FasTracks TOD
Lessons Learned Report
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Executive Summary

With more than five years into the Regional Transportation District (RTD) FasTracks program and a tremendous effort of planning, design and construction completed, it is important to assess the accomplishments and lessons learned for the Transit Oriented Development (TOD) Program as a part of the larger FasTracks success. Some of the critical questions to ask as a part of this reflective assessment are:

- How is success defined with TOD?
- What are the metrics of success?
- What should be expected in each phase of project development for the corridors and for FasTracks as a whole?

The real significance is not the passage of five years as much as moving from one phase of FasTracks and TOD to another – a milestone marker and a sure sign of success. The environmental studies are substantially complete, local governments have made great strides in completing TOD plans, and the private development community is getting ready for the next development cycle after a national period of historic economic collapse. Now is a perfect time to step back and evaluate where TOD is headed, reflect on what did and did not work, and the elements needed to be successful in the next phase. This Lessons Learned Report outlines those successful achievements that should be repeated and actions that may need to be different in the future. The report is organized into four separate categories with lessons in each category. The key lessons learned are summarized below.

- **TOD Policy/Guidance** – The *Strategic Plan for TOD* and other related policies should be visible and updated as a part of RTD’s role in shaping TOD. The TOD policies must be an integrated part of the design process and serve as a key resource at the same level as the Design Criteria and other RTD policies. Once rail operations commence, it is reasonable to expect there will be increased interest in TOD implementation. RTD will need to determine the appropriate level of effort of staffing for the TOD program to ensure that TOD is implemented successfully and that partnerships are formed to collaborate on public and private investment.

- **TOD Outreach and Coordination** - To ensure success, external outreach efforts need to continue through the later phases of FasTracks and beyond. Also, greater internal TOD outreach is needed to ensure TOD issues are fully considered in the design and construction phases. This may be accomplished in part with the Transit Access Committee (TAC). The *TOD Status Report*, one tool to assist with outreach, should continue to be updated annually. As a part of the report, more in-depth analysis of development trends utilizing the comprehensive database is warranted.

- **TOD Planning** – Two primary products emerged from this overarching topic: Station Area Plans and Corridor-wide TOD Workshops. The station area plans were critical to initiate early in the corridor planning and environmental process both in placement of uses and infrastructure as well as an understanding of construction and development phasing. RTD corridor-wide TOD Workshops allowed RTD and the jurisdictions to determine how each of the stations within the corridor may relate to each other rather than compete with each other. Working groups from each corridor should be considered
to ensure continued corridor-wide discussion between the jurisdictions and RTD. This could be through existing corridor-wide groups or through the formation of corridor-wide groups with RTD support.

- **TOD Implementation** – As FasTracks evolves into the implementation phases of the project, attention to TOD implementation will continue to evolve as well. It is reasonable to expect increased attention on realizing TOD as FasTracks moves through implementation and the real estate market recovers from the current downturn. Therefore, TOD policies must evolve to implement TOD over the long term. RTD’s joint development policy laid the foundation for the steps to implement TOD. Specific recommendations related to implementation include:
  - Reactivate the Transit Access Committee to be a focal point for RTD coordination;
  - Develop an alternative to the 1:1 ratio for parking replacement; and
  - Capitalize on national, regional and local funding programs.
Definition of Lessons Learned

Lessons Learned are general statements that describe good practices or innovative approaches that are shared to promote repeat application. They may also be descriptions of challenges or areas for improvement that are shared to provide continuous improvement. Effective organizations use past experience as a guide to improve future performance. A program as large and complex as FasTracks is likely to offer lessons that can be used throughout the completion of FasTracks itself, as well as for future programs. TOD is an essential component of the transit development program. As several FasTracks corridors move from the planning to construction phase, now is an excellent time to reflect on Lessons Learned from the FasTracks TOD program to-date—both things that have gone well that should be repeated and things that would be done differently. The FasTracks team intends to apply these Lessons Learned moving forward to ensure continuous improvement on its implementation of FasTracks and to invite other agencies and organizations to learn from our experience as well.

RTD/FasTracks Overview

RTD Mission
RTD’s organizational mission is: “To meet our constituent’s present and future public transit needs by offering safe, clean, reliable, courteous, accessible and cost-effective service throughout the district.” In concert with the three core goals of FasTracks, RTD’s long-range transit plan is to:

- Provide improved transportation choices and options to the residents of the District – additional transportation choices add to the region's quality of life.
- Increase transit mode share during peak travel times – existing congestion during peak travel times of the day is frustrating for many drivers and is expected to worsen as the region grows.
- Establish a proactive plan that balances transit needs with future regional growth – the Denver metropolitan region is expected to grow from 2.6 million (2005) people to nearly 4 million in 2030.

FasTracks is RTD’s voter-approved, multi-billion dollar program to build 122 miles of rail transit, including six new commuter rail and light rail lines and extensions of three existing lines; build 18 miles of bus rapid transit service, add 21,000 new parking spaces, redevelop Denver Union Station into a multi-modal transit hub and redirect bus service to better connect the eight-county District. FasTracks is funded through a combination of sources, including the voter approved sales-tax increase of 0.4 percent (4 pennies on every $10) that passed in 2004. RTD has adopted program goals and objectives to guide the implementation of FasTracks.

FasTracks Program Guiding Principles

- Ensure every step contributes to the full vision
- Focus money available to the greatest good
- Spend public money wisely
• Maximize outside funding before returning to taxpayers
• Deliver key investments in all corridors

FasTracks Program Objectives
The FasTracks team mission is to provide a reliable and safe transit system that enhances mobility, responds to the growing transportation needs within the District, and creates a legacy for current and future generations. The team will accomplish this by achieving the following objectives:
• Complete the FasTracks investment initiative
• Provide a quality program and transit system
• Ensure public and transit system safety
• Minimize negative impacts to the community
• Provide timely, accurate, clear, and consistent information to the public
• Create opportunities for Small and Disadvantaged Business Enterprises

FasTracks – An Economic Driver
FasTracks is projected to create more than 10,000 construction jobs alone during the height of construction. Economists estimate that every $1 invested in transportation infrastructure translates into $6 of local economic activity. The FasTracks investment initiative will pump billions of dollars into the regional economy.
RTD/FasTracks Role in TOD

FasTracks has placed the Denver Metro area onto the national stage with a comprehensive transportation plan to connect the region, improve air quality, reduce traffic congestion on highways and provide opportunities for economic development around transit stations. With nearly 60 FasTracks stations planned in addition to RTD’s 37 existing stations, the Denver Metro area will be on par with other mature fixed guideway transit systems in the U.S. Moreover, it will have done so with an eye toward maximizing transit ridership and encouraging jurisdictions to maximize the economic and community benefits of the public investment. The scale of transit expansion linked with proactive planning for TOD puts Denver in a unique leadership position nationally. FasTracks plays an important role in realizing these goals.

In the T-REX Lessons Learned Report (known as the Transportation Expansion Project or T-REX during construction and currently referred to as the Southeast Corridor), two of the three most valuable lessons learned were:

- Identifying light rail transit station planning as a major area of focus early in the project, and;
- Placing a greater emphasis on TOD.

Based on the Southeast Corridor experience, RTD committed itself to incorporating TOD into its project development for new corridors to increase transit ridership, enhance transit-rider experience, and leverage public investment for the benefit of local communities.

The purpose of RTD’s TOD Program within the larger FasTracks program is to support opportunities that enhance the transit system and communities around stations through thoughtful TOD planning, design and development. To realize this, a number of efforts were undertaken ranging from the establishment of overarching policies and a defined process for implementation, to refinements of specific station location designs and Joint Development Request for Proposal (RFP) procurements.

The primary mission of RTD’s early TOD program focused on education and outreach efforts to jurisdictions, the development community and the public. Since then it has partnered with the Denver Regional Council of Governments (DRCOG) and Urban Land Institute (ULI) to provide these education forums to the external community and turn its efforts toward policy, planning and implementation of TOD within the FasTracks program.

Evolution of TOD in the Denver Region and Nationally

The first light rail line (LRT) in the Denver Region, the Central Corridor, opened in 1994. This corridor connects Downtown Denver with the Five Points Business District and Auraria Higher Education Center. The Englewood Station on the Southwest Corridor, which opened in 2000, was the first station area to incorporate TOD principles with mixed-use development that leveraged its proximity to the station.
The Southeast Corridor opened in 2006 with 13 stations serving the southeast Denver Metro area. The corridor adds to a number of development opportunities that have been afforded to sites within a ½ mile radius (10-minute walk) of the stations. RTD’s TOD program has tracked development activity within all station areas (½ mile radius) since 2004 and found the following completed projects:

- Nearly 5,300 residential units
- Nearly 500,000 square feet (sf) of retail
- More than 1.9 million sf of office

The development identified above breaks down into more than 1,000 residential units, 100,000 sf of retail and 380,000 sf of office absorbed into the southeast area of Denver per year for approximately five years.

The development activity happening around existing light rail lines in Denver is notable in itself. However, it is important to look at other mass transit systems nationally as an indication of the potential for TOD. While Portland’s TriMet transit network developed its system on an incremental line-by-line basis, its station area plans were completed before the lines opened for operation, similar to the Denver region. Today the Portland region has approximately 130 rail stations split between five light rail lines, an urban streetcar and a commuter rail line. TriMet estimates more than $11 billion in TOD has occurred along the 51 miles of rail in the region. In comparison, the San Francisco Bay Area is playing catch-up in preparing and adopting station area plans well after the transit system was in place and operating. They are currently in the middle of a region wide station area planning initiative funded by the Metropolitan Transportation Commission, the MPO for the Bay Area. According to Reconnecting America, upwards of 100 station area plans are expected to be completed in the San Francisco Bay Area. Dallas Area Rapid Transit (DART), like Denver’s RTD, is engaged in a large scale expansion of their system with four extensions to their 45 miles of rail scheduled to be completed by 2013. The City of Dallas historically has not played a proactive role with TOD. As DART’s rail lines move into the suburbs, there has been a pronounced acceleration in the planning and implementation of TOD, despite the lack of a strong role by the City of Dallas. In 2008, DART estimated that $4.7 billion in development has occurred around their stations.

As Denver looks to the future, the Portland region can serve as a guide to TOD planning and implementation over 30 years of actively pursuing TOD. Portland’s emphasis has shifted away from TOD planning to building and implementation—using both financial and regulatory tools. One of the lessons from Portland is to allow the TOD approach to evolve as FasTracks moves through project development and into construction and operations.

**Level of TOD Activity since FasTracks Passed in 2004**

Since the passage of FasTracks in 2004, the Gold, East and I-225 corridors have secured final environmental approval (Record of Decision or Final Environmental Evaluation), North Metro has issued a Draft Environmental Impact Statement (EIS), and the Southeast and Southwest Corridors and Central Corridor Extension have issued Final Environmental Evaluations. The West Corridor is under construction, as are the Phase I BRT improvements along U.S. 36. An
enormous amount of TOD planning has been completed by RTD, the jurisdictions and regional partners, and the private development community.

RTD’s coordinated efforts with DRCOG on Transportation Improvement Program (TIP) funding for TOD station area planning laid the groundwork for intensive planning by jurisdictions. Jurisdictions across the Denver region recognized the value in planning for FasTracks by undertaking station area planning activities well in advance of opening day. By the end of 2010, 36 station area plans are anticipated to be completed and adopted. This level of activity is unprecedented from a national perspective as few other regions have laid the groundwork for TOD as well as Denver. The jurisdictions should be commended for this remarkable planning effort and the development and adoption of new zoning language that encourages transit-supportive development.
Lesson Learned # 1
TOD Policy/Guidance

1. Overview

A successful TOD program is shaped by sound policies and a clear role within the larger framework of transit development and operation. The primary policies that guide the RTD TOD Program are the Strategic Plan for TOD and the Transit Access Guidelines, both of which serve internal and external audiences for the planning and implementation of TOD. These documents establish the vision, goals and recommended strategies for TOD. These policies considered local, state and federal policies in their initial development and will be revised as necessary to incorporate new policy guidance at the national level which may impact the way that RTD engages in TOD.

Through experience with policy guidance developed both internally and externally, a number of key findings have emerged:

- Policy alone is not enough to facilitate TOD. Leadership and resources to implement these policies are also critical.
- National best practices and guidance on TOD are evolving rapidly. The partnership between the Environmental Protection Agency (EPA), Federal Transit Administration (FTA) and Housing and Urban Development (HUD) to form the Sustainable Communities Initiative will provide a potential source of funding for new TOD initiatives for RTD and its partners. More recent changes to the FTA New Starts rating process will place greater emphasis on creating linkages between land use and transportation and the importance of encouraging TOD as a sustainable transit solution.
- RTD TOD policies need to be more visible both internally and externally. Although all have received Board of Directors approval and adoption, the successful implementation of the policies is dependent on their wide acceptance into everyday practice.

2. Background

The intent of policy guidance is to provide a foundation for decision-making at the outset of the FasTracks program. The policy guidance is then revisited periodically to ensure its relevancy and accuracy based on changing conditions. The RTD TOD Program views the policies developed to-date as “living documents” that RTD, the development community, and local jurisdictions can utilize as a common base of understanding and discussion.

RTD’s primary guiding TOD framework is the Strategic Plan for TOD – originally published in 2006 and updated in 2008. This document establishes the agency’s vision, goals and recommended strategies for TOD. It outlines the process for implementing TOD, and defines its role in relationship to other major stakeholders. The plan identifies timelines and milestones for TOD relative to the project development process. Its intended audiences are RTD staff and leadership, the development community and the general public.
The RTD Transit Access Guidelines (2009) provide the rationale and guidelines for transit access from multiple modes in the design of transit stations. These guidelines are intended to support implementation of a hierarchy of access – beginning with pedestrians and followed by bicyclists, transit buses and private automobiles. The guidelines are intended to supplement RTD’s design criteria manuals for light rail, commuter rail and bus facilities with application by RTD’s engineering design staff and consultants designing RTD facilities.

3. The Lessons

The RTD TOD Program has successfully facilitated the adoption of TOD policy guidance to guide the FasTracks Program. This guidance was developed collaboratively with RTD staff from multiple departments and with input from partner agencies and entities. However, additional work is needed to ensure that these policies are effective on-the-ground and are an integral part of RTD’s station area decision-making. Through RTD’s history with developing TOD policy and guidance, a number of lessons learned have emerged:

- The Strategic Plan for TOD had a number of accomplishments. The Plan established more comprehensive TOD policy and clearly set forth the goals and objectives of the TOD Program. The Plan established clear roles of RTD and others in the TOD process, including jurisdictions and the development community. Finally, the Strategic Plan for TOD created a framework for joint development, the primary implementation tool that RTD offers for partnership with another public or private sector entity.

- The Strategic Plan for TOD and other related policies should be a more visible part of RTD’s role in shaping TOD through a reinvigoration of the Transit Access Committee and internal outreach to Corridor Project Managers, designers and engineers. The Policy documents should be regularly reviewed and updated as required based on the strategic direction of the RTD Board of Directors.

- To ensure that RTD TOD policies are implemented, they must be an integrated part of the design process and serve as a key resource at the same level as the Design Criteria and other RTD policies.
Lesson Learned #2
TOD Outreach and Coordination

1. Overview

Outreach and coordination at the local and regional level are critical elements of a successful TOD program. Education on the main principles of TOD and its benefits must occur to ensure that FasTracks stations are leveraged to maximize public investment and benefits to communities, both for transit access and development. This outreach should be targeted toward local jurisdiction staff and elected officials, the development community, interested professionals and the public. With the exception of the annual TOD Status Report, RTD has relegated this task of external outreach and education on their regional partners. Key findings from RTD’s engagement in outreach and coordination include:

- RTD’s partner organizations, such as DRCOG, Transit Alliance, ULI, the American Institute of Architects (AIA), American Planning Association (APA), among many others, have fulfilled an important role in TOD education and outreach. Their videos, events and trainings have raised the profile, expanded the TOD dialogue and helped generate citizen interest and participation in FasTracks.
- Internal outreach and coordination within RTD is an important part of policy implementation and education on the importance of TOD. External communication is consistent if staff within RTD understands the agency’s role in TOD and its vision for TOD.
- RTD’s Transit Access Committee provides inter-disciplinary coordination and recommendations for any access related design changes. The Committee is an important part of the joint development review process and is intended to be the primary group that coordinates with external parties—such as developers and local jurisdictions—on TOD issues.
- The annual TOD Status Report provides a comprehensive summary of all of the TOD activity occurring throughout the existing system and around proposed FasTracks stations. The report pulls from an RTD database of development projects within ½ mile radius of each station to track regional activity. Information collected for each project includes land use type, square footages, development timeframe and developer contact, among other information. The TOD Status Report provides a comprehensive database and offers the potential to conduct an in-depth analysis of regional development trends.

2. Background

When the RTD TOD Program began a decade ago, the emphasis was primarily on marketing and outreach to the development community, jurisdictions and the public. TOD was new to the region and the fundamental components of successful TOD needed to be communicated. Since that time, the TOD program has evolved to focus on policy and implementation. As the FasTracks corridors finalize the environmental processes and draw nearer to final design and construction, the level of development activity is expected to increase. The current TOD program is focused on coordination and developing the tools necessary to attract development to stations and to ensure that stations are well integrated and connected to surrounding neighborhoods.
As described above, a number of organizations are engaging in TOD outreach and coordination. DRCOG works with stakeholders to understand their information needs, marshals resources to address those needs, and stimulate informed dialogue on issues of importance to stakeholders. DRCOG’s Planner Idea Exchange workshops have served to create an interactive forum for local jurisdictions to come together and discuss TOD implementation, among other topics. A number of resource materials to encourage TOD dialogue have been completed or are ongoing such as the recent “Who is TOD” Research Study, an online TOD project viewer and an online database of relevant links and reports. DRCOG also disseminates Congestion Mitigation Air Quality (CMAQ) funding; a federal program which has enabled jurisdictions to fund station area plans.

Organizations such as the Denver Metro Chamber, ULI Colorado, Metro Mayor’s Caucus, APA and AIA have held numerous plenary sessions and developed a documentary video to educate and discuss the benefits of TOD to economic development and city planning. The Denver Metro area has continued to support RTD’s FasTracks program and worked successfully to complete the necessary planning work to best leverage the public investment of the FasTracks system through TOD.

All of these efforts together provide a diverse array of information to TOD professionals and the public. With the complexities of implementing a program such as FasTracks, it is important that TOD continues to have a forum for dialogue in the public arena.

3. The Lessons

Agencies and organizations across the Denver region have embraced TOD as an important step in creating a more sustainable region. RTD has developed TOD outreach efforts internally and relies on partner organizations for external efforts. These efforts have successfully raised awareness of TOD and as the FasTracks program continues through the final design and construction phases, so will the need to continue outreach on TOD. The challenge is to keep the TOD dialogue fresh and informative to all audiences.

- The successful outreach efforts of RTD and its partner agencies and organizations demonstrate the continued support for TOD regionwide. To ensure success, these outreach efforts need to continue through FasTracks and beyond.
- RTD TOD staff needs to engage in greater internal TOD outreach to ensure TOD issues are fully considered in the design and construction phases. Regular communication is needed with RTD right-of-way staff and corridor project managers.
- The Transit Access Committee needs greater visibility within RTD and needs to meet regularly on TOD-related activities. The Committee should become known externally as the guiding operating committee for TOD matters.
- RTD TOD program staff need to conduct more in-depth analysis of RTD’s comprehensive development database to understand and communicate development trends and other information as the real estate market changes over time. The database should continue to be updated regularly to provide accurate information on existing and proposed development projects.
Lesson Learned #3

TOD Planning

1. Overview

In anticipation of FasTracks, both local jurisdictions and RTD engaged in TOD planning. Over the past four years, local jurisdictions have prepared transit supportive land use plans across the region. All together, 19 plans have been adopted by the Cities of Denver (9), Lakewood (4), Arvada (3), Wheat Ridge (1), Boulder (1) and Thornton (1) creating a vision and plan to encourage TOD. Nearly 20 other plans have been initiated or are nearing completion. In addition to station area land use plans, RTD organized corridor-wide planning workshops for each FasTracks corridor. The purpose was to gather RTD staff, city and county representatives and the local development community together to analyze each station individually and its function within the larger corridor. The following are observations from the station planning process:

- Station area planning is a critical first step in planning for TOD at each station. If station area plans are initiated early in the corridor planning process, the jurisdictions are better positioned to incorporate zoning, infrastructure and other tools to attract new development.
- The adoption of transit-supportive rezoning will ensure that development maximizes its proximity to transit and incorporates the station into the development. Issues such as urban design, setback maximums, parking maximums, entry frontage, and ground-floor transparency are all important factors for jurisdictions to consider with TOD zoning.
- A corridor level perspective allows RTD, the jurisdiction and the region to evaluate how stations will relate to each other and to evaluate the function and location of each station individually. This exercise is important to highlight potential overlap in market competition for the same uses and overall typology and functionality of the corridor. It also identifies opportunities to benefit from the unique characteristics of each station, and the increased ridership potential from various destinations along each line or along connecting lines.
- The magnitude of TOD planning in the Denver region poses a challenge of opportunity. There are simply more sites with planning in place to allow TOD than the real estate market can be reasonably be expected to absorb in the foreseeable future. Not every station will have short-term success. RTD would be well served to work with local jurisdictions to help align plans, leadership and resources to guide where to best focus attention to leverage TOD at stations.

From 2005 through 2008, RTD held intensive Development-Oriented Transit workshops for each FasTracks corridor to probe the function and location of TOD. City, County, DRCOG, other key stakeholders, and RTD planning and design representatives attended the workshops. The workshops, for the most part, were held during the early phases of the EIS process so that any changes could be fully vetted and incorporated into the EIS without impact to the corridor budget and schedule. The following are observations concerning the corridor workshop process:
- The workshops successfully integrated a discussion on land use and TOD into the station planning process. The interactive dialogue between RTD, the jurisdictions and development community led to some shifts in the station design to better accommodate TOD potential at some locations.
- Regular communication between jurisdictions and RTD staff is a key factor in continuing the TOD planning conversation and ensuring that action is taken to facilitate TOD through policies, incentives, etc. While RTD has certainly been part of the TOD conversation, there is a danger that TOD opportunities will be lost or conflicts with local jurisdictions and developers will occur more frequently if RTD does not provide additional attention and resources to be more proactive in the TOD process.
- A primary goal of the corridor workshop process was to establish a corridor-wide working group for each corridor. The purpose was to share information on TOD and to implement the recommendations from the corridor-wide workshops. Corridor working groups have been largely unsuccessful to date because limited stakeholder resources have been utilized to initiate and sustain the groups.

2. Background

Each station area has a unique vision based on the surrounding context and land use as well as the community’s desires. By engaging in station area planning early in the EIS and corridor planning process, jurisdictions were able to provide important input to RTD concerning their goals for the stations. Planning precedes implementation and provides a means to show RTD, the local jurisdiction, and the development community the intent for each station.

RTD’s corridor-wide workshops provided an opportunity to address TOD outside of the EIS process. The workshops covered topics such as station function, pedestrian access, parking location, and community partnerships. By working with all of the stakeholders in each corridor, the workshop imparted a corridor-wide perspective that led to a corridor TOD action plan for the jurisdictions and RTD. The plan guided jurisdictions in making changes to comprehensive and neighborhood plans and zoning codes, infrastructure improvements, financial and regulatory incentives, and identification of private-sector partners. Action items were also addressed to the RTD project team, including evaluation of a shift in stations or supporting infrastructure (parking, platforms) to maximize TOD potential.

A corridor-level perspective allows RTD, the jurisdiction and the region to evaluate the stations as they relate to each other and to evaluate the function and location of each station individually. This exercise is important to highlight potential overlap in market competition for the same uses and overall functionality and typology of the corridor. It also
identifies opportunities to benefit from the unique characteristics of each station, and the increased ridership potential from various destinations along each line or along connecting lines. Recent research shows that destinations themselves matter. The ability of transit to connect riders to various destinations—employment centers, educational institutions, and special event facilities—is an influential part of attracting greater ridership.

3. The Lessons

A number of lessons have emerged from both the station area planning efforts and the corridor-wide TOD workshops. These lessons will carry forward into future RTD rail planning beyond FasTracks. A key success of the station area plans and corridor-wide workshops involved the intensive goal-setting and partnerships between jurisdictions and amongst RTD and the development community. The key challenge will be to continue with these into the implementation of public infrastructure and other elements to attract private investment.

**Station Area Plans:**
- Jurisdictions across the region had the foresight to initiate station area planning early in the corridor planning and environmental process. Because they initiated planning early, their plans could inform the EIS station planning process. RTD and local jurisdictions should embrace this practice in future projects.
- Not every station offers short-term TOD opportunity since there will not be an immediate market everywhere, even though the rail stations will come on line within a few years of each other. Cities can shape future growth through investing resources at key catalyst stations, and allowing longer-term stations to transition/ripen over time. Stations with substantial infrastructure needs may be longer term than those with amenities in place (i.e., surrounding development, parks, infrastructure, etc). Those stations in single ownership may develop sooner than fragmented parcels that need to be assembled. Understanding the final desired plan for development and parking in relation to the station is critical to the assessment of all development phases – both in placement of uses and infrastructure. Phasing plans should be a part of the station area plan process. RTD and jurisdictions need to build partnerships to plan for phasing of the parking and development over time.

**RTD Corridor-wide TOD Workshops:**
- To maintain corridor-wide discussions through the life of FasTracks, TOD working groups should be considered for FasTracks corridors. This could be through existing corridor-wide groups or through the formation of corridor-wide groups with RTD support. The purpose of corridor-wide working groups would be to develop a corridor vision, priorities for the corridor and action items. During the workshop process, the need to form work groups was identified but there were limited resources for local jurisdictions and RTD to follow through.
- Future corridor development should integrate the corridor workshops and working groups early in the planning process – either before or during the EIS planning process.

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Expectations created during the station area planning process need to be tempered with market reality and an understanding of a broader geographical context than an individual station area. The dynamics and relationships between stations within a corridor and between corridors within the RTD system should be evaluated by all stakeholders. Reflecting on this broader context will result in more thoughtful implementation of TOD and help in prioritization of resources.
Lesson Learned #4
TOD Implementation

1. Overview

Implementation of TOD has been referred to as “institutionally messy,” meaning typically no one entity has the authority or responsibility to make TOD happen. The implementation of TOD requires active participation by RTD and local jurisdictions, not just the development community. Joint development is the primary implementation tool that RTD offers for partnership with another public or private sector entity. Within RTD (like other transit agencies) responsibility for TOD is institutionally complex – legal, financial, property, service and intergovernmental issues can often be at play. Speaking with “one voice” and coming to closure on issues in a timely manner is important in dealing with RTD’s public and private TOD partners. Jurisdictions have a responsibility for implementing TOD by establishing a clear vision and zoning and finance tools to attract new development. To be effective, RTD and its local government partners need to keep up-to-date with funding and policy at the national level and need to explore evolving strategies to fund TOD, as the TOD landscape continues to evolve.

Although the FasTracks program is early in the final design and construction phases for several of its corridors, some early lessons learned from implementation may be noted:

- TOD by its very nature can create policy dilemmas. Local governments and developers approach TOD first as a city building and development strategy. Transit agencies often have a different starting point for TOD – as something secondary to their primary transit mission, as a way to create revenue, or perhaps as a conflict with transit operations. TOD can also provide an additional base of support for RTD.
- The implementation of TOD projects span a long gestation period. Successfully delivering a TOD requires incorporation of TOD principals in all phases of RTD’s project development process. Consideration of TOD needs to start in project planning, be carried forward into engineering and design, as well as through construction and during operations. If other regions are a guide, the major opportunities for TOD will present themselves after the FasTracks program is open for operations.
- It is now generally accepted that effective transit agency TOD strategies need to address the entire walkable area around a station – the 5 to 10 minute walk. Rather than focusing primarily on land controlled by RTD, national best practice would suggest equal attention needs to be given to this walkable area. The scale of the opportunity beyond RTD controlled land is significant – the area within a ¼ mile/5-minute walk comprises approximately 125 acres. For a 10-minute walk/½ mile, just over 500 acres are included. This requires extensive coordination and partnership with the surrounding local jurisdictions, who would need to take the lead in implementing TOD-friendly changes outside of RTD-controlled property.
- Commuter parking encapsulates one of the TOD policy dilemmas RTD faces. Nationally transit agencies interested in TOD are gradually changing how they view parking. For RTD, commuter parking has been a primary ridership generator as RTD has traditionally operated a commuter-oriented system with a large parking supply. This framework is reflected in the current DRCOG travel demand model which projects ridership on future
RTD lines and creates a self-reinforcing mechanism to replicate existing RTD operational characteristics. In addition, under FTA New Start procedures, the travel demand model plays a heavy role in determining cost effectiveness and the eligibility of projects for New Starts funding. FTA’s world view on parking and station access is evolving with FTA’s new emphasis on livability. Physically, parking creates an automobile-oriented environment near the station where TOD theory would place pedestrian activity and transit-supportive development. Financially, RTD’s standard practice of requiring commuter parking to be replaced 1:1 in a TOD can add costs which according to the Denver development community can make TOD financially infeasible.

- Funding for the integration of land use and transportation has recently been made available through the national partnership between HUD, DOT and EPA. Changes in New Starts guidance and greater flexibility in the DRCOG TIP criteria could provide avenues through which to encourage TOD. Innovative funding strategies and programs are available (and more will likely be developed), but leadership and guidance from RTD, local jurisdictions and other regional partners will be required to position the Denver region to access these new funding opportunities.

- Jurisdictions are responsible for ensuring that the station areas are attractive for investment through making infrastructure investments at station areas. Pedestrian and multimodal connections are critical to integrating the station with the surrounding community. Improvements to utilities and drainage infrastructure, along with construction of new facilities, provide a competitive advantage to station areas when attracting interest from the development community. Funding for most pedestrian improvements that connect neighborhoods to transit is outside the scope of RTD and FasTracks. Across the nation, a number of regions have tapped into the flexible federal transportation sources controlled by MPOs (DRCOG) to fund these types of improvements. RTD, along with other partners in the region, need to develop partnerships to actively pursue potential sources of federal and other funding for TOD and livable communities.

2. Background

As mentioned above, the implementation of TOD requires active participation by RTD and local jurisdictions—not just the development community. Joint development is the primary implementation tool that RTD offers while jurisdictions have a responsibility for implementing TOD by establishing a clear vision, zoning, finance tools and capital improvements to attract new development. This section outlines both of those efforts.

As defined in the Strategic Plan for TOD, joint development is a development project that occurs in, on or adjoining an RTD transit facility (e.g., a rail or bus station, maintenance facility, other transit system infrastructure, or administrative office) that involves a public and/or private partner in addition to RTD. Joint development may involve air rights development, ground lease arrangements, the outright sale of land or “other initiatives that may promote real estate development at or near transit stations to the mutual benefit of public and private interests.” Joint development is a subset of TOD under which RTD partners with a developer for land use, infrastructure improvements, and shared facilities in addition to coordinating development with
any adjacent property owners. The process for Joint Development and evaluation criteria for review of proposals is included in the RTD Strategic Plan for TOD.

The Strategic Plan for TOD specifies the policies and procedures for joint development. The plan states that joint developments may be approached either through a solicited proposal process that is initiated by RTD through a Request for Qualifications (RFQ)/Request for Proposal (RFP) or an unsolicited process that is initiated by a private developer or another public entity. Each of these two steps is outlined in detail in the Plan.

The definition of success for joint development varies considerably between transit agencies depending on agency policy and their legal grant of authority. Getting a fair financial return on investment is a primary guide for many transit agencies. Other transit agencies have a broader view of success – such as leveraging transit supportive development patterns at their stations, encouraging affordable housing, or facilitating implementation of local TOD plans.

In terms of jurisdiction responsibilities for implementation, adopted station area plans represent the first step. The next step is the development and adoption of zoning language that encourages pedestrian friendly urban form and acknowledges the need for greater densities to off-set higher development costs of TOD. Next, the jurisdictions need to conduct detailed infrastructure planning and capital improvements programming, as well as finance incentives to attract investment.

Capturing TOD opportunities in the construction and operations phase requires agility and flexibility. In this phase, RTD can expect developers, local governments, and non-profits to come forward to want to partner on sites, seek changes in the design of transit facilities, update TOD plans, and donate or write-down land for development. In many cases, these proposals may need to be reconciled with considerations for transit operations as it is difficult to change station layouts and design after a project has moved to construction. To be successful, RTD will need procedures, staff and/or consultant assistance to quickly evaluate and address these opportunities as they come forward.

3. The Lessons

RTD’s joint development process has been applied with limited success in a few situations. TOD and Real Property staff play a key role upfront in screening and shaping potential joint development proposal prior to review with the full TAC. This process should be evaluated to determine if it can be streamlined and made more predictable for developers. In addition to joint development, a number of other strategies are needed to ensure that TOD implementation occurs:

- Alternatives to requiring 1:1 commuter parking replacement need to be explored. Detailed discussions are needed with the development community to understand the trade-offs between development return vs. parking, and the impacts and potential offsets to ridership.
- RTD and its partners need to be further engaged in opportunities to capitalize on national, regional and local funding programs. RTD and its partners need to research sustainable communities funding, DRCOG CMAQ funding and other opportunities to enhance
station infrastructure and focus targeted investment at stations. At the same time, TOD needs to be more integrated into RTD’s station planning and infrastructure process.

- Jurisdictions need to allocate funding toward infrastructure investments at station areas (ie funding committed in Capital Improvement Programs) and develop a menu of funding sources to assist in the regional infrastructure that will be needed to support TOD development.

- TOD momentum will continue to build once the lines are in operation. Thus, the RTD TOD program should be maintained through the life of FasTracks and beyond to ensure that coordination continues over time.
### List of Acronyms

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<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AIA</td>
<td>American Institute of Architects</td>
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<tr>
<td>APA</td>
<td>American Planning Association</td>
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<td>CDOT</td>
<td>Colorado Department of Transportation</td>
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<tr>
<td>CMAQ</td>
<td>Congestion Mitigation and Air Quality</td>
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<td>DRCOG</td>
<td>Denver Regional Council of Governments</td>
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<td>EA</td>
<td>Environmental Assessment</td>
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<td>EIS</td>
<td>Environmental Impact Statement</td>
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<td>EPA</td>
<td>Environmental Protection Agency</td>
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<td>FTA</td>
<td>Federal Transit Administration</td>
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<td>HUD</td>
<td>Housing and Urban Development</td>
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<td>JD</td>
<td>Joint Development</td>
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<td>NEPA</td>
<td>National Environmental Policy Act</td>
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<td>RFP</td>
<td>Request for Proposals</td>
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<td>RFQ</td>
<td>Request for Qualifications</td>
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<td>ROD</td>
<td>Record of Decision</td>
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<td>RTD</td>
<td>Regional Transportation District</td>
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<td>Transit Access Committee</td>
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<td>Transit-Oriented Development</td>
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<td>T-REX</td>
<td>Transportation Expansion Project</td>
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<td>ULI</td>
<td>Urban Land Institute</td>
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