

Appendix D:
SFMTA Peer Analysis Report

DRAFT

SFMTA Peer Analysis Report

August 6, 2012

DRAFT

Prepared for

San Francisco Municipal Transportation Agency

Prepared by

**PARSONS
BRINCKERHOFF**

Table of Contents

Executive Summary	I
<i>TOD/Joint Development-Related Findings</i>	<i>II</i>
<i>Ideas, Insights, and Lessons Learned for SFMTA</i>	<i>II</i>
1 Introduction	1
2 Peer Analysis Methodology	2
2.1 Peer Questionnaire	2
2.2 Peer Selection	3
2.3 Peer Interview Process	5
3 Summary of Peer Responses	6
3.1 Facilities-Related Findings	6
3.1.1 <i>Strategic Plan</i>	6
3.1.2 <i>Funding</i>	6
3.1.3 <i>Warehouse Locations</i>	7
3.1.4 <i>Employee and Vehicle Parking</i>	7
3.1.5 <i>Storage Systems</i>	8
3.1.6 <i>Training Facilities</i>	8
3.1.7 <i>Component Rebuilds</i>	8
3.1.8 <i>Vehicle Body Repair and Painting</i>	9
3.2 <i>TOD/Joint Development-Related Findings</i>	9
3.2.1 <i>Joint Development and Transit-Oriented Development</i>	9
3.2.2 <i>Policy</i>	10
3.2.3 <i>Agency Role</i>	11
3.2.4 <i>Criteria for Identifying Sites</i>	12
3.2.5 <i>Private Development Location</i>	12
3.2.6 <i>Vertical or Side-by-Side</i>	13
3.2.7 <i>Turnkey</i>	13
3.2.8 <i>Revenues</i>	13
3.2.9 <i>Other Facility Related Revenue Generating Mechanisms</i>	13
3.2.10 <i>Construction during Operations</i>	14
3.2.11 <i>Post-construction Issues</i>	14
3.2.12 <i>Community Issues</i>	14
4 Ideas, Insights, and Lessons Learned for SFMTA	16
4.1 Challenges and Lessons Learned: Facilities	16
4.2 Challenges and Lessons Learned: TOD and Joint Development Projects	16

Appendices

- Appendix A – Peer Questionnaire
- Appendix B – Peer Contacts
- Appendix C – RTD TOD Policy
- Appendix D – LACMTA Joint Development Policies and Procedures

Executive Summary

As part of the SFMTA Real Estate and Facilities Vision for the 21st Century, the Parsons Brinckerhoff team conducted a peer analysis of other transit agencies in order to identify ideas, insights, and lessons learned regarding their approach to operating their facilities at maximum efficiency and generating revenues using their real estate, specifically with transit-oriented development or joint development projects. Prior to engaging with these peer agencies, the consultant team met with the SFMTA Executive Committee at the March 30, 2012 meeting to review, edit, and approve a list of agencies to survey and questions to include in the peer questionnaire.

Peer selection was based on input from the SFMTA Executive Committee and the team's industry experience. Out of the ten peers, the team was able to receive input from six peers, including:

- Los Angeles County Metropolitan Transportation Authority (LA Metro)
- Metropolitan Transit Authority of Harris County (Houston Metro)
- Massachusetts Bay Transportation Authority (MBTA)
- Denver Regional Transit District (RTD)
- TransLink of Metro Vancouver
- Dallas Area Rapid Transit (DART)

Facilities-Related Findings

The following list outlines the key findings associated with facilities:

- Most of the agencies incorporated their facilities needs into a strategic plan, while funding for facilities is generally included as part of the capital improvement program. MBTA is the only peer agency that has a facility-specific strategic plan.
- All agencies have at least one centralized warehouse and smaller satellite locations.
- Employee parking is typically free, with the exception of parking at administrative facilities. Houston Metro charges employees for parking at its administrative facility, but employees are allowed to park free of charge at rail stations and park-and-ride stations. In Vancouver, TransLink's operating subsidiaries provide free parking for employees who work before or after revenue service hours.
- All but one agency reported separating employee parking and revenue vehicle parking. MBTA occasionally combines parking for both.
- Revenue vehicles are stored at their respective bus and rail facilities, and non-revenue vehicles are stored at whichever facility they are supporting.

- Component rebuilds are handled through a mix of in-house staff and outsourcing; the decision to complete rebuilds in-house versus outsourcing is generally based on a cost/benefit analysis.

TOD/Joint Development-Related Findings

The following list outlines the key findings associated with TOD/joint development:

- Agencies have widely varying levels of experience implementing joint development and TOD projects, and almost all of the agencies reported having explicit TOD and joint development policies in place. LA Metro's policies are detailed in their Joint Development Policies and Procedures document.
- The agency role throughout the development process varies; while some agencies play an advisory role, other agencies lead the process. MBTA and Houston both have limited roles while LA Metro leads most of its TOD process, consulting and collaborating with local jurisdictions, redevelopment agencies, and developers.
- Criteria for identifying sites were determined by a mixture of agency input and outside consultation.
- Revenue collected by the agency is typically from the land that is leased or sold to the developer, but can also result from direct activities from the TOD projects.
- Agencies also emphasized the importance of understanding and mitigating issues that may arise during and after construction in order to minimize disruption to transit operations. LA Metro's Construction Management personnel coordinate all activities with operations to ensure operation and management activities and customers are not adversely affected during the construction period. In Boston, the developer funds a force account to cover oversight costs.
- Finally, many peer agencies cited the importance of engaging the community early on and regularly throughout the project development phase in order to prevent significant project delays or even cancellation.

Ideas, Insights, and Lessons Learned for SFMTA

Peer interviewees were asked to reflect on the challenges and lessons learned from their experiences with the operations of facilities and with the revenue-generating potential of real estate. All agencies identified funding as a challenge for facility improvements and construction of new facilities. While leveraging federal grants is the primary source of funding, agencies also cited using public-private partnerships to access resources they did not have.

The TOD and joint development process requires planning, coordination and consultation with major stakeholders. Agencies cited having different goals and outcomes for joint development and transit-oriented development projects; while some

agencies focused on ridership and revenues, other agencies emphasized qualitative measures such as creating affordable housing, employment, and livable communities. Another insight agencies identified is the importance of having internal buy-in within an agency to help foster a stronger understanding of TOD and joint development objectives.

1 Introduction

Parsons Brinckerhoff (PB) was retained by the San Francisco Municipal Transportation Agency (SFMTA) to develop a Real Estate and Facilities Vision for the 21st Century. The SFMTA Board of Directors realized that the Agency's use and configuration of property could be improved in order to accommodate the projected growth of its fleet, be more sustainable, and generate new revenues. In response to these challenges, the SFMTA Board asked the following questions:

- Are there any sites that are under-used, overcrowded or redundant?
- Where and how will the Agency accommodate the growing transit fleet needed to transport future residents and those that work in the City?
- Can facilities be redesigned for functionality and sustainability?
- Are there full or partial sites no longer needed for SFMTA purposes which could meet other City goals while generating revenues for the Agency?
- Can the Agency increase the revenue from property leases, including cell phone antenna leases?

The Vision will include an implementation plan with short-, medium-, and long-term solutions that can address these questions by improving the operations of the agency's facilities and leveraging the agency's real estate to generate more revenue.

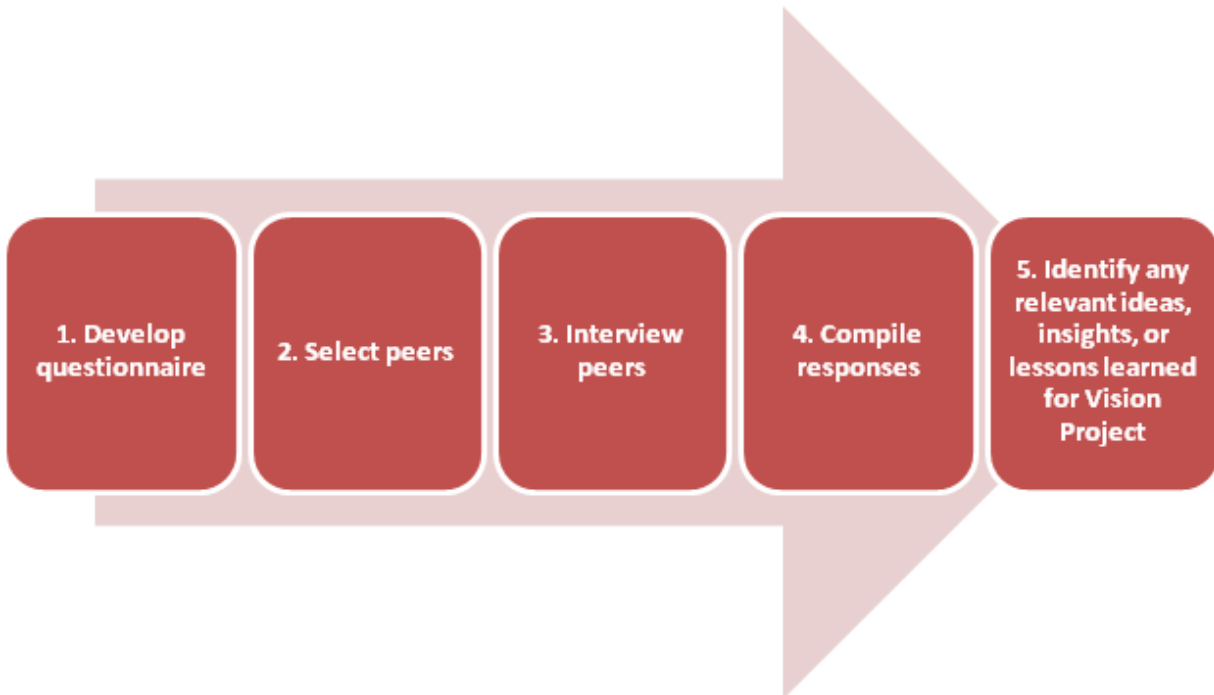
As part of the study, the consultant team conducted a peer analysis of other transit agencies in order to identify ideas, insights, and lessons learned regarding their approach to operating their facilities or generating revenues using their real estate, specifically with transit-oriented development (TOD) or joint development (JD) projects. This report summarizes the methodology and findings associated with the peer analysis.

The goal of this peer analysis is to identify ideas, insights, and lessons learned from SFMTA's peers regarding maximizing the effectiveness of existing facilities and identifying any revenue-generation potential.

2 Peer Analysis Methodology

To gather and analyze peer practices and lessons learned in the operations of facilities and revenue-generating potential of SFMTA's real estate and facilities, the PB team interviewed six of SFMTA's peers. Figure 1 outlines the key process steps.

FIGURE 1 – PEER ANALYSIS METHODOLOGY



Each of these steps is described in more detail below.

2.1 PEER QUESTIONNAIRE

Based on the initial observations from the facility and transit-oriented development (TOD) analysis, the PB team developed a draft questionnaire related to the following facilities and TOD topics:

- **Facilities**
 - Decision-making process
 - Funding
 - Employee & vehicle parking
 - Storage/warehousing
 - Functions

- Training sites
- Component rebuilds
- Vehicle body repair & painting
- **TOD/JD**
 - Shared site usage
 - TOD/joint development experience
 - Site selection
 - Agency role
 - Revenues
 - Challenges/lessons learned
 - Community issues
 - Other facility revenue-generating mechanisms

These questions were reviewed, edited, and approved by the SFMTA Executive Committee at the March 30, 2012 meeting. A full copy of the peer questionnaire is available in Appendix A.

2.2 PEER SELECTION

Based on input from the SFMTA Executive Committee and the team's industry experience, the PB team developed a list of ten peers who have noteworthy practices in either or both facility management and TOD/joint development. Out of the ten peers, our team received input from the following six peers:

- Los Angeles County Metropolitan Transportation Authority (LA Metro)
- Metropolitan Transit Authority of Harris County (Houston Metro)
- Massachusetts Bay Transportation Authority (MBTA)
- Denver Regional Transit District (RTD)
- TransLink of Metro Vancouver
- Dallas Area Rapid Transit (DART)¹

To provide context, Table 1 outlines some key information regarding how each of these peers compares to SFMTA with regard to number and types of modes operated, number and types of facilities, number of TOD/joint development sites, and number of revenue vehicles. As shown in this table, SFMTA operates more modes than any of the peers; however, it falls in the middle of the range based on the current number of facilities and the number of revenue vehicles owned in 2010.

¹ DART's response focused on the TOD portion of the questionnaire

TABLE 1 – SELECTED PEERS

Peer Agency	Modes	# of Types of Facilities	# of TODs/Joint Developments	# Revenue Vehicles (2010) ¹
SFMTA	bus (trolley, motorbus), light rail, streetcar, cable car	5 bus, 2 LRV, 1 streetcar, 1 cable car, 1 NRV, 2 OCCs, and many parking facilities	1	2,815
LA Metro	bus, light rail, heavy rail	11 bus, 4 rail, rail OCC, and others	11 completed, 4 under construction, 9 in negotiations, and 19 under consideration	4,298
Houston Metro	bus, light rail	11 bus and rail, 28 transit centers, 28 park and rides	1	3,208
MBTA (Boston)	bus (trolley, motorbus), rail (heavy, commuter, light), ferry	9 bus, 4 rapid transit, 4 light rail, 3 commuter rail, 17 maintenance facilities	>50	2,961
Denver RTD	bus, rail (light, commuter in 4 yrs)	4 bus, 2 light rail, 1 commuter (new)	4 pilot developments	1,503
TransLink (Vancouver)	bus, rail (light, commuter), ferry	8 bus, 1 light rail, 1 commuter rail	>2	1,808 ²
DART	bus, rail (light, commuter)	3 bus, 2 light rail, 1 commuter rail, 15 transit centers	>10	1,216

1. Source: 2010 National Transit Database
2. Source: TransLink Asset Management Infrastructure Listing – June 2006

2.3 PEER INTERVIEW PROCESS

The peer questionnaire involved multiple agency contacts due to the wide variation in questions. For that reason, our team either conducted multiple phone interviews with each agency (talking to multiple contacts) or the agency distributed the questionnaire among its relevant staff and compiled the responses on their own. A table of contacts from each agency is included in Appendix B.

3 Summary of Peer Responses

This section presents a summary of the peer findings associated with each of the group's questions as outlined in the questionnaire (see Appendix A for full questionnaire).

3.1 FACILITIES-RELATED FINDINGS

3.1.1 Strategic Plan

While four of the agencies incorporate their facilities needs into the agency-wide strategic plans, one of the agencies has a facility-specific strategic plan. In 2011, MBTA's Engineering and Maintenance Team created a new strategic program to systematically and holistically address all facility maintenance. The program is titled T-Global Asset Preservation Strategy, or T-GAPS. This program addresses all facility maintenance issues, documents the revolving capital funding required to maintain the facilities, and provides a return on investment analysis for the program over its five year revolving terms.

The MBTA Global Asset Preservation Strategy (TGAPS) is a strategic capital improvement program aimed at repairing facilities system-wide. The strategy is grounded in the FTA-endorsed paradigm of "a strategic and systematic process of operating, maintaining, improving, and expanding physical assets effectively through their life cycle."

—Source: *T-Global Asset Preservation Strategy, Fiscal Years 2013-2018*

3.1.2 Funding

All of the peers noted the challenges associated with fully funding their facility needs. New facilities are generally funded through a broader capital improvement program (e.g., new rail line requires new maintenance facilities), so they are funded through a mix of federal and local funds. Maintenance associated with existing facilities is generally locally funded; however, agencies cited a few examples of applying for and receiving federal grants.

All five peers use some form of a needs assessment and/or return on investment (ROI) analysis to “make the case” for funding facility maintenance:

- ▶ Houston Metro has a model used to calculate the “facility condition index,” which can identify the agency’s backlog of maintenance. This is used to develop a portfolio of projects.
- ▶ Denver RTD looks for opportunities to show energy savings in facility improvements.
- ▶ MBTA uses its T-GAPS program to communicate its facility needs, calculate the ROI, and demonstrate the cost savings associated with investing in its facilities.
- ▶ LA Metro makes the case based on communicating their deferred maintenance backlog, safety and environmental regulations, and the cost of replacing facilities exceeding the cost of maintenance.
- ▶ TransLink in Vancouver uses an approvals process that includes a business case and financial analysis to provide background information and project benefits. For some projects, feasibility studies are carried out first to determine potential long-term savings.

3.1.3 Warehouse Locations

All of the agencies have at least one central warehouse (MBTA cited three central warehouses) and many satellite locations. LA Metro has some items that are “drop shipped” directly to the de-centralized storerooms due to size, volume of orders, or risk to transport. Additionally, they provide internal “hot trucks (emergency delivery service)” to support critical needs Monday through Friday on two shifts. Each of TransLink’s subsidiaries operates a central warehouse system where parts are ordered, received, and then distributed to other operating and maintenance centers.

Houston Metro splits materials between facilities based on their frequency of use. LA Metro’s parts and supplies are split amongst the warehouses by demand and commodity. The commodities are defined by their respective categories of support such as: bus, rail, maintenance of way, custodial, computer, facility maintenance, first aid, hardware, lubricants, revenue collection, shop consumables, stationary and telecom. Each individual item is assigned a value class using the ABC method which aids in determining optimal stocking levels.

They all utilize non-revenue vehicles to transport materials and equipment between facilities and use barcodes and software systems to manage their inventory.

3.1.4 Employee and Vehicle Parking

Most employee parking is free; however, a few agencies charge at their administrative facility and headquarters. Houston Metro does not provide employees with free parking at the administrative facility; however, employees are allowed to park for free at rail

stations and park-and-ride stations. Similarly, LA Metro provides free parking at its bus and rail divisions but charges employees a fee at their headquarters. In Vancouver, TransLink's operating subsidiaries provide free parking for employees who work before or after revenue service hours. Parking at corporate offices is not free, but is typically provided at transit maintenance centers.

Most agencies that reported having employee parking at transit or maintenance yards do not allow employee vehicles to be intermingled with transit vehicles. TransLink organizes their sites so that bus parking and circulation is separated from all other forms of traffic as much as possible. Houston Metro does not allow private vehicle parking inside the maintenance yards. LA Metro and Denver RTD have separate employee parking lots at their operations divisions. MBTA is the only agency that reported combining employee parking and transit vehicles occasionally.

All agencies store their revenue vehicles at their respective bus and rail facilities, and all non-revenue vehicles are stored at whichever facility they are supporting. None of the agencies mentioned using shuttles to vehicles or off-site parking.

3.1.5 Storage Systems

Each of the agencies uses a mix of storage systems, including pallet, shelving, stack systems, vertical and horizontal carousel systems, and drawer units.

3.1.6 Training Facilities

All of the agencies' training facilities are separated by mode; however, several agencies have centralized facilities for certain aspects of training. For example, MBTA currently has a Signals Training Facility at Cabot Yard and they are establishing a Maintenance of Way and Trades training facility at Cobble Hill. These training facilities will address all required engineering and maintenance specialized training. Additionally, MassDOT University has been established to support training MassDOT-wide. Four out of five peers have bus simulators.

3.1.7 Component Rebuilds

All of the peers handle their component rebuilds through a mix of in-house staff and outsourcing. Most of the agencies favor completing these in-house or just replacing the equipment outright; however, they make this decision based on a cost/benefit analysis which considers:

- Availability, capacity, and quality of work of contractors
- In-house labor skill sets and availability
- Asset age

- Parts availability
- Labor agreement limitations
- CEO's preference

3.1.8 Vehicle Body Repair and Painting

Three of the agencies (Denver RTD, LA Metro, and TransLink) have a centralized body repair with painting capability, while satellite locations have the ability to handle minor work. On the other hand, two of the agencies (MBTA and Houston Metro) have the body repair and painting capability at all facilities.

MBTA recently hired a Director of Training and Resource Development to create an all inclusive training program for all areas of engineering and maintenance.

3.2 TOD/JOINT DEVELOPMENT-RELATED FINDINGS

3.2.1 Joint Development and Transit-Oriented Development

Each agency has varying levels of experience implementing joint development and TOD projects:

- LA Metro has completed 11 joint development projects, with 4 under construction, 9 in negotiations, and 19 under consideration;
- MBTA has over 50 TOD sites;
- Houston Metro has worked on 6 joint development projects, but only has one that is built and operational;
- Denver RTD began with 4 pilot TOD projects and has since received proposals for many others; and
- DART has worked on over 10 TOD projects.

Project goals for transit-oriented development and joint development projects vary by agency. Most agencies have goals that are written and formalized in their policies. While some agencies focused on increasing ridership and raising revenue, other agencies broaden the scope to include other goals such as economic development and maximizing the value and use of land.

LA Metro's Joint Development Program (which includes TOD) seeks to:

- ▶ Encourage comprehensive planning and development around station sites and along transit corridors
- ▶ Reduce auto use and congestion through encouragement of transit-linked development
- ▶ Deliver developments that:
 - Promote and enhance transit ridership;
 - Enhance and protect the transportation corridor and its environs;
 - Enhance the land use and economic development goals of surrounding communities and conform to local and regional development plans; and
 - Generate value to Metro based on a fair market return on public investment.

3.2.2 Policy

Almost all of the agencies reported having TOD and joint development policies in place. These policies define TOD and lay out goals and strategies to carry out an overall vision and serve a variety of objectives; not only do they identify potential projects, but they also promote the consideration of implementing such projects early on in the planning process.

RTD acknowledges that approaches to TOD projects may vary, so the agency identified four key goals in its policy to achieve success:

- ▶ Promoting multi-sector, cross-jurisdictional partnerships;
- ▶ Encouraging sustainable development that supports the transit system;
- ▶ Ensuring a hierarchy of multimodal access; and
- ▶ Protecting and enhancing RTD's transit assets.

For the full document, see Appendix C.

LA Metro has a document detailing joint development policies and procedures which was adopted by the LACMTA Board of Directors in May 2005. These policies are divided into two categories: transportation and land use coordination policies and development policies. Below are some highlights from the policies:

- ▶ Prepare development guidelines specific to each joint development site that articulate the intensity and type of land uses that LACMTA desires for that site as well as any desired transit and urban design features
- ▶ Encourage transit compatible land use plans that enhance LACMTA's multi-modal transit, regional mobility, ridership, and revenue goals
- ▶ Actively encourage and allow surrounding property owners/developers, at their expense, to construct direction connections to station from their properties/buildings
- ▶ LACMTA retains authority over its transit facilities and services
- ▶ Projects must be consistent with regional and local community policies and plans

For the full document, see Appendix D.

3.2.3 Agency Role

The agency role varies and in some cases, is contingent upon the specific project. While MBTA and Houston both have limited roles, LA Metro leads most of its TOD process, consulting and collaborating with local jurisdictions, redevelopment agencies, and developers.

RTD acts as a partner in development in the TOD process. Using consulting services, RTD is the lead when it comes to setting policies, site selection, and choosing a developer. The agency serves as an advocate on behalf of TOD developers and local jurisdictions, working with operations, service planning, and legal to move projects through to get a timely review.

MBTA's primary role in the TOD process is to come up with properties for development. MBTA outsources the initial due diligence, evaluation of sites, and canvassing of MBTA operating departments to prepare use or design restrictions to a consultant. Once the parcel is approved for joint development, the consultant works with the MBTA and local communities to prepare development guidelines and run community meetings when necessary. In rare cases, MBTA will perform pre-development activities such as environmental cleanup or filing subdivision plans, but it is generally the developer's responsibility to carry out public review, entitlement, and design. The MBTA will work with the developer to review designs and ensure compatibility with existing MBTA operations.

3.2.4 Criteria for Identifying Sites

Criteria for identifying sites were determined by a mixture of agency input and outside consultation. LA Metro's criteria are outlined in their Joint Development Policies and Procedures document and include compatibility with agency use, acreage of available and developable land, market readiness, economic development potential, and responsiveness to community needs for housing, employment, and other services. DART hired a real estate advisor to perform an assessment on their sites and determine which ones were most ready for development. Specific criteria used by DART include accessibility, market/demographics, property attributes, and development readiness.

Denver RTD used 6 criteria to rank development readiness and determine which sites would be ideal for its TOD pilot projects:

- ▶ Within the existing or funded rail corridor
- ▶ RTD's ability to influence development
- ▶ TOD plan in place
- ▶ Commitment from local jurisdiction
- ▶ Commitment from local developer/property owner
- ▶ Market potential

3.2.5 Private Development Location

All agencies reported using ground leases as well as land sales, with MBTA also citing the leasing and selling of air rights for its TODs.

3.2.6 Vertical or Side-by-Side

A vertical development is integrated above the transit facility whereas a side-by-side development is located on a separate parcel. LA Metro, Houston Metro, and MBTA have utilized both types of developments.

LA Metro has a side-by-side development located along the Gold Line at Del Mar station. Two parcels of land totaling 3.56 acres are separated by the Gold Line right-of-way. The development consists of residential and ground floor retail, along with a public plaza that connects to the Gold Line station. The Wilshire/Vermont station is a vertically integrated development located along the Red and Purple Lines. The development is located on 3.24 acres of property and consists of a mix of residential, ground floor retail, a public plaza, and direct access to the subway portal.

3.2.7 Turnkey

Turnkey projects are built and completed by a developer and then turned over to another party. Under joint development projects, private developers build transit facility turnkey projects in exchange for private development rights. LA Metro and MBTA have both utilized this arrangement. Most of LA Metro's joint development sites consist of transit park-and-ride lots or above subway stations, such as the Sepulveda Park-and-Ride and the Hollywood and Vine station. A requirement for any joint development is the replacement of the parking facility to accommodate existing and future capacity, and the turnkey arrangement has resulted in the offset of LA Metro facilities costs by future rent revenues.

3.2.8 Revenues

The revenue typically collected by the agency is from the land leased or sold to the developer, but revenues can also be generated as a result of direct activities from the TOD projects. LA Metro generates over \$3M in ground lease revenue from 12 leases while the MBTA has generated over \$232M in non-fare revenues and over \$500M in cash and non-cash benefits over the past 15 years. DART has generated approximately \$400,000 to date.

3.2.9 Other Facility Related Revenue Generating Mechanisms

All peer agencies have found innovative methods to generate additional revenue, such as installing vending machines or generating lease revenues from right-of-way. The MBTA has an extensive non-fare revenue generating program, which includes advertising, telecommunications, utilities, retail concessions, abutter land use, and surplus property sales. TransLink utilizes musician busking, a practice in which

performers are juried and issued a license for a fee to perform at designated transit platforms and corridors. This practice has been in place for many years as an additional revenue stream.

Many agencies cited parking as a revenue generating mechanism:

- ▶ RTD collects parking revenue from out-of-district patrons, patrons who wish to reserve parking at park-and-rides, and patrons who park for over 24 hours;
- ▶ DART utilizes leases and licenses for uses such as utilities, parking, and special events;
- ▶ In Houston, the public can submit requests to use property at Metro (e.g., parking for cars).

3.2.10 Construction during Operations

The construction period is a critical concern since agencies want to minimize disruption to transit operations. LA Metro's Construction Management personnel coordinate all activities with operations to ensure operation and management activities and customers are not adversely affected during the construction period. An interim operations plan is developed and implemented during the construction process. In Boston, the developer funds a force account to cover oversight costs. With limited exceptions, the developer is expected not to interfere with transit operations.

3.2.11 Post-construction Issues

Defining this role upfront is an important part of the TOD and joint development process. Peer agencies reported that post-construction issues are addressed as they arise by an appointed person or department. LA Metro has the Joint Development project manager coordinate resolutions while the MBTA has its Real Estate Department mediate any questions. Examples of post-construction issues may include noise, odors, and traffic.

LACMTA has received post-construction complaints from residents regarding an alarm that sounds as buses exit an enclosed parking garage that has residential units above.

3.2.12 Community Issues

Community concerns can result in significant project delays or even a complete cancellation. Many peer agencies cited the importance of engaging the community early on and regularly throughout the project development. According to LA Metro,

communities are open to joint development, but are concerned with increased traffic and additional pressure on existing services, building heights, and massing and compatibility of target user groups within adjacent neighborhoods. TransLink builds landscaping and noise abatement issues into a plan as part of a good neighbor policy. The agency also holds several public consultation events to allow the public to participate in an open forum to express their thoughts and concerns.

4 Ideas, Insights, and Lessons Learned for SFMTA

Peer interviewees were asked to reflect on the challenges and lessons learned from their experiences with the operations of facilities and the revenue-generating potential of real estate.

4.1 CHALLENGES AND LESSONS LEARNED: FACILITIES

- **Inventory.** Ensuring that inventory transactions are recorded accurately continues to be a challenge for agencies. In order to overcome this, communication is crucial between all users in various roles and locations to ensure consistent processes and practices. Planning and sharing information between groups is also vital to the integrity of any inventory system.
- **Component rebuilds.** Buying parts needed from outside contractors to rebuild components in-house can be a big obstacle. Union contracts can be restrictive and make outsourcing a challenge. However, outsourcing provides a great opportunity for comparing cost and efficiency to work done in-house.
- **Warehouse locations.** All agencies had at least one centralized warehouse and smaller satellite locations. Materials were split between warehouses based on several criteria, including frequency of use, fleet/vehicle type, and functionality.
- **Funding.** All agencies pointed out the challenges with the complexity and scarcity of funding. Leveraging federal grants was the primary method for funding capital facility improvements and construction of new facilities. Examples of grants include State and Federal Grants/Appropriations (SFGA), Congestion Mitigation and Air Quality Improvements (CMAQ), American Recovery and Reinvestment Act (ARRA), Transit Investments for Greenhouse Gas and Energy Reduction (TIGGER), Transportation Investment Generating Economic Recovery (TIGER), Department of Homeland Security (DHS) funding, and State of Good Repair (SGR) grants. Making improvements in energy savings can also yield long-term savings that can be used towards funding for future projects.
- **P3s.** Utilizing public-private partnerships can contribute to private sector equity and give agencies access to resources they may not have on hand.

4.2 CHALLENGES AND LESSONS LEARNED: TOD AND JOINT DEVELOPMENT PROJECTS

- Each TOD and joint development situation is unique and requires planning, coordination, and consultation with major stakeholders, as well as a willingness to

consider alternatives. This involves working with the facilities group to ensure their use and design needs are met.

- If development is not part of the mission of the agency but treated as a beneficial outcome of the mission, then it will not be prioritized when it comes to budgets and staffing.
- Using an experienced development consultant is vital for representing an agency's interests, mixing in local knowledge with outside expertise. Many of the agencies used consultants to develop their criteria for potential TOD and joint development sites.
- Seek balance and industry input in developing use or design guidelines to ensure they do not limit private interest.
- Ensure the internal TOD staff has some autonomy to help coordinate TOD processes across various departments and retain flexibility in regards to development due-diligence. This will speed up the response time to private sector requests for environmental, title, and other costs associated with land transactions.
- Engage in partnerships with the surrounding community in order to connect the community and the transit property rather than individual parcels of land in isolation.
- Community outreach is an essential component of the TOD and joint development process. Developers may not be accustomed to working in a transparent and public environment so they should be involved in the process to ensure community interests are considered. However, internal buy-in is also necessary to make initiatives happen and help foster a stronger understanding of TOD and joint development objectives within an agency.
- The benefit of TODs goes beyond quantitative measures, such as increased ridership and revenues. Considerations of qualitative outcomes are just as valuable, such as creating affordable housing, employment, and livable communities.

Appendix A – Peer Questionnaire

SFMTA REAL ESTATE AND FACILITIES PROJECT

Peer Practice Review Questions

INTRODUCTION

The purpose of this best practices review is to identify ideas, insights, and lessons learned from SFMTA's peers regarding maximizing the effectiveness of existing facilities and identifying any revenue-generation potential.

Date:

Interviewee:

- Name:
- Title:
- Email:
- Phone #:
- Brief overview of responsibilities:
- # of years working in agency:

Agency Overview:

1. 2010 Revenue Vehicle Miles:
2. 2010 Revenue Vehicle Hours:
3. Modes Operated:
4. Modes: (trolley bus, heavy rail, commuter rail, etc):
5. Contracted Service: (which aspects , if any, of service are outsourced?):
6. Estimated ages of assets:
7. # and types of facilities:
8. Location of facilities (and level of deadheading?):

Facility Questions:

1. General facilities questions:
 - a. Who in your agency is responsible for decisions regarding facilities?
 - b. Does your organization have a strategic plan regarding your real estate and facilities? If so – can it be shared?
 - c. Does your organization have a multi-modal and/or multi-purpose training facility? Does it include simulators for various vehicle types? How was it funded?
 - d. Do you provide parking for your employees? Do you charge them?
 - e. Where do you store your vehicles?
2. How does the funding of facilities work?
 - a. How are real estate and facility improvements funded?
 - b. How, if at all, has your agency been able to “make the case” for additional funding to support maintenance facilities? How do you calculate long-term savings as a result of upfront investment?

- c. What funding sources have been utilized to fund the construction of new transit facilities?
3. How does your agency handle component re-builds?
 - a. Is this addressed in-house or out-sourced?
 - b. If a change was made, have you seen an increase or decrease in cost or reliability?
 - c. If in-house – where is it located? How many staff are involved? What challenges are faced?
 - d. If outsourced – what are the terms of the contract? Cost? What challenges are faced?
 - e. Has the alternative (in-house versus outsourced) ever been considered? Under what circumstances would you recommend a switch?
4. How does your agency address warehousing?
 - a. Is there one central warehouse or many de-centralized warehouses? How are parts and supplies split among different warehouses?
 - b. How are materials transported to appropriate facilities?
 - c. What kind of inventory control system (if any) is used? What works well? What challenges are faced?
 - d. What kinds of storage systems are used (e.g., pallet racks, drawer units, shelving units)?
5. Where do you handle (all) body repair and painting activities?

Land Use Questions:

1. Do any of your sites serve multiple purposes (e.g., maintenance facility and privately owned housing or office)?
 - a. If so, what was the motivation behind this arrangement?
 - b. Is such development vertically integrated (i.e. housing/office on a deck above the transit facility) or side-by-side (i.e. on separate parcels)?
 - c. If the expansion was to an active, operating facility, during construction, how did the agency manage on-going operations? Were operations or vehicle storage temporarily relocated?
 - d. Post-construction, were there conflicts between the uses? If so, how were they managed?
 - e. What challenges/lessons learned were identified?
 - f. What community issues or concerns arose when joint development has been proposed?
2. Do you utilize transit-oriented development (TOD) or joint development (JD) to generate revenues for your agency?

- a. What experience, if any, does your agency have with “joint development” in which a private developer builds a transit facility turnkey for the agency in exchange for private development rights?
 - b. If so – how much money is generated for the Agency? Was there a sharing of risk and up-side?
 - c. Do all revenues go to the agency?
 - d. What criteria were used to identify sites for TOD and for program development?
 - e. What role did the agency play in the public review, entitlement and design?
 - f. What were the key challenges and lessons learned associated with establishing the TOD/JD?
 - g. Was the private development on purchased land, on a ground lease, on an air rights conveyance?
 - h. Can you provide a link or write-up regarding your TOD/JD activities?
3. Do you have any other revenue-generating mechanisms that are associated with your facilities or land?

SFMTA REAL ESTATE AND FACILITIES PROJECT

Peer Practice Review Questions – DART

INTRODUCTION

The purpose of this best practices review is to identify ideas, insights, and lessons learned from SFMTA's peers regarding maximizing the effectiveness of existing facilities and identifying any revenue-generation potential.

Date: 7/3/12

Interviewee:

- Name: Jack Wierzenski
- Title: Director, Economic Development
- Email:wierzens@DART.org
- Phone #:214 749-2881
- Brief overview of responsibilities: TOD, member city coordination, revenue opportunities, etc.
- # of years working in agency: 21

Land Use Questions:

1. Do you utilize transit-oriented development (TOD) or joint development (JD) to generate revenues for your agency?
 - a. What experience, if any, does your agency have with "joint development" in which a private developer builds a transit facility turnkey for the agency in exchange for private development rights? DART has 1 full-time person working on TOD. The land use framework is not as supportive in Dallas as it is in other parts of the United States; suburban cities have more transit-supportive plans and policies. TOD developments require special approvals in Dallas. Projects are usually led by developers, resulting in larger projects. TOD sites include Carrollton, Mockingbird, Baylor, Downtown Plano (Eastside Village), South Side on Lamar, Downtown Garland, and Richardson.
 - b. If so – how much money is generated for the Agency? Was there a sharing of risk and up-side?

Money generated: To date, approx. \$400,000 Also, infrastructure connections to stations etc. are funded by development and/or TIF district.

Risk varies on a project by project basis. DART is currently in negotiations to use the Mockingbird Station parking as part of a tod Apartments, retail possibly hotel and signature office in phase 2 (200,000 sf+)
 - c. Do all revenues go to the agency?

Revenues from agency land go to the agency. DART also intends to set up long-term leases, which are used as an income stream. By leasing the land instead of selling it, the agency has continual control through ownership.
 - d. What criteria were used to identify sites for TOD and for program development?

Dallas hired a real estate advisor to perform an assessment of their sites and determine which sites were most ready for development. Specific criteria: Accessibility, market/demographics, property attributes, development readiness.

- e. What role did the agency play in the public review, entitlement and design?
DART plays a different role for different stations. For example, the Downtown Plano station was a partnership between the city, DART, and the developer. DART changed the design of the station by moving the bus transfer further away from the station, which then allowed the developer to integrate the station directly with the development (this same concept has been used when the Bush Turnpike Station was designed several years ago, the project is now moving forward with a developer)The city of Plano drove this negotiation. The Mockingbird station iss a direct negotiation between DART and the developer since the land was owned by DART.
 - f. What were the key challenges and lessons learned associated with establishing the TOD/JD?
TODs and JDs require fairly specialized skills. It is important to have champions internally. All TODs require partnerships to draw a focus on connecting communities and not individual parcels. The process is lengthy, developers are not accustomed to working in a transparent /public environment with their public partners, approval processes, not zoning, but MOU's, development agreements, etc. in a "no-risk" environment – also, development is not the primary mission of the agency but a beneficial outcome of the mission and therefore not a priority when it comes to budget and staffing.
 - g. Was the private development on purchased land, on a ground lease, on an air rights conveyance?
 - h. Can you provide a link or write-up regarding your TOD/JD activities?
 - i. Yes, we do have a draft process and procedures as well as a TOD Policy
2. Do you have any other revenue-generating mechanisms that are associated with your facilities or land?
Leases and licenses for uses such as utilities, parking, special events, etc.

SFMTA REAL ESTATE AND FACILITIES PROJECT

Peer Practice Review Questions – Houston METRO

INTRODUCTION

The purpose of this best practices review is to identify ideas, insights, and lessons learned from SFMTA's peers regarding maximizing the effectiveness of existing facilities and identifying any revenue-generation potential.

Date:

Interviewee:

- Name: Rocky Marrero
- Title: Vice President Facilities Maintenance
- Email: Rocky.Marrero@ridemetro.org
- Phone #: 713-739-4850
- Brief overview of responsibilities:
 - VP of facilities maintenance – O&M of all buildings and properties uses in support of transportation. Over 30 million square feet. Mix of transit centers, park and ride, operations side – bus farms and support facilities. 67 total sites. Staff of 150 people – combo of salary and union staff. Anything that doesn't have wheels on it, they maintain. Bus stops and bus shelters are included too. 150 routes and over 10,000 stops – 20% of them have shelters. Maintain cleaning, trash, etc. service area covers 1250 square miles from Maxi Park and ride to Katy (47 miles).
 - Central office and other offices Lapco street
 - Contracting services team
 - Support and operating team
 - Public facilities team – transit centers, bus shelters, park and ride
 - Project team – engineers that drive capital improvement and rehabilitation plan
 - Now reports to group VP – HR, procurement, materials, IT, marketing/communications, etc. He reports to CEO.
- # of years working in agency: Joined in May 2008.

Agency Overview:

1. 2010 Revenue Vehicle Miles:
2. 2010 Revenue Vehicle Hours:
3. Modes Operated:
 - b. Light rail – 2014 three new rail lines.
 - c. Bus (bulk) – 152 routes. Local and park and ride service. Red line to university Houston.
 - d. Paratransit – “MetroLift” service – big portion of what agency does for the region. Charge about \$1 a ride. Mix of local and federal funds. Can apply for this if there is no reliable bus service within a few blocks.
4. Modes: (trolley bus, heavy rail, commuter rail, etc):
5. Contracted Service: (which aspects , if any, of service are outsourced?):

- a. Metro operates most of service
- b. One bus operating facility contract – operated by “first transit services”
- c. Paratransit: Metro, own vehicles/contracted drivers, local cab companies under contract with Metro.
- d. Rail – all owned/operated by Metro
- 6. Estimated ages of assets:
 - a. Buildings – average age is 22 years
 - b. Buses – lifecycle is 12 years. 5-7 year range. Purchase 100 buses/year.
- 7. # and types of facilities:
 - a. 67 total facilities (11 operations; 56 public facilities)
 - i. 11 operating facilities
 - 1. 6 bus operating facility (bus farm – O&M): Bus maintenance, facilities
 - 2. 5 support facilities (warehouse, admin, etc.)
 - 3. 1900 main – primary center
 - ii. 28 transit centers
 - iii. 28 park and ride
- 8. Location of facilities (and level of deadheading?):
 - a. All over the place; can shift as needed in emergency.

Facility Questions:

- 1. General facilities questions:
 - b. Who in your agency is responsible for decisions regarding facilities?
 - i. I-Drive
 - ii. Senior VP of Ops – tactical leadership committee (Senior VPs + CEO)
 - c. Does your organization have a strategic plan regarding your real estate and facilities? If so – can it be shared?
 - i. There is a strategic plan – falls under senior VP of design services at Metro (long term strategic plan) includes facilities and services. Currently in development and will be made public. 10-year span. One that currently includes facilities does not exist but future one will.
 - d. Does your organization have a multi-modal and/or multi-purpose training facility? Does it include simulators for various vehicle types? How was it funded?
 - i. Service delivery – divided into different groups: transportation (operates bus service); rail (red line, rail operator); paratransit
 - ii. Each individual group trains within their own
 - iii. Maintenance is separate from transportation
 - iv. Yes, using simulators
 - v. Funding for training facilities – embedded within existing operating facilities and funding. No training building.
 - e. Do you provide parking for your employees? Do you charge them?
 - i. Yes at bus operating and support facilities. Not at 1900 main.

- ii. One of the park and rides is by rail line. 7 months ago made available to employees to park there for free. At admin building – limited parking: executive group is priority. Non-revenue fleet gets priority as well. Regular employee doesn't get free parking at center, but has free park and ride and access to rail.
 - f. Where do you store your vehicles?
 - i. Revenue fleet – park at rail/bus operating center
 - ii. Non revenue fleet – cleaning/maintenance, police, etc. park at various facilities where they are working from
 - iii. No shuttles. All cars are where they need to be.
- 2. How does the funding of facilities work?
 - a. How are real estate and facility improvements funded?
 - i. Combo of local funds and grants from federal government; purchasing new property for park and ride
 - ii. Improvements – mostly locally funded. A few years ago submitting applications for federal grants. \$8 million grants for a couple facilities. \$22-30 million applied for this year in grants.
 - b. How, if at all, has your agency been able to “make the case” for additional funding to support maintenance facilities? How do you calculate long-term savings as a result of upfront investment?
 - i. \$54 million
 - ii. “Facility condition index” – a model used to identify backlog of maintenance; current replacement value. Obtain a ratio. Anything over 50% in bad shape, 10-15% in OK shape. Used this to develop portfolio of properties.
 - iii. Needs 7-10 million dollars to maintain facilities at acceptable rate over longer term.
 - c. What funding sources have been utilized to fund the construction of new transit facilities?
 - i. Grant money and local funds
- 3. How does your agency handle component re-builds?
 - a. Is this addressed in-house or out-sourced?
 - i. Combo. Small component in each facility.
 - b. If a change was made, have you seen an increase or decrease in cost or reliability?
 - c. If in-house – where is it located? How many staff are involved? What challenges are faced?
 - i. Rocky can find out
 - d. If outsourced – what are the terms of the contract? Cost? What challenges are faced?

- e. Has the alternative (in-house versus outsourced) ever been considered? Under what circumstances would you recommend a switch?
 - i. Depends on complexity of situation.
 - ii. Depends on leadership (former CEO was supportive of outsource model; current CEO supportive of more internal model); staff supports depending on complexity of issues (costs/operations, etc.)

- 4. How does your agency address warehousing?
 - a. Is there one central warehouse or many de-centralized warehouses? How are parts and supplies split among different warehouses?
 - i. Centralized warehouse
 - ii. Materials group – satellite warehouse; split between facilities by frequency of use (e.g., 100 widgets/day; arrange for that amount the next day).
 - b. How are materials transported to appropriate facilities?
 - i. Use non revenue vehicles; also have 1-2 trucks or use subcontractors
 - c. What kind of inventory control system (if any) is used? What works well? What challenges are faced?
 - i. Barcodes are issued and tracked throughout lifecycle; parts are associated with work orders and incorporated in asset management program/software
 - d. What kinds of storage systems are used (e.g., pallet racks, drawer units, shelving units)?
 - i. Combination of all
 - ii. Central warehouse uses automated system for tools but not big pallets

- 5. Where do you handle (all) body repair and painting activities?
 - a. All sites have capability to body repair and painting

Land Use Questions:

- 1. Do any of your sites serve multiple purposes (e.g., maintenance facility and privately owned housing or office)?
 - a. If so, what was the motivation behind this arrangement?
 - i. Yes – park and ride TOD → Cypress (included apartments, retail, garage parking, etc.) – very successful model and looking at how to replicate this and develop future guidelines
 - ii. Field Service Center
 - 1. Facilities group (shelter rehab)
 - 2. MetroLift (paratransit)
 - 3. Bus maintenance (non-revenue)
 - 4. Some admin offices
 - b. Is such development vertically integrated (i.e. housing/office on a deck above the transit facility) or side-by-side (i.e. on separate parcels)?

- i. Cypress – side by side
 - c. If the expansion was to an active, operating facility, during construction, how did the agency manage on-going operations? Were operations or vehicle storage temporarily relocated?
 - i. No expansion
 - d. Post-construction, were there conflicts between the uses? If so, how were they managed?
 - i. Space/service challenges when adding paratransit operations to this site
 - ii. Operational challenges addressed through improvement projects
 - e. What challenges/lessons learned were identified?
 - i. Space/service/operational (see above)
 - f. What community issues or concerns arose when joint development has been proposed?
 - i. None identified.
- 2. Do you utilize transit-oriented development (TOD) or joint development (JD) to generate revenues for your agency?
 - a. What experience, if any, does your agency have with “joint development” in which a private developer builds a transit facility turnkey for the agency in exchange for private development rights?
 - i. Cypress
 - b. If so – how much money is generated for the Agency? Was there a sharing of risk and up-side?
 - i. Revenues generated from increased ridership
 - c. Do all revenues go to the agency?
 - d. What criteria were used to identify sites for TOD and for program development?
 - e. What role did the agency play in the public review, entitlement and design?
 - f. What were the key challenges and lessons learned associated with establishing the TOD/JD?
 - i. Community outreach really important. Apartment complex adjacent to park and ride
 - ii. Increase involvement of facilities group in this process so that they can adequately address specification/design needs, etc.
 - g. Was the private development on purchased land, on a ground lease, on an air rights conveyance?
 - h. Can you provide a link or write-up regarding your TOD/JD activities?
 - i. Working on TOD/JD guidelines this year for Board approval
- 3. Do you have any other revenue-generating mechanisms that are associated with your facilities or land?
 - a. Public can submit requests to use property at Metro (e.g., parking for cars)
 - b. Rodeo – service expansion from park and ride (1-5) “Reliant” fixed fee of \$5

SFMTA REAL ESTATE AND FACILITIES PROJECT

Peer Practice Review Questions – LA METRO

INTRODUCTION

The purpose of this best practices review is to identify ideas, insights, and lessons learned from SFMTA's peers regarding maximizing the effectiveness of existing facilities and identifying any revenue-generation potential.

Date:

Interviewee:

- Name: *Frank Shapiro*
- Title: *Deputy Executive Officer, Finance*
- Email: *shapirof@metro.net*
- Phone #: *213-922-2111*
- Brief overview of responsibilities: *Budget manager*
- # of years working in agency: *20*

Agency Overview:

1. 2010 Revenue Vehicle Miles: *112,665,734*
2. 2010 Revenue Vehicle Hours: *8,305,715*
3. Modes Operated: *bus, light rail, heavy rail*
4. Modes: (trolley bus, heavy rail, commuter rail, etc):
5. Contracted Service: (which aspects , if any, of service are outsourced?): *7% of bus service*
6. Estimated ages of assets: *Average 10 years for vehicles, 25 years for facilities. Vehicles range from new to 23 years, Facilities range in age from first use this month to nearly a century old.*
7. # and types of facilities: *11 bus divisions; 4 rail divisions, headquarters, central maintenance, rail operations control, and many small facilities*
8. Location of facilities (and level of deadheading?): *Facilities are located throughout much of LA county. Deadheading varies considerably from less than a mile to 33 miles with an average of 8.3 miles.*

Facility Questions:

1. General facilities questions:

- a. Who in your agency is responsible for decisions regarding facilities? *Ultimate authority rests with the Board of Directors. The CEO/DCEO decides which capital projects will be presented to the BOD for approval.*
 - b. Does your organization have a strategic plan regarding your real estate and facilities? If so – can it be shared? *Our facility plan is part of our Long Range Strategic Plan and individuals plans for major capital projects.*
 - c. Does your organization have a multi-modal and/or multi-purpose training facility? Does it include simulators for various vehicle types? How was it funded? *We have a bus operator training facility.*
 - d. Do you provide parking for your employees? Do you charge them? *We charge employees for parking at the headquarters facility, and parking is free at other facilities*
 - e. Where do you store your vehicles? *We store revenue vehicles at each of the bus and rail divisions.*
2. How does the funding of facilities work?
- a. How are real estate and facility improvements funded? *Each project has unique funding. Metro's First choice is to get outside grant funding. If grant funds are not available for then we will use sales taxes, our primary local funding source, (cash or bond) or TDA.*
 - b. How, if at all, has your agency been able to “make the case” for additional funding to support maintenance facilities? How do you calculate long-term savings as a result of upfront investment? *We have made the case based on our deferred maintenance backlog, safety and environmental regulations, and the cost of replacing facilities exceeding the cost of maintenance.*
 - c. What funding sources have been utilized to fund the construction of new transit facilities? *New rail and bus rapid transit lines, including maintenance facilities, have been funded primarily with local sales taxes (cash and bond), and to a lesser extent federal and state grants.*
3. How does your agency handle component re-builds?
- a. Is this addressed in-house or out-sourced? *Either rebuilt in-house or acquired new.*
 - b. If a change was made, have you seen an increase or decrease in cost or reliability? *Since we don't out-source this not really an issue for us, but we get better reliability when we buy new (also the benefit of a warranty).*
 - c. If in-house – where is it located? How many staff are involved? What challenges are faced? *We do in-house re-builds at our Central Maintenance Facility with a staff of*

about 60 doing rebuilds and fabrication. The biggest challenge can be buying parts needed to rebuild something in-house (parts not available, long lead times, running out of stock, etc).

- d. If outsourced – what are the terms of the contract? Cost? What challenges are faced? *Labor union contract does not permit out-sourcing. This does pose a problem when a part is not available for purchase new.*
 - e. Has the alternative (in-house versus outsourced) ever been considered? Under what circumstances would you recommend a switch? *No, due to limitations of labor agreement.*
4. How does your agency address warehousing?
- a. Is there one central warehouse or many de-centralized warehouses? How are parts and supplies split among different warehouses? *We utilize one central warehouse which supplies 11 de-centralized bus storerooms, 5 de-centralized rail warehouses and 3 de-centralized specialty storerooms. The 11 bus storerooms and 4 rail warehouses operate on a 24/7 basis. Parts and supplies are split among by demand and commodity. The commodities are defined by their respective means of support such as: bus, rail maintenance of way, custodial, computer, facility, first aid, hardware, lubricants, revenue collection, shop consumables, stationary and telecom. Each individual item is assigned a value class using the ABC method which aides in determining optimal stocking levels.*
 - b. How are materials transported to appropriate facilities? What kind of inventory control system (if any) is used? What works well? What challenges are faced? *Metro trucks and personnel are used to transport material to de-centralized storerooms and warehouses. Additionally, there are items that are “drop shipped” directly to the de-centralized storerooms due to size, volume of orders, or risk to transport. Metro trucks deliver replenishment orders Monday through Friday. Additionally we provide internal “hot trucks (emergency delivery service)” to support critical needs Monday through Friday on two shifts.*
 - c. What kind of inventory control system (if any) is used? What works well? What challenges are faced? *Metro uses the Infor Software Solution (Spear4i) for Inventory and Materials Management (M3). M3 is Maintenance and Materials Management software that is Work Order/Materials Request driven. M3 interfaces with other software programs including Oracle Financials for Procurement and electronic commerce, Automated Storage and Retrieval System (ASRS), Documoto (Illustrated electronic Parts Catalogs) and ASAP (Storeroom Carousel/Vertical Control system).*

What works well?

M3 captures collects and stores large amount of information. This includes transactional, historical and item specific attributes. This has enabled Metro to maintain tighter controls and higher accuracy of Metro Inventory Assets.

What challenges are faced?

As with any system or systems, the more information/data that is captured and accounted for, the more maintenance and “housekeeping” that is needed to

monitor and adjust M3 control settings as Metro Inventory needs evolve over time. Ensuring transactional integrity at all locations is a challenge we continue to focus on to provide M3 with accurate decision support information. Communication is crucial between all users in various roles and locations to ensure consistent processes and practices. Planning and sharing information between groups is vital to the integrity of any Inventory System.

Key Inventory Control Processes:

Inventory Transactions: *All “Ins and Outs” are transacted in the system including, PO Receipts, Receipt of Internal Rebuilds, Issues, Returns, Transfers, and Receipt of Transfers. This supports inventory accuracy.*

Audits of On-Hand Inventory: *Quarterly Random Sampling Inventory (RSI) for the Central Warehouse – a sampling is generated and physically counted to match against system records. We also Cycle Count item records at the de-centralized storerooms and warehouses by value class on a quarterly rotation. Value Class A and B items are counted three (3) times per year and C items are counted once a year. Plans are distributed to management staff for execution at each of the locations. Weekly reports are generated showing completion progress as well as specific adjustments that may have resulted from the counts.*

Item Catalog Maintenance: *A detailed analysis of each part number is completed by Inventory Control prior to being set-up or changed in the system. This ensures database integrity within the parts catalog and prevents duplication of inventory records.*

- d. *What kinds of storage systems are used (e.g., pallet racks, drawer units, shelving units)? Standard pallet, shelving, stack systems—manually operated (crane designed-air or electrically assisted), vertical and horizontal carousel control systems, drawer units, cabinet for corrosive and flammable materials, chemical specific warehousing systems, hazardous material containers, underground storage tanks (fuel)*

- 5. *Where do you handle (all) body repair and painting activities? We handle our body repair and complete painting activities at our Central Maintenance Facility. Minor repairs and paint touch-ups can be made at the 11 bus operating divisions by a roving body crew that reports to the Central Maintenance Facility or by qualified mechanics assigned to the divisions.*

Land Use Questions:

- 1. *Do any of your sites serve multiple purposes (e.g., maintenance facility and privately owned housing or office)? Yes, Metro has several rail stations that have multiple purposes through joint development, e.g., rail station entrance and exit with private development above the station and/or another public use. Metro’s Wilshire and Vermont station has a public school and privately owned apartments. We are also reviewing a likely joint use of our West Hollywood bus division and mixed use development. Our LACMTA Board has adopted Joint Development*

Policies and Procedures (attached) which our department/agency follows. Virtually all of our development proceeds on a ground lease basis wherein Metro owns the underlying land

- a. *If so, what was the motivation behind this arrangement? To increase ridership, maximize the value of the underlying land as well as to provide further support for the general development goals.*

Metro's Joint Development Program (includes TOD) seeks to:

- o Encourage comprehensive planning and development around station sites and along transit corridors*
 - o Reduce auto use and congestion through encouragement of transit-linked development*
 - o Deliver developments that:*
 - Promote and enhance transit Ridership;*
 - Enhance and protect the transportation corridor and its environs;*
 - Enhance the land use and economic development goals of surrounding communities and conform to local and regional development plans; and*
 - Generate value to Metro based on a fair market return on public investment.*
- b. *Is such development vertically integrated (i.e. housing/office on a deck above the transit facility) or side-by-side (i.e. on separate parcels)? Both, vertical integration can be found along the Red/Purple line joint development sites. Side-by-side development can be found along our light rail lines (e.g., Willow, Del Mar, Sierra Madre)*
- c. *If the expansion was to an active, operating facility, during construction, how did the agency manage on-going operations? Were operations or vehicle storage temporarily relocated? Construction Management personnel coordinate all activities with Operations to ensure that operating and maintenance activities as well as transit users are not adversely affected. An interim operations plan is formulated and implemented during the construction process.*
- d. *Post-construction, were there conflicts between the uses? If so, how were they managed? As issues arise, the joint development project manager coordinates resolutions. For example, there is an alarm that sounds as a bus exits an enclosed parking garage that has residential units above and is receiving complaints.*
- e. *What challenges/lessons learned were identified? Generally not, but each situation is unique and requires planning, coordination, consultation with major stakeholders, political support, creative solutions and willingness to consider alternatives.*
- f. *What community issues or concerns arose when joint development has been proposed? Please see our attached process which takes 3-6 years. On the whole, communities are open to joint development but are very much concerned with increased traffic density, additional pressure on existing services particularly schools, building heights and massing and compatibility of target user groups with the adjacent neighborhoods.*
2. *Do you utilize transit-oriented development (TOD) or joint development (JD) to generate revenues for your agency? Yes.*
- a. *What experience, if any, does your agency have with "joint development" in which a private developer builds a transit facility turnkey for the agency in exchange for private development rights? Most of our joint development project sites are transit park-and-ride lots or as situated above our subway stations. A requirement for any joint development is the replacement of the parking facility to accommodate existing and future capacity. This has been done in all cases on a turn-key arrangement where the costs of the Metro facilities are offset by future rent revenues. Notable examples are the Metro Blue Line Willow Station Parking structure, the Metro Red Line Hollywood and Highland joint development.*

- c. If so – how much money is generated for the Agency? Was there a sharing of risk and up-side? Currently, approximately \$3M in ground lease revenue from 12 executed leases, plus additional ridership and activity around the station. Our development agreements try to capture any upside as a percentage of revenue beyond an agreed to threshold and/or as a percentage of revenue upon sale.
- d. Do all revenues go to the agency? *Yes, all revenues due Agency goes to its General Fund.*
- e. What criteria were used to identify sites for TOD and for program development? *Several criteria, including compatibility with Agency use, acreage of available/developable land, and market readiness. We follow project development guidelines outlined in our Joint Development Policies and Procedures.*

The following is for illustrative purposes only, as each project is unique:

- *Market/Highest and Best Use Study* *4 months*
 - *Procure Market/Economic Consultant* *(2 months)*
 - *Prepare Market/Economic Study* *(2 months)*
 - *Adopt Preferred Project Development Strategy (Hold, Proceed to next phase, Partner, etc.)*
- *Design/Development Guidelines* *6 months*
 - *Procure Design Consultant* *(2 months)*
 - *Conduct Community Outreach* *(2 months)*
 - *Prepare Design/Development Guidelines (* *1 month)*
 - *Obtain Board Approval* *(1 month)*
- *RFQ Process* *6 months*
 - *Prepare & Issue RFQ* *(2 months)*
 - *RFQ Response Prep by Proposers* *(2 months)*
 - *RFQ Response Review/Selection of QCP* *(2 months)*
- *RFP Process* *7 months*
 - *Prepare & Issue RFP* *(1 month)*
 - *RFP Response Prep by Proposers* *(3 months)*
 - *RFP Response Review/Selection of Proposal* *(2 months)*
 - *Metro Board Approval of Selected Proposal* *(1 month)*
- *Execute ENA* *1 month*
 - *JDA/Ground Lease Process* *11 months*
 - *Negotiate & Finalize Business Terms* *(6 months)*
 - *Metro Board Approval of Business Terms* *(1 month)*
 - *Negotiate/Finalize Form of JDA, Ground Lease, etc.* *(3 months)*
 - *Execute JDA* *(1 month)*
- *Entitlement Process (Concurrent with Above)* *1-18 months*

- Obtain Entitlements (assume 1-18 months)
 - Execute Ground Lease, etc. (1 month)
 - Construction Period 24-36 months
 - TOTAL PROCESS: 60-85 months
 - f. What role did the agency play in the public review, entitlement and design? *Please see our attached policies and process. Entitlement is the responsibility of the developer.*
 - g. What were the key challenges and lessons learned associated with establishing the TOD/JD? *Working with adjacent neighborhoods and major stakeholders, identifying development, community, and political issues early and working with affected groups to develop solutions.*
 - h. Was the private development on purchased land, on a ground lease, on an air rights conveyance? *As a policy, MTA ground leases rather than sells its land. There are rare exceptions to this policy such as when the property is so small and so physically constrained that the only potential developer is the adjacent property owner. We have also done a land swap within the same project site where the joint development parcels are contiguous.*
 - i. Can you provide a link or write-up regarding your TOD/JD activities? *Go to www.metro.net. Click on the Projects and Programs “tab” and “Transit Oriented Development .” This link has the information provided and an interactive map http://www.metro.net/projects/joint_dev_pgm/*
3. Do you have any other revenue-generating mechanisms that are associated with your facilities or land? *Yes, we generate over \$13M in lease revenues from our rights-of-way.*

SFMTA REAL ESTATE AND FACILITIES PROJECT

Peer Practice Review Questions – MBTA

INTRODUCTION

The purpose of this best practices review is to identify ideas, insights, and lessons learned from SFMTA's peers regarding maximizing the effectiveness of existing facilities and identifying any revenue-generation potential.

Date:

Interviewee:

- Name: Victor Rivas
- Title: Deputy Director of Capital Budget
- Email: vrivas@mbta.com
- Phone #: (617) 222-1622
- Brief overview of responsibilities: Oversight of the MBTA Capital Program
- # of years working in agency: 7+

The following MBTA staff have helped answer this questionnaire:

- Mike Turcotte, Assistant General Manager, Engineering & Maintenance (E&M)
- Mark Boyle, Assistant General Manager, Real Estate & Development
- Robert Johnson, Director, Materials Management
- Joseph Cosgrove, Director, Development and Planning

Agency Overview:

1. 2010 Revenue Vehicle Miles: 95,035,507
2. 2010 Revenue Vehicle Hours: 6,450,605
3. Modes Operated: Bus, Heavy Rail, Commuter Rail, Light Rail, Demand Response, Trolleybus, Ferryboat
4. Modes: (trolley bus, heavy rail, commuter rail, etc): Bus, Heavy Rail, Commuter Rail, Light Rail, Demand Response, Trolleybus, Ferryboat
5. Contracted Service: (which aspects , if any, of service are outsourced?): Commuter Rail, Ferryboat and some Bus service.
6. Estimated ages of assets: It varies widely and it is difficult to estimate. For example, the oldest MBTA station (Park Street) dates back to 1897, but it has received continued refurbishment/renovation (in this context is age relevant?)
7. # and types of facilities: See attached documents
8. Location of facilities (and level of deadheading?): N/A

Facility Questions:

1. General facilities questions:
 - a. Who in your agency is responsible for decisions regarding facilities?

The Assistant General Manager for Engineering & Maintenance (E&M), along with his team has the responsibility for all maintenance decisions regarding facilities. Should any facility maintenance issue or issues become too large or costly for our Engineering & Maintenance (E&M) team to handle, the facility repairs are recommended to our Design & Construction team to be programmed within our Capital Improvement Program as large stand-alone projects.

- b. Does your organization have a strategic plan regarding your real estate and facilities? If so – can it be shared?

With regard to facilities, our E&M Team has created a new strategic program to systematically and holistically address all facility maintenance. Our program is titled T-Global Asset Preservation Strategy or T-GAPS. This program addresses all facility maintenance issues, documents the revolving capital funding required to maintain our facilities and provides a Return on Investment for the program over its 5 year revolving terms. (A copy is attached).

- c. Does your organization have a multi-modal and/or multi-purpose training facility? Does it include simulators for various vehicle types? How was it funded?

There are three main training centers: for bus, heavy rail and light rail. The Bus Training Center has two simulators. The equipment for the training facilities was funded through the MBTA capital program.

From an E&M stand point, we have recently hired a Director of Training and Resource Development to create an all inclusive training program for all areas of E&M. We currently have a Signals Training Facility at Cabot Yard and we are establishing a Maintenance of Way and Trades training facility at Cobble Hill. These training facilities will address all E&M required specialized training. Additionally, MassDOT University has been established to support training MassDOT –wide.

- d. Do you provide parking for your employees? Do you charge them?

We do provide parking for our employees at our yards, larger stations and in some cases at our larger bus stations. All employee parking is free of charge.

- e. Where do you store your vehicles?

Revenue vehicles are stored at yards specifically designed for the type of revenue vehicle. Non revenue vehicles are stored at our maintenance yards and facilities.

2. How does the funding of facilities work?

- a. How are real estate and facility improvements funded?

Depending on the improvements required, most funding is via the MBTA's Capital Investment Program. Additionally, with our new T- Global Asset Preservation Strategy, nearly all facility improvements and maintenance will be addressed within a 5 year revolving capital maintenance plan.

- b. How, if at all, has your agency been able to "make the case" for additional funding to support maintenance facilities? How do you calculate long-term savings as a result of upfront investment?

Until this year, making the case was difficult. Capital funding was programmed based on critical requirements and safety of a facility. With the incorporation of T-GAPS program, we have met the global facility maintenance requirements requested by the FTA and within this program we have established a Return of Investment that proves a significant cost savings over the same revolving 5 years of the program.

- c. What funding sources have been utilized to fund the construction of new transit facilities?

Almost 100% of the MBTA Capital Investment Program is focused on State of Good Repair projects, meaning investment in existing infrastructure. The construction of expansion projects is supported mainly with State/Federal funds (e.g., Small/New Starts programs).

- 3. How does your agency handle component re-builds?

- a. Is this addressed in-house or out-sourced?

Most component rebuilds are handled in house. However, we currently evaluate the cost and schedule to complete component rebuilds, assess it against our current maintenance schedule, and determine the most efficient course of action. In some cases the most efficient course of action is to outsource the re-builds.

- b. If a change was made, have you seen an increase or decrease in cost or reliability?

We have the data to show that a proper rebuild increases reliability while decreasing maintenance costs.

- c. If in-house – where is it located? How many staff are involved? What challenges are faced?

This is dependent on the type of rebuild. For example, in some cases E&M's machinists will rebuild a pump in house, if the pump is not too far beyond its life expectancy. In other cases, it is more economical to simply purchase a new pump. **NOTE:** The E&M Division is in charge of the maintenance of Stations and Facilities. E&M is also in charge of the Power, Track, Signals and Communications Systems for Heavy and Light Rail. The E&M Division had funding for approximately to 350 full-time employees.

- d. If outsourced – what are the terms of the contract? Cost? What challenges are faced?

The MBTA has a facility with the capability to manufacture highly advanced mechanical equipment. The ultimate responsibility of whether to do it in-house falls on a cost-

benefit analysis and other associated factors such as timing (lead-times), manpower available, other work being performed at the time, etc. The terms of the contract are straight forward. The final product has to meet quality standards and have a cost advantage (cost assessment is not limited to the product itself, but the time involved and the impact on other competing projects if done in-house).

Typically, E&M does not outsource the rebuilding of components. It is more economical to purchase a new component.

- e. Has the alternative (in-house versus outsourced) ever been considered? Under what circumstances would you recommend a switch?

Yes. In the past the MBTA has split single project's work into two segments: in-house and outsourced segments. This has provided a great opportunity for comparing cost and efficiency. The decision to take any particular approach depends on a number of factors described in 3d.

From an E&M perspective, we complete cost/benefit analysis to determine the most economical approach to any issue. This is how we approach any in-house vs. outsourced issue.

4. How does your agency address warehousing?

- a. Is there one central warehouse or many de-centralized warehouses? How are parts and supplies split among different warehouses?

The MBTA has three central warehouses and 18 satellite inventory locations. Material is split at satellite locations by fleet/vehicle type

- b. How are materials transported to appropriate facilities?

MBTA owned and operated trucks transport materials from central warehouses to satellite locations

- c. What kind of inventory control system (if any) is used? What works well? What challenges are faced?

MBTA uses the materials management module of the Oracle software package

- d. What kinds of storage systems are used (e.g., pallet racks, drawer units, shelving units)?

The MBTA uses a variety of storage systems depending on the item(s) being stored including pallet racks, drawer units, and shelving units.

5. Where do you handle (all) body repair and painting activities?

There a number of facilities (between 7 and 8) with areas specially designed for body repair and painting activities (for bus, light/heavy rail vehicles, as well as commuter rail locomotives and coaches)

Land Use Questions:

1. Do any of your sites serve multiple purposes (e.g., maintenance facility and privately owned housing or office)? Yes

- a. If so, what was the motivation behind this arrangement?

The MBTA is motivated to pursue joint development whenever possible in order to raise non-fare revenue, obtain in-kind improvements to MBTA facilities, and encourage increased ridership through transit oriented development.

- b. Is such development vertically integrated (i.e. housing/office on a deck above the transit facility) or side-by-side (i.e. on separate parcels)?

The MBTA has done both types of joint development. Of course air rights development is always more difficult but has proved to be quite lucrative as well.

- c. If the expansion was to an active, operating facility, during construction, how did the agency manage on-going operations? Were operations or vehicle storage temporarily relocated?

Each project has its own challenges and requirements. The developer funds a force account to cover oversight costs. With limited exceptions, the developer is expected to not interfere with transit operations.

- d. Post-construction, were there conflicts between the uses? If so, how were they managed?

We have not experienced any conflicts between the uses. At times there are conflicts regarding who is supposed to be doing what, but generally the real estate department adjudicates any questions in this area based upon the terms of the development agreement.

- e. What challenges/lessons learned were identified?

There are many challenges to joint development. The MBTA solves some of them through hiring an experienced development consultant to represent its interests with the developer. For complex projects it also uses what it calls a "PDG" or Project Development Group which is a team of key MBTA staff from relevant departments, the real estate department and the real estate consultant to meet and flush out the concerns and have responsibility for seeing that the project is carried through to completion.

- f. What community issues or concerns arose when joint development has been proposed?

The MBTA operates in 178 different municipalities so each community has its own concerns and level of sophistication for dealing with development. Depending on the site, size and type of development, the MBTA will usually start by reaching out to the municipal planning board or administrator. In some communities it is also necessary to make various political contacts to seek support, and finally, in some cases, the MBTA has held extensive community meetings to prepare development guidelines that become part of the procurement documents. The MBTA's enabling legislation requires it to sell or lease its property to the "highest, responsible, and eligible bidder" so it is unable to involve the community in developer selection. The best we can do is to listen to the community and to the extent feasible incorporate concerns in the bid documents. Ultimately it is up to the selected developer to secure permits in the community in which the development is to be built.

2. Do you utilize transit-oriented development (TOD) or joint development (JD) to generate revenues for your agency?

a. What experience, if any, does your agency have with “joint development” in which a private developer builds a transit facility turnkey for the agency in exchange for private development rights?

The MBTA has done this on more than one occasion.

b. If so – how much money is generated for the Agency? Was there a sharing of risk and up-side?

Over the past 15 years, the MBTA has produced over \$232 million in non-fare revenues from all of its real estate activities and a total of over \$500 million in cash and non-cash benefits.

c. Do all revenues go to the agency? Yes

d. What criteria were used to identify sites for TOD and for program development?

The MBTA has outsourced its real estate function to the professional asset management firm. This firm has the mandate to identify sites for TOD and for program development and uses a market based approach for this process.

e. What role did the agency play in the public review, entitlement and design?

The MBTA is not a development agency and therefore it essentially tees up properties for development. As explained in questions 1 f above, the MBTA’s consultant performs the initial due diligence, evaluates the types of uses that would potentially work at a site, and canvasses the MBTA operating departments to prepare use or design restrictions that may be necessary due to MBTA operations and then once a parcel is approved for surplusage or for joint development, works with the MBTA and the local communities when needed to prepare development guidelines and/or run community meetings. In rare cases the MBTA will perform some pre-development activities such as environmental cleanup or filing subdivision plans. But generally the developer is responsible for carrying out public review, entitlement and design. The MBTA will review the design prepared by the developer to assure that it is compatible with MBTA operations.

f. What were the key challenges and lessons learned associated with establishing the TOD/JD?

We believe that having overly restrictive guidelines as to use or design will inhibit the development market from responding to offerings and/or inhibit the ability to achieve the maximum value for the property. Therefore a balance needs to be achieved and the developer needs to be able to work directly with the community in which the development is located. We have found that communities would rather have the

developer teed up to extract its own conditions and community benefits separately from the transit agency. If the transit agency places its own operating conditions in the RFP and leaves the community benefits to the community process, then the transit agency is more likely to achieve the highest value for its property. See also the answer to 1.e. above.

- g. Was the private development on purchased land, on a ground lease, on an air rights conveyance?

The MBTA does not purchase land specifically to produce TOD at this time. However it has sold, used ground leases, and leased and sold air rights in over 50 TOD developments.

- h. Can you provide a link or write-up regarding your TOD/JD activities?

See the following websites: www.transitrealty.com and http://www.mbta.com/business_center/

Attached is a write up of our real estate program.

- 3. Do you have any other revenue-generating mechanisms that are associated with your facilities or land?

Yes, the MBTA has a very robust non-fare revenue generating program which includes advertising, telecommunications, utilities, retail concessions, abutter land uses, TOD, and surplus property sales. We also have a non-revenue program for bike paths.

SFMTA REAL ESTATE AND FACILITIES PROJECT

Peer Practice Review Questions – Denver RTD

INTRODUCTION

The purpose of this best practices review is to identify ideas, insights, and lessons learned from SFMTA's peers regarding maximizing the effectiveness of existing facilities and identifying any revenue-generation potential.

Date:

Interviewee:

- Name: David Genova
 - Title: Assistant General Manager, Safety, Security & Facilities
 - Email: David.Genova@rtd-denver.com
 - Phone #: 303-299-4038
 - Brief overview of responsibilities:
 - # of years working in agency:
-
- Name: Patrick McLaughlin
 - Title: Associate, Transit Oriented Development
 - Email:
 - Phone #:
 - Brief overview of responsibilities:
 - # of years working in agency:

Agency Overview:

1. 2010 Revenue Vehicle Miles:
 - a. 41,449,000 (fixed route bus, doesn't include light rail. Diesel bus primarily, some hybrid but not many. Standard 40, articulated and intercity coaches). Operate some cutaways, ADA, etc.
2. 2010 Revenue Vehicle Hours:
 - a. Not available
3. Modes Operated:
 - a. Light rail
 - b. Call and ride
 - c. Access a ride (ADA)
 - d. Commuter rail (in four years)
4. Modes: (trolley bus, heavy rail, commuter rail, etc):
5. Contracted Service: (which aspects, if any, of service are outsourced?):
 - a. 40% of bus fixed route
 - b. paratransit
6. Estimated ages of assets, established lifecycle?:

- a. Rolling stock on bus side – anywhere from 6 or 7 subfleets. Spread throughout the 12-year lifecycle. 12 year lifecycle approach. Some that are fairly new, old and halfway through. Never having to do a complete fleet overhaul
 - b. Oldest lightrail are 12-14 years old. Just received new light rail vehicles. 10%
 - c. Bus side – pretty good variety of manufacturers and facilities. Hoists and bus washes for example. On light rail side all are Siemens and able to standardize more. Components of these vehicles that are different but not as much as different manufacturers (example from AC to DC)
7. # and types of facilities:
- a. 4 bus facilities
 - i. 1 - Heavy repair, rebuild paint shop
 - ii. 3 - Light maintenance transportation facilities
 - iii. Oldest facility is about 30 years old
 - iv. Newest bus facility is about 20 years old
 - b. 2 light rail facilities
 - i. Heavy repair and some train pull out in the future
 - ii. 2007
 - iii. One is about 20 years old
 - iv. Other facility is about 8 years old
 - v. New commuter rail facility under concession agreement
8. Location of facilities (and level of deadheading?):
- a. Largest bus facility is centrally located in Denver. Deadhead is not too bad. One that they operate out of and heavy maintenance facility is right next door.
 - b. Other bus facilities are in suburb areas to strategically serve locations – aurora and boulder
 - c. On the rail side – smaller facility is pretty centrally located.
 - d. Other facility – larger one is centrally located to where the rail lines are now and deadhead is not too bad.

Facility Questions:

- 1. General facilities questions:
 - a. Who in your agency is responsible for decisions regarding facilities?
 - i. Building new ones – comes out of planning process (MIS or EIS process – planning and capital side)
 - ii. Replacement – combo of facilities and operations
 - iii. First phase is dealing with rolling stock with new asset management program. next year will be looking at more linear assets.
 - b. Does your organization have a strategic plan regarding your real estate and facilities? If so – can it be shared?
 - i. Other half of strategic planning process is through MIS/EIS phases
 - c. Does your organization have a multi-modal and/or multi-purpose training facility? Does it include simulators for various vehicle types? How was it funded?

- i. Completely separate and independent
 - ii. Do not have any simulators
 - iii. Training facilities are part of the maintenance facilities. Heavy maintenance facility – dispatch center and bus operator/maintenance training. All other training occurs at large facility
 - d. Do you provide parking for your employees? Do you charge them?
 - i. At maintenance facilities – parking is provided and is part of design and acquisition. Do not charge employees for it. At administrative buildings, no parking is provided. If there is a relief for a bus operator, for example, they have to pay but they get ½ hour pay (or something similar) to offset costs.
 - e. Where do you store your vehicles?
 - i. Most bus fleet is stored in doors. Primarily due to climate. Although some outdoor storage. For rail/rolling stock – stored outdoor mostly.
 - ii. No off-site parking.
 - iii. Running heated covered in-door.
- 2. How does the funding of facilities work?
 - a. How are real estate and facility improvements funded?
 - i. Two-fold: when building a brand new facility it will be part of the capital improvement program; attached to federally funded project. Successful in getting grant funding for new facilities. If talking about improvements and maintaining facilities handled through strategic budget planning 2013-2018 (6 years) enhancement lists, etc.
 - ii. As asset management matures - condition assessment, and then quantitative assessment out of maintenance records (performance metrics) that feed into strategic budget plan
 - b. How, if at all, has your agency been able to “make the case” for additional funding to support maintenance facilities? How do you calculate long-term savings as a result of upfront investment?
 - i. Strategic location to minimize deadhead miles. What are the best locations strategically for long term dead head savings. Predominant factor that would drive a new facility
 - ii. Existing facility – how can we make improvements in terms of energy savings that would be more long term. How do we keep the facilities in a state of good repair and keep the service on the street.
 - iii. Full funding grants. TIFIA and RIF? To fund Denver union station.
 - iv. Concession agreement – PPP. Significant amount of equity brought in for commuter rail. Maintenance facility, rolling stock. Utilize more private sector equity.
 - c. What funding sources have been utilized to fund the construction of new transit facilities?
 - i. SFGA, CMAQ, ARRA, TIGGER/TIGER, etc. and DHS funding as well.

3. How does your agency handle component re-builds?
 - a. Is this addressed in-house or out-sourced?
 - i. Mixed
 - ii. Depends on fleet age
 - b. If a change was made, have you seen an increase or decrease in cost or reliability?
 - c. If in-house – where is it located? How many staff are involved? What challenges are faced?
 - d. If outsourced – what are the terms of the contract? Cost? What challenges are faced?
 - i. Successful in building lessons learned in each contract. Lean on asset management program to build that in as well. Average lifecycle – can we extend lifecycle where we have really good performing equipment?
 - e. Has the alternative (in-house versus outsourced) ever been considered? Under what circumstances would you recommend a switch?
 - i. Haven't had big discussions about this. Balance works for them depending on skill sets in workplace and availability of resources.

4. How does your agency address warehousing?
 - a. Is there one central warehouse or many de-centralized warehouses? How are parts and supplies split among different warehouses?
 - i. Predominantly central. One large central bus warehouse at major facility with major maintenance. Each division has their own inventory/warehouse component – satellite facilities.
 - b. How are materials transported to appropriate facilities?
 - i. Daily deliveries to outliers
 - c. What kind of inventory control system (if any) is used? What works well? What challenges are faced?
 - i. Oracle system based – maximus module that tracks all maintenance and parts. Barcodes not sure?
 - d. What kinds of storage systems are used (e.g., pallet racks, drawer units, shelving units)?
 - i. Stacks system?
 - ii. With sophisticated systems, recommend manual backup

5. Where do you handle (all) body repair and painting activities?
 - a. Large heavy repair at main facility
 - b. At satellite divisions, small body and paint work can be done

Land Use Questions:

1. Do any of your sites serve multiple purposes (e.g., maintenance facility and privately owned housing or office)?
 - a. If so, what was the motivation behind this arrangement?

- i. Yes - Combined bus/heavy maintenance facility with admin support, bus dispatch, IT, and support vehicles
 - ii. Space was available and there was a need for all of these services
 - b. Is such development vertically integrated (i.e. housing/office on a deck above the transit facility) or side-by-side (i.e. on separate parcels)?
 - i. Combo. Maintenance is one level and attached is the admin building which is 3 stories.
 - c. If the expansion was to an active, operating facility, during construction, how did the agency manage on-going operations? Were operations or vehicle storage temporarily relocated?
 - i. No expansion on central site - site was built at the same time
 - ii. Expansion at rail facilities largely to accommodate more cars
 - d. Post-construction, were there conflicts between the uses? If so, how were they managed?
 - i. No real conflicts
 - e. What challenges/lessons learned were identified?
 - i. Successful mostly
 - ii. Lessons learned – be cautious of fleet size predictions. Planning as you acquire. Robust public involvement program – reassurance to community and partner with environmental groups and health department.
 - iii. Challenges – NIMBYism (difficult to locate and determine size of facilities); having property that meets the needs so you don't have to compensate day-to-day operations
 - f. What community issues or concerns arose when joint development has been proposed?
 - i. Mostly around size and location of facilities.
- 2. Do you utilize transit-oriented development (TOD) or joint development (JD) to generate revenues for your agency?
 - a. What experience, if any, does your agency have with “joint development” in which a private developer builds a transit facility turnkey for the agency in exchange for private development rights?
 - i. Not much TOD generating revenue yet.
 - ii. Shared use and expenses however (e.g., parking structure, 1400 spaces). All contribute to the cost of the structure and have a certain number for agency parking and a certain number for the developer.
 - iii. Denver RTD has a TOD program with a senior manager, TOD manager, TOD real estate economist, and TOD planner. The program has evolved in terms of scope; a new TOD strategic plan was created in 2010 that expanded the agency's role in TOD. Previously, the role was narrow, as success was defined by ridership and revenue. The scope has since been broadened to include affordable housing, employment, and livable communities. RTD initiated 4 TOD demonstration projects, which were joint undertakings with local governments

and developers: Alameda Station, Federal Center, Welton Corridor, and Old Towne Arvada. There are unsolicited and private proposals that are also coming in for development. RTD's program has a focus on land use and ridership, rather than revenue.

- b. If so – how much money is generated for the Agency? Was there a sharing of risk and up-side?
 - i. The amount of revenue generated is site specific depending on the value of the land involved in the transaction. RTD's current joint development projects only involve fee simple sale of land so no shared risk or profit sharing has been negotiated.
- c. Do all revenues go to the agency?
 - i. The proceeds from selling their own land go to the agency. Some revenue from land proceeds can be appropriated back into the development for transit-specific benefits at RTD's discretion.
- d. What criteria were used to identify sites for TOD and for program development?
 - i. There were 6 criteria used to rank stations on development readiness: within the existing or funded rail corridor, RTD's ability to influence development, TOD plan in place, commitment from the local jurisdiction, commitment by developer/property owner, and market potential.
- e. What role did the agency play in the public review, entitlement and design?
 - i. RTD is a partner in development, focusing on the TOD outcome. Using consulting services, RTD is the lead when it comes to setting policies, site selection, and choosing a developer. It is the developer's responsibility to obtain permits. RTD TOD serves as an advocate on behalf of TOD developers and local jurisdictions. They work with operations, service planning, and legal to move projects through to get a timely review. Community outreach is happening with the development of the rail line and the land use planning that precedes the TOD development deals.

There are three activities that are occurring: 1) Design of transit facility, using a development-oriented transit approach to ensure transit design is development friendly, 2) Local government-initiated land use plan to change plans, policies, and zoning to make TOD legal, 3) Individual deals and development activity that are parcel-based. RTD will work with developers and nearby owners that have sites adjacent to RTD owned land to create larger opportunities. In many instances, RTD participated in the local land use planning.

- f. What were the key challenges and lessons learned associated with establishing the TOD/JD?
 - i. The key challenges have been the evolution within the agency to deploy itself to make TOD happen, identifying and changing the agency's role, getting internal buy-off and understanding, legislative issues such as private land rights, governance issues, and the balance between parking replacement and the

amount of development and parking around stations. In addition, part of the challenge of the Denver region is the scope of opportunity versus the size of the market; the real estate market is not able to absorb all of the available opportunities. It is also important to maintain focus on selected outcomes, as RTD did with its expanded TOD focus.

A key challenge related to interfacing with the private development community includes retaining flexibility in regards to development due-diligence. RTD discovered it was relatively slow to respond to private sector requests for environmental, title, and other relatively small costs associated with land transactions. This was due to those tasks falling under various departments throughout the agency, and those different departments having their internal processes geared towards ROW acquisition and not TOD facilitation. Making sure the internal TOD staff have some autonomy in this regard would help future joint development efforts.

- g. Was the private development on purchased land, on a ground lease, on an air rights conveyance?
 - i. Private development on RTD's current set of TOD/joint development projects will occur on purchased land.
 - h. Can you provide a link or write-up regarding your TOD/JD activities?
 - i. See RTD's 2011 Transit-Oriented Development Status Report: http://www.rtd-fastracks.com/main_196
3. Do you have any other revenue-generating mechanisms that are associated with your facilities or land?
- i. Fiscal Sustainability Task Force (assistant GM, senior members, CEO) – how to improve revenues and save costs
 - ii. Focus on energy savings
 - iii. Parking management program – RTD collects parking revenue from out-of-district patrons, patrons who wish to reserve parking at park and rides, and patrons who park for over 24 hours.

SFMTA REAL ESTATE AND FACILITIES PROJECT

Peer Practice Review Questions – TransLink

INTRODUCTION

The purpose of this best practices review is to identify ideas, insights, and lessons learned from SFMTA's peers regarding maximizing the effectiveness of existing facilities and identifying any revenue-generation potential.

Date:

Interviewee:

- Name: Joe Halhead
- Title: Project Manager, TransLink Engineering and Implementation
- Email: joe.halhead@translink.ca
- Phone #: 1.604.453.4581
- Brief overview of responsibilities: I manage capital projects for TransLink. These projects may include the design and construction of new facilities, or upgrading existing facilities.
- # of years working in agency: 21

Agency Overview:

1. 2010 Revenue Vehicle Miles: In 2006, TransLink provided 5.1 million hours and 116.2 million vehicle kilometers of Transit service. Public transit ridership has increased from 129 million revenue passengers in 2001, to 165 million revenue passengers in 2006 and increase of 23%
2. 2010 Revenue Vehicle Hours: see above
3. Modes Operated: Buses: diesel, overhead trolley 600VDC -2 wire, CNG, Hybrid, alternative fuel testing program. Light automated (driverless) rail – 2 systems, non-interchangeable technologies, with future expansions underway. Heavy commuter rail – 66.3 km 4 trains inbound AM, 4 trains outbound PM, 400 passenger harbor ferry, multi-door loading and unloading (3 vessels + 1 under construction) 10 minute sailings berth to berth on 15 minute schedule.
4. Modes: (trolley bus, heavy rail, commuter rail, etc): see above
5. Contracted Service: (which aspects, if any, of service are outsourced?): HandyDart (paratransit system is contracted to an operator responsible for operations, maintenance and fare administration TransLink owns and provides vehicles – 115 W/C equipped vanbus conversions. West Vancouver (Blue Bus) system of 49 buses is contracted to District of West Vancouver, Transit Division, responsible for operations and maintenance. Fare collect by TransLink. Facilities and vehicles owned and provided by TransLink. Langley Community Shuttle service contracted to an operator responsible for operations and maintenance. Vehicles owned and provided by TL. Fare collected by TL.
6. Estimated ages of assets: please see attachment TransLink Asset Management Infrastructure Listing.xls
7. # and types of facilities: on same spreadsheet as above
8. Location of facilities (and level of deadheading?):

Transit Operating and Maintenance Centres	
Burnaby Transit Centre North	3855 Kitchener St, Burnaby, V5C 3L8
Burnaby Transit Centre North	3750 Kitchener St, Burnaby, V5C 3L6
North Vancouver Transit Centre	536 East 3 rd St, North Vancouver, V7L 1G5
Oakridge Transit Centre	949 W 41 Ave, Vancouver V5Z 2N5
Port Coquitlam Transit Centre	2061 Kingsway Ave, Port Coquitlam, V3C 4S7
Richmond Transit Centre	11133 Coppersmith Way, Richmond, V7A 5E8
SeaBus Operations and Administration	2 Chesterfield Place, North Vancouver, V7M 3G1
Surrey Transit Centre	7740 132 St, Surrey, V3W 4M9
Vancouver Transit Centre	9149 Hudson St, Vancouver , V6P 4N5
West Vancouver Transit Centre	221 Lloyd Ave, North Vancouver ,V7P 3M2

The following chart is the 2011 deadheading analysis for TransLink's bus division. Units are shown in hours from home depot to first revenue stop (pull in) and return (pull out).

	Pull in Time	Pull out Time
BTC - Burnaby	21,497.73	23,316.33
NVT -North Vancouver	6,366.40	6,391.50
PCT - Port Coquitlam	12,026.07	13,249.52
RTC - Richmond	21,235.28	23,340.77
STC - Surrey	18,047.65	17,940.90
VTC - Vancouver	46,300.35	44,561.83
XNE- Coquitlam/M.Ridge CS	4,507.53	4,671.63
XOT- Oakridge CS	5,494.13	6,868.30
XSS - S.Surrey/N.Surrey CS	2,743.93	2,822.35
Total	138,219.08	143,163.13

Facility Questions:

1. General facilities questions:
 - a. Who in your agency is responsible for decisions regarding facilities? All Capital expenditures (vehicle or facilities) are requested with SPA (specific project approval) and vetted through a Capital Review Committee. Large Cap projects require Board approval. (also see 2a)

Does your organization have a strategic plan regarding your real estate and facilities? If so – can it be shared? Prior to 2008, TransLink's strategic planning was done as a series of three-year transportation and financial plans, using as their long term direction the objectives in Transport 2021, the transportation component of Metro Vancouver's Livable Region Strategic Plan. The last of these three-year plans before the change in governance involved an aggressive road and transit expansion program in which costs were forecast to outstrip revenues and accumulated reserves by the end of 2011. Within this context, in its first year of existence the new Board oversaw two critical processes mandated by the

Act. One was the creation of a new long-term strategic vision to replace Transport 2021. Transport 2040, developed on the basis of public and stakeholder consultation, established the desired ‘end state’ for Metro Vancouver from TransLink’s rolling 10-year plans. The other was the first Base Plan that, as the new *Act* required, represented a 10-year road, transit, cycling and transportation demand management program that TransLink would be able to undertake using its established revenues. Because the transition in governance structures didn’t allow time for consultation, no Supplemental Plan was submitted in 2008. The Board recognizes its responsibility to deliver a comprehensive plan that provides Greater Vancouver with an effective and efficient transportation system – public transit, major roads network, bikeways and bridges to move people and goods safely and cost effectively. Attaining the goals of Transport 2040 is critically important if we are to sustain Metro Vancouver’s quality of life, economy, green spaces and air quality. The goals of Transport 2040 are also consistent with the Provincial Transit Plan, as outlined by the Premier in 2008, and with provincially-mandated greenhouse gas reduction targets.

- b. Does your organization have a multi-modal and/or multi-purpose training facility? Does it include simulators for various vehicle types? How was it funded? The British Columbia Rapid Transit Company, our operating subsidiary for SkyTrain, has a training facility at their Operating and Maintenance Centre. BCRTC trains control operators, who operate the fully automated, driverless system of elevated and at-grade trains. BCRTC also operates simulators to train field staff to operate the trains in emergency situations. These facilities are funded through the operating budget, which is provided by TransLink. CMBC Training Dept. conducts 12 week new operator classes in its Vancouver Transit Centre facility. New students are first taken through the class room steps to Class 2 air brakes compliancy, they then begin trolley bus familiarization. Further training with demonstration overhead wiring networks and switches. They progress to on street driving training in designated vehicles, and so on to graduation.
 - c. Do you provide parking for your employees? TransLink’s operating subsidiaries provide parking for employees who must report for work before or after revenue service hours. This parking is provided free of charge. TransLink’s offices as well as those of the operating subsidiaries are typically located so as to take full advantage of the transit system. Employees who report to work in the corporate offices are expected to cover their own parking costs. All employees are provided with passes for the transit system. Typically, most corporate office employees take transit. Staff at Transit maintenance centers are typically provided on site staff parking. Do you charge them? See my previous answer.
 - d. Where do you store your vehicles? Transit vehicles, including buses, SkyTrain vehicles, commuter trains, are stored at the operating and maintenance centres for these services. Revenue vehicles are also washed and fueled at each centre.
2. How does the funding of facilities work?
- a. How are real estate and facility improvements funded? Most improvements projects are handled as capital projects. Each capital project has to go through a similar process in order to be approved. Typically, a Request for Approval in Principle application has to be submitted first for a project that will be carried out in the next few years. For a capital project, this application contains information of the proposed project such as budget,

project description, business case, and financial analysis. The application will be reviewed by several groups at TransLink - Financial Planning, Strategy Sourcing, and Capital Assets. Changes may or may not be necessary. Final document will be submitted to TransLink Executive Committee for approval. At the year when the project is expected to be carried out, a Specific Project Approval application has to be submitted and reviewed. The process is similar to the Request for Approval in Principle application as described above. Once the Specific Project Approval application is approved, funding will be available.

- b. How, if at all, has your agency been able to “make the case” for additional funding to support maintenance facilities? How do you calculate long-term savings as a result of upfront investment? As mentioned in 2a. a business case is prepared for any capital project. The business case provides background information, the reason(s) and alternative and options of the project. For some projects, to calculate the potential long-term savings of a project, feasibility studies are carried first.
 - c. What funding sources have been utilized to fund the construction of new transit facilities? TransLink funding sources as follows: Transit fares and Ad revenues – 38%; Property taxes – 28%; Fuel taxes – 27%; Hydro levy – 2%; Transportation tolls; 1%; Parking sales taxes – 1%. Prior to the formation of TransLink in 1999 funding for transit services for Metro Vancouver was 47% provincial sources and 53% local sources, in 2012 it has shrunk to 35% provincial sources, 65% local sources. A permanent Federal gas tax transfer is now in place. In 2009 the Federal gas tax transfer was \$120 million. Local municipalities are lobbying the Provincial Gov. to examine the \$1.8 billion (in 3 year) collected carbon tax and apply to a sustainable Transit funding formula rather than the current personal income tax credit now in place.
3. How does your agency handle component re-builds?
- a. Is this addressed in-house or out-sourced? Most parts are rebuilt in-house at our Fleet Overhaul Facility at Burnaby Transit Centre. Fleet Overhaul rebuilds engines, engine components, transmissions, as well as performing frame-up restorations of buses, including full body repair and painting.
 - b. If a change was made, have you seen an increase or decrease in cost or reliability?

Typically, bus life is 17 years. If a fleet has high or low maintenance costs we will review and recommend early or later replacement to Fleet Assets and TransLink. Other factors of bus life is funding availability. More often, lack of sufficient funding can defer bus replacements. Example - the replacement program for the 1996 buses in 2013 has been cancelled with no clear defer-to date. Review of inspection cycles noted have 24.5 Preventive Maintenance (scheduled) events per bus/year. We also have 138 Bad Orders, or Road Calls per bus/year (unscheduled). This ratio is 5.6 unscheduled events for every 1 scheduled event. One analysis completed in the past was based on total labour ratios. That review resulted in about 20%-30% scheduled (PM based) and the remainder everything else. The next major group of work is brake work which is actively moving toward scheduling shortly.

- c. If in-house – where is it located? How many staff are involved? What challenges are faced? See attachment .
 - d. If outsourced – what are the terms of the contract? Cost? What challenges are faced? New bus purchases are staggered over a number of quarters, so the coming time for engine or transmission replacement doesn't affect the entire new fleet simultaneously . As above, the scheduled maintenance is 20%-30% and the rest being as-needed for M.V.A.s, bad order, road calls, and other unscheduled maintenance events. Even with these uncertainties, comes the knowledge that breakdowns will occur and shifts are staffed with enough flexibility to address ad-hoc maintenance. Being a union shop is an important factor in keeping work in-house. It assures inspection and standardization are normal, and keeps the Union brothers and sisters happy.
 - e. Has the alternative (in-house versus outsourced) ever been considered? Under what circumstances would you recommend a switch? See above. Contracted operators outsource their maintenance or in-house if so equipped.
4. How does your agency address warehousing?
- a. Is there one central warehouse or many de-centralized warehouses? How are parts and supplies split among different warehouses? Each operating subsidiary operates a central warehouse system. In the case of the bus subsidiary, there is one central warehouse, which distributes parts to the other operating and maintenance centres. SkyTrain and West Coast Express each operate their own warehouse system for the ordering, receiving and distribution of parts.
 - b. How are materials transported to appropriate facilities? Company-owned trucks.
 - c. What kind of inventory control system (if any) is used? What works well? What challenges are faced? Material Management uses a computerized supply management system which automatically reorders supplies and materials. An office of S.M. analysts monitor the system, and respond quickly to adjust for failures, quality concerns, changing suppliers, and etc.
 - d. What kinds of storage systems are used (e.g., pallet racks, drawer units, shelving units)? Depends on the location. Most transit centers use pallet racks and/or shelving units.
5. Where do you handle (all) body repair and painting activities?
- Body repair and painting activities are handled mainly at our Fleet Overhaul Facility at Burnaby Transit Centre. That facility has a 40 foot paint booth, a 60 foot paint booth, and a small part paint booth. It also has a body shop for body repair. Some of our transit centers also have smaller paint booths and body shops and they can handle some body repair and painting activities.

Land Use Questions:

- 1. Do any of your sites serve multiple purposes (e.g., maintenance facility and privately owned housing or office)? No, not at this time.

- a. If so, what was the motivation behind this arrangement? It has been discussed as a revenue source.
 - b. Is such development vertically integrated (i.e. housing/office on a deck above the transit facility) or side-by-side (i.e. on separate parcels)? None to date
 - c. If the expansion was to an active, operating facility, during construction, how did the agency manage on-going operations? Were operations or vehicle storage temporarily relocated? n/a
 - d. Post-construction, were there conflicts between the uses? If so, how were they managed? n/a
 - e. What challenges/lessons learned were identified? n/a
 - f. What community issues or concerns arose when joint development has been proposed? City would review development permit and zoning allocation in concert with Official Community development Plan. If approved, landscaping and noise abatement issues would be built into the plan as a good neighbor policy. Public consultation events (town halls & info forums) are organized with advertised notice, and staffed for Q&A and visual displays. Although joint ventures are rare, they do happen with the developer taking the lead role, and TransLink providing all requirements for its stake.
2. Do you utilize transit-oriented development (TOD) or joint development (JD) to generate revenues for your agency?
- a. What experience, if any, does your agency have with “joint development” in which a private developer builds a transit facility turnkey for the agency in exchange for private development rights? Some Transit stations have been funded around developments using PPP partnerships where the developer funded a 33% share of the costs where there is a direct benefit to the development ie: high rise or shopping next to train station. Ie: Gateway Station, and Surrey Central Stations, Surrey, BC
 - b. If so – how much money is generated for the Agency? Was there a sharing of risk and up-side? All ventures would be revenue neutral and be tied to the specific development and construction cost of the transit facility. Future maintenance costs would be shared based on jurisdiction or statutory R.O.W. ie: snow & ice removal/ landscaping/ irrigation. Loss of parking due to transit construction is compensated as a one-time cost.
 - c. Do all revenues go to the agency? n/a
 - d. What criteria were used to identify sites for TOD and for program development? Real Estate division works with Infrastructure Development to ear-mark possible partnerships or collaborations. Land swaps of holdings have occurred with sizable benefits to the company. As TransLink’s current financial climate dictates “State of Good Repair” status, properties are held until either disposal is the only option due to unsuitability, denial of development approval, or emergency sell-off to raise . “Replacement” or “Expansion” statuses permit higher Capital spending and more .
 - e. What role did the agency play in the public review, entitlement and design? The next new Bus Maintenance and Operations Centre, currently is final design and site preparation stages was facilitated through a negotiation process with the local city gov.

council to help fund preservation and enhancement of park land reserves, river bank enhancement and facilitating a new day care centre on adjacent lands. Public forums, town hall meetings and show and tells helped the public understand and garner acceptance and approval to move forward,

- f. What were the key challenges and lessons learned associated with establishing the TOD/JD? Being a good corporate neighbour and adhering to all environmental compliancy laws
 - g. Was the private development on purchased land, on a ground lease, on an air rights conveyance? The day care centre is on surplus lands from initial land purchase for the Transit Centre, and gifted in perpetuity.
 - h. Can you provide a link or write-up regarding your TOD/JD activities? See Department Newsletter attached
3. Do you have any other revenue-generating mechanisms that are associated with your facilities or land? Currently new revenue generating ideas are being contemplated, from vending machines, mobile food vendors, advertising, and such. Musician busking has been in place for many years, and performers are juried and issued a license for a fee to perform at designated Transit platforms and corridors

Appendix B – Peer Contacts

Peer Agency	Name	Title	Email	Phone Number
LA Metro	Frank Shapiro	Deputy Executive Officer, Finance	shapirof@metro.net	213-922-2111
Houston Metro	Rocky Marrero	Vice President, Facilities Maintenance	rocky.marrero@ridemetro.org	713-739-4850
MBTA (Boston)	Victor Rivas	Deputy Director, Capital Budget	vrivas@mbta.com	617-222-1622
	Mike Turcotte	Assistant General Manager, Engineering & Maintenance (E&M)		
	Mark Boyle	Assistant General Manager, Real Estate & Development		
	Robert Johnson	Director, Materials Management		
	Joseph Cosgrove	Director, Development and Planning		
Denver RTD	David Genova	Assistant General Manager, Safety, Security & Facilities	david.genova@rtd-denver.com	303-299-4038
	Patrick McLaughlin	Associate, Transit Oriented Development		
TransLink (Vancouver)	Joe Halhead	Project Manager, TransLink Engineering and Implementation	joe.halhead@translink.ca	604-453-4581
DART	Jack Wierzenski	Director, Economic Development	wierzens@DART.org	214-749-2881

Appendix C – RTD TOD Policy



1560 Broadway, Suite 700, Denver, CO 80202 phone 303.299.6990

RTD TOD Policy

Definition of TOD

While TOD can have many physical forms, it generally includes the following design principles:

- More compact and dense development around transit facilities compared to existing development patterns in the same area;
- A mix of uses—either horizontal or vertical—usually including residential, retail, and office employment;
- High-quality, pedestrian-oriented urban design and streetscapes

By focusing compact development around transit stations, TOD capitalizes on the value of public infrastructure investments and promotes sustainability. These development synergies promote increased transit ridership for transit agencies. In addition to increased ridership, TOD also is a successful tool for promoting local economic development, helping communities plan for sustainable growth, and increasing the overall quality of life in a region.

Basis for TOD

TOD's ability to increase transit usage while achieving valuable ancillary benefits for the region means that it plays a crucial role in fulfilling RTD's organizational mission—"To meet our constituents' present and future public transit needs by offering safe, clean, reliable, courteous, accessible and cost-effective service throughout the district,"—as well as in accomplishing the three core goals of FasTracks, RTD's long-range transit plan, which are to:

1. Provide improved transportation choices and options to the citizens of the District,
2. Increase transit mode share during peak travel times, and
3. Establish a proactive plan that balances transit needs with future regional growth.

RTD's mission is to provide transit service, and RTD recognizes that other public agencies and private developers are primarily responsible for the region's built environment. However, RTD believes that increased coordination among public and private organizations in promoting TOD throughout the land use planning, zoning, and development process will result in higher-quality sustainable development that meets the varying objectives of all parties.

RTD has the power of eminent domain, or condemnation, to carry out the purposes set forth in its enabling act (C.R.S. 32-9-161). Pursuant to its enabling act, RTD is authorized to operate a mass transportation system (C.R.S. 32-9-107). Therefore, RTD may exercise the power of eminent domain as necessary for the operation of its mass transportation system. RTD does not have authority to exercise its power of eminent domain for any other use, even if it serves a public purpose.



1560 Broadway, Suite 700, Denver, CO 80202 phone 303.299.6990

TOD Vision

RTD's vision for TOD is to encourage compact, mixed-use, pedestrian-oriented, high-quality development at and around transit stations consistent with federal requirements, regional goals, and community objectives—including sustainable growth—while operating an attractive, comfortable, and convenient transit system for the residents of the district.

Since there is no one-size-fits-all approach to TOD, RTD has identified four key goals to best achieve success:

1. Promoting multi-sector, cross-jurisdictional partnerships;
2. Encouraging sustainable development that supports the transit system;
3. Ensuring a hierarchy of multimodal access; and
4. Protecting and enhancing RTD's transit assets.

Goals and Strategies

Goal 1: RTD will foster relationships with local jurisdictions, regional agencies, private developers, local residents and businesses, and other stakeholders to support transit station area planning and TOD.

Strategies to achieve this goal include:

- Providing RTD staff expertise and resources to local jurisdictions for station area planning and zoning
- Supporting efforts to encourage TOD by the Denver Regional Council of Governments (DRCOG), which include conducting research, sharing information, and providing planning assistance to connect transit service expansion to economic and community development that supports sustainable growth consistent with the DRCOG Metro Vision Plan
- Working with trade and advocacy organizations—such as the Urban Land Institute—to promote TOD education and best practices
- Establishing guidelines for how TOD relates to the planning and design of transit projects and RTD's project development process
- Establishing a framework for developing partnerships with private developers on joint development projects where developers acquire, use, or modify RTD property and stations

Goal 2: RTD will encourage sustainable development that supports the transit system.

Strategies to achieve this goal include:

- Collaborating with local jurisdictions on station area planning and TOD for areas within ½-mile of stations
- Advocating for new development around stations which generally meet the following principles:
 - It is denser than existing development patterns in the area



1560 Broadway, Suite 700, Denver, CO 80202 phone 303.299.6990

- It contains a mix of uses
- It has a compact and attractive urban design
- It is oriented to allow easy pedestrian access to transit facilities
- Encouraging local jurisdictions to adopt TOD supportive policies, plans and zoning for transit stations within their jurisdiction that provide a flexible framework for TOD and prevent development which does not support transit
- Considering both the function and relationship of transit stations to the surrounding community when evaluating joint development projects. The objectives of maximizing revenues and ridership should be evaluated in this context.

Goal 3: RTD supports multimodal access to the transit system by all users.

Strategies to achieve this goal include:

- Creating a hierarchy of access which considers the following modes in order of priority: pedestrians, bus riders, bicyclists, vehicles (short-term parking), and vehicles (long-term parking)
- Considering access needs beyond RTD property in the planning and design of transit stations, including:
 - Pedestrian connections to destinations within a 5- to 10-minute walk
 - Regional bus transit and bicycle connections
 - Vehicular access for the station catchment area
- Strategically managing the use and construction of RTD parking facilities to balance vehicular access and the opportunity for TOD to maximize ridership at stations and minimize the need for single-occupancy vehicle trips by transit riders outside of their trips to stations
- Optimizing RTD parking at stations by considering: proximity to Downtown Denver (less parking closer in), local feeder bus service (less parking with higher levels of service), and pedestrian connectivity (less parking with good pedestrian connections)

Goal 4: Protect and enhance RTD's transit assets and investments.

Strategies to achieve this goal include:

- Considering TOD as an opportunity to increase the value of RTD-owned land near stations
- Encouraging local jurisdictions to support TOD by:
 - Utilizing best practices in TOD planning and implementation around transit stations
 - Encouraging station area planning early in the transit planning process, consistent with the Federal Transit Administration's New Starts guidelines for transit-supportive land uses



1560 Broadway, Suite 700, Denver, CO 80202 phone 303.299.6990

- Leveraging Federal investment in the regional transit system, recognizing that there is significant competition among regions throughout the country for Federal transit support, by:
 - Ensuring consistency of local policy with the FTA's funding guidelines for transit joint development, which mandate a transit element, economic development, new or enhanced inter-modal coordination, and non-vehicular capital improvements resulting increased transit usage
 - Ensuring consistency of local policy with the Federal Highway Administration's economic development goals stated in the Federal Transportation Infrastructure Finance Innovation Act
- Using surface parking as a strategic land bank for potential TOD opportunities, and utilizing shared and joint-use parking when available to reduce costs to build and maintain parking facilities
- Favoring the acquisition of permanent rights that meet transit requirements or long-term ground leases as an alternative to ownership in fee simple when RTD property is available for joint development projects
- Utilizing joint development as a means to maintain control of and receive long-term revenue from RTD assets, or to identify capital projects that can be funded or developed from land sales or swaps
- Where land sales are pursued for joint development projects, ensuring that the project will support the long-term generation of revenue for RTD through the protection and enhancement of station ridership and the continuing utilization of the land for TOD purposes

Appendix D – LACMTA Joint Development Policies and Procedures

ATTACHMENT

Los Angeles County Metropolitan Transportation Authority**JOINT DEVELOPMENT POLICIES AND PROCEDURES****Revised October, 2009****I. PURPOSE**

Joint development is a real property asset development and management program designed to secure the most appropriate private and/or public sector development on properties owned by the Los Angeles County Metropolitan Transportation Authority ("LACMTA"). Joint Development also includes coordination with local jurisdictions in station area land use planning in the interest of establishing development patterns that enhance transit use.

This Joint Development Policies and Procedures document updates the Joint Development Policies and Procedures adopted by the LACMTA Board of Directors ("Board") in May 2005.

II. GOALS

- A. With respect to overall planning, LACMTA's Joint Development Program seeks to:
1. Encourage comprehensive planning and development around station sites and along transit corridors.
 2. Reduce auto use and congestion through encouragement of transit-linked development.
- B. With respect to specific sites, LACMTA's Joint Development Program seeks developments that include a mix of the following goals:
1. Promote and enhance transit ridership.
 2. Enhance and protect the transportation corridor and its environs.
 3. Enhance the land use and economic development goals of surrounding communities and conform to local and regional development plans.
 4. Generate value to LACMTA based on a fair market return on public investment.

III. POLICIES**A. Transportation and Land Use Coordination Policies:**

To encourage coordinated transportation and land use decisions, LACMTA shall:

1. Consult and work cooperatively with local jurisdictions, redevelopment agencies, developers, and other public and private sector entities to promote land use policies and plans which encourage intensive, high quality development at stations and surrounding properties that are located in regional/community activity centers.
2. In consultation with local jurisdictions and with community input, prepare development guidelines specific to each joint development site that articulate the intensity and type of land uses that LACMTA desires for that site as well as any desired transit and urban design features. Obtain Board approval of the development guidelines for each site.

3. Encourage transit compatible land use plans that enhance LACMTA's multi-modal transit, regional mobility, ridership and revenue goals.
4. Consider joint development opportunities in the acquisition of property, location of new station sites, and construction of station facilities.
5. In the initial planning of a transit corridor project (e.g., during the environmental and preliminary engineering phases) LACMTA will conduct site analysis, include a preliminary layout of each passenger station site, develop conceptual urban design strategies integrating station sites with adjacent communities, and evaluate proposed station sites for their joint development potential.
6. Actively encourage and allow surrounding property owners/developers, at their expense, to construct direct connections to stations from their properties/buildings and require connector fees or equivalent consideration for such connections based on the proportional benefit to any such property/building.

B. Development Policies:

LACMTA shall consider joint development projects based on the following criteria:

1. LACMTA shall retain authority over its transit facilities and services.
2. Projects shall be consistent with development guidelines to be established by LACMTA for individual joint development sites. (Refer to Item #2 above.)
3. Projects shall not negatively impact present or future public transportation facilities.
4. Projects shall be consistent with regional and local community policies and plans.
5. Projects must demonstrate, at a minimum, fair market value to LACMTA.
6. Selection between projects will be based on those which meet the above criteria and additionally demonstrate:
 - a. The greatest potential to increase transit ridership and enhance the transit system environment.
 - b. The greatest economic development potential to the community consistent with adopted land use plans.
 - c. Responsiveness to community needs for housing, employment, services, or other facilities.
7. Projects are encouraged which create a long-term source of revenue to LACMTA and allow LACMTA to participate in the increase in value of its real estate assets over time. This will generally take the form of a long-term lease. Under extraordinary circumstances, LACMTA may consider sale of property if it is determined to be in LACMTA's best interest.
8. Projects are encouraged which do not require commitment of LACMTA financial resources, minimize any investment risk, and maximize asset security for LACMTA.
9. Projects are encouraged which obtain investment capital from other public agencies, or in-lieu contributions, where needed, to create greater economic benefit to LACMTA-sponsored joint development projects.
10. Where appropriate, projects are encouraged which provide for increased station access using alternative modes. Where appropriate and after consideration of possible alternative modes of access, projects are encouraged which provide new or additional park-and-ride facilities (except at Downtown Los Angeles stations).
11. Consistent with LACMTA procurement policy, encourage involvement of disadvantaged, minority and women-owned business enterprises.
12. Projects shall take into account LACMTA's Public Restroom Policy in effect at the time.

13. Projects with a residential component are encouraged to provide a range of housing types to meet the needs of a diversity of household income, sizes, and ages particularly if such diversity of housing is not currently provided within walking distance of the transit system.

IV. JOINT DEVELOPMENT IMPLEMENTATION PROCEDURES

A. Project Proposals Initiation/Solicitation:

LACMTA will periodically conduct market feasibility studies for LACMTA-owned properties at transit stations. LACMTA will also consult with local jurisdictions regarding local land use development efforts. These market analyses and consultations with local jurisdictions shall provide the basis for establishing project priorities and project implementation strategies to ensure maximum attainment of LACMTA's joint development goals.

Based on the consultation with the local jurisdiction and with community input, LACMTA will prepare development guidelines specific for each joint development site that articulate the intensity and type of land uses that LACMTA desires for that site as well as any desired transit and urban design features. Staff will forward proposed development guidelines for each site to the Board for approval, which shall include information regarding necessary California Environmental Quality Act ("CEQA") compliance procedures, National Environmental Protection Act ("NEPA") compliance procedures, Federal Transit Authority approval requirements, California Department of Transportation approval requirements and the presence of LACMTA Financing or tax-exempt bonds on the Property.

LACMTA will be open and competitive in marketing its properties.

LACMTA will solicit proposals for joint development of its properties through a Request for Proposal or other forms of competitive solicitation as appropriate except that an unsolicited proposal may be recommended in limited cases, such as when the site is small or constrained by location or access. If solicited by LACMTA, the standard Request for Proposal ("RFP") procedure as practiced by the Procurement Department following Procurement Policies and Procedures shall be used as a general guideline for determining the appropriate process for solicitation.

B. Proposal Evaluation:

1. Solicited Proposals:

At LACMTA's discretion, staff can initiate an RFP process to solicit development proposals. In soliciting joint development proposals, LACMTA shall provide all available relevant site information including the Board adopted design guidelines for the site and encourage developers to seek information or consult with local jurisdictions regarding current and planned land uses in the project area.

In evaluating proposals solicited through an RFP process, staff will use LACMTA's Procurement Policies and Procedures as a general guideline for determining the appropriate process. Staff will utilize an evaluation panel generally consisting of key

personnel, joint development and urban design consultants, academic and legal professionals, and local jurisdiction technical staff, where appropriate.

Additionally, an urban design panel may be used to evaluate projects in an advisory capacity to the evaluation panel. The panel shall evaluate joint development proposals and advise the LACMTA Chief Executive Officer ("CEO") on a developer to be recommended to the Board. The CEO may recommend a developer to the Board or defer joint development if none of the proposals maximize joint development objectives.

2. **Unsolicited Proposals:**

The CEO shall evaluate and recommend unsolicited proposals only in limited cases such as when the site is small or constrained by location or access. In the event that LACMTA receives an unsolicited proposal, staff will ensure that at a minimum, the unsolicited proposal contains sufficient information to allow the adequate evaluation of the proposal in a manner consistent with solicited proposals. The CEO shall evaluate whether the unsolicited proposal meets the exceptions for non-competitive solicitation and is in the best interest of LACMTA to accept for evaluation. The CEO will evaluate the unsolicited proposal and, if the proposal maximizes joint development objectives, make a recommendation to the Board of Directors to enter into a written agreement reflecting the parties' intent to work toward joint development as presented to the Board.

C. **Exclusive Negotiations Agreement: Before the CEO recommends the developer's proposal to the LACMTA Board, developer shall complete and execute an Exclusive Negotiation Agreement ("ENA") with terms and conditions regarding general planning and development goals agreed to by the proposed developer.** Upon approval of a recommended developer and authorization by the LACMTA Board, the CEO shall enter into the ENA with the developer.

1. **Developer Responsibilities under the ENA:**

- a. In consideration for entering into the ENA, developer shall provide LACMTA a non-refundable fee ("Fee") in an amount determined by the CEO but in no event less than twenty-five thousand dollars (\$25,000) or such other consideration as determined by the CEO.
- b. In addition to the fee, developer shall also provide LACMTA with a good faith deposit ("Deposit") in an initial amount determined by the CEO to pay LACMTA's actual costs to negotiate the documents to implement the proposal and any LACMTA in-house and third party costs incurred to evaluate the Proposal.

2. **LACMTA Responsibilities under the ENA:** During the Negotiation Period and provided that Developer is not in default of its obligations under the ENA, Metro shall negotiate exclusively and in good faith with Developer with respect to a Joint Development Agreement ("JDA") and Ground Lease to be entered into between

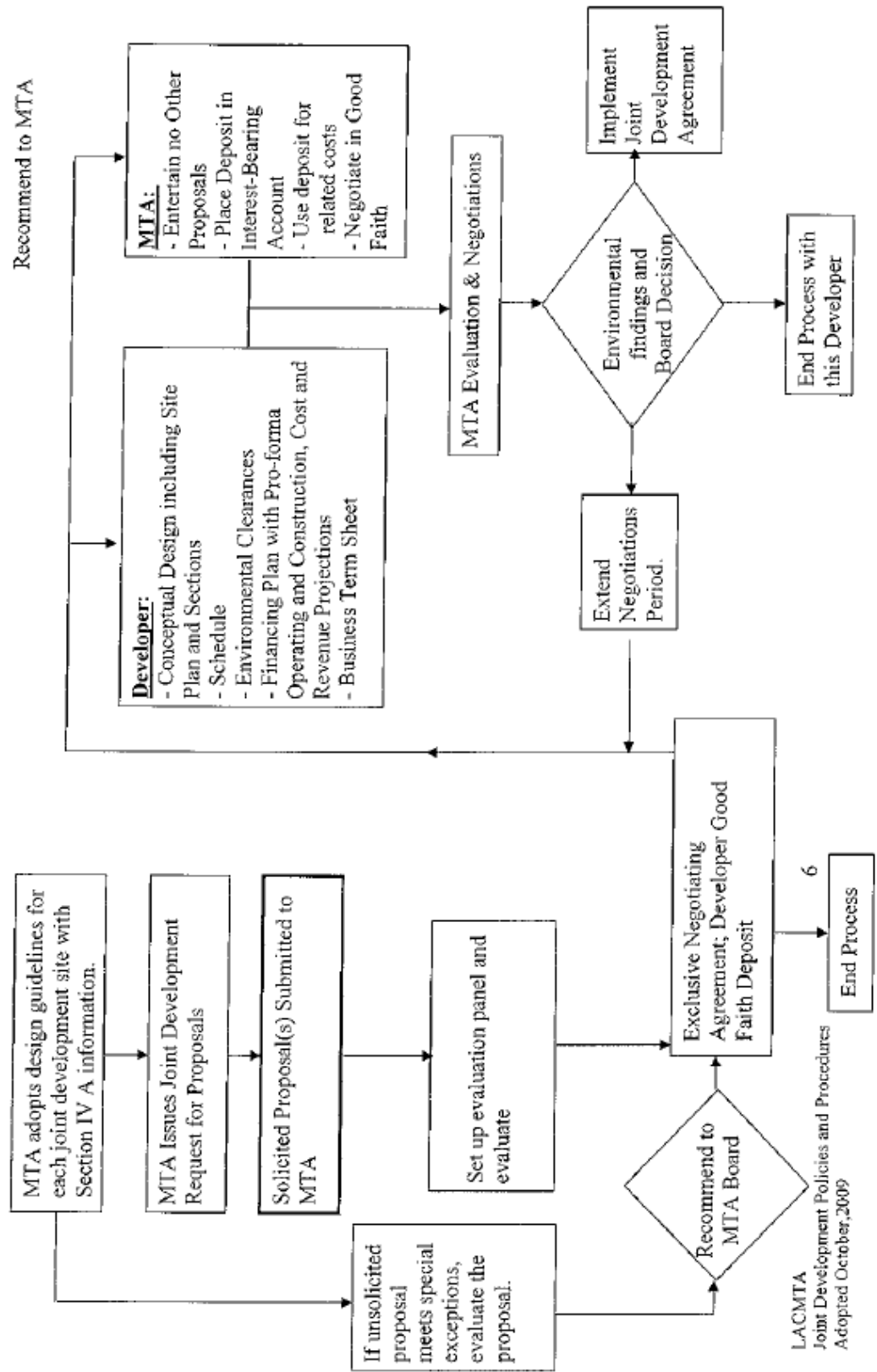
LACMTA and Developer, and shall not solicit or entertain offers or proposals from other parties concerning the Site.

Term of the ENA: The ENA term shall be determined by the CEO; provided, however, such term, including any extensions thereto as determined by the CEO, shall not exceed 18 months. In considering an extension, the CEO shall determine whether substantial progress have been made towards fulfillment of the requirements of the ENA in considering an extension and may require payment of additional Fee and/or Deposit amounts.

- D. **Development Agreement:** Upon satisfactory fulfillment of all the development requirements in the ENA, LACMTA may enter into a JDA for the implementation of a Project. The JDA shall describe the rights and responsibilities of both parties.
- E. **Ground Lease and Other Miscellaneous Documents:** Upon satisfactory fulfillment of all the closing conditions required in the JDA, LACMTA shall enter into a Ground Lease for the lease of the site. The Ground Lease shall describe the rights and responsibilities of both parties with respect to the site. The LACMTA CEO may also enter into such other documents and agreements necessary to implement and administer the Project as described in the JDA and Ground Lease.
- F. **Environmental Compliance:** LACMTA shall not approve or be committed to a Project until the LACMTA Board as a responsible agency under CEQA and/or NEPA considers and analyzes the environmental impacts of the Project.
- G. **Statutory Basis:** LACMTA's joint development function acquired a statutory basis through one of its predecessor agencies, the Southern California Rapid Transit District. Under California Public Utilities Code, Section 30600: "The district may take by grant, purchase, gift, devise, or lease, or by condemnation, or otherwise acquire, and hold and enjoy, real and personal property of every kind within or without the district necessary or incidental to the full or convenient exercise of its powers. That property includes, but is not limited to, property necessary for, incidental to, or convenient for joint development and property physically or functionally related to rapid transit service or facilities. The Board may lease, sell, jointly develop, or otherwise dispose of any real or personal property within or without the district when, in its judgment, it is for the best interests of the district to do so."

Attachment

Los Angeles County Metropolitan Transportation Authority Joint Development Implementation Procedures



LACMTA
Joint Development Policies and Procedures
Adopted October, 2009

Appendix E:

List of SFMTA Garages with Retail Leases

DRAFT

SFMTA Garages with Retail Leases

	Sq. Ft.
Fifth & Mission Garage	26,274
Good Vibrations	3,035
Zpizza	1,600
Artists Alley	3,644
Sprint	2,152
SOMA Cleaners	570
Cravery/Icebert Yogurt	1,624
Green Papaya	1,866
Nova Nail Spa	1,423
Mel's Drive-In	5,720
Starbucks	1,860
Vacant Space (10%)	2,780
Moscone Center Garage	4,150
Shiki Restaurant	525
Moscone News & Snacks	525
Vacant (75%)	3,100
Ellis-O'Farrell Garage	11,029
Grace Jewelry	4,534
Les Joulins Jazz Bistro	5,368
Vacant (10%)	1,127
Sutter-Stockton Garage	27,005⁽¹⁾
Jos. A. Bank	7,100
Klaus Murer & Co.	720
Wm Glen & Son	3,200
Bibbo's Salon	3,215
Scheuer Linens	6,650
Nara Camacie	3,400
Blooming Alley	350
Nobel Shoes	550
Richard's Hair Design	600
Sutter Café	500
Vacant (5%)	720
Polk-Bush Garage	3,700
PIP Printing	1,625
Quetzal Coffee Co.	2,075
Performing Arts Garage	3,668
Muse and Sage	3,668
Lombard Street Garage	13,943
U.S. Postal Service	13,943
Union Square Garage	1,012
Emporio Rulli Cafe	1,012

Source: SFMTA, KMA (as of June 2012)

⁽¹⁾ Retail sq. ft. in Sutter-Stockton garage includes basement space.