# Transportation Planning Capacity Building (TPCB) Peer Program

# Transit-Oriented Development (TOD) in Southern Nevada

*A TPCB Peer Exchange*

**Location:** Las Vegas, Nevada

**Date:** December 2-3, 2015

**Host Agency:** Regional Transportation Commission of Southern Nevada

**Peer Agencies:** Metro Transit of the Twin Cities
Nashville Area Metropolitan Planning Organization
Utah Transit Authority

**Federal Agencies:** Federal Highway Administration
Federal Transit Administration
Volpe National Transportation Systems Center

U.S. Department of Transportation
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This report highlights key recommendations and noteworthy practices identified at "Transit-Oriented Development in Southern Nevada" Peer Exchange held on December 2-3, 2015 in Las Vegas, Nevada. This event was sponsored by the Transportation Planning Capacity Building (TPCB) Peer Program, which is jointly funded by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA).

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# Introduction

This report highlights key recommendations and noteworthy practices identified at the "Transit-Oriented Development in Southern Nevada" Peer Exchange held on December 2-3, 2015 in Las Vegas, Nevada. This event was sponsored by the Transportation Planning Capacity Building (TPCB) Peer Program, which is jointly funded by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA). Additional information about the TPCB Program is available on page 17 of this report.

# Background

## What is Transit-Oriented Development?

Transit-oriented development (TOD) is compact, mixed-use development near transit where people can easily access jobs and services.[1] When implemented well, TOD offers a diverse mix of amenities and housing choices and provides a safe, attractive environment for all users, including pedestrians and bicyclists. By focusing commercial and residential development near transit hubs, TOD can help boost transit ridership and promote walkable, sustainable land use. TOD can take many forms; some TOD projects are located near transit stations in urban downtown areas, while others are located in more suburban settings. TODs may be primarily residential, primarily commercial, or a mix.

In comparison with low-density, auto-centric development patterns, TOD can provide economic, environmental, and social benefits. These include:

- Increased ridership and associated revenue gains for transit systems;
- Congestion relief due to reductions in vehicle miles traveled (VMT);
- Economic development and neighborhood revitalization;
- Human and environmental health benefits due to reduced VMT, increases in active transportation, and improved safety for pedestrians and cyclists; and
- Increased housing and transportation choices for people of all ages and incomes.

TOD connects to several current U.S. Department of Transportation (DOT) policy initiatives, including:

- **Ladders of Opportunity**. The Ladders of Opportunity initiative seeks to leverage investments in transportation infrastructure to revitalize communities, create jobs, and connect housing, employment, education, and services. In December 2015, FTA launched a TOD technical assistance program as part of the Ladders of Opportunity initiative.
- **Livability.** U.S. DOT works to promote livable communities – places where coordinated transportation, housing, and commercial development gives people access to affordable and environmentally sustainable transportation. As part of its Livability Initiative, the U.S. DOT partnered with the U.S. Department of Housing and Urban Development (HUD) and the U.S. Environmental Protection Agency (EPA) on the Partnership for Sustainable Communities.
- **Safer People, Safer Streets.** The Safer People, Safer Streets Initiative addresses non-motorized safety issues and helps communities create safer, better connected bicycling and walking networks, particularly around transit stops and other multimodal connections.

[1] See FTA's Transit-Oriented Development page for links to TOD technical assistance resources, trainings, research, and publications: http://www.fta.dot.gov/16046.html

# Overview of the Peer Exchange

## Why TOD in Southern Nevada?

In 2011, the Southern Nevada Strong (SNS) consortium received a $3.5 million Sustainable Communities Initiative (SCI) grant to develop an integrated, federally recognized regional plan for Clark County, Nevada, which contains the City of Las Vegas. The SCI grant was supported by HUD, EPA, and U.S. DOT. The resulting SNS Regional Plan, adopted in 2015, provides a strategy for building a more sustainable future by increasing transportation choices, investing in complete communities, and improving economic competitiveness and education.[2]

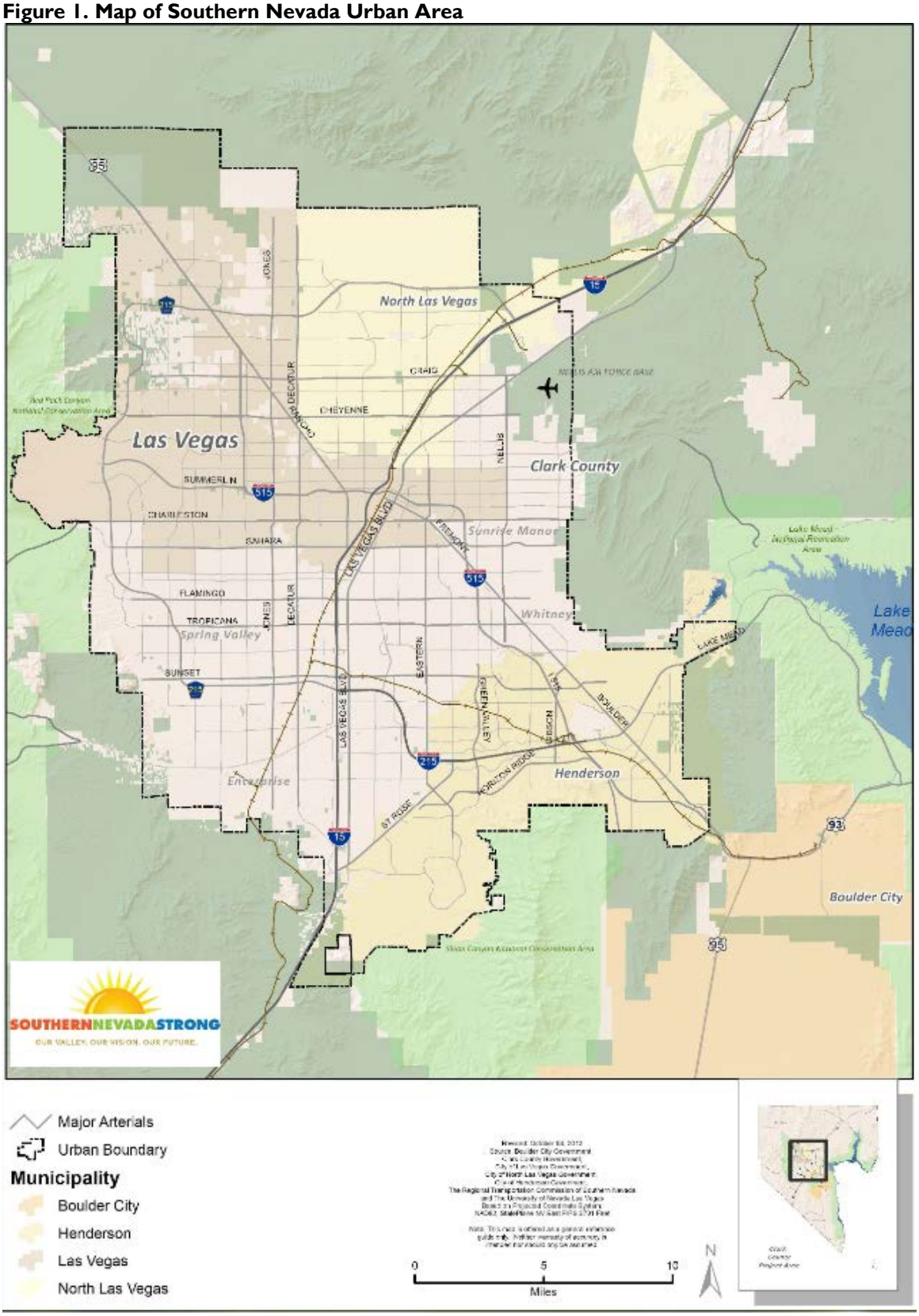
The SNS Regional Plan identifies TOD as a key implementation strategy for improving regional sustainability through better integration of transportation and land use patterns. The SNS Regional Plan found that Southern Nevada residents spend about 25% of household income on transportation, and TOD offers a way to reduce transportation costs by building mixed-use communities and promoting connections between transit, bicycle, and pedestrian networks. In addition, the bulk of the region's housing is single-family houses, and TOD could provide additional housing choices for the region's residents. Although the current development patterns in Southern Nevada are automobile-centric, the SNS Regional Plan showed that there is community support for increasing transportation choices and housing choices in the region.

In 2015, the Regional Transportation Commission of Southern Nevada (RTC) agreed to serve as the core administrator for the adopted SNS Regional Plan. RTC serves a number of regional transportation roles in region, including as metropolitan planning organization (MPO) and transit authority. In addition, RTC administers the regional traffic management center and the traffic demand program. As the core administrator for the SNS Regional Plan, RTC will assume increased responsibility for implementation of the plan's strategies, including TOD. RTC wants to leverage its position as MPO and transit operator to actively facilitate a demonstration TOD site in the region.

Figure 1 provides a map of the Southern Nevada urban area.

[2] http://www.southernnevadastrong.org/files/managed/Document/378/SNS-Plan-final-print.pdf

**Figure 1. Map of Southern Nevada Urban Area**




Source: Southern Nevada Strong Existing Conditions Report, 2013.

# Why a TPCB Peer Exchange?

RTC requested a TPCB peer exchange in order to:

- Learn from peer agencies about case studies, lessons learned, and key considerations for implementing TOD;
- Identify next steps for RTC as it seeks to implement TOD in the region;
- Educate public-sector stakeholders—including State DOT, Clark County, and local cities—about how TOD has been implemented in peer communities; and
- Leverage other related technical assistance activities, including a National Transit Institute training on TOD (September 2015) and an EPA Building Blocks workshop for the development community (2016).

In addition, this event provided an opportunity for peer agencies to come together and share challenges and best practices in TOD. Beyond being a training opportunity for RTC, this workshop was structured to provide a valuable experience for the peer agencies and to encourage a culture of continued intergovernmental partnership in the planning process.

# Who Were the Peers?

Representatives of three agencies participated in the peer exchange: Metro Transit of Minneapolis / St. Paul (Metro Transit), Nashville Area MPO, and Utah Transit Authority (UTA). Table 1 below lists the agencies and peers. Contact information for each of the peer representatives is included in Appendix A of this report.

**Table 1. Peer Agencies**

| Organization | Location | Peer |
|---|---|---|
| **Metro Transit** | Minneapolis / St. Paul, MN | **Lucy Galbraith,** Director of Transit-Oriented Development[3] |
| **Nashville Area MPO** | Nashville, TN | **Michael Skipper,** Executive Director |
| **Utah Transit Authority** | Salt Lake City, UT | **Matt Sibul,** Chief Planning Officer |

Peer experts were selected based on 1) their experience and maturity with TOD and 2) their similarity to the RTC geography and organizational structure. The TPCB Program selected peers from cities with various stages of TOD in order to give RTC a range of viewpoints.

[3] Lucy Galbraith previously served as Director of Transit Oriented Development at Capital Metro in Austin, TX. During the peer exchange, she discussed TOD case studies and lessons learned from Metro Transit and Capital Metro.

# Peer Exchange Format

RTC hosted the 1.5-day peer exchange at its offices in Las Vegas, Nevada on December 2-3, 2015. Three peer representatives, RTC staff, representatives of other public agencies in Southern Nevada, and staff from FTA, EPA, and Volpe attended the peer exchange. Appendix B provides a full list of attendees.

The peer exchange incorporated peer presentations and facilitated group discussions. The agenda for the peer exchange is provided in Appendix C. The peer exchange began with an introduction of the peers, facilitators, and participants. RTC gave an overview of their goals for the peer exchange. Next, each peer gave a presentation about TOD at their agency, focusing on results and key takeaways. After the peer presentations, RTC provided background on four possible TOD sites in their region.

During the afternoon of the first day and the morning of the second day, the peer exchange included six sessions that focused on different aspects of TOD: Planning; Education and Cheerleading; Implementation; Modes and Level of Service; TOD as Catalyst for Housing Choice and Sustainable Communities; and Financial Planning and Fiscal Constraint. For each of the six sessions, one peer introduced the topic with a brief presentation on their agency's perspective. The remainder of each session consisted of facilitated discussion between peers and participants, with emphasis on lessons learned and relevant applications for the Southern Nevada region.

The event concluded with a discussion of next steps for RTC, key takeaways for the region, and a review of resources discussed during the peer exchange.

# Key Recommendations and Lessons Learned

During the peer exchange, the peers delivered presentations and led discussions about their relevant experiences and lessons learned in planning, implementing, and advocating for TOD. Appendix C of this report provides the agenda and specific discussion topics. Consistent with the agenda, the key recommendations and lessons learned fit into the following six categories:

1. Planning
2. Education and Cheerleading
3. Implementation
4. Modes and Level of Service
5. TOD as a Catalyst for Housing Choice and Sustainable Communities
6. Financial Planning and Fiscal Constraint

## Planning

***Make sure that the local zoning allows and facilitates TOD.***

Throughout the peer exchange, the peers emphasized that transit and land use planning must be integrated in order for TOD to succeed. As the sidebar to the right illustrates, transit alone is not enough to catalyze TOD; local zoning must also support the development of compact, mixed-use communities. Several peers shared that form-based code can be an effective way to communicate to developers the types of TOD projects that the jurisdiction wants to see.

Metro Transit noted that minimum parking requirements for new developments often require developers to build more parking than may actually be necessary. This additional parking may make TOD projects more expensive to build and encourage people to drive rather than take transit. In order to reduce overbuilding of parking, local jurisdictions can adjust their zoning so that minimum parking

***Example: Integrating Transit and Zoning on the Salt Lake City University Line***

In 2001, UTA opened a 2.3-mile light rail segment linking downtown Salt Lake City to the University of Utah campus. For the first 8 years of operation, very little development occurred along the corridor. In 2010, Salt Lake City adopted a Transit Station Area District zone along the route. This was a form-based code that encouraged dense mixed-use developments around light rail stations. The zoning change successfully catalyzed TOD along the corridor; between 2010 and 2015, more than 750 new residential units were developed.


Development along the University Line. Source: UTA

requirements vary based on proximity to transit. For example, in 2015 the City of Minneapolis amended their zoning code to reduce the parking requirements for residential buildings located near high-capacity transit.[4]

***Integrate TOD into existing regional and corridor-level planning processes.***

Several peers mentioned scenario planning as an effective tool for integrated land use and transportation planning that supports TOD. For example, Nashville MPO's Transportation and Land Use Program provides scenario planning support for local governments within its jurisdiction. In the program, Nashville MPO works with 2-3 counties at a time on a scenario planning exercise, and the results feed directly into each county's comprehensive plan update. This ensures that comprehensive plans make sense across county boundaries, and that the transportation elements of local comprehensive plans are consistent with the MPO's regional goals.

At the corridor level, Nashville MPO requires that its Alternatives Analyses (AAs) consider competiveness for FTA New Starts / Small Starts funding when choosing locally preferred alternatives for transit projects. As part of this, all AAs must look at the potential of a corridor for TOD and include recommendations about how transportation can support TOD.

## Education and Stakeholder Engagement

***Engage non-governmental partners—including educational, civic, and business organizations—in outreach efforts.***

In discussing public engagement, the peers emphasized the importance of partnering with non-governmental organizations. Peers noted that business organizations, universities, philanthropic organizations, environmental groups, churches, and bicycle/pedestrian advocacy groups can be very effective allies when trying to build public support for transit and TOD initiatives.

For example, Capital Metro in Austin built relationships with local churches as part of its public engagement process when building the Metro Rail Red Line. UTA partnered with Utah Moms for Clean Air, an air quality advocacy organization, to promote transit. As described in the sidebar to the right, Nashville MPO's strong

***Example: Working with the Chamber of Commerce to Advance Nashville Transit***

Nashville MPO's strong partnership with the Nashville Chamber of Commerce has been key to advancing transit and TOD in the region. The Chamber of Commerce provides a non-governmental voice that can advocate for TOD from a business perspective. For example, the Chamber of Commerce brings in transportation experts to speak to the business community.

In Nashville MPO's experience, group trips to other cities are an effective way to build relationships and trust between the public and private sectors. Since 1992, the Nashville Chamber of Commerce has organized an annual Leadership Study Mission that brings together business and civic leaders on a trip to another city in North America. The 2015 trip to Salt Lake City focused on transit.

[4] http://www.minneapolismn.gov/cped/wcms1p-141081

relationship with the Nashville Chamber of Commerce helps the MPO build support for transit and TOD among the business community.

***Build public support for transit by telling the story of the transit system's benefits.***

Peers recommended that RTC use a combination of data and anecdotes to communicate to the public how the transit system benefits their community. In particular, telling stories about real people and real situations can be an effective strategy for gaining popular support. The peers suggested several mechanisms for measuring and communicating the value of transit, including third party analyses and regular benchmarking of key indicators. For example, Nashville Chamber of Commerce publishes an annual Regional Vital Signs report that helps build public awareness of the importance of transit.[5] Dallas Area Rapid Transit (DART) regularly partners with the Center for Economic Development and Research at the University of North Texas to produce analyses of DART's economic impact.[6]

***Show skeptics successful examples of TOD, either locally or in other regions.***

Peers noted that taking stakeholders and developers to visit successful TOD projects—either within the region or in other cities—is an effective way to educate stakeholders about the benefits of well-designed density. In the experiences of UTA, Nashville MPO, and Metro Transit, skeptical stakeholders can better understand the positive benefits of TOD by seeing TOD first-hand and having conversations with peers in other cities.

Metro Transit observed that developers may be more likely to listen to other developers than to government employees. One strategy for convincing developers to consider TOD is to introduce them to other developers who have built successful TOD projects.

***Example: Educating Utah Stakeholders through Site Visits***

The City of Sandy, a suburb of Salt Lake City, wanted to pursue TOD but was hesitant about increasing density. In order to educate stakeholders about the advantages of mixed-use, walkable communities, UTA took the Mayor of Sandy, several City Council members, and the master developer to see examples of TOD in Vancouver, BC. The trip successfully convinced city stakeholders that density, if done correctly, could complement the existing community. As of 2015, several TOD projects in Sandy are under construction.

Rendering of East Village TOD in Sandy, which is scheduled to open in 2016. Source: East Village.

***Develop and promote a long-term regional vision for TOD.***

Metro Transit recommended that RTC develop an "elevator pitch" that articulates the agency's long-term vision for TOD in Southern Nevada. Throughout the peer exchange, the peers recommended that RTC emphasize several key points when communicating to the public:

[5] http://www.nashvillechamber.com/Homepage/AboutUs/ChamberInitiatives/vital-signs
[6] http://www.dart.org/about/economicdevelopment/developmentalimpactjanuary2014.asp

- TOD promotes housing choice because it gives people who want to live in walkable, transit-accessible neighborhoods the option to do so.
- Even without transit, "transit-ready" walkable communities are great places to live.
- TOD takes time and will not happen overnight.

The peers also encouraged RTC to consider the specific reasons why Southern Nevada residents might be resistant to TOD, and take those factors into consideration when developing a vision. For example, in some areas, people may see new development and growth in property value as a good thing. However, in other areas, people may be afraid of overly rapid development and displacement.

### *Example: Taking Advantage of TOD Opportunities on the Music City Star*

The Hamilton Springs TOD outside Nashville illustrates the importance of remaining open to unexpected possibilities for TOD. Although the Hamilton Springs site is adjacent to the Music City Star commuter rail line, the developer originally intended to develop the 220-acre property as a low-density subdivision. However, following the housing market crash in 2007, the developer realized the site's TOD potential and approached the MPO and transit agency about adding a new commuter rail station to serve the development. The first phase of apartments opened in 2013, and commuter rail service at the new station is scheduled to begin in 2016.

Groundbreaking at the Hamilton Springs TOD project. Source: Nashville MPO.

# Implementation

***Work with market forces, not against them.***

During the discussion on implementation, the peers emphasized that real estate market forces (including property values, housing markets, and socioeconomic trends) drive TOD implementation. Although public agencies can use a variety of policy tools and incentives to increase the feasibility of a TOD project, public support alone is typically not enough to advance a project in unfavorable market conditions. All peers encouraged RTC to be opportunistic and nimble when considering which TOD projects to pursue. Nashville's Hamilton Springs TOD project is one example of how TOD opportunities may arise in unexpected locations (see sidebar).

Metro Transit referenced the expression, "don't let the perfect be the enemy of the good," in order to emphasize that agencies should allow for compromise when pursuing TOD projects. Metro Transit also strongly encouraged agencies to plan TOD projects in order to facilitate incremental improvement over time. For example, if the TOD plan includes a surface parking lot, agencies should site utility lines so that the surface parking lot can be more easily redeveloped later.

***Distinguish between TOD on public land and private land.***

Land ownership determines what role a public agency can play in supporting TOD projects. The peers noted the distinction between transit agencies pursuing TOD projects on publically owned land and

community-driven TOD on privately owned land. Public agencies have more leverage and more ability to advance TOD projects when the land is publically owned.

UTA actively promotes TOD both on sites it owns and on privately-owned properties. Figure 2 shows TOD sites along UTA corridors, including UTA-owned sites and private sites. For UTA-owned sites, many of which are former Park & Ride lots, UTA asks developers to submit proposals for developing a TOD project. UTA reviews proposals for consistency with its agency TOD goals of increasing transit ridership, supporting the regional growth vision, and generating revenue. After selecting a proposal and approving a master plan and site plan, UTA enters into a joint-development agreement with the developer. For privately owned TOD sites, UTA does not have the ability to approve master plans or require amendments. Nonetheless, UTA actively works with local jurisdictions to promote TOD zoning and conducts outreach to educate stakeholders about the benefits of TOD. (See the sidebar on page 12 for an example of how UTA promotes TOD on sites that it does not own.)

**Figure 2. Map of TOD sites along UTA corridors.** Blue and red stars indicate sites that UTA owns. Source: UTA


Although RTC owns limited land that is suitable for TOD, the peers noted that other public agencies in Southern Nevada may own land near transit hubs. Metro Transit recently completed a GIS-based inventory of public land ownership around transit stops, including land owned by State, regional, and local governments. Metro Transit plans to use the inventory to identify potential TOD sites for further study.

***Use educational materials and demonstration sites to engage the development community.***

All three peers developed printed materials to educate the development community about TOD design principles:

- Capital Metro in Austin, TX published a *Transit-Friendly Development Guide*, an illustrated brochure that provides a set of best practices for developing TOD.
- UTA's *TOD Design Guidelines* gives developers on UTA's joint-development TOD projects detailed guidance on design elements.

- Nashville MPO partnered with the Nashville Civic Design Center (a local non-profit organization focused on urban design) to produce *Moving Tennessee Forward*, an idea book exploring what TOD could look like in the Nashville region.

Peers also noted that, in their experience, developers are more likely to respond to specific sites than to hypothetical discussions about TOD. One strategy to engage the development community is to put out a Request for Proposals (RFP) for TOD on a specific site. RTC could use the demonstration site to learn from developers about any constraints to success and identify incentives or policy measures that could help advance the project. If RTC does not own any suitable sites, it may be able to partner with an interested private property owner.

***Use transit investments to promote placemaking.***

Metro Transit observed that a sense of place, more than location, drives real estate value. Placemaking is an approach to urban design that emphasizes creating public spaces that build a sense of community and improve the neighborhood's quality of life. Transit agencies can use placemaking techniques to create transit stations that reflect their neighborhood context, provide high-quality pedestrian spaces, and promote a strong sense of community. The sidebar to the right provides examples from Austin, TX and Minneapolis/St. Paul, MN.

> ***Example: Creative Placemaking at Transit Stations and TOD Districts***
>
> Placemaking does not have to be expensive or complicated. At a Metro Rail station in Austin, Capital Metro installed "piano key" pavers to reflect music's role in the neighborhood's history. Interventions like this are an effective—and affordable—way to build a sense of place.
>
> In Minneapolis/St. Paul, Metro Transit leverages partnerships with local non-profit and philanthropic organizations to help fund placemaking and public art initiatives.
>
> 
>
> Piano key pavers. Source: Capital Metro.

# Modes and Level of Service

***Focus on level of service, and avoid getting sidetracked by a specific transit technology.***

All three peers agreed that the service characteristics of a transit route are more important for promoting transit ridership than the specific technology. In other words, factors like trip length and pleasantness are more important than whether the route is served by bus, streetcar, or light rail. People decide whether to take transit or drive based on tradeoffs between many factors, including:

- **Trip time.** This includes time spent waiting for transit or parking a car.
- **Cost**. This includes gas, tolls, bus fare, and parking.
- **Reliability**. An option that sometimes takes 10 minutes and other times takes 30 minutes is less appealing than an option that always takes 15 minutes.
- **Safety and security.** Factors such as overcrowded buses, poor lighting at shelters, or graffiti can make people feel less safe.

- **Stress**. For example, stressful driving conditions like slushy weather encourage people to take transit rather than drive. Bad sidewalks can encourage people to drive rather than walk.
- **Range of destinations on the network.** For example, when Metro Transit opened its second light rail line, property values along the first light rail line increased in reflection of the increased network value of the system.

Transit agencies should design the transit service to effectively address the above factors, and then chose the mode that best fits the situation. Specifically, Metro Transit recommended that transit planners seek to maximize ridership (e.g., by serving dense neighborhoods) and enable effective operations (e.g., by giving transit its own lane).

Peers noted that many transit agencies face political pressure to choose a particular transit mode, often light rail or streetcar. Nashville MPO recommended that RTC communicate to stakeholders the importance of level of service and encouraged RTC not degrade the level of service in order to be able to afford a particular technology. If local jurisdictions prefer light rail over bus rapid transit (BRT) for economic development purposes, RTC should look for ways for those jurisdictions to contribute towards the project cost. UTA noted that many of the communities they work with have strong preferences about the type of transit mode. UTA's policy is to be clear and straightforward about the additional costs associated with rail and the expectations for local funding.

Although BRT can support successful TOD projects and spur real estate development, peers noted that the development community may be more hesitant to build TOD projects around BRT than around rail. To counter this, it is important to educate developers about the level of service that BRT can provide and to show examples of successful TOD around high-frequency bus stations. In addition, if transit agencies invest in high-quality stations and distinctive branding, it helps signal to the development community that a BRT route is permanent. As an example of investment in bus stations, Metro Transit adds on-demand heaters to their high-traffic bus stops for use in cold weather.

# TOD as a Catalyst for Housing Choice and Sustainable Communities

***Aim for a mix of housing affordability and community uses, but recognize that one project may not fulfill all goals.***

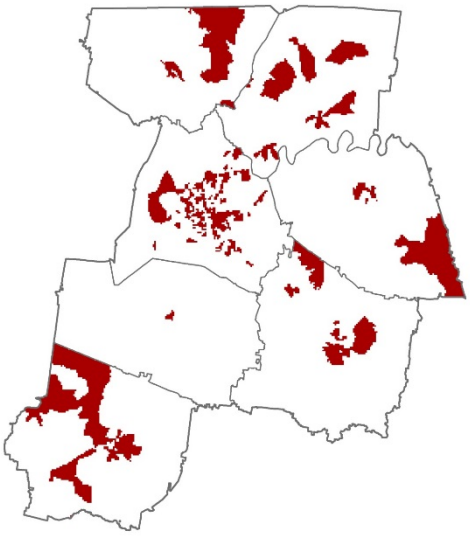
Peers agreed that, ideally, TOD districts should be mixed-income, mixed-use, and contain some community benefit component, such as a park or community center. However, they cautioned that it may not be possible to have everything in one project. Metro Transit noted that requiring all TOD projects to set aside a certain threshold of units for affordable housing raises another barrier to development. However, a mix of affordable and market rate buildings within the same district can have the effect of creating a mixed-income district. For example, in the Pearl District in Portland, OR, the first TOD project was income-restricted affordable housing, and the second project was market rate.

***Analyze and articulate the connection between transportation and health.***

Transportation affects human health in numerous ways, including through roadway safety, air quality, and physical activity. By making it easier for people to take transit and walk, TOD can lead to healthier communities. Nashville MPO shared its experiences in making the public health case for transit and active transportation. Recent initiatives include:

- **Middle Tennessee Transportation and Health Study.**[7] Nashville MPO conducted a regional transportation and health study to gather additional data to support the 2040 Regional Transportation Plan (RTP). The study also identified regional health priority areas with high levels of poverty, unemployment, carless households, and people over the age of 65. These health priority areas receive priority for funding for active transportation projects.

**Figure 3. Health Priority Areas in the Middle Tennessee Region.**
Source: Nashville MPO



- **Integrated Transportation and Health Impact Model (ITHIM).**[8] Using the results of Transportation and Health Study, Nashville MPO used ITHIM to analyze how increasing active transportation would influence health outcomes and healthcare spending. It found that if Nashville residents walked or biked an additional 10 minutes per day, it would reduce cardiovascular disease by 21% and save $200 million in healthcare spending. Nashville MPO noted that the ITHIM analysis has helped promote public awareness of the connections between transit, active transportation, and health.
- **Health impact assessments.** Nashville MPO conducted health impact assessments around several proposed TOD sites. These health impact assessments provide information about neighborhood-specific barriers to healthy communities and recommendations for next steps.

# Financial Planning and Fiscal Constraint

***Do not plan to make money from TOD.***

Few transit agencies in the United States have successfully used TOD as a revenue generation tool. Peers cited Washington Metropolitan Area Transit Authority as the rare exception to this trend. Although UTA originally assumed that it would receive revenue from its TOD joint development projects, it has

[7] http://www.nashvillempo.org/regional_plan/health/
[8] http://www.cedar.iph.cam.ac.uk/research/modelling/ithim

adjusted its expectations and now assumes no revenue. However, UTA considers its TOD projects to be a success because they increase transit ridership.

Although TOD can increase property tax revenues and spur economic development, most of the new value accrues to the private sector or local governments (through property and sales taxes). Transit agencies in some regions use tax increment financing (TIF) to finance transit improvements with the property tax revenue generated by new developments. Peers recommended that RTC investigate whether TIF is allowed in Nevada and if it could be used to support TOD.

### *Target public money to address specific development barriers.*

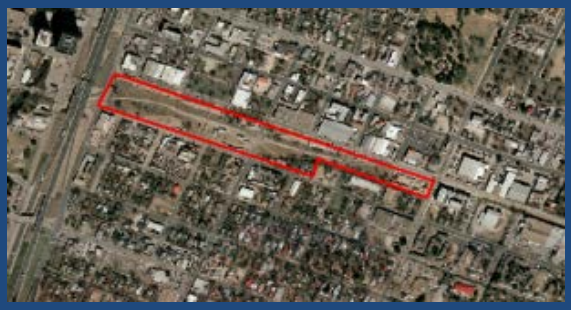
Although some development barriers may be regional, each site has its own specific challenges. As in the sidebar to the right, transit agencies and MPOs can use a variety of funding sources to reduce or mitigate the development barriers. Peers noted that the Surface Transportation Program (STP) and the Congestion Mitigation and Air Quality Improvement (CMAQ) Program are potential sources of funding for TOD projects. For example, one UTA joint-development TOD property required a 400-stall park and ride garage, but the costs of the parking garage made the project unprofitable for the developer. UTA secured $10 million in STP funding to pay for the garage, which ensured that the project could move forward.

#### *Example: Making TOD Feasible at Plaza Saltillo in Austin, TX*

In some respects, Plaza Saltillo was the perfect TOD opportunity – 10 acres owned by Capital Metro with an adjacent MetroRail station. However, a site feasibility study identified several major barriers to development, including the need for brownfield cleanup, track relocation, and infrastructure improvements. Working closely with the City of Austin, Capital Metro secured grants to pay for brownfields cleanup and track relocation:

- Brownfields Site Assessment Grant from EPA and the Texas Commission on Environmental Quality
- Track relocation grant from U.S. DOT (STP).

In 2014, Capital Metro selected a master developer for the site.



Aerial view of Plaza Saltillo. Source: Capital Metro

### *Promote joint ownership in the system.*

Peers recommended that RTC bring in local partners to help finance TOD. When local jurisdictions have a financial stake, they typically feel more invested in the success of the project and better understand the tradeoffs that the transit agency faces. For example, UTA noted that it has worked with cities that insist on light rail or streetcar, until UTA communicates that the local jurisdiction will need to contribute financially. Sometimes, cities are willing to pay for additional service that the transit agency would not otherwise provide. For example, the City of Austin's Convention and Visitors Bureau reimburses Capital Metro for the cost of late-night transit service.

# Conclusion and Next Steps

At the conclusion of the peer exchange, participants developed a list of next steps for RTC:

1. **Integrate TOD (and the lessons learned at this peer exchange) into ongoing regional and corridor planning efforts**. These efforts include the National Environmental Policy Act (NEPA) analysis for Maryland Parkway, the 2040 update of the RTP, and implementation of the SNS Regional Plan.
2. **Develop and promote a shared vision for regional TOD.** RTC should develop an "elevator pitch" that articulates the agency's long-term vision for TOD in Southern Nevada and the benefits of transit-ready, walkable communities.
3. **Hire a designated TOD staff person to focus on implementation.** Peers recommended looking for someone who has a real estate background and is comfortable working with both private and public sectors.
4. **Engage strategically with the development community.** Specifically:
    - Develop TOD materials that communicate RTC's vision.
    - Hold informal and formal conversations with developers to gauge interest and discuss regional barriers to TOD.
    - Consider taking trips to show developers TOD in other cities.
5. **Identify one or more potential TOD sites and move forward with implementation.** Peers recommended that RTC:
    - Map publically owned and vacant land near transit corridors to identify parcels that may suitable for a TOD demonstration project.
    - Consider using an RFP process to solicit developer interest.
    - Identify a private sector partner who is interested in TOD, and ask if RTC can use his or her property as the subject of a design charrette.

# About the Transportation Planning Capacity Building Program

The TPCB Program is a joint venture of FHWA and FTA that delivers products and services to provide information, training, and technical assistance to the transportation professionals responsible for planning for the capital, operating, and maintenance needs of our nation's surface transportation system. The TPCB Program website (www.planning.dot.gov) serves as a one-stop clearinghouse for state-of-the-practice transportation planning information and resources. This includes more than 70 peer exchange reports covering a wide range of transportation planning topics.

The TPCB Peer Program advances the state of the practice in multimodal transportation planning nationwide by organizing, facilitating, and documenting peer events to share noteworthy practices among State DOTs, MPOs, transit agencies, and local and Tribal transportation planning agencies. During peer events, transportation planning staff interact with one another to share information, accomplishments, and lessons learned from the field and help one another overcome shared transportation planning challenges.

# Appendices

## Appendix A: Key Contacts

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# Appendix B: Event Participants

| First | Last | Organization |
|---|---|---|
| Alejandra | Fazekas | City of Henderson |
| Rick | Schroder | City of Las Vegas |
| Robert | Summerfield | City of Las Vegas |
| Johanna | Murphy | City of North Las Vegas |
| Mario | Bermudez | Clark County |
| Shane | Ammerman | Clark County |
| Scott | Stollman | EPA |
| Noah | Berger | FTA Region 1 |
| Jacob | Snow | JABCO |
| Lucy | Galbraith | Metro Transit |
| Michael | Skipper | Nashville MPO |
| Cleveland | Dudley | Nevada DOT |
| Ken | MacDonald | NewFields |
| Andrew | Kjellman | RTC |
| Beth | Xie | RTC |
| Craig | Raborn | RTC |
| Fred | Ohene | RTC |
| Mike | Galizio | RTC |
| Monika | Bertaki | RTC |
| Nathan | Goldberg | RTC |
| Raymond | Hess | RTC |
| Tina | Quigley | RTC |
| Matt | Sibul | UTA |
| Kate | Macfarlane | Volpe |
| Terry | Regan | Volpe |

# Appendix C: Peer Exchange Agenda

TRANSPORTATION PLANNING
CAPACITY BUILDING PROGRAM (TPCB)

***Federal Transit Administration (FTA)***
***Federal Highway Administration (FHWA)***

## Agenda for Regional Transportation Commission of Southern Nevada (RTC) Transit Oriented Development (TOD) Peer Exchange

**Dates:** December 2-3, 2015

**Exchange Location: RTC Offices,** 600 S. Grand Central Pkwy. Ste. 350, Las Vegas, NV 89106

**Host:**

- Raymond Hess, Director of Planning, Regional Transportation Commission of Southern Nevada

**Facilitators:**

- Terry Regan, Acting Chief, Organizational Performance Division, Volpe Center
- Noah Berger, Director of Planning & Program Development, FTA Region 1
- Kate Macfarlane, Social Scientist, Volpe Center

**Peers:**

- Lucy Galbraith, Director, Transit Oriented Development, Metropolitan Council of the Twin Cities
- Michael Skipper, Executive Director, Nashville Area Metropolitan Planning Organization
- Matt Sibul, Chief Planning Officer, Utah Transit Authority

**Format**:

- Brief presentations by peer agencies
- Facilitated discussion among all participants

**Day 1: Wednesday, December 2, 2015**

| Time | Topic | Lead Presenter |
|---|---|---|
| **8:30 a.m.** | **Welcome and Overview**<br><br>Facilitators welcome attendees, review the agenda, describe documentation/follow-up, and establish ground rules for discussions. FHWA/FTA discuss TPCB and the Peer Program. | FTA/FHWA & Facilitators |
| **8:45 p.m.** | **RTC Welcome & Goals**<br><br>RTC welcomes participants and opens the exchange. Provides context on what motivated the peer exchange request and RTC's goals for the day.<br><br>Discussion of the TPCB peer exchange in the context of a series of TOD-focused technical assistance activities:<br>• NTI Training<br>• EPA Building Blocks Workshop<br>• Developer Roundtable | Host (Raymond Hess) |
| **9:00 a.m.** | **Peer Agency/Federal Partners Introductions Goals & TOD Highlights *(5 minutes each)***<br><br>• Lucy Galbraith (Met Council)<br>• Michael Skipper (Nashville Area MPO)<br>• Matt Sibul (UTA)<br>• Federal Partners: EPA, HUD, FTA/FHWA | Peers/Federal Partners |
| **9:30 a.m.** | **Leading with the Punchline: So What?**<br><br>• What do you have to show for your TOD(s)?<br>• Maps / Before and after images of TOD projects<br>• How have you been able to ***measure*** success?<br>• Did/Do you have the tools & data to adequately demonstrate the full benefit of TOD implementation?<br>• Are people using TOD the way you thought they would?<br>• What have been the disappointments? Where has TOD implementation not met expectations?<br>• New partners—Have reluctant stakeholders been won over? How?<br>• Has success created a demand for more TOD in your area? Are you able to meet this demand? | All Peers (20 minute presentation each) |
| **10:45 a.m.** | ***Break*** | |

| Time | Topic | Lead Presenter |
|---|---|---|
| **11:00 p.m.** | **RTC Discussion of TOD Planning Efforts to Date & Future Vision**<br><br>***Southern Nevada Strong*** Regional Plan<br>Corridors studied:<br><br>• Maryland Parkway<br>• Boulder Highway<br>• Downtown North Las Vegas<br>• Las Vegas Medical District<br><br>Discussion with peers | RTC |
| **Noon** | ***Lunch*** | |
| **1:00 p.m.** | **Planning**<br><br>• How did peers select TOD sites? What are the most important site/corridor factors to look for?<br>• Relationship to transit service—Modes surveyed, service planning<br>• How did peers forecast benefits of TOD implementation? What measures were used?<br>• Relationship between transportation & land use<br>• Who took the lead? Transit Provider? MPO?<br>• Role of local governments? Business community? Other Stakeholders?<br>• What aspects of early planning facilitated smooth implementation? What didn't? What do you wish you had done in the planning phase? | Peers<br>(Lead: Michael Skipper) |
| **2:30 p.m.** | **Education & Cheerleading**<br><br>• Who needs to be at the table?<br>• How did you educate potential stakeholders about potential for TOD in your area? Were you able to turn skeptics into believers?<br>• What measures are most effective in capturing the full benefit of TOD?<br>• How did you engage developers and the business community?<br>• How did you work as a team? | EPA (Scott Stollman)<br><br>Peers<br>(Lead: Matt Sibul) |
| **3:15 p.m.** | ***Break*** | |

| Time | Topic | Lead Presenter |
|---|---|---|
| **3:30 p.m.** | **Implementation**<br><br>• How did you transition from planning to implementation?<br>• What barriers to implementation did you encounter, and what strategies did you use to overcome those barriers?<br>• Role of transit<br>  o What transit investments were needed to make TOD successful? New modes? New service plans? More robust service?<br>  o What was the relationship between the timing of the transit investment and the timing of the land use investment?<br>• Key partnerships<br>• Tradeoffs—When is a TOD no longer a TOD?<br>  o (affordability v. effectiveness)<br>• Timeframes/Incrementalism | Peers<br>(Lead: Lucy Galbraith) |
| **4:45 p.m.** | **Wrap-Up and Charge for Day 2** | Facilitators |
| **5:00 p.m.** | **Optional: Walking tour of Bonneville Transit Center (BTC) in Downtown Las Vegas**<br>*(101 E. Bonneville Ave.)* | RTC |

**Day 2: Thursday, December 3, 2015**

| Time | Topic | Lead Presenter |
|---|---|---|
| **8:30 a.m.** | **Welcome and Overview of the Day**<br><br>Facilitator welcomes attendees, reviews the key take aways from Day 1 and provides context for Day 2 | Facilitators |
| **8:40 a.m.** | **Modes & Level of Service**<br><br>• Transit is the 'T' in TOD—Is the fit right? Did you select the right mode to spur the development envisioned?<br>• Is the transit LOS sufficient? (headways? span of service?)<br>• Does the transit serving the TOD connect to the right destinations?<br>• Did you have sufficient resources to fund both the necessary transit capital & operating costs to fuel your TOD?<br>• Was enough development spurred to ensure a productive transit system?<br>• Why did your city invest in light rail?<br>• Lessons learned | Peers<br>(Lead: Lucy Galbraith) |
| **9:20 a.m.** | **TOD as a Catalyst for Housing Choice & Sustainable Communities**<br><br>• Livability<br>• Affordability<br>• Environmental justice<br>• Anti-displacement<br>• Health impacts | Peers/Federal Partners<br>(Lead: Michael Skipper) |
| **10:00 a.m.** | ***Break*** | |
| **10:10 a.m.** | **Show Me the Money! Financial Planning & Fiscal Constraint**<br><br>• Annual budget process for both capital and operating—TIP/STIP<br>• Did you have sufficient funding to implement TOD effectively?<br>• Did the success of your TOD leverage additional funding?<br>• Non-traditional funding sources?<br>  o Value capture, TIF districts, private sector, etc.<br>• Missed funding opportunities? | Peers<br>(Lead: Matt Sibul) |
| **10:40 a.m.** | **Next Steps for Southern Nevada**<br><br>Guided by peer experiences, RTC identifies what it sees as the Next Steps for implementing TOD in Southern Nevada:<br>• What needs to be done to make TOD work for the Las Vegas Valley?<br>• What can RTC do internally?<br>• What can partners do?<br>• Where in Las Vegas does TOD make the most sense? | RTC |
| **11:30 a.m.** | **Wrap-up & Follow-up Actions** | Facilitators |
| **Noon** | **Adjourn** | |

# Appendix D: Key Resources

This appendix compiles the resources and documents that were referenced during the TPCB Peer Exchange on Transit-Oriented Development in Southern Nevada on December 2-3, 2015.[9]

- **Materials for Developers:**
    - **Austin Transit Friendly Development Guide:** https://www.capmetro.org/uploadedFiles/Capmetroorg/Future_Plans/Transit-Oriented_Development/transit-ready-development-guide2010.pdf
    - **UTA TOD Development Design Guide:** http://www.rideuta.com/uploads/TODDesignGuidelinesFinalDraft2014125HiRES.pdf
    - **Nashville Civic Design Center - Moving Tennessee Forward:** http://www.nashvillempo.org/regional_plan/land_use/moving_tennessee_foward.aspx
- **Communicating the Economic Benefits of Transit**
    - **EDRG Study on the Economic Impacts of Light Rail in Salt Lake City:** https://w3.usa.siemens.com/mobility/us/en/Documents/Economic%20Impacts%20of%20Light%20Rail%20in%20Salt%20Lake%20City%20(2).pdf
    - **University of North Texas analysis of development impacts of Dallas Area Rapid Transit:** http://www.dart.org/about/economicdevelopment/developmentalimpactjanuary2014.asp
    - **Annual Nashville Region Vital Signs Report published by Chamber of Commerce:** http://www.nashvillechamber.com/Homepage/AboutUs/ChamberInitiatives/vital-signs
- **Analysis Tools:**
    - **Integrated Transport and Health Impact Modelling (ITHIM) Tool:** http://www.nashvillempo.org/regional_plan/health/ http://www.cedar.iph.cam.ac.uk/research/modelling/ithim/
    - **Transit Competitive Index Tool (originally developed by Cambridge Systematics):** http://www.camsys.com/transittools.htm
- **Data Visualization:**
    - **Edward Tufte course on presenting data and information:** http://www.edwardtufte.com/tufte/courses

[9] The United States Government does not endorse products or manufacturers. Trade or manufacturers' names appear solely because they are considered essential to the objective of this document.

- **Other Resources:**
    - **NACTO Urban Street Design Guide:** http://nacto.org/publication/urban-street-design-guide/
    - **NACTO Guidance for Transit Streets:** http://nacto.org/publication/urban-street-design-guide/street-design-elements/transit-streets/
    - **Rail-Volution** http://railvolution.org/

# Appendix E: Acronyms

| | |
|---|---|
| AA | Alternatives Analysis |
| BRT | Bus rapid transit |
| CMAQ | Congestion Mitigation and Air Quality Improvement |
| DOT | Department of Transportation |
| EPA | Environmental Protection Agency |
| FHWA | Federal Highway Administration |
| FTA | Federal Transit Administration |
| HUD | Department of Housing and Urban Development |
| ITHIM | Integrated Transport and Health Impact Model |
| MPO | Metropolitan planning organization |
| NEPA | National Environmental Policy Act |
| RFP | Request for Proposals |
| RTC | Regional Transportation Commission of Southern Nevada |
| RTC | Regional Transportation Plan |
| SCI | Sustainable Communities Initiative |
| SNS | Southern Nevada Strong |
| STP | Surface Transportation Program |
| TOD | Transit-oriented development |
| TPCB | Transportation Planning Capacity Building |
| UTA | Utah Transit Authority |
| VMT | Vehicle miles traveled |

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