the funding efforts for future art at stations since it is not in the FasTracks budget.

## 2.2 Station Typologies

General station typologies were identified by the workshop participants. The identification of typologies acknowledges that each station area may have a different land-use emphasis while still supporting transit. The intent of the typologies is to determine how development at each station area can reinforce the overall success of development along the entire corridor, and should not be interpreted as a narrow definition of the TOD opportunities at each. For example, a residential typology station may still have a mix of other uses, such as retail and employment, but the development around the station has a residential emphasis.

The stations were grouped into four typologies:

- Peoria/Smith, Montview, and Florida were identified as **Employment Stations**
- Abilene and 13<sup>th</sup> Avenue (a potential additional station) were identified as a **Residential Stations**
- Aurora City Center was identified as Aurora's **Downtown**
- Colfax and Iliff were identified as **park-n-Ride/transfer Stations**

## 2.3 Corridorwide Observations

The I-225 light rail line will link several destinations, including the Aurora Medical Center, Aurora City Center, the Fitzsimons medical campus and Bioscience Park, and the East corridor commuter

rail line. Aurora sees this new rail connection as an opportunity to develop a “linear downtown” and present a distinct city image. The City aspires for the transit line to become an expression of Aurora, integrated into the built environment and public art and spaces around the stations along the length of the corridor.

With this vision in mind, it is important to recognize that not all of the stations will become regional destinations in and of themselves. Given current overall economic and regional market conditions, development may occur over time and may not be imminent at each station area. Therefore, from a resource perspective, public and private investment will need to be prioritized and phased.

The following are observations about the corridor as a whole—the opportunities, challenges and timing of TOD.

**Challenge of location** – Nationally the experience of TOD adjacent to freeways is a mixed bag. For the I-225 Corridor this heightens the importance of getting the planning and design right. Freeways tend to overwhelm the impact of transit and freeways diminish the opportunity for TOD in a number of ways.

- Impact of interchanges – even with the introduction of a rail line the automobile can be expected to continue to shape the physical landscape and the real estate market.
- Walkability – a core fundamental of TOD is designing around the pedestrian. The automobile domination of interchanges conflicts with this objective.
- Limited TOD catchment area – in a classic TOD the walkable catchment area spans the 360’ degree circle around the station. With a freeway the walkable catchment area is severed by automobile dominated streets and the freeway itself.

**Opportunity of a Corridor** – The I-225 Corridor presents a special opportunity to create a synergy among and between the individual stations and a coordinated corridor strategy within the City of Aurora. Experience elsewhere points to the importance of planning for a mix of uses in the corridor – places to live, work and play. In particular residential uses have been shown to play an important role in suburban corridors interested in adding more employment.

- From a market and planning perspective an early strategic decision will be to provide an overall framework for how the stations fit together in a cohesive transit supportive manner.
- The opportunity to plan and brand a combination of regionally accessible stations as a district distinct from downtown Denver, or perhaps Boulder.
- Examples of successful mixed-use transit-friendly corridor TOD strategies include the Rosslyn Ballston Corridor in Arlington, Virginia and the Lloyd District in Portland, Oregon.

**Importance of taking the long view** – With 53 new stations coming on line in a compressed period of time, part of the challenge of FasTracks will be taking a long-term view. At the same time, regardless of market timing, with proper planning FasTracks can impact the shape of Aurora for years to come. Part of the discipline in capitalizing on FasTracks is planning with the understanding that the real estate market is unlikely to be robust enough to support build-out of all the I-225 stations initially.

**Challenge of timing** – timing is a common challenge in new transit corridors. One way to express the issue is *‘when do short term planning and development decisions by the City of Aurora get shaped by FasTracks?’* Planners, developers and elected officials know transit is

coming, but it is not there yet. In all likelihood, the real estate market and public policy have not shifted to reflect FasTracks. With supportive public policy FasTracks can impact the shape of Aurora for years to come. Moving the market and public policy to shift to reflect a new reality of a long-term future with transit can take time.

- For the City of Aurora and RTD, defining a strategy to shape today's planning and development approval decisions with an eye to the coming of FasTracks will be essential to seizing the opportunity of rail.
- One strategy for the city to strongly consider would be to adopt regulations to help assure that development within the influence area of the I-225 stations only occurs in a transit supportive manner when it comes to factors such as: parking, building orientation, density and the automobile dependency of land uses.

**Parking and TOD-** Since the EE is currently in process, the transit parking requirements for Opening Day at each station have not been finalized. The City has expressed a need for more than the 1,800 additional spaces budgeted for the project. Aurora must complete a corridor parking study to determine parking demand, how the additional parking will be paid for, if it would be integrated in RTD's facilities or managed separately by the city, how land would be acquired for the additional parking and by what entity, and whether it would be constructed as part of the transit project.

## 3.0 STATION AREA FINDINGS

The workshop resulted in a series of recommendations for City of Aurora staff and consultants and the I-225 corridor project team to evaluate as part of the EE. The purpose of these recommendations is to take full advantage of TOD and to better integrate the planned transit facilities with the surrounding community.

A discussion of the recommended action items, including responsible party(ies) and timeframes for implementation follows below by station. Due to the need to prioritize discussions due to the time constraints of the workshop process, prospective TOD actions were not addressed for the Montview, Abilene or Florida stations, or for Nine Mile, the existing Southeast Corridor station from which the line will be extended north along I-225 to Peoria/Smith.

### 3.1 Peoria/Smith Station

#### Location/Character

The Peoria/Smith Station is a planned transfer station for the East Corridor (commuter rail) and I-225 Corridor (light rail). The area is characterized by primarily industrial land uses and highway-serving retail. Large vacant parcels are located southwest of the intersection of Smith and Peoria. The station serves two jurisdictions: the land to the north of Smith Road is within Denver and the land south of Smith Road is within Aurora. I-70 is located at the north end of the station area (within ½ mile) and provides both access and visibility to the planned station. There are approximately 3,000 jobs currently in the ½ mile radius of the station. A photo of the station area is shown in Exhibit 3-1 and the location of the station is shown in Exhibit 3-2.

**Exhibit 3-1: Peoria/Smith Station area**



#### Opportunities/Challenges

##### Opportunities:

- Functions as a transfer station, bringing additional ridership and activity.
- Gateway station to Aurora.
- Visibility and access from I-70.
- Located in close proximity to the Fitzsimons Complex (south) Stapleton (west), and to Montbello to the north.
- Adaptive reuse potential in older warehouses north of Smith Road.
- Denver portion of the station area is shown as an Area of Change in *Blueprint Denver* and as an employment use.

##### Challenges:

- Parking requirements in the short-term and long-term (up to 1,900 spaces).
- The existing freight crossing at Peoria causes traffic congestion.
- The station serves two jurisdictions, requiring more intensive coordination with station area planning efforts.
- Environmental constraints in the station area include a concrete batch plant, prison, major gas line parallel to Smith Road, and major drainageways.
- Market competition for office with nearby sites (competing with Stapleton, 40<sup>th</sup>/Airport, optional airport stations).

**Exhibit 3-2: Peoria/Smith Station**



**Recommendations**

*Identify a champion, funding sources and an implementation timeframe for Peoria grade separation.*

- **Timeframe for completion:** Prior to start of construction of I-225 LRT Corridor or later
- **Aurora/Denver Responsibility:** Decide what roles each city will play, how the project will be funded, when it would be constructed, how to coordinate with RTD and/or rail construction contractors.

*Reach agreement on desired alignment of Smith Road*

- **Timeframe for completion:** As part of development of Preferred Alternative (summer 2008)
- **Responsibility:** Aurora, Denver and RTD

*Investigate feasibility of moving the platform as close as possible to the Peoria intersection*

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*(This would require approval of the UPRR and a design variance from RTD). Update: Due to engineering requirements, the station is proposed to be located west of the Peoria/Smith intersection.*

- **Timeframe for completion:** Prior to completion of EE process/FEIS for East Corridor (Fall 2009).
- **Aurora/Denver Responsibility:** Come to agreement on Peoria grade separation project to allow decision on platform location.
- **RTD Responsibility:** Determine feasibility of moving platforms as close as possible to Peoria, including UPRR approval.

*Determine the location of transit parking and potential parking expansion after Opening Day.*

- **Timeframe for completion:** As part of development of Preferred Alternative (Summer 2008)
- **Aurora Responsibility:** Complete station area plan to provide input to RTD on where parking siting would accommodate transit-supportive development.
- **RTD Responsibility:** Coordinate with Aurora and determine feasibility and location of parking expansion if needed after Opening Day.

*Plan and implement improvements to streetscape and pedestrian environment on segment of Peoria between the I-70 interchange and UP ROW to create a gateway to the station.*

- **Timeframe for completion:** Prior to the completion of construction of I-225 Corridor (2015).
- **Denver/Aurora Responsibility:** Create streetscape improvement plan, engage property owners, and determine funding sources and implementation timeframe.

*Identify areas of transition to transit-supportive uses, multi-modal connectivity, potential catalyst sites, preferred land use mix, and available implementation tools.*

- **Timeframe for completion:** Prior to completion of EE process (Fall 2009).
- **Aurora Responsibility:** Complete station area plan to address above.

*Determine desired betterments to station to make Peoria/Smith a “gateway” or signature station for the City of Aurora. There are unique challenges to the design of a station that provides the interface between two rail technologies.*

- **Timeframe for completion:** Prior to start of construction of East Corridor (2010).
- **Aurora responsibility:** Determine desired urban design improvements, funding and implementation plan for upgrading the amenity level of the station.
- **RTD responsibility:** Coordinate with Aurora staff on key milestones for funding and other commitments to ensure that the Station can be upgraded with initial construction.

## 3.2 Colfax Station

### Location/Character

The Colfax Station is planned south and east of the Fitzsimons Medical Campus along Colfax Avenue. The station will be a walk-up station (no parking is planned). Existing uses south of Colfax include warehouses, commercial and mobile home sales. This station is in an area of transition. A restaurant retail complex has been constructed at the intersection of Fitzsimons Parkway and Colfax. Two RTD bus lines run along Colfax at 3.5 minute frequencies in the peak hour. A bus transfer location (on-street stops) is planned closer to the rail station along Colfax Avenue.

Exhibit 3-3: Colfax Station area



At the time of the workshop, RTD had not reached a consensus for a station location. One proposed option is a Wheeling Street Alternative alignment (west of the VA Hospital). Under this scenario, buildings would need to be acquired south of Colfax which could become potential TOD sites. The City of Aurora prefers a diagonal alignment of the corridor. RTD has not explored this option, however, if the City would prefer that RTD to evaluate this alternative, RTD may be willing to do that per direction from the City. A photo of the station area is shown in Exhibit 3-3 and the location of the station area is shown in Exhibit 3-4.

(Update: Since the workshop, the station location has been confirmed as an elevated station that spans Colfax. The rail alignment runs parallel to and just west of Tollgate Creek. The station would be accessed by stairs and elevators on both the north and south sides of Colfax.)

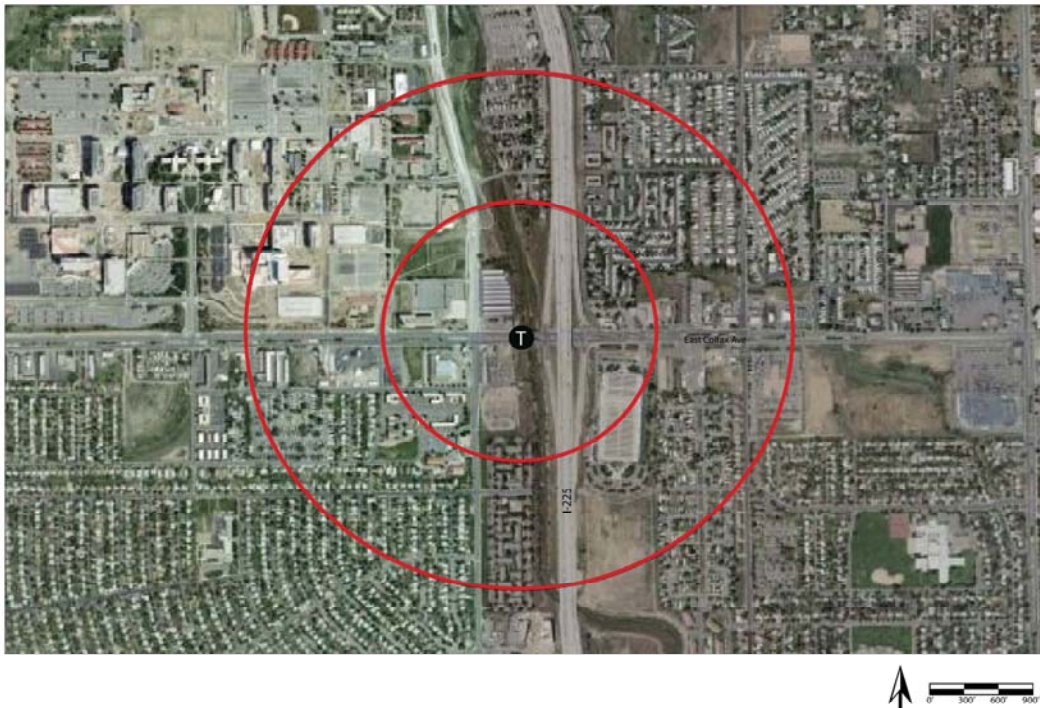
### Opportunities/Challenges

#### *Opportunities:*

- Proximity to the Fitzsimons Medical Campus and associated facilities, as well as I-225.
- Location of a major bus transfer site along Colfax—two major RTD bus lines (with 3.5 minute peak hour frequencies) will have stops at the station, providing increased activity and regional connectivity.
- A high-density development plan is underway for the area south of Colfax.

#### *Challenges:*

- This station requires substantial further coordination between all stakeholders to confirm a station location that provides walkability, connectivity to all modes (including bus) and frontage along Colfax Avenue.
- The proposed VA Hospital would separate the station from Fitzsimons under the current station configuration.
- Electromagnetic concern (LRT in proximity to medical equipment).
- Coordination with the Fitzsimons Medical Campus has confirmed that the Campus will not allow the rail alignment to cross through their property along Wheeling.

**Exhibit 3-4: Colfax Station****Recommendations**

*Reach agreement on alignment of Colfax Station bridge.*

- **Timeframe for completion:** Immediate (Note: Completed as of August 2008).
- **Aurora Responsibility:** Determine City preference for the station bridge to be parallel to Tollgate Creek rather than a diagonal alignment across Colfax.
- **RTD Responsibility:** I-225 project team to evaluate environmental and operational impacts and costs of Tollgate Creek bridge alignment pending decision by Aurora staff.

*Plan for multi-use trail access from Tollgate Creek to Colfax Station.*

- **Timeframe for completion:** As part of development of Preferred Alternative (Summer 2008)
- **Aurora Responsibility:** Determine timing for Tollgate Creek trail planning and implementation and collaborate with RTD to preserve ability to provide station access.
- **RTD Responsibility:** Coordinate with Aurora so station design does not preclude future access from Tollgate Creek trail whenever it is constructed.

*Determine street cross-section and bus transfer connection to station for westbound segment of Colfax between I-225 and Potomac.*

- **Timeframe for completion:** Prior to completion of EE process (Fall 2009)
- **Aurora Responsibility:** Complete station area plan to determine if median-separated local lane plus on-street parking is desirable, and coordinate with RTD to ensure bus operations are functional.
- **RTD Responsibility:** Coordinate with Aurora on bus transfer function to station.

### 3.3 13<sup>th</sup> Avenue Station

#### Location/Character

The 13<sup>th</sup> Avenue station was not part of the original FasTracks plan but is being evaluated as a potential station location. RTD is currently working with Aurora to look at options for funding the station. Initial modeling results show 250 parking spaces on Opening Day, and 700 by 2035. The station would be located on a vacant parcel east of I-225 adjacent to a residential neighborhood and mobile home park. An elementary school is located nearby. This station has considerable residential development potential. Commercial development potential may be limited due to the lack of access from I-225 and surrounding streets. Preliminary station plans from Aurora's consultant depict development adjacent to the station platform. Access to the commuter parking would be provided under the highway. A photo of the station area is shown in Exhibit 3-5 and the location of the station is shown in Exhibit 3-6.

**Exhibit 3-5: 13<sup>th</sup> Avenue Station area**



#### Opportunities/Challenges

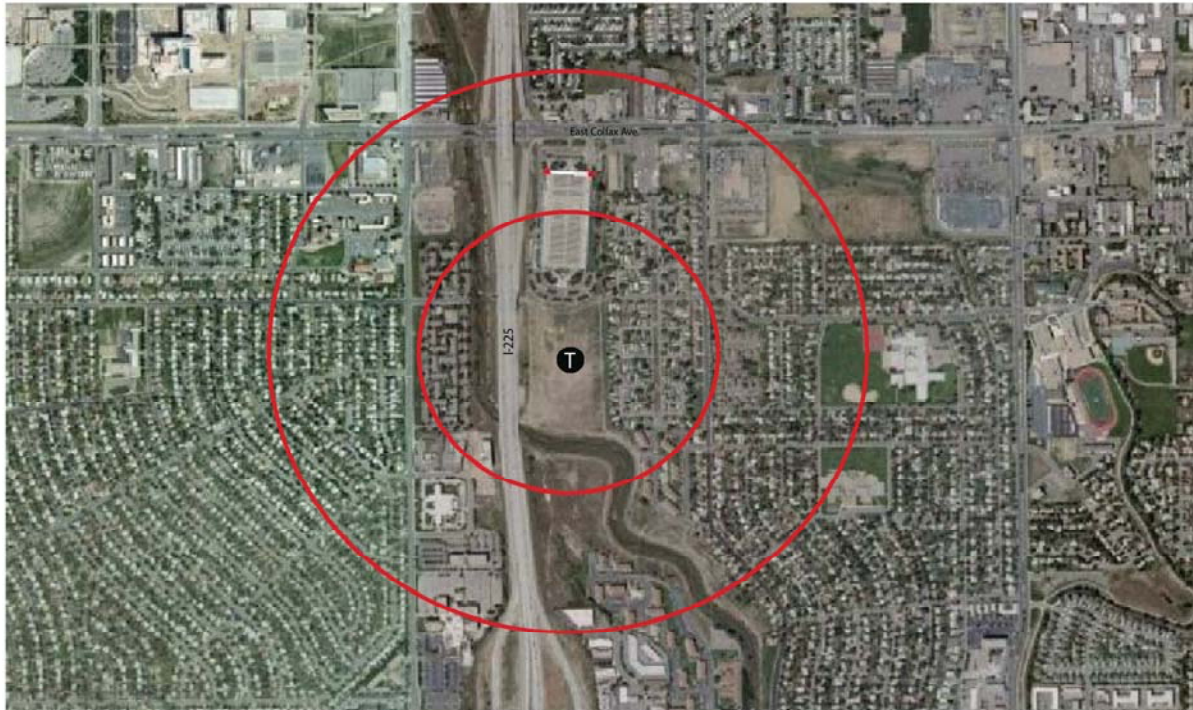
##### *Opportunities:*

- Large vacant property east of I-225 owned by RTD
- Proximity to Fitzsimons (supportive residential)
- Consider small separate parking lots

##### *Challenges:*

- Pedestrian and vehicular access to the station is limited (except for 13th Avenue from the east). Additional roadway infrastructure is needed.
- Noise levels are substantial adjacent to the highway, which could limit the potential for residential development.
- Parking may be utilized by Fitzsimons visitors (1 stop away).

Exhibit 3-6: 13<sup>th</sup> Avenue Station



### Recommendations

*Reach agreement on cost sharing for station construction budget*

- **Timeframe for completion:** Prior to completion of EE process (Fall 2009)
- **Responsibility:** Both Aurora and RTD need to define the steps recognized to reach an agreement (define RTD budget, cost estimates for alternatives, timing, etc)

*Determine preferred rail alignment, transit parking location, auto circulation/street network*

- **Timeframe for completion:** Prior to completion of EE process (Fall 2009)
- **Aurora Responsibility:** Work with adjacent property owners and neighbors to gain support for station location, access and redevelopment opportunities and complete station area plan.
- **RTD Responsibility:** Determine and resolve operational and safety challenges posed by potential at-grade crossings of rail alignment. Clear entire RTD owned site in EE to not preclude the opportunity for an alternative alignment pending completion of Aurora station area planning process.

*Determine alignment and implementation timeframe for 13<sup>th</sup> Avenue roadway crossing over Tollgate Creek.*

- **Timeframe for completion:** Prior to completion of EE process (Fall 2009)
- **Aurora Responsibility:** Conduct necessary planning and engineering to determine feasibility and cost of Tollgate crossing at 13<sup>th</sup> Avenue to provide access to station and redevelopment sites. Identify funding and implementation timeline for project.

- **RTD Responsibility:** Coordinate with Aurora on 13<sup>th</sup> Avenue roadway plans and access to station for I-225 project.

*Evaluate potential for joint development of RTD property and whether this approach could be leveraged to provide transit infrastructure.*

- **Timeframe for completion:** Prior to completion of EE process (Fall 2009)
- **Aurora Responsibility:** coordinate with RTD to ensure RFP process will be supportive of station area plan.
- **RTD Responsibility:** monitor/evaluate political environment on joint development of site.

### 3.4 Aurora City Center Station

#### Location/Character

The City Center is envisioned as Aurora's downtown with a Main Street concept through the center of the development. Over the last 10 years, over 400 million dollars has been invested in new development in the area around City Center. RTD is in the process of constructing a bus transfer station on a 3-acre site owned by RTD next to the proposed City Center station location. A photo of the station area is shown in Exhibit 3-7 and the location of the station is shown in Exhibit 3-8.

**Exhibit 3-7: Aurora City Center Station area**



#### Challenges/Opportunities

##### *Opportunities:*

- Large vacant property
- Development plan in review by the City
- Opportunity to create a downtown center of activity and new identity for Aurora.

##### *Challenges:*

- The suburban-style development plan may not facilitate creation of a downtown "place" and center of activity.
- No civic spaces are planned.
- The location of the bus transfer facility and RTD parking adjacent to the station is in a prime location for development.
- A grid pattern is needed to enhance the walkability of the area.

**Exhibit 3-8: Aurora City Center Station**



**Recommendations**

*Evaluate relocation of planned 200-space park-n-Ride to an alternative location to allow for development adjacent to the station.*

- **Timeframe for completion:** As part of development of Preferred Alternative (Summer 2008)
- **RTD Responsibility:** Determine ridership, access and budget impacts.
- **Aurora Responsibility:** Determine city support for moving parking.

*Evaluate feasibility and cost of partially relocating bus transfer facility to the north to create developable frontage on north side of Centrepont Drive (this assumes that the current design of the bus transfer facility will be built in the near future and that any reconfiguration of the facility will be funded by a developer or the City in a later phase).*

- **Timeframe for completion:** Prior to completion of EE process (Fall 2008)
- **Aurora/RTD Responsibility:** Determine timing of bus facility reconstruction, location of temporary bus facilities during construction, cost sharing, and how to develop Centrepont frontage currently owned by RTD.

*Balance need for property owner revenue with TOD market readiness.*

- **Timeframe for completion:** Immediate
- **Aurora Responsibility:** Work with Woodbury Corporation to allow phased development of the site that provides short-term economic return, and preserves the potential for a pedestrian-oriented local street network connecting Aurora Town Center (mall) and the Civic Center to the station. Also, allow connectivity to transit-supportive uses to be built when the real estate market has matured.

### 3.5 Iliff Station

#### Location/Character

RTD proposes a station along the I-225 freeway off ramp at Iliff Avenue. Preliminary parking estimates indicate a need for 600 parking spaces at this station. Approximately 16 acres of land are vacant east of the station. The station location is north of an existing hotel and apartment complex. Further east along Iliff are retail and restaurant uses. The City envisions a long term market for medical office at this location. Future retail development at the station could compete with existing retail nearby.

A few different options are feasible for the station location. One option is to move the station location farther from the freeway. A lane of traffic would be removed on Harvard (making it a three lane roadway). The light rail would be configured on the north side of the street. A second alignment would be located on Anaheim Street which would allow development to be focused around the station and park-n-Ride lots on the periphery. Any deviations from the proposed alignment would have greater costs and likely require additional funding beyond RTDs base budget. A photo of the station area is shown in Exhibit 3-9.

**Exhibit 3-9: Iliff Station area**



(Update: The station location has been confirmed at the location shown in Exhibit 3-10.)

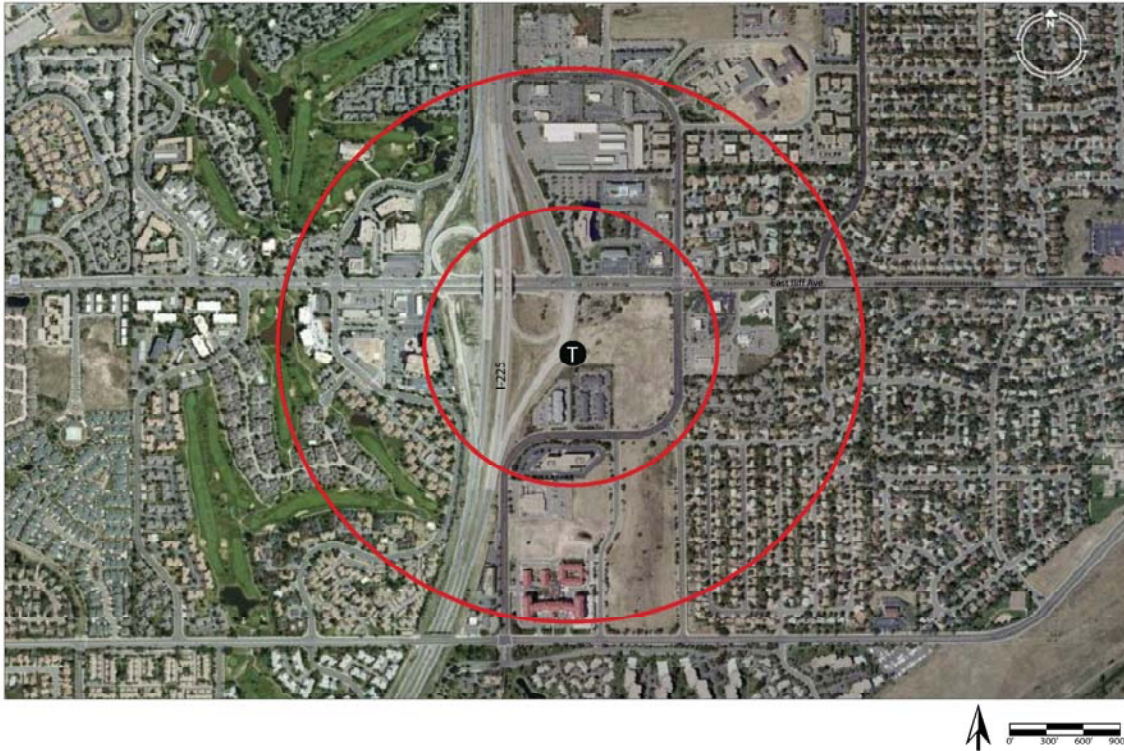
#### Challenges/Opportunities

##### *Opportunities:*

- Vacant land under one ownership in proximity to the station.
- 49,500 trips per day on Iliff (currently)
- A bike/pedestrian bridge is located on Yale Avenue (over I-225).

##### *Challenges:*

- The Nine Mile Station is in the middle of I-225-connects to the east at Iliff.
- 600 parking spaces will require a substantial amount of land next to the station.
- Vocal neighborhood south of Yale.
- A station location close to Iliff puts vehicular traffic on Iliff.

**Exhibit 3-10: Iliff Station**

### Recommendations

*Balance location of parking for station with development opportunity along Iliff.*

- **Timeframe for completion:** Prior to completion of EE process (Fall 2009).
- **Aurora Responsibility:** Work with adjacent property owners to evaluate development opportunities to promote transit-supportive development and accommodate station parking needs
- **RTD Responsibility:** Coordinate with Aurora and property owner on the location and design of parking

*Finalize location of platform and parking.*

- **Timeframe for completion:** Immediate (Note: completed July 2008).
- **Aurora and RTD Responsibilities:** Work to evaluate the cost/benefit of alternative alignments and make a decision based on multiple factors including development opportunity, access, transit operations and cost.