PHASE 1 REPORT:
Best Practices Research and Assessment of Station Areas

February 2013
ACKNOWLEDGEMENTS

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# TABLE OF CONTENTS

## PREFACE

### INTRODUCTION AND PROJECT OVERVIEW
- The Regional Vision............................................................................................................1
- Summary of the Growing Transit Communities Partnership............................................1
- East Corridor Implementation Support Project.................................................................4
- Phase 1 Tasks and Station Areas Analyzed........................................................................6

### BEST PRACTICES RESEARCH
- Purpose of the Best Practices Research...........................................................................11
- General Approach to the Best Practices Research.............................................................11
- Research Framework—Key Questions Addressed by the Research..................................13
- Best Practices Research Findings....................................................................................17
  - Affordable Housing...........................................18
  - Partnerships.......................................................58
  - Business Retention and Attraction...............48
  - Transportation Access and Connectivity........73

### ASSESSMENT OF STATION AREAS
- Key Needs and Opportunities in Each Station Area........................................................99
- Assessment Methodology and Criteria..............................................................................106
- Partnership for Sustainable Communities Livability Principles....................................107
- Assessment Matrix.........................................................................................................108
- Station Areas Selected for Phase 2 Focus........................................................................111

### NEXT STEPS
- Phase 2 of the East Corridor Implementation Support Project.........................................119
- Description of Work Elements.........................................................................................119
- Proposed Deliverables.....................................................................................................127
- Work Plan.......................................................................................................................127
The Puget Sound Regional Council (PSRC) is coordinating a regional effort called the Growing Transit Communities Partnership to help make the most of voter-approved $15 billion investments in regional high-capacity transit. The Growing Transit Communities Partnership is funded by a grant from the US Department of Housing and Urban Development’s Sustainable Communities Regional Planning Grant Program.

The Growing Transit Communities Partnership is supporting neighborhood planning for sustainable communities around more than seventy new transit centers—covering three counties in sixteen cities—that are expected in the region over the next few decades. The Partnership’s goal is to put jobs and opportunities closer to where people live, while sustaining a healthy environment and economy in the decades to come.

Planning activities focus along the three light rail corridors from Seattle north to the city of Everett, south to Tacoma, and east to the city of Redmond. Task Forces have been formed for each of the three geographic corridors. These Task Forces are charged with analyzing and reviewing existing conditions, and identifying unique opportunities and challenges for development of current and future transit station areas.

**East Corridor Implementation Support Project**

When developing the Growing Transit Communities Partnership work plan, the partners felt that it was important to focus implementation activities in specific station areas of the region’s transit corridors to serve as models for other parts of the region. In the case of the East Corridor, the intention was to work with the East Corridor Task Force to identify what catalyst project, or projects, were most appropriate.

In 2011, the Sound Transit Board of Directors made its final decision about the East Link light rail transit (LRT) corridor alignment and station locations. Also in 2011, King County Metro began operation of its Bus Rapid Transit service (BRT) RapidRide line B. In order to help areas around LRT and BRT stations transform into more transit-oriented communities, the four cities participating in the East Corridor Task Force (Seattle, Mercer Island, Bellevue, and Redmond) and other Task Force members were interested in developing focused implementation strategies and tools for specific East Corridor station areas. Seattle and Mercer Island had already completed extensive planning for the station areas in their jurisdictions. (They each have one station in the corridor.) The cities of Bellevue and Redmond felt the station areas in the Bel-Red Corridor were in most need of implementation support. Given these considerations, the Task Force determined that the East Corridor Implementation Support Project should focus on the following subset of East Corridor station areas in the cities of Bellevue and Redmond, along East Link and King County Metro’s RapidRide Route B stations:

**Light Rail Station Areas for the East Corridor Implementation Support Project:**
- Hospital Station Area in Bellevue
- 120th Avenue NE/Spring Creek Station Area in Bellevue
- 130th Avenue NE Station Area in Bellevue
- Overlake Village Station Area in Redmond
- Overlake Transit Center Station Area in Redmond

Existing Metro Transit RapidRide B Line Station Areas in Bellevue’s Crossroads Neighborhood:
The overall purpose of the East Corridor Implementation Support Project is to advance implementation and move forward with steps that have not already been completed by the cities of Bellevue and Redmond in their respective plans. The project will build on planning decisions that have already been made, and past station area planning and study work, and take efforts to the next level.

Four Focus Areas for Implementation Activities

The East Corridor Task Force examined key issues and potential barriers to transit-oriented development in the East Corridor. The Task Force identified the need for detailed strategies and action steps to implement existing local plans, particularly in the areas of:

- Affordable Housing
- Business Retention and Attraction
- Public and Private Partnerships
- Transportation Access and Connectivity.

It is important to note that these four focus areas are not in order of priority, and that the Task Force specified that each focus area should generally be given equal weight and attention during the course of the project.

East Corridor Implementation Support Project Guidance

As the lead and fiduciary agent for the Growing Transit Communities Partnership grant, PSRC has overall project management responsibilities. However, the work of all phases of the East Corridor Implementation Support project is informed by representatives of the East Corridor Task Force. In order to keep on schedule, the Task Force identified a subset of the members, called the Project Management Team, who will help advance the project and bring back timely matters to the Task Force for direction and decisions. The Project Management Team members were solicited from the general membership of the Task Force and confirmed by the Task Force co-chairs. The Acknowledgements page lists Project Management Team members.

Through spring 2012, the Project Management Team worked to finalize a work program, which was brought to the Task Force for approval. The selection process for the consultant team was handled through PSRC’s competitive procurement process, and a consultant team was selected and contracted with in early summer 2012.

In July 2012, the consultant team and the Project Management Team began working on Phase 1 of the East Corridor Implementation Support Project, which is detailed in the chapters that follow. The last part of this Phase 1 report identifies the process by which the two stations for Phase 2 were selected. Phase 2 of the project began in January 2013, with scheduled completion in October 2013.
Introduction and Project Overview
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INTRODUCTION AND PROJECT OVERVIEW

The Regional Vision
VISION 2040 is the central Puget Sound region’s long-range vision for maintaining a healthy region. VISION 2040’s cornerstone is its emphasis on development of vibrant, mixed use centers where people can live, work, and play. Integrating affordable housing in mixed use centers throughout the region contributes to achieving a jobs-housing balance that increases access to opportunity, lowers households’ combined cost of housing and transportation, and helps ensure that infrastructure investments enhance equity across the region.

Summary of the Growing Transit Communities Partnership
The central Puget Sound region is investing more than $15 billion dollars in high-capacity transit over the next twenty years. This regional decision provides a once-in-a-lifetime opportunity to capitalize on transit investments by growing and strengthening communities around station areas. The Growing Transit Communities Partnership, funded by a grant from the US Department of Housing and Urban Development’s Sustainable Communities Regional Planning Grant Program and administered by Puget Sound Regional Council (PSRC), is designed to help make the most of this investment by locating housing, jobs, and services close enough to transit so that it is a viable option for many people. If done right, more people will have a faster and more convenient way to travel.

The Growing Transit Communities Partnership is a coalition of city and county governments, housing authorities and affordable housing interests, transit agencies, public health agencies and departments, real estate and development interests, social justice and community development groups, economic development and business interests, community based organizations, educational interests, environmental advocacy groups, and other citizens. These regional interests, called the Consortium, have joined together to address issues of social equity, connectivity, accessibility, economic development, and environmental preservation in areas around high-capacity transit stations. The Consortium has continued open membership for additional agencies and organizations to join.

The following primary tasks are being conducted under the Growing Transit Communities Partnership.

• Regional Equity Network—Developing and supporting a regional network to promote equitable community planning
and mobilize residents and community groups representing diverse populations to participate in local planning and decision making.

- **Affordable Housing Strategy**—Creating an affordable housing strategy that will test, recommend, and implement local policies and financial tools to encourage and facilitate a wide variety of housing choices along light rail corridors.

- **Corridor Action Strategies**—Convening and supporting light rail corridor task forces to craft local agreements and Corridor Action Strategies to attract transit-oriented development along the North, East, and South light rail investment corridors. Work includes establishing goals for station areas and adjacent communities, and for coordination of development, housing, jobs, and community amenities.

- **Innovative Tools**—Developing new tools and resources to bridge the gap from goals and policies to specific actions and steps. New technologies and analyses will assist local communities in planning, decision-making, and building local support for sustainable development. Tasks will test and refine these approaches with catalyst demonstration and case study projects in light rail corridor neighborhoods to serve as visible templates for sustainable development.

- **Technical Assistance**—Providing direct technical support to jurisdictions and to nonprofit organizations to explore and establish incentive programs for affordable housing. Technical assistance will support local jurisdiction updates to local comprehensive plans.

Through these efforts, the Growing Transit Communities Partnership is working to shape the region and station areas in ways that benefit both current and future residents, local businesses, and the wider region. Working within the framework of existing plans, policies, and goals of local governments and guided by VISION 2040, the Partnership is helping local communities bring their visions to reality and to make the most of new light rail service, bus...
rapid transit, and other transit investments, including identifying unique roles and opportunities for community development associated with rapid transit investments.

The Partnership is supporting neighborhood planning for more connected, livable, and sustainable communities around more than 74 high capacity transit centers in the region, including existing, new, and future station areas. Through the coordination and direct involvement of a wider array of stakeholders, both public and private, the Partnership is working to put jobs and opportunities closer to where people live, while sustaining a healthy environment and a healthy economy in the decades to come along high-capacity transit light rail and bus rapid transit corridors.

For more information about the Growing Transit Communities Partnership and PSRC, visit www.psrc.org.

PARTNERSHIP FOR SUSTAINABLE COMMUNITIES LIVABILITY PRINCIPLES

The Growing Transit Communities Partnership supports the livability principles of the Partnership for Sustainable Communities. The US Department of Housing and Urban Development (HUD), US Department of Transportation (DOT), and the US Environmental Protection Agency (EPA) have joined together to help communities nationwide improve access to affordable housing, increase transportation options, and lower transportation costs while protecting the environment through the Partnership for Sustainable Communities.

The Partnership for Sustainable Communities works to coordinate federal housing, transportation, water, and other infrastructure investments to make neighborhoods more prosperous, allow people to live closer to jobs, save households time and money, and reduce pollution. The Partnership agencies incorporate the following six principles of livability into federal funding programs, policies, and future legislative proposals.

- **Provide more transportation choices**—Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation’s dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health.

- **Promote equitable, affordable housing**—Expand location- and energy-efficient housing choices for people of all ages, incomes, races, and ethnicities to increase mobility and lower the combined cost of housing and transportation.

- **Enhance economic competitiveness**—Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services, and other basic needs by workers, as well as expanded business access to markets.

- **Support existing communities**—Target federal funding toward existing communities—through strategies like transit-oriented, mixed use development and land recycling—to increase community revitalization and the efficiency of public works investments and to safeguard rural landscapes.

- **Coordinate and leverage federal policies and investment**—Align federal policies and funding to remove barriers to collaboration, leverage funding, and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy.

- **Value communities and neighborhoods**—Enhance the unique characteristics of
all communities by investing in healthy, safe, and walkable neighborhoods—rural, urban, or suburban.

CORRIDOR TASK FORCES
The Growing Transit Communities Partnership is based on the idea that change happens at the local level through tools and solutions that address similar challenges that communities share. The Partnership provides a big-picture perspective so that people can see both local and regional benefits. Corridor task forces for the North, East, and South corridors are charged with analyzing and reviewing existing conditions and identifying unique opportunities and challenges for development of existing and future transit station areas. The task forces will help to develop broad agreement on corridor action strategies as a basis for achieving the region’s transit-oriented development (TOD) vision. Ongoing work efforts include data-based analyses of existing transit and demographic conditions in the corridors, and the development of recommendations for how to accelerate the scope and scale of TOD to meet the diverse needs of the region’s communities.

East Corridor Implementation Support Project

BACKGROUND AND INTRODUCTION
The Growing Transit Communities Partnership is funding and guiding the East Corridor Implementation Support Project to examine opportunities for TOD along Sound Transit’s East Link Light Rail and King County Metro RapidRide Line B alignments through the Eastside cities of Bellevue and Redmond. Portions of the project area are located within the area known as the Bel-Red Corridor.

The East Corridor Implementation Support Project is analyzing potential opportunities and developing recommendations to support and catalyze equitable transit-oriented development at selected East Corridor high-capacity transit station areas. When developing the Growing Transit Communities Partnership work plan, partners felt that it was important to include implementation activities in specific station areas of the region’s future rapid transit corridors to serve as demonstration elements or templates that can serve as models for other parts of the region. As such, the East Corridor Implementation Support Project was initiated to address key implementation challenges and catalyze TOD in East Corridor station areas and transit nodes.

PURPOSE OF THE PROJECT
The East Corridor Implementation Support Project is identifying pivotal opportunities to transform Eastside station areas into more vibrant, economically healthy neighborhoods that offer equitable housing choices, more convenient access to jobs and jobs-to-housing balance within the high-capacity transit corridors and region, and better connectivity to goods and services. The project will support immediate advancement of the implementation of visions
and plans that have already been developed by participating jurisdictions on the Eastside. The team is leveraging other products developed by PSRC and the Growing Transit Communities Partnership, including affordable housing and opportunity mapping, existing conditions reports, market analyses, station area typologies, Center for Transit-Oriented Development (CTOD) market strength index, and other information as a base of reference for the project.

FOUR AREAS OF FOCUS
Through a series of meetings, the East Corridor Task Force examined key issues and potential barriers to TOD in the East Corridor. In its discussion of how to incent and accommodate equitable transit-oriented development in station areas, the Task Force identified four areas of focus for the East Corridor Implementation Support project. Working with the Project Management Team (PMT), a subcommittee of the Task Force, and Growing Transit Communities staff, a team of consultants is examining particular challenges to implementing equitable TOD in station areas and developing strategies and action steps to address challenges in each of these four areas of focus:

- Affordable Housing
- Business Retention and Attraction
- Partnerships (Including Public and Private Partnership Strategies)
- Transportation Access and Connectivity

This listing is alphabetical and does not indicate priority. The Task Force has requested that these issues be addressed in Phase 1 with equal weight and emphasis.

OVERVIEW OF PHASES 1 AND 2
The scope of work for the East Corridor Implementation Support project is being completed in two phases. The results of Phase 1 work are summarized in this report. Phase 1 included best practices research, a high level assessment of seven East Corridor station areas, screening and selection of station areas for further analysis in Phase 2, and development of the scope of work for Phase 2.

Based on the four areas of focus (affordable housing, business retention and attraction, partnerships, and transportation access and connectivity), Phase 2 will involve more intensive analysis and development of specific recommendations for TOD implementation for two station areas: 130th Avenue NE in Bellevue and Overlake Village in Redmond. Phase 2 will
Implementati    n support
meetings. Phase 2 will continue these regular
interactions, as well as outreach to and
involvement of business and development
interests, property owners, and others in
the vicinity of the selected station areas,
in addition to other outreach activities
conducted as part of the overall Growing
Transit Communities program. Refer to
the Preface to this report for additional
information and project background.

Phase 1 Tasks and Station
Areas Analyzed
Phase 1 included the following series of tasks:

1.1 Phase 1 Project Start Up, Corridor Tour,
Ongoing Management and
Coordination, and Identification of
Locations for Best Practices Research

1.2 Best Practices Research

1.3 High Level Assessment of Seven Station
Areas and Screening and Selection of
Station Areas for Further Analysis in Phase 2

1.4 Development of the Scope of Work
for Phase 2

The chart on the following page depicts
the Phase 1 process and the role of the best
Introduction and Project Overview

Proposed Light Rail Station Areas:
- Hospital Station Area in Bellevue
- 120th Avenue NE/Spring Creek Station Area in Bellevue
- 130th Avenue NE Station Area in Bellevue
- Overlake Village Station Area in Redmond
- Overlake Transit Center Station Area in Redmond

practices research in informing the assessment of station areas.

Phase 1 work focused on the following seven station areas in the East Corridor. Refer to the Preface of this report for an explanation of why these seven stations were selected for the East Corridor Implementation Support Project. For a list of all the East Corridor stations and additional information about each, visit: www.psrc.org.
Existing Metro Transit RapidRide B Line Station Areas in Bellevue’s Crossroads Neighborhood:

- NE 10th Street Station Area
- NE 15th Street Station Area

Refer to the map on page 9 for the locations of these station areas.

The process began with a series of kick off meetings and a tour of the station areas by the consultant team, PMT members, and Growing Transit Communities staff. The consultant team then reviewed background information including existing available data, demographics, studies, and plans relevant to the seven station areas. A review of best practices in TOD was completed next, framed around the four issue topics and evaluating case studies in locations across North America similar in context and character to the East Corridor. The consultant team then proceeded to complete a high level assessment of specific issues and opportunities in the seven station areas, working closely with the PMT and Growing Transit Communities staff.

The Phase 1 high-level assessment focused on conditions affecting implementation of equitable TOD and comparative analysis of these conditions in alignment with the four focus areas and best practices. A list of screening criteria was developed collaboratively with the PMT and Growing Transit Communities staff, and a short list of station areas was identified based on evaluation of the criteria for each station area. The evaluation results and short list were then presented to the East Corridor Task Force for approval. Refer to the Assessment of Station Areas section of this report for the key needs and opportunities identified for each station area, as well as the assessment criteria and matrix. After the two station areas were selected for further focus in Phase 2, the consultant team developed a specific scope of work for Phase 2 work efforts, which was also reviewed and approved by Growing Transit Communities staff, the PMT, and ultimately the Task Force.
Introduction and Project Overview

Phase 1 Station Areas

Station areas shown represent a subset of the East Corridor stations. For a full list of all stations go to www.psrc.org.
Best Practices Research
BEST PRACTICES RESEARCH

Purpose of the Best Practices Research

This section of the report summarizes research of current best practices and addresses key questions related to each of the four focus areas:

- Affordable Housing
- Business Retention and Attraction
- Partnerships
- Transportation Access and Connectivity

Best practices examples researched by the consultant team provide insight into how plans, actions, and strategies have been successfully implemented in other metropolitan regions throughout North America to meet the housing, jobs, livability, access, and equity needs along major rapid transit corridors. The research focuses on examples that removed barriers and helped to catalyze and support transit-oriented development (TOD) implementation, and that are relevant to the East Corridor context.

Gaining an understanding of the plans, actions, and strategies that other communities and partners have implemented related to TOD, as well as the challenges and successes experienced as part of these efforts, provided important background for the East Corridor Implementation Support Project. Review of successful best practices in settings of similar context and characteristics enabled the team to identify potential tools and strategies to be applied to East Corridor station areas.

The matrix on the following page depicts the four focus areas and relevance to the seven station areas in the East Corridor.

General Approach to the Best Practices Research

The general approach to the research first involved identifying a list of relevant locations to evaluate. The consultant team’s experience and knowledge of best practices in TOD around the United States and abroad helped to inform development of this list. Potential best practices examples in locations similar in context and with potential applicability to the East Corridor were identified in a preliminary outline for the best practices research report. The project management team (PMT) reviewed and approved the list and outline and provided additional suggestions for locations to be researched. The consultant team then

Focus of Best Practices Research

The best practices research presented in this section of the report provides examples of how other metropolitan regions in North America have developed plans and strategies to meet the housing, jobs, livability, access and equity needs along major rapid transit corridors.

Transit-oriented communities are vibrant, people and business-friendly places.
### Phase 1 Station Areas—Relationship to Four Focus Areas

<table>
<thead>
<tr>
<th>East Corridor Station Areas:</th>
<th>East Link LRT</th>
<th>RapidRide BRT</th>
<th>Affordable Housing</th>
<th>Business Retention and Attraction</th>
<th>Partnerships</th>
<th>Transportation Access and Connectivity</th>
<th>Important Considerations:</th>
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<td></td>
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<td>Primary</td>
<td>Secondary</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Accessibility to hospital/medical services; redevelopment phasing</td>
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<tr>
<td>120th Avenue NE</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Redevelopment phasing; all four focus areas are relevant</td>
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<tr>
<td>130th Avenue NE</td>
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<td>X</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>Redevelopment phasing; all four focus areas are relevant</td>
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<td>NE 10th Street</td>
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<td>NE 15th Street</td>
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<td>X</td>
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<td>BRT only; retention of affordable housing and diverse businesses</td>
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<tr>
<td>Overlake Village</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Implementation activities already underway; all four focus areas are relevant</td>
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<td>X</td>
<td>X</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>Park-and-ride focus; seamless connections between transit modes</td>
</tr>
</tbody>
</table>
conducted the research and prepared a draft report summarizing the research results. The draft report was presented to Growing Transit Communities staff, the PMT, and the East Corridor Task Force for review and comment. The finalized best practices research is presented in this section of the report.

**Research Framework—Key Questions Addressed by the Research**

Growing Transit Communities staff, working with the East Corridor Task Force, developed a list of key questions to be addressed by the best practices research for each of the four focus areas of affordable housing, business retention and attraction, partnerships, and transportation access and connectivity. Each of the four focus areas and the key questions addressed by the best practices research are introduced below.

**AFFORDABLE HOUSING**

Affordable housing is most effective when located close to economic centers and high-capacity transit. Housing affordability is a major issue across the United States, and jurisdictions nationally have made strides in ensuring that an adequate affordable housing supply is available for residents in safe, accessible, and well-connected neighborhoods. The Growing Transit Communities Partnership is analyzing regional opportunities for affordable housing to serve the following income levels:

- 50 to 80 percent of Area Median Income (AMI)
- 30 to 50 percent of AMI
- Under 30 percent of AMI

The East Corridor is a predominately affluent area with a robust mix of business and employment opportunities including Microsoft’s headquarters and close proximity to downtown Bellevue. In 2011, the Growing Transit Communities Partnership engaged Ohio State University’s Kirwan Institute for the Study of Race and Ethnicity to map opportunity areas throughout the region. Opportunity areas are defined as those locations with conditions that place individuals in a position to be more likely to succeed or excel. These conditions include access to high quality education, a healthy and safe environment, sustainable employment, political empowerment, and other factors.

The East Corridor station areas that are the subject of this project are located in areas mapped as having “high” to “very high” access to opportunity.
While the station areas are well-situated for access to opportunity, affordable housing opportunities are limited in many locations across the Eastside. Much of the most affordable housing in the area was built over 30 years ago, and some affordable communities are nearing the end of their intended economic life cycles.

Minimizing economic dislocation and gentrification and maintaining, preserving, and providing a housing supply that is affordable and accessible to households of all income levels is essential to creating vibrant neighborhoods surrounding the East Corridor stations.

The best practices research for affordable housing addresses the questions listed below, as relevant to the locations evaluated. Research underway by the Growing Transit Communities Partnership related to the capitalization of a Regional TOD Loan Fund, land banking to preserve affordable development opportunities, and methods to capture the incremental increase in land values to help support public improvements have been synchronized in this report to the greatest extent possible. It should be noted that the answers to several of these questions will be explored in more detail in Phase 2 of the East Corridor Implementation Support Project for the selected station areas.

- What happened at the subject location related to providing equitable housing choices/affordable housing?
- Who was involved (e.g., partners, agencies, etc.), and what were their roles?
- What tools were deployed to create affordable and equitable development and how did public sector initiatives affect preservation and creation of affordable housing?
- How well has affordable housing been embraced in the station area? What was the role and responsibility of the private sector, including nonprofits in the development? What has been done to more seamlessly integrate diverse housing choices?
- How can a Regional TOD Loan Fund be structured and funded for greatest impact? How can a Regional Land Bank be created and sustained?
- What funding tools can be adapted from other regions to support necessary public investment in housing?
- Are there lessons learned—things that should be avoided or done differently in the East Corridor?
- What best practices are particularly relevant and applicable to East Corridor station areas and why? Which tactics and methods are available to implement equitable TOD?

**BUSINESS RETENTION AND ATTRACTION**

Business retention and attraction programs within transit corridors and station areas are becoming more common as communities across the United States work to leverage transit investments to support local economic development. In general, commercial anti-displacement strategies include efforts focused on the construction phase of transit projects, as well as efforts designed to assist small and minority-owned businesses to thrive once the real estate market begins to reflect transit investments in the form of increased land values and commercial rents.

Sometimes coupled with business retention strategies, business attraction programs targeting transit corridors and station areas tend to focus on attracting employment generating land uses, retail uses (especially grocery stores), and services that are complementary to the existing business mix and that respond to the needs of
the surrounding community. The best practices research for this topic addresses the following questions, as relevant to the locations evaluated:

- Was business retention and attraction a stated goal? If so, how successful has it been?
- What types of businesses were affected? (e.g., small businesses, retail, office, industrial, manufacturing, warehousing/distribution, light industrial, etc.)
- What positive results and successes happened at this location related to business retention and/or attraction?
- Who was involved (e.g., partners, agencies, etc.) and what were their roles?
- How did public sector initiatives and specific policies and tools affect the business retention and attraction activities? (e.g., help mitigate impacts to existing businesses so that some new space was affordable and fulfilled the needs of small, mid-sized, and/or disadvantaged businesses)
- How did developers and partners create and maintain affordable commercial space that addressed the needs of small and disadvantaged businesses and the TOD in the case study area?
- • What has happened over time in the area? How have business activities evolved or changed since before transit was operational?
- • Are there lessons learned – things that should be avoided or done differently in the East Corridor?
- • What best practices are particularly relevant and applicable to East Corridor station areas and why?

PARTNERSHIPS

Across the United States, almost all successful examples of TOD involve partnerships between public agencies, private developers, community stakeholders, and major civic institutions. Inter-agency partnerships, community partnerships, and public-private partnerships (P3s) can occur in various forms depending on the financial, market, and regulatory context of a given station area. In their most typical form, however, they entail one or more public sector agency or agencies entering into an agreement with a private party to provide certain publicly controlled assets (e.g., land, infrastructure, entitlement controls, etc.) in exchange for developer investment and capacity. Local “anchor institutions” such as major employers, hospitals, and universities also are often critical partners in successful P3s. The goal of
Introduction

These P3s from the public sector perspective is to leverage scarce resources by drawing on developer capacity and financial resources to achieve community and economic development goals.

Although partnerships have a specific legal context in Washington state law and practice, the synergy possible by coalescing multiple and often disparate interests is compelling. This section introduces best practices from elsewhere related to creating and sustaining partnerships. To be salient to the context of the East Corridor, however, partnerships need to encompass the full spectrum of community and corporate values found locally. Most successful partnerships are tailored to suit local conditions and tap the creative energies of local civic, business, and political leaders. The best practices research related to partnerships addresses the following questions as relevant to the locations evaluated:

- What happened at this location related to partnership activities (public-private as well as other types of partnerships)? What is the on-the-ground result today?
- Who was involved (e.g., partners, agencies, etc.) and what were their roles, and what or who catalyzed the relationship?
- Were their special partnership agreements, funding programs, initiatives? How or why were they successful?
- What were the drivers and economics of these partnerships? Who founded or catalyzed the partnerships and why? What were the risks and rewards?
- How did public sector initiatives affect the partnerships? Were there certain policies, regulations, or programs that made partnerships easier to enter into or implement?
- Are there lessons learned or things that should be avoided or done differently in the East Corridor?
- What best practices are particularly relevant and applicable to East Corridor station areas and why?

TRANSPORTATION ACCESS AND CONNECTIVITY

Connecting residents to transit is essential for successful station areas. Multimodal transportation access and connectivity to, from, and within station areas involves connections with local transit, pedestrian and bicycle access and connectivity, and access for motorists via drop-off/pick-up (kiss-and-ride) and parking facilities. Facilitating access for people with special needs is required and deserves careful attention. The best practices research for transit access and connectivity evaluated the following sub-topics.

Transit Connections—Seamless integration of multiple modes of transit, such as local and rapid bus transit service with light rail to improve user experience, safety and satisfaction. The best practices research evaluates various approaches to service integration.

Pedestrian and Bicycle Access to Transit—Expanding the reach of transit and connecting residents of surrounding neighborhoods through pedestrian and bicycling amenities and facilities benefits transit ridership and TOD. Examples of settings that successfully connect riders to transit with crossing facilities, continuous sidewalks, shared-use paths, bike lanes, cycle tracks, secure bike parking, and other facilities are evaluated in this best practices research.

Auto Access, Parking, and Transition to TOD—Effective automobile access to stations, including station parking, and a seamless transition from auto orientation to pedestrian, bicycle, and transit orientation are important aspects of successful station areas. This best
practices research examines good models for auto access, parking, and transition to TOD.

In addition, the research addresses the following questions, as relevant to each location evaluated:

- What happened at the subject location related to strengthening multimodal access and connectivity to the station? Were there special projects, initiatives, or programs?
- Who was involved (e.g., partners, agencies, etc.), and what were their roles?
- How were improvements funded?
- How did public sector initiatives affect the program or improvements made?
- How did private investment (e.g., redevelopment) bring about positive changes?
- What has happened as a result of the investments and improvements made? (e.g., increased ridership, attraction of TOD redevelopment, etc.)
- Are there lessons learned and things that should be avoided or done differently in the East Corridor?
- What best practices are particularly relevant and applicable to East Corridor station areas and why?

Best Practices
Research Findings

Findings from the best practices research are summarized on the following pages under each of the four focus areas of affordable housing, business retention and attraction, partnerships, and transportation access and connectivity.

A photo of the McDonald’s Cycle Center in Millennium Park, downtown Chicago. Photo by Steven Vance. (Source: City of Chicago)
AFFORDABLE HOUSING

The policies contained in VISION 2040, the long-range plan adopted by the central Puget Sound Region, call for providing a variety of housing choices and types of people of all ages, incomes, abilities, races, and ethnicities. VISION 2040’s cornerstone is its emphasis on development of vibrant, mixed use centers where people can live, work, and play. Integrating affordable housing in mixed use centers throughout the region contributes to achieving a jobs-housing balance that increases access to opportunity, lowers households’ combined cost of housing and transportation, and helps ensure that infrastructure investments enhance equity across the region.

Growing Transit Communities is analyzing affordable housing in the following ranges: 50 to 80 percent of Area Median Income (AMI), 30 to 50 percent of AMI, and under 30 percent of AMI. Various case studies related to implementation of affordable housing within these ranges in transit communities are summarized on the following pages. In researching these best practices, the following key strategies were identified for implementation of successful affordable housing.

• **Develop partnerships with financial institutions and between agencies.** Partnering with financial institutions allows affordable housing developers to tap into financial resources that often limit projects. For example, the Denver Mile High TOD Loan Fund in Denver, Colorado is a multi-agency partnership that engages financial institutions to leverage funding, expertise, and marketing to bring projects to completion. Partnerships between affordable housing developers and transit agencies can provide more low-cost and better-located opportunities.

• **Leverage community resources, facilities and amenities.** Community resources, facilities, and amenities are important elements of livable, sustainable neighborhoods and may include social services, community centers, daycares, education facilities, and libraries. Locating these facilities nearby residents and those traveling on transit makes them more convenient and cost effective to access.

• **Layer other land uses with housing.** Successfully integrating affordable housing with other land uses contributes to the vibrancy mixed use, transit-oriented communities. For example, the Santa Clara Valley Transit Authority in San Jose, California

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**Denver TOD Loan Fund**

**CITY:** Denver, Colorado

**CASE STUDY PROPERTIES:** Dahlia Apartments, Yale Commons, Mile High Vista, Villa TOD, Blake TOD and 11th Avenue TOD

**CITY POPULATION:** 2.9 million

**LOCATION:** Low- to medium-density commercial and residential areas

**AFFORDABLE HOUSING AGENCY:** Mile High Transit-Oriented Development Loan Fund (Denver TOD Fund), a collaboration between Urban Land Conservancy, City and County of Denver, Enterprise Community Partners, Rose Community Foundation, MacArthur Foundation, Colorado Housing and Finance Authority, Wells Fargo, US Bank, FirstBank

**HOUSING UNITS:** 1,000+ affordable units

**TARGET POPULATION:** 60 percent AMI and below

**TRANSIT LINKAGES:** RTD FasTracks LRT and high-capacity transit
provides funding to support multiple uses in addition to housing, such as retail and commercial, as well as park-and-ride.

DENVER, COLORADO—A REGIONAL COLLABORATIVE

Mile High Transit-Oriented Development Loan Fund

In 2010, a group of Denver community investors and agencies established the Mile High Transit-Oriented Development Loan Fund (Denver TOD Fund), the first acquisition fund in the nation to focus on affordable housing as part of TOD. With the purpose of preserving and creating over 1,000 affordable housing units, the Denver TOD Fund is purchasing properties around current and future transit stations along the Regional Transportation District’s (RTD) FasTrack LRT corridor.¹

The Denver TOD Fund is a unique partnership between nonprofit agencies, local governments, and private banks, including the Urban Land Conservancy (ULC), which specializes in land banking, the City and County of Denver, and Enterprise Community Partners. Initially capitalized with $15 million in 2010, the Denver TOD Fund has grown to $30 million in total loan capital and has acquired seven properties along high-capacity transit corridors.² The City and County of Denver were the first “catalytic investors” in this TOD Loan Fund, and their initial investment of $2 million leveraged the other partners.

The Denver TOD Fund has leveraged emerging opportunity by acquiring properties at low market values and preserving them for affordable housing development purposes. The properties are then held up to a period of five years while projects are designed and sites are readied for redevelopment. The Denver TOD Fund focuses its investments based on specific criteria, including:

- Locations in economically and socially diverse neighborhoods; and
- Locations within one-half-mile of a light rail transit station or one-quarter-mile of a high frequency bus stop.

Several project-specific examples funded by the Denver TOD Fund are summarized below.

DAHLIA APARTMENTS—DENVER, COLORADO

This property was the first to utilize financing through the Denver TOD Fund. In December of 2009, ULC acquired this Northeast Park Hill property located at East 33rd Avenue and Dahlia Street, one block north of Martin Luther King Boulevard. The property had been foreclosed upon in 2008, which resulted in its qualification for the Neighborhood Stabilization Program prior to capitalization of the Denver TOD Fund. The property consists of six buildings with a total of 36, two-bedroom family apartment homes and serves over 100 residents. The Dahlia Apartments provides four permanent jobs. To date, $320,000 has been expended on improvements to Dahlia, primarily focused

Dahlia Apartments (Source: Affordable Housing Resource Center)
on needed health and safety repairs, roofs, drainage, landscaping, and environmental remediation. This work has created more than 25 project-related jobs for contractors.³

**Yale Commons—Denver, Colorado**

The Denver TOD Fund was used to purchase this 1.2-acre piece of land adjacent the existing LRT station at I-25 and East Yale Way for $1,325,000. In an innovative step, the Regional Transportation District (RTD) voted unanimously to execute an agreement between RTD and Yale TOD Partners to create a transit-oriented master plan for the Yale station area. This site includes parcels of land owned by the Yale TOD Partners: ULC, Koelbel and Company, and Mile High Development. The master planning process will involve area evaluation including the engagement of property owners in the vicinity. The ULC will work with Yale TOD Partners to create a framework for the future development of the RTD-owned property, property owned by the Yale TOD Partners, and potentially additional properties in the vicinity. This is an ideal site to develop into a mixed use, transit-oriented community supportive of RTD’s TOD policy and the growth of LRT ridership. The ULC plans to develop 100 workforce homes on the site and up to 30,000 square feet of commercial space creating 100 jobs during the development of the site and 35 permanent jobs once the construction is complete. Total projected redevelopment investment is $20,000,000.⁴

**Mile High Vista—Denver, Colorado**

The ULC used the Denver TOD fund to purchase this two-acre parcel of land for $2,140,000. The site is located along west Denver’s FasTracks LRT corridor, as well as a high frequency bus route. The ULC will be the master developer of the site that will include the new 30,000-square-foot west Denver library, 120,000 square feet of mixed use development with 80 units of workforce housing by Del Norte Neighborhood Development, and...
10,000 square feet of space for nonprofits. The property acquisition provides an opportunity for additional TOD and revitalization along the west Colfax corridor and the future Knox and Decatur LRT stations. Approximately 125 temporary jobs will be created through the construction. The library is expected to create approximately 15 permanent jobs, and it is expected that the residential and commercial buildings will create 50 permanent jobs. Total redevelopment investment is $25,000,000.5

**DELAWARE STATION—DENVER, COLORADO**
This is the fourth property that the ULC purchased using the Denver TOD Fund. This .96-acre parcel was purchased for $1,197,900 and is located directly across the street from the Evans LRT Station. The ULC is partnering with Medici Communities LLC in the development of 50 residential workforce housing units and up to 7,100 square feet of retail and commercial space. This five-story development will be the first family low-income housing tax credit project at an existing LRT station along RTD’s FasTracks and will serve households with incomes ranging from 30 to 60 percent of the AMI.6

**VILLA TOD—DENVER, COLORADO**
This 0.31-acre mixed use property purchased for $1,350,000 is located in the Santa Fe Arts District of Denver and includes 16 units of workforce housing and 7,400 square feet of commercial space. The ULC plans to partner with New West Side Economic Development (NEWSED) in the short term to manage the necessary rehabilitation work, and Denver Inner City Parish, which will provide housing services programs for the long term financing. Villa TOD is on the Santa Fe bus corridor and includes five blocks around the West 10th Avenue and Osage Street LRT station.7

**BLAKE TOD—DENVER, COLORADO**
Blake TOD is a 1.4-acre property at 38th Street and Walnut Street. This is the site of the first stop on RTD’s future East Corridor Commuter Line connecting Downtown Union Station to Denver International Airport. This property,

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**Denver Region Tools & Techniques:**

1) The Urban Land Conservancy is the primary organization to manage and acquire property. The organization serves as the region’s urban land bank for other area nonprofits developers in housing and community facilities.

2) A short holding period of three to five years by the Denver TOD Fund allows for a “revolving” pool of money for future purchases and ensures continued land banking efforts.

3) Criteria was established for prospective purchases allowing prioritization of funding based on site requirements.

4) Use of grant funding to help initial funding has allowed the Denver TOD Fund to grow to $30 million.8

5) Partnerships with multiple agencies, nonprofits, and banks have allowed for cross-collaboration between multiple industries.
which was vacant in 2012, will be stabilized and eventually developed as a mixed use site with an emphasis on affordable housing. Development at this site will be catalytic to the area, with much needed access to transit at the Blake Street Station scheduled to be operational in early 2016. This property was purchased for $1.7 million in November of 2011, and is the ULC’s sixth acquisition using the Denver TOD Fund.9

11th Avenue TOD – Denver, Colorado
The 11th Avenue TOD property was purchased for $350,000 using the Denver TOD Fund in July 2012. The .83-acre parcel is located less than one-quarter-mile from the future Sheridan Station on the West Line corridor of FasTracks and will be developed into 58 affordable senior homes. ULC will partner with Rocky Mountain Communities, which will manage the design and construction of this five-story development. These homes will serve seniors earning between 30 to 60 percent AMI (family of two with a 2012 income of between $19,050 and $38,100). This projected $10 million project will complement the redevelopment of the area surrounding the Sheridan Station, which will include an 800-car parking garage, 200 housing units, and commercial and retail space.10
Lessons Learned for the East Corridor

The Denver TOD Fund provides an example of a funding mechanism for removing properties from the speculative market until sufficient funds have accumulated for preservation or development. In evaluating how this approach could be applied in Washington State, the role of the land bank needs to be considered. If the land bank is a nonprofit, the land may still be taxed during the holding period unless it is for a low-income use. This argues for a public agency, such as a county housing authority, to serve in this capacity during the property development process unless state legislation creates a tax exemption for nonprofit land trusts during their temporary custody of urban land for TOD purposes. The ULC’s role in Denver, however, is not strictly that of a land bank, as they are also the master developer of one of the Denver TOD Loan Fund’s premium sites: Mile High Vista. Considering this model applied in Washington State, if the land bank were to also function as the developer, an open transparent process in assigning those duties is recommended to address potential conflict-of-interest concerns.

DENVER, COLORADO—DENVER HOUSING AUTHORITY’S SOUTH LINCOLN REDEVELOPMENT PLAN

Redevelopment investments of the Denver Housing Authority (DHA) target LRT station areas for maximum location efficiency. The South Lincoln Redevelopment Plan was conceived to transform the South Lincoln Park Homes, a former public housing site, into an equitable TOD community. The site is adjacent to the Regional Transportation District’s (RTD) West 10th Avenue and Osage Street Station, which opened in the mid-1990s. Del Norte Housing is a partner in the project.

The original community features 270 public housing units built in 1954 (254 of which were occupied) on a 15.1-acre site (a density of 17 dwelling units per acre). Upon completion, 434 units will be owned by the DHA (including 223 public housing units) for a variety of low- and moderate-income households and 327 units will be sold for owner occupancy. In total, 761 new mixed-income/mixed-tenure dwellings will replace the former public housing units. The redevelopment will include a mix of affordability including public housing units, middle-income units that are rent-capped (and financed through the Low Income Housing Tax Credit (LIHTC)) and market rate dwellings. Each phase is being designed separately, but the general mix is about one-third of each type (low income, middle income, and market rate) in each family building.

The DHA also has developed a building that provides replacement public housing for seniors and people with disabilities (financed with public housing funds as well as LIHTCs). The neighborhood will include some 44,000 square
feet of community space and nearly 30,000 of neighborhood commercial. The new gross density will be 50 dwelling units per acre. The DHA sponsored a B-Cycle (bike rental) station at the light rail station for added connectivity to the neighborhood and to encourage shorter bicycle trips from the station.

The DHA has fostered several partnerships to enhance the level of community-services and support resident self-sufficiency, as well as programs for local residents. These include the Bridge Project (an after school program provider for youth), an early childhood education provider, a Neighborhood Networks Center computer lab with free internet access, and a Youth Employment Academy, which has sponsored a Youth Culinary Academy that recently opened the Osage Café. The Café includes a commercial kitchen for culinary training and healthy food classes, which will eventually to serve as a small café to provide prep and retail sales—all operated by DHA’s program participants—to the general public. The DHA serves as master developer for South Lincoln Park Homes.

While it is premature to evaluate the outcomes of the DHA’s development program at South Lincoln Park Homes, the agency has shown that it is facile and committed to equitable TOD, distinguishing itself as among the best of class in local housing authorities nationally in this regard. They are building on past successes, such as their partnership with Del Norte Housing, which has been replicated elsewhere in the Denver region.

Lessons Learned for the East Corridor
Public agency leadership on large catalytic sites could serve as the necessary means to create equitable transit communities within the East Corridor. The King County Housing Authority, local (city and county) governments, and the Seattle Port Authority collectively have the means and legislative tools to engender this scale of community development. A Regional
Coalition for Housing (ARCH), formed in 1992 is another key entity in the region that can support implementation. Formed in 1992, ARCH is an award-winning, nationally recognized partnership of fifteen cities and King County, established to address affordable housing needs in East King County. ARCH administers a jointly-funded housing trust fund that that has provided over $30 million in resources to support over 2,500 units of affordable housing and to assist member jurisdictions in developing and administering local land use incentive programs that have resulted in over 1,000 units of affordable housing.

The King County Housing Authority is among the best local housing authorities in the country and has successfully undertaken developments with the support of ARCH and local nonprofits such as the YWCA and other partners. For example, the Village at Overlake Station and Overlake Park-and-Ride TOD project in Redmond was the first pilot project for King County’s Transit-Oriented Development Section. It combines moderate-income rental housing, a day care facility, and a park-and-ride transit center into a single integrated use. The King County Housing Authority and ARCH have demonstrated the ability to meet and exceed expectations.

SANTA CLARA COUNTY, CALIFORNIA—PRIVATE SECTOR LEADERSHIP YIELDS RESULTS

The San Francisco Bay Area, a region encompassing a population of approximately seven million people, has actively embraced TOD over the past two decades. Sprawl, spiraling housing costs, chronic traffic congestion, and environmental concerns have all fueled the interest in using transit service to direct public investment and growth throughout the Bay Area. Private interests, nonprofits, and public agencies, often working in concert, have all invested time and money in planning, conceiving, and implementing TOD projects. The area includes nine county governments, several regional agencies, more than 40 transit agencies, dozens of local governments, countless nonprofit organizations, and local and national developers.

Such intense interest in TOD by so many different groups has often resulted in an ad hoc and fragmented regional approach. While many planners and professionals in the region understand the importance of coordinating activities across jurisdictional boundaries, strong home-rule dominates, and the parochial instincts of localities and special districts have often thwarted progress in this area. Development continues to unfold in a largely ad hoc fashion, which creates challenges to achieving the often expressed regional goals of smart growth and coordination of transportation and land use. Compared to regions, such as Portland, Oregon, that are more cohesive with fewer local government interests to balance, implementing TOD in the Bay Area can be complex and challenging.

The Association of Bay Area Governments, the Metropolitan Transportation Commission, and multiple Congestion Management Agencies
(CMAs) provide a regional planning, decision-making, and funding context for many TOD projects within the region. Each group has carved out its role in the TOD process and employed its own implementation tools and strategies. Goals and objectives of those involved are not always aligned.

In *Housing Silicon Valley* (2007), a twenty-year plan to end the region’s affordable housing crisis, Bay Area Local Initiatives Support Corporation and the Institute for Metropolitan Studies at San Jose State University found:

- An existing unmet housing needs gap of over 90,000 dwellings;
- A future unmet housing needs gap of over 49,000 dwellings over the next twenty years;
- Once existing planned housing and resources are accounted for there is an unmet/unfunded gap of over 40,000 or 2,000 units per year; and
- Based on 2007 development costs, it will cost $4 billion or $200 million per year in additional local funding for housing to address the unfunded gap.\(^\text{12}\)

Santa Clara County within the larger Bay Area region has many similarities and is comparable to the East Corridor due to the suburban development pattern, density and advanced technology employment base. The cities of Milpitas, Mountain View, and San Jose within Santa Clara County are of particular note, as they have coordinated with the Santa Clara Valley Transportation Authority and the Santa Clara County Housing Authority to implement equitable TOD policies and projects. In 2012, the Santa Clara Valley Transportation Authority’s (VTA) 42-mile LRT system provided service to 62 stations, serving over 10 million passengers annually. VTA’s active fleet of 435 buses serves 32 million annual riders with 69 routes and over 3,800 stops.\(^\text{13}\)

**EDEN HOUSING/VALLEY TRANSIT AUTHORITY’S OHLONE-CHYOWETH COMMONS—SAN JOSE, CALIFORNIA**

With the history of high monthly rents in San Jose, housing affordability has long been a major issue in the city as well as in the surrounding region.\(^\text{14}\) Families are willing to live at ever-increasing distances from employment centers, which has impacted the region’s economy, traffic, and overall quality of life.

This joint development project between the Valley Transportation Authority (VTA) and Eden Housing Inc. created 194 units of medium and high-density affordable housing in a city where housing prices have skyrocketed over the last several years. The development also features a childcare center for use by residents and transit riders, a computer learning center, and a variety of recreational amenities, including tot lots and a bicycle/walking path.\(^\text{15}\)
This mixed use development also contains 4,400 square feet of ground-floor, transit-oriented commercial space and on-site child care. Developed with the needs of low-income families in mind, Ohlone-Chynoweth Commons comprises housing and community facilities located on the former site of an underutilized 1,100-space park-and-ride lot along San Jose’s Guadalupe LRT line. Eden Housing secured a 75-year lease from the owner, VTA.

Ohlone-Chynoweth Commons is part of the VTA’s larger effort to integrate transportation and land use planning. The agency has long supported TOD and actively pursued a number of projects as part of its strategic TOD program. In 1993, the agency produced TOD design concepts for Santa Clara County to serve as a guideline for development.

The VTA has varied its approach to joint development depending on the specific situation at each station. These approaches typically include concept planning for many stations along the Tasman West LRT line, as well as three ambitious joint development projects that replace portions of underutilized park-and-ride lots while providing much-needed housing. This joint development program has four goals:

- Enhancing the quality of the station environment;
- Improving the linkages between transit and the community;
- Encouraging transit system ridership; and
- Generating revenue for the transit system.\(^{16}\)

The VTA set a new precedent when it undertook what it refers to as a “tranodominium” joint development project on the park-and-ride lot adjacent to the Ohlone-Chynoweth Station to develop Ohlone-Chynoweth Commons. (Tranodominium is term VTA created to represent a condominium project oriented around transit.)\(^{17}\)

The Ohlone-Chynoweth Commons site was identified as an ideal location for a joint development project for the following reasons.
The Guadalupe line offered service to large and growing employment centers to the north.

The VTA had projected that future demand for the park-and-ride lot would leave significant available land that could be put to a higher use.

The owner of the adjacent site with 135 dwellings, the BRIDGE Housing program, also was planning to develop affordable multifamily housing, which would reinforce and support VTA’s goals.18

The Federal Transit Administration’s revised joint development policy was instrumental to the agency moving forward with this initiative. As background, it is important to note that in the late 1990s VTA and the City of San Jose released a request for proposals (RFP) to build on part of the VTA-owned parking lot. The RFP originally did not include affordable housing. Tepid developer interest prompted a change of focus to constructing affordable units on the site, and a nonprofit developer was selected as master developer.

Initially, there was considerable community opposition to this project because of the proposed concentration of affordable housing in the area. Support from interest groups as diverse as the Sierra Club, Silicon Valley Leadership Group, and Greenbelt Alliance helped balance the public review process. These advocacy groups, representing a full range of interests, from environmental interests to high-tech industry advocates, supported the link between affordable housing and transit. With such a breadth of support for TOD, the initial public resistance was quelled.

The project’s residential density is 27 units per acre with two parking spaces per dwelling unit. While the density is moderately low compared to current best practices, it is important to note that the development adjoins single family neighborhoods. Other Silicon Valley jurisdictions such as Milpitas and Mountain View allow considerably lower parking ratios in the 0.8-1.5 range. All of the housing units were rented before construction was completed. However, the retail component has experienced difficulty in maintaining commercial tenant occupancy even though retail rents are below market value. This is largely attributed to location and design, since the retail area is not easily accessible from the main street and is set back behind the primary VTA park-and-ride lot.

All of the housing units are affordable to households with incomes between 30 and 60 percent of the region’s median income. San Jose’s median family income in 2012 is $76,794.19 Monthly rental rates are indexed on a sliding scale according to income and unit

Housing Trust of Santa Clara County

COUNTY: Santa Clara County, California

CASE STUDY PROPERTIES: Ohlone-Chyoweth Commons

COUNTY POPULATION: 1.78 million people

BAY AREA POPULATION: 7,150,739

AFFORDABLE HOUSING AGENCY: Eden Housing Inc., Housing Trust of Santa Clara

HOUSING UNITS: 14,500 regionwide since 1999

LOCATION: Guadalupe LRT station park-and-ride

TRANSIT LINKAGES: San Jose

Guadalupe LRT line
size. Market rate housing for a two-bedroom unit ranged from $1,192 to $1,345 per month in August 2012. Because of the overwhelming demand for affordable housing in the region, very little marketing was needed to promote the development initially. The time frame from the start of leasing to the apartments being fully occupied was less than five months. Demand is reported to remain strong.

Currently, a small grocery store utilizes 1,500 square feet and a florist, a coffee shop, and a hair salon occupy the remaining retail square footage. Because the retail is not visible from the street, there has not been as much demand for the retail services as initially anticipated. As a result, the retail space eventually may become office space.

The total development cost for the project was $31.9 million. The City of San Jose issued $14.2 million in tax-exempt bonds, backed by a standby letter of credit from the Federal Home Loan Bank of San Francisco. The City also provided a $5.2 million loan as part of its Redevelopment Agency budget set-aside for the development of affordable housing. Pacific Gas and Electric, now Union Bank, furnished $10.5 million in tax-credit equity from the syndication of Low Income Housing Tax Credits for the project. The Metropolitan Transportation Commission (MTC) granted $574,000 (using urban mass transit funds) for landscaping and improvements to the station. The Federal Transit Administration provided a $250,000 grant to reconfigure the bus transfer center at the light rail station. An additional $500,000 was provided by the Federal Home Loan Bank of San Francisco Affordable Housing Program, and $350,000 was made available in State Proposition 1 funds to reimburse the school impact fee required for housing development.

In light of reduced federal and state funding, local stakeholders in Santa Clara County have been proactive in garnering local funding for affordable housing. The Santa Clara County Office of Affordable Housing was instituted in 2003 by the County Board of Supervisors and was provided with $18.6 million to assist in the development of affordable housing for low income and special needs populations. In 1999, various supporters of affordable housing, including the Community Foundation Silicon Valley, Silicon Valley Leadership Group (then the Silicon Valley Manufacturing Group), the County Collaborative on Housing and Homelessness, and the County of Santa Clara, came together to create the Housing Trust of Santa Clara County.

Capitalization of the Housing Trust initially came from the Santa Clara Valley’s largest advanced technology employers including...
Adobe, Applied Materials, Cisco, Hewlett-Packard and Sun Microsystems. Each committed $1 million, which leveraged federal, state, and local public funds as well as other private funds. Their current equity to debt ratio is 10:1 with about $45 million in assets. About $4 million is on deposit from lenders who provided below market rate loans to invest in the community and receive credit under the Community Reinvestment Act.

According to Housing Silicon Valley, A 20 Year Plan to End the Affordable Housing Crisis, published in 2007, the combined efforts of the Housing Trust and local jurisdictions helped support the construction or rehabilitation of more than 14,500 new affordable housing units between 1999 and 2005.  

Despite difficult economic conditions, rising land costs, and a myriad of other obstacles, local government and developers (both nonprofit and for-profit) worked closely together to deliver much needed housing to Santa Clara County families at all levels of the income spectrum. In total, local resources dedicated to affordable housing equaled approximately $70 million per year from 1999 to 2005, primarily in the form of redevelopment agency tax-increment financing. That funding source has been diminished by the California State Legislature, and as such, new financial commitments beyond February 2012 are in doubt. This means that the role of private development and the mix of incomes, income targeting, and long-term affordability will need to be reassessed to achieve financial feasibility on projects and a sustainable approach to equitable development over the long-term.

Lessons Learned for the East Corridor

For the East Corridor, major employers, local governments, and nonprofits including ARCH are a close proxy for the Silicon Valley corporate culture that created the Silicon Valley Leadership Group. While King County Metro operates a regional Housing Opportunity Fund (HOF), it is not robust enough to support the development of numerous new equitable TOD projects along the East Corridor.

The Growing Transit Communities Partnership, administered through PSRC, is helping to develop resources, convene partners and stakeholders, and provide information to support creation of equitable transit communities throughout the region. This includes working with partners to explore methods for new value capture mechanisms, as well as for implementation of a regional land bank, and establishment of a TOD loan fund in the $50-60 million range. These efforts align well with the successes of the Silicon Valley Leadership Group and the potential for private sector participation. Private sector leadership similar to the scope and scale of the Silicon Valley Leadership Group could generate additional new local private funds for equitable TOD development in the East Corridor and within the Puget Sound region.

Santa Clara County/ San Jose Area Tools & Techniques:

1) Local employers can help to qualify the problem and create and capitalize a housing trust fund to serve the unmet need.

2) Leveraging business advocates for well-located and well-conceived affordable housing is critical.

3) Regional and local nonprofits provide focus on issues of social equity and ensure long term affordability.

4) Diversified county-wide housing authority operates with vision and foresight.
PASADENA, CALIFORNIA—PASADENA’S TRANSIT COMMUNITIES

Six LRT stations—part of the Los Angeles County Metropolitan Transit Authority’s (MTA) Gold Line that links Downtown Pasadena to Los Angeles and other parts of Southern California—were established and put into service in 2003 after twenty years of planning and construction.

In the 1994 City of Pasadena General Plan revision, the Land Use Element established a development cap of 5,095 new residential units and 6.2 million square feet of new non-residential development within the Central District to alleviate concerns over traffic congestion. This had the unintended effect of increasing housing prices beyond already high Southern California median prices. The median household income in the City of Pasadena in 2012 for a household of three was $58,300, and 50 percent AMI for a household of three was $37,950.26

The City of Pasadena has enacted affordable housing policies to try to create a mix of housing opportunities for people of a wide range of incomes given these land and housing supply constraints. This has resulted in many urban infill and mixed-income, mixed use projects in the vicinity of the Del Mar and Memorial Park Stations along the MTA Gold Line. The City of Pasadena has employed strategies such as inclusionary housing requirements, the use of redevelopment/tax-increment finance (TIF) funds, city-owned land, and Housing Choice Vouchers to achieve their goals of a diverse mix of housing opportunities for people of all incomes. California State Urban Redevelopment Statutes require at least 25 percent of TIF funds be used for affordable housing.27 Two specific projects in the Pasadena area are singled out for discussion: Holly Street Village Apartments and Del Mar Station.

HOLLY STREET VILLAGE APARTMENTS—PASADENA, CALIFORNIA

Holly Street Village is a noteworthy project for several reasons. The project was built in anticipation of LRT service in 1994 nine years before the Gold Line was activated in 2003, demonstrating that project developers can design to anticipate future increases in transit service rather than respond to level of service improvements. The site is located in Historic Old Town Pasadena and linked to adjacent Memorial Park and Levitt Pavilion for the Performing Arts, an important arts venue and gathering place. City of Pasadena public
sites, including the Hall of Justice—a historic public courthouse, were integrated into the redevelopment plans for the Holly Street Village Apartments site.

The Holly Street Village Apartments is a mixed use, mixed-income development with 375 one-, two-, and three-bedroom apartments and three ground floor retail tenants. The adaptive reuse of the Hall of Justice accommodates 16 lofts. Twenty percent of the units were required to be maintained as affordable by the City of Pasadena’s Inclusionary Zoning Ordinance. The property asset managers accept Housing Choice Vouchers in 20 percent of the units to meet this requirement. The use of vouchers ensures low-income tenants with incomes less than 50 percent AMI pay no more than 40 percent of their income on rent and utilities provided the units are rented at Fair Market Rent determined annually by the US Department of Housing and Urban Development (HUD) in order to be eligible for vouchers.

The City of Pasadena leveraged the Hall of Justice as an important anchor for the historical context of the site and was able to provide 75 apartments affordable to very low-income families and individuals otherwise priced out of the Old Town Pasadena location.

Key Outcomes: Holly Street Village Apartments

- 168 one-bedroom, 190 two- and three-bedroom apartments, and 16 lofts within the renovated Hall of Justice. 11,000 square feet of ground floor retail. Gross density of 55 du/acre;
- Mixed-income (80 percent market rate; 20 percent below market rate rental for very low income (50 percent AMI) households);
- Adaptive reuse & preservation of Pasadena Hall of Justice;
- $56 million TDC funded with $6.9 million in low-interest loans underwritten by the City of Pasadena and $7.2 million in tax exempt bonds issued by the Pasadena Community Development Commission;
- Built over the Gold Line Memorial Park Station platform;
- Located within Old Pasadena’s Arts District destination neighborhood; and
- Strong urban submarket with 97 percent occupancy.

**Holly Street Village**

**CITY:** Pasadena, California

**CASE STUDY PROPERTIES:** Holly Street Village Apartments

**CITY POPULATION:** 131,122

**METROPOLITAN POPULATION:** 17 million

**TRANSIT LINKAGES:** Los Angeles MTA
Gold Line, linking Downtown Los Angeles to the east cities of Pasadena, Claremont, San Dimas, and Glendora

**Holly Street Village Apartments at Memorial Park Station**
(Source: Kurt Creager)
anchored by the historic Santa Fe train depot, which was rehabilitated and now houses a popular restaurant. Like Holly Street Village, the Gold Line bisects the site but it does so at grade, enabling better integration of and connectivity to transit. The development is distinguished as a good example of transit-oriented neighborhood design, but it only provides a nominal level of affordable housing (see key outcomes below).

Located at the southern edge of downtown, Del Mar Station serves as a gateway to the City of Downtown Pasadena with 347 studios, apartments, lofts, and townhomes. Approximately 20,000 square feet of retail is linked with a network of public plazas, paseos, and private courtyards. The 3.4-acre, $77 million project sits above a 1,200-car multi-level subterranean parking garage, with 600 spaces dedicated to transit commuters. The site adjoins Pasadena’s Central park, and the light rail right-of-way, detailed as a public street, bisects the site.

A blended density project with 100 units per acre, Del Mar Station remains consistent with the height and mass of the surrounding buildings and the existing traffic-handling capacity of adjacent streets. The project comprises four separate buildings developed by Urban Partners LLC and owned by Archstone, which vary in typology, style, and details, such as exterior cladding, windows and doors, balcony types, building color, roof materials, landscaping, and exterior lighting fixtures. The diversity of the plan reduces the mass of the development and transitions the density to blend with adjacent
existing buildings and integrate the complex into the urban core of the city.

**Key Outcomes: Del Mar Transit Village**
- 347 units; 20,000 square feet of ground floor retail; gross density of 100 du/acre;
- There is a lack of affordable housing to low income households (only six percent of units are for low income households with fourteen units for low income and seven units for moderate income households);
- Adaptive reuse and preservation of Santa Fe Railroad Station;
- $77 million total development cost;
- Bisected by Gold Line Del Mar Station; and
- 600 parking spaces dedicated to transit riders.

**Lessons Learned for the East Corridor**
Holly Street Village Apartments demonstrates a successful linkage of the offering of public land for development with project-based rental assistance vouchers. Holly Street developers were also successful in building ahead of the curve of high-capacity transit availability, which shows great vision and fortitude on part of the city and development team. The City of Pasadena’s policy of providing incentives to produce mixed-income housing as a condition of approval is well within the legal purview and abilities of East Corridor local governments and their partners (such as ARCH, Imagine Housing, and the King County Housing Authority).

The lack of affordable housing at the Del Mar Station and other TOD locations represents another lesson learned. Some jurisdictions along the Gold Line implement fee-in-lieu

**Pasedena Area Tools & Techniques:**
1. Adaptive reuse of existing historic structures into landmark urban gathering spaces;
2. Use of surplus land owned by the Pasadena Community Development Commission captures value, leverages private investment and strengthens ridership;
3. Inclusionary Housing Regulatory Requirements: 80 percent Market; 20 percent affordable at 50 percent AMI or below;
4. Tax-increment financing affordable housing set aside helps make units affordable
5. Rental Assistance vouchers tied to affordable units to ensure equitable access; and
6. Conduit bond financing provided by the Pasadena Community Development Commission ensures capital access at tax exempt rates.
ordinances for affordable housing. However, they diminish the ability to produce affordable units unless the fees are sufficiently high to represent the foregone opportunity to create permanent affordable housing. Another important consideration is ensuring that the mission of nonprofit organizations is broad enough in scope to capture the full spectrum of affordable housing needs. This may lead to using multiple partners to implement projects, potentially adding in cost and complexity. However, involvement of multiple partners can be successful. The Imagine Housing and Paragon Development mixed-income housing development project on the existing South Kirkland Park-and-Ride lot on SR 520 is one model of a project successfully involving multiple partners on the Eastside.

With respect to governance and partnerships in Pasadena, the City’s Community Development Commission is central to their success. This model may not be readily transferrable to the East Corridor at the regional level. As an alternative, a Public Development Authority (PDA) could be created and supported by an intergovernmental agreement between King County Metro, the Cities of Bellevue and Redmond, Sound Transit, and perhaps other entities. The mission of the PDA could include TOD as well as small business recruitment and preservation to maintain equity within the East Corridor. This is discussed further in the context of establishing a local funding source through utilization of Government Property Leasehold Excise Tax (GPLET) below.

**Phoenix, Arizona—Government Property Leasehold Excise Tax**

The State of Arizona has similar constitutional prohibitions on the lending of credit as found in the Washington State Constitution. Similar constitutional strictures on the uniformity of property taxed (e.g., no allowance for split roll or taxing like properties at different rates) has limited the opportunity for tax-increment financing (TIF) in Arizona. In lieu of TIF, Arizona cities (such as Phoenix, Mesa, Glendale, and Chandler) have used a tool referred to locally as the Government Property Leasehold Excise Tax or GPLET. This case study explores how GPLET works and how it could be adapted for use in Washington State to create equitable transit-oriented development (ETOD).

The Transformation of Downtown Phoenix, Arizona

While it is simplistic to credit one specific project, program, or tool with the transformation of downtown Phoenix, it is useful to examine the interplay of public finance and the use of public debt and equity to reinvest in the Central Business District (CBD). Downtown Phoenix has long been the locus of government serving the citizens of Phoenix and Maricopa County (where 60 percent of the population of Arizona is located). In addition, most major sports and entertainment venues are within the CBD including two stadiums with national teams. These facilities and three publicly-owned theatres and performing arts centers are located adjacent to the Phoenix Convention Center in the CBD, as shown in the map on the following page. Combined, the sports venues and convention facilities constitute over $2 billion in public investment. Equally important, the area is connected with Valley Metro’s LRT system that links Phoenix with Mesa and Tempe.

Also of note, the ASU Downtown Phoenix Campus is immediately north of this area. Facilitated by $250 million investment by the City of Phoenix, the ASU Downtown Phoenix campus is now supporting an enrollment of 10,000 students. Downtown commuters, students, residents, and visitors alike are served by the Phoenix Central Transit Station; a transfer point for bus and light rail. In addition, downtown is served by five additional LRT stations.
The Role of CityScape and GPLET Financing in Downtown Phoenix Redevelopment

CityScape was envisioned a 24-hour downtown district, linking the assets described above within a vibrant, pedestrian-friendly urban core. A broader vision for Phoenix was at the heart of the plans for CityScape. As observed by one of the partners, Ken Kendrick, Managing General Partner of the major league baseball team the Arizona Diamondbacks, “Phoenix is a big city, but not yet a great city.” To elevate the city’s stature, several investors came together to create CityScape, with a major objective of adding vitality to the Phoenix CBD.

As mentioned above, GPLET is Arizona’s version of tax-increment financing. GPLET was used to fund the first phase of CityScape, two blocks in the center of downtown. One block was previously Patriot’s Square, an obsolete pedestrian plaza. The other city block was a surface parking lot. The surface parking lot was acquired by Red Development for $28 million and conveyed to the City of Phoenix. The City of Phoenix, in turn, leased the two-block area back to Red Development. Because the property was public land, it was categorically exempt from payment of property taxes. The private use of the property was, however,
subject to the payment of GPLET. The City of Phoenix leveraged this investment further with parking revenue bonds backed by the stream of GPLET revenue. The development agreement and lease stipulated urban amenities to offset and replace the public amenities within the former Patriot’s Square.

While housing was initially an important element of the plan, the housing elements were placed on hold in 2007 with the economic downturn. The retail, office, hotel, and other urban amenities were initiated in 2007 and completed in 2011. A hotel (Phoenix Palomar) opened in June 2012. The second phase immediately east of the completed project is in the planning and predevelopment phase with housing, hospitality, and office use under consideration.

**Applicability of GPLET to Equitable Transit-Oriented Development in Washington State**

Washington State has a similar provision for GPLET, however it has never been deployed at the scale found in Arizona cities. In Washington State, any private use of public land (with some limited exemptions) must pay a GPLET of 12.84 percent of the gross revenues annually. That means retail sales and private market rents are subject to annual remittance of GPLET.
Properties exempt from GPLET are historic districts (e.g., Fort Vancouver National Historic Trust in Vancouver, Washington) and properties owned by local governments.

In consulting on the potential use of GPLET in Washington, a representative from the consultant team contacted legal experts in development financing. While not asked to issue an official legal opinion, these experts indicated that GPLET was viable as a financing tool from a statutory and constitutional standpoint. It is a political necessity (and their recommendation) that use of GPLET to support ETOD consider the following.

- The uses of the funds should be for public benefit to avoid a lending or gift of public credit conflict. Project costs such as public parking, public open space, habitat restoration, public streets (including complete streets and eco-district development) as well as below market rate housing (under 80 percent of the AMI) would all constitute bona fide public uses.

- The affordable housing could be owned by private or public entities provided there were long-term affordability protections enforced through a leasehold and development agreement.

- An intergovernmental agreement between the taxing districts is recommended to ensure transparency. Primary participants could be city and county governments as well as local school districts and potentially other public agencies.

**The Applicability of GPLET to the East Corridor**

The applicability of GPLET in the East Corridor as an implementation tool should be further explored and evaluated. Several opportunities could emerge. For example, the City of Bellevue has identified and quantified the cost of daylighting the anadromous fish-bearing streams in both the 120th Avenue NE and 130th Avenue NE station areas and has not yet identified the means to pay for these public improvements. The GPLET tool would be a means to pay for such improvements if the developer/landowners were to consider deeding title to a public entity. As another example, with the involvement of public entities such as local school districts and other agencies that regularly advocate for workforce housing opportunities, the use of GPLET could help subsidize housing for low-income workers (less than 80 percent of the AMI) on the Eastside. The Growing Transit Communities Partnership’s interests in ETOD and sustainable development could be well served by utilizing GPLET to support equitable TOD projects in the East Corridor.

**PORTLAND, OREGON—CREATING SYNERGY BY LINKING TRANSIT TO REDEVELOPMENT**

**Interstate Corridor Urban Renewal Area**

At nearly 4,000 acres, the Interstate Corridor Urban Renewal Area is Portland’s largest urban renewal area. It includes a diverse collection of historic communities in north and northeast Portland, composed of older residential neighborhoods interconnected by commercial corridors, with large-scale industrial centers. The area also includes historically low-income communities and communities of color including Oregon’s largest public housing community, Columbia Villa.

In August 2000, the Portland City Council approved the North Interstate Corridor Urban Renewal Area. In July 2011, City Council approved expansion of the boundaries of the urban renewal area along a series of transit corridors including Martin Luther King, Jr. Boulevard, Alberta, Killingsworth, Lombard, and the St. Johns Town Center. The Interstate Corridor Urban Renewal Area was formed to accomplish multiple goals described below.
Goals of the Interstate Corridor Urban Renewal Area

- Spur mixed use development along the LRT corridor and in station areas while distributing public investment fairly and evenly among other areas within the district.

- Create new employment and housing opportunities for a range of incomes.

- Develop new housing that supports transit, is compatible with the existing neighborhood, strikes a balance between homeownership and rental, and minimizes displacement of existing residents.

- Create wealth through expansion of existing businesses, fostering a healthy business environment and generating family wage jobs.

- Improve transportation corridors to encourage the use of alternative modes of travel, maintain and improve access, create a pedestrian-friendly environment, and mitigate traffic impacts associated with new growth.

- Promote community livability through strategic improvements to parks, open
Several of the specific projects implemented in the Interstate Corridor Urban Renewal Area are summarized below.

**NEW COLUMBIA—INTERSTATE CORRIDOR URBAN RENEWAL AREA, PORTLAND, OREGON**

As discussed above, the City of Portland established the Interstate Corridor Urban Renewal Area in North Portland as a TIF district to capture property value increases for economic development and equitable housing development. The TIF revenue provided a valuable source of equity to replace aging infrastructure within and to the Columbia Villa Public Housing Community now transformed into New Columbia.

Home Forward (previously known as the Housing Authority of Portland or HAP) and its partners, funded by a $35 million federal Housing and Urban Development (HUD) grant in 2001, spearheaded the largest neighborhood revitalization undertaken in Oregon history. The HUD grant was supplemented with funding from multiple other sources including TIF revenue from the Interstate Corridor Urban Renewal Area into a project total of $151 million. The former Columbia Villa public housing development, 460 World War II-era rental units on 82 acres in North Portland, were demolished and replaced by a mixed-income, mixed use community of 854 households, known as New Columbia. Since TIF revenue flows into the urban renewal district accounts gradually over time, the City of Portland provided a bridge loan from the HUD Section 108 Loan Program to fully fund the infrastructure for New Columbia at the outset of development. There were several key projects in New Columbia included the Community Campus and Rosa Parks Elementary School.

- **Community Campus**
  Located at the eastern edge of the New Columbia community on land donated by HAP, the Community Campus features a new public elementary school co-located with a Boys and Girls Club, directly adjacent...
to the City of Portland’s University Park Community Center. With more than 1,400 children now living at New Columbia, these facilities complement each other and provide the programs that help children thrive. The Community Campus concept reduced the duplication of services through joint use of space and resulted in an overall reduction in capital costs while increasing operational efficiencies.

- **Rosa Parks Elementary School**
  The new 550-student elementary school replaced an aging facility three blocks away that had long been at the top of Portland Public School’s priority list for replacement. However, without the partnerships brought together by the New Columbia redevelopment, a new school would still have been only a dream. Rosa Parks Elementary School was the first new school built in Portland Public Schools in more than twenty years.

  In addition to the award-winning design, the school has been certified LEED Gold and provides an environmental learning laboratory for students. It was also the first public elementary school in the country built with New Markets Tax Credits and creative financing that attracted foundations and grants. The partnership of nonprofit, profit, and public entities supported housing and community development goals while also reinforcing the educational mission of the school district.

  **Rosa Parks Elementary School Capital Funding Structure and Partners:**
  - Boys and Girls Club fundraising supported 14 percent of the costs ($2.5 million)
  - HAP lot sale proceeds and fundraising provided 15 percent ($2.7 million)
  - New Market Tax Credits provided 21 percent ($3.8 million)
  - Portland Public Schools bank loan provided 48 percent ($8.8 million)
  - Miscellaneous funding at .02 percent (0.4 million)
  - New Columbia Community Campus Corporation and City Parks also contributed.
  - Total: $20.2 Million Community Campus
Key Outcomes of the Interstate Corridor Urban Renewal Area and New Columbia

- New Columbia contains 854 mixed-income housing units, including public housing, affordable rentals, senior housing, as well as market rate and affordable homes for sale.
- New Columbia is not connected to the Interstate MAX line but connects with TriMet bus service.
- The Rosa Parks K-12 School, serving North Portland, was funded with New Markets Tax Credits and other sources.
- The mix of residents represents a variety of cultures, age groups, and income levels.
- The community-friendly design with front porches, parks, and public spaces creates an attractive, livable setting for residents.
- The re-established urban street grid provides easy circulation within New Columbia and connects the community to the rest of the Portsmouth neighborhood.
- Creation of a new Main Street offers a variety of recreational, cultural and educational opportunities both for New Columbia residents and the surrounding neighborhood.
- The project is a model of excellence with regard to sustainability and community design.39

Lessons Learned for the East Corridor

While TIF in its typical form is not currently possible in Washington State, other mechanisms such as the GPLET are available. (An in-depth discussion of the use of GPLET by cities in Arizona was provided on preceding pages of this report.) The use of the state share of incremental increases in sales taxes, authorized under the State of Washington’s Local Infrastructure Financing Tool (LIFT) is being used in the Bothell and Vancouver to support urban redevelopment. The legislature funded the amount of sales tax available for the LIFT Demonstration. However, it has since been fully allocated and is not available to new projects unless the state expands the program.

Other mechanisms, such as the use of special assessment districts paid by private property owners, could be used to create financing districts within the framework of current law. The use of the Community Renewal Act (CRA) in Washington State requires approval of a community renewal plan with legislative findings by the local government that community renewal is necessary and appropriate. A
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lead agency such as city government, public development authority, port authority, or housing authority must be designated as the community renewal agency to implement the community renewal plan. Currently CRAs don't have access to any new funding sources but are conduits for existing sources of funds. Because there is more than one governmental entity involved, it is recommended that a public development authority be established with a mission to foster TOD, engage in small business recruitment and preservation, and promote equity within the corridor.

PORTLAND, OREGON—A COMMENTARY ON THE PEARL DISTRICT

In a decade of remarkable activity, Portland’s River Pearl District has been transformed from an underutilized industrial area into a thriving residential neighborhood. The Pearl District, located just north of downtown Portland, is a vibrant urban neighborhood named by Project for Public Places as one of the World’s Best Places. The city’s vision of this 100-acre district has been an outstanding and nationally recognized example of a successful urban redevelopment. The district will ultimately be home to 5,500 residential units and two million square feet of commercial space.

THE YARDS AT UNION STATION—PORTLAND, OREGON

The three- to five-story complex at the Yards at Union Station occupies 7.5 acres, adjacent to historic Union Station along the Willamette River. The development links the two neighborhoods of Old Town and the Pearl District within the River District Urban Renewal Area (two blocks from the Pearl) and set the tone for future development in the area. The 724 rental and for-sale dwelling units accommodate mixed-income ranges: 15 to 25 percent of the units are targeted for low-income households while 20 to 30 percent of the units were designed for moderate-income households.

Five phases of the Yards at Union Station have been implemented supported by the Low Income Housing Tax Credit (4 percent) Program, TIF, property tax abatement to produce affordable units, and private sources. The developer sold the first phase of the Yards at Union Station to the Housing Authority of Portland. That phase was the first purpose-built affordable housing in Northwest Portland in more than twenty years. In March 2012, the developers broke ground on the fifth Phase at the Yards at Union Station. Over a span of fourteen years, the project has provided over 700 units of housing (including studio, one-,
and two-bedroom units affordable to various income levels and workforce rental housing). The site is linked to the historic Union Pacific train station and is within walking distance of the Portland Streetcar.

**Lovejoy Station—Portland, Oregon**

Lovejoy Station was another early development with affordable housing to be implemented in the Pearl District (completed in 2001). This five-story 181-unit equitable TOD project was developed by Home Forward and serves households from 40 to 80 percent AMI in the northwest Portland neighborhood. Rental units range from 400 square-foot studios to 1,045 square-foot, two-bedroom units. This site is also located on the Portland Streetcar line and was certified LEED Gold by the US Green Building Council.

**The Ramona Apartments—Portland, Oregon**

More recently, in 2011-12, on the northern edge of the Pearl District, The Ramona Apartments (named in honor of popular local children’s author Beverly Cleary) was successfully developed. Turtle Bay Development LLC, the project’s developer had previously implemented the acclaimed Pearl Family Housing nearby. The Ramona was conceived as a mixed use family building with a ground floor elementary school, but Portland Public Schools’ funding constraints prevented full implementation of the plan.
Nonetheless an early childhood development learning center (K-2) occupies the ground floor, and a concerted effort has been made by Turtle Bay to increase the supply of family housing affordable under 60 percent AMI ($39,420 for a household of three) into the area. Turtle Bay used low-income housing tax credit (LIHTC) and TIF equity from the City of Portland Bureau of Housing to ensure long-term affordability. The Ramona was is certified as a LEED Gold building by the US Green Building Council.

**Brewery Blocks—Portland, Oregon**

In the ten years from 2000-2010, about 5,000 dwelling units were added to the housing stock of the Pearl District. Initially, developers focused on loft conversions, but developed new structures or added onto existing structures after exhausting the supply of existing buildings. The redevelopment of the (Henry Weinhard) Brewery Blocks was one of the most noteworthy projects of this adaptive reuse trend. Within the Brewery Blocks, the Gerding Theatre is a standout public facility. Formerly the Portland Armory, the developers used equity from the New Markets Tax Credit Program and the Historic Preservation Tax Credit Program to reconfigure and preserve the historic building, a stage for contemporary theatre.

**Portland Pearl District/River District Tools & Techniques:**

1. The TIF housing set aside produced about 1,000 affordable housing units within River District Urban Renewal Area.
2. Public infrastructure investment and urban design produced a variety of distinctive urban open spaces.
3. Adaptive reuse of existing noteworthy buildings created unique character in the neighborhood.

**Portland Pearl District—Key Outcomes and Lessons Learned**

Portland City policy stipulates that at least 30 percent of the TIF Revenue be allocated to affordable housing in the Pearl District and adjacent River District Urban Renewal Area, which has greatly supported equitable housing opportunities in the area. Public open spaces, especially Jamison Square, provide passive recreation and attractive urban amenities and gathering spaces, which also enhance neighborhood livability. The Portland Streetcar links the Pearl and northwest Portland with the Portland State University Campus in southeast Portland. An expansion of the streetcar line to northeast Portland across the Broadway Bridge is underway.

Portland has much to be proud of with the Pearl District. However, there are a few issues that should be considered in applying lessons learned to the East Corridor.

- Families with children are not well-served with the range of housing options and choices in the Pearl District. The Ramona is a good attempt to alleviate this shortfall but does not fully compensate the need for more housing to serve families.

According to the 2010 Census, 268 additional people under age 18 lived in the two census tracts encompassing the Pearl, up from 128 in 2000. This was only a gain of just 140 children and youth in a community of 5,000 dwellings. While some affordable housing is provided in the district, overall there is not sufficient to attract more families with moderate to low-incomes. It is also difficult to retain growing families without a broader mix of unit sizes. Many families visit and enjoy the area and Jamison Square, but few
In summary, the Pearl District is successful in many respects. It is a destination for people due to its exciting mix of retail, services, and urban amenities. It is a model of urban revitalization, especially the execution of the Brewery Blocks. It is not, however, an especially viable or helpful case study in creating an economically integrated community or equitable housing outside of a few examples given. Early, proactive planning for development that is attractive and attainable for families and affordable to people with a range of incomes could have led to creation of a more equitable district. The Growing Transit Communities Partnership is supporting the need for early, proactive planning in the East Corridor and elsewhere throughout the central Puget Sound region.

The Pearl is not well-connected physically to the waterfront. The Portland Development Commission acquired the nearby Centennial Mills complex with the intent to make this connection, but has not been able to secure financing and a bankable development partner for the adaptive reuse of the site. This may be corrected in the next business cycle.

Jamison Square (foreground) and Tanner Place in the Pearl (Source: Adrienne Gunde)

can afford to live there, nor do the units provided serve their needs.

With the exception of the examples given, there are still few affordable housing units in the Pearl. Nearly all the affordable units in the River District are actually in one project: The Yards at Union Station. The neighborhood would not yet be considered equitable nor attainable by households even at 100 percent of the AMI, much less low- and very-low income households.
Footnotes for Affordable Housing


2. Ibid.


4. Ibid.

5. Ibid.


8. Ibid.


10. Ibid.


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14. Ibid.

15. Ibid.

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17. Ibid.

18. Ibid.

19. Ibid.

20. City of San Jose, 2012-2013 San Jose City Budget (2012).


22. Ibid.

23. Bay Area Local Initiatives Support Corporation and San Jose State University, Housing Silicon Valley.

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25. Housing Trust Executive Director, Kevin Zwick,

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27. Ibid.

28. City of Pasadena, Department of Housing

29. Ibid.

30. Arizona State University Stardust Center, Case Studies - TOD in Practice.


32. Ibid.

33. Pacifica Law Group (Faith Li Pettis and Jay Reich) and Foster Pepper (Hugh Spitzer and Jeff Nave)


35. Ibid.

36. Ibid.


38. Ibid.

39. Ibid.

40. GSL Properties, developers of the Yards and Union Station and Otak, Inc. architects of the project.


43. Ibid.

44. Ibid.
BUSINESS RETENTION AND ATTRACTION

Economic development, particularly the retention and attraction of businesses, is critical to maintaining successful station areas and neighborhoods. The case studies presented on the following pages address the following strategies for fostering a supportive business environment:

- **Communication is key.** During long-term business impacts, such as the construction of light rail lines, communicating early and often to business owners and providing business assistance is critical to retaining businesses. Businesses, particularly retail and restaurants, are highly sensitive to the neighboring environment for attracting customers. Providing information and services to affected businesses is critical to keeping business afloat during construction impacts. Denver, Colorado’s Regional Transportation District (RTD) provides an example of an agency that is proactive in addressing potential business impacts prior to and during construction, including providing assistance with finding new leases when businesses were physically impacted.

- **Plan early.** In addition to developing strong communication, early warning is critical for businesses and agencies to prepare for potential impacts. In both the Portland, Oregon TriMet and Denver, Colorado RTD examples, agencies were proactive in contacting businesses individually prior to construction. Agencies were able to garner support as well as address potential needs of the businesses early on.

- **Advertise and attract.** Agencies can further support local businesses in specific station areas by developing an advertising campaign focusing on the businesses during and after construction. Portland’s TriMet developed an advertising campaign to assist businesses and property owners affected by construction of the Interstate Max Yellow Line. The agency created print and bus ads, events, and signage to notify and attract customers. The agency reports that only one business failed as a result of the project and over 50 new businesses have emerged in the corridor.

- **Create sustainable resources for ongoing and future support to businesses.** When agencies are able to provide support, local businesses are more likely to survive, and beyond survival, to thrive and be stronger than they were prior to construction. The use of business experts and community development specialists can provide support such as one-on-one counseling, financial training, grant funding, or micro-lending to expand or strengthen businesses.

**DENVER, COLORADO—PREVENTING BUSINESS DISPLACEMENT**

The Denver metropolitan region is currently engaged in a multi-billion dollar transportation project led by the RTD, the region’s public transit authority. The overall goal of this ambitious effort is to expand and integrate multiple transportation modes into one comprehensive system. The plan calls for the construction of 140 miles of commuter rail, light rail, bus rapid transit, new parking, and maintenance facilities, and the redevelopment of Union Station into a multimodal hub in the heart of downtown. These improvements are slated to open by 2016, and will augment existing LRT service along the central and southeast corridors.

Business anti-displacement was stated as an explicit goal by RTD and the City of Denver, but in large part also was driven by federal government requirements. Given the scale of
this construction effort and the related impacts on local economic development conditions, business retention has been a major concern in the Denver region in both central city and suburban locations.

**Business Anti-Displacement Planning**

Business displacement was acknowledged as a potential impact early in the planning process, particularly retail and office businesses affected by transit construction. To address this, RTD prepared a relocation analysis and devised solutions to minimize adverse impacts.

A relocation study was commissioned, which inventoried existing businesses and estimated the number, type, number of employees, and size of businesses that would be affected. An outreach campaign was launched, and relocation needs and preferences were clearly discussed with affected businesses. To retain businesses, site relocation services were offered and businesses received a list of available properties and lease rates that was frequently updated.

In cases where acquisition of a site was necessary, all affected property owners were provided notification in the form of a written letter describing the acquiring agency’s intent, and the right of the owner to fair
Business Retention and Attraction

Denver, Colorado
Tools & Techniques:

1) Conduct relocation studies and analyze solutions to minimize adverse effects on businesses
2) Implement an outreach campaign with targeted outreach to businesses as well as to their customers
3) Provide list of available properties and lease rates
4) Provide ongoing assistance, mentoring, and support prior to, during, and after construction

The majority of the program’s efforts are focused on helping displaced businesses either directly or indirectly affected by disruptions during the construction process. The Denver BAC provides many services, including site selection assistance, small business financing, and other consulting services. The OED maintains a database of commercial properties, which was used to help relocating businesses, and also offers small business loans and access to state tax credits for qualified businesses. Businesses can further tap into OED’s extensive network of community partners for small business administration guaranteed loans and micro loans. Moreover, businesses are able to benefit from the full set of other services offered by OED, including one-on-one consulting, referrals to community resources, business development, and mentoring.1

Lessons Learned for the East Corridor

This case study focuses primarily on public sector efforts to provide technical assistance and financial resources to businesses affected by the Denver region’s large-scale transit public works project. The City of Denver’s OED has been particularly active in supporting small businesses affected by the construction process and appears to represent a model for other economic development agencies seeking to proactively address business needs during the construction phase of a new transit project.

At the same time, the Denver Mile-High TOD Fund (discussed in the Affordable Housing section), provides perhaps a more novel and innovative example of a nonprofit led effort to support business retention and attraction through equitable mixed use development on sites near transit stations in the Denver region. Although not focused on business retention explicitly, this $15 million loan fund supports future mixed use projects including affordable space for small businesses and community facilities. Refer to the Affordable Housing section for more information.

MINNEAPOLIS - ST. PAUL, MINNESOTA—COMMUNITY-BASED RETENTION EFFORTS

The Central Corridor is a planned LRT line that will connect the downtowns of St. Paul and Minneapolis, running east to west through the Twin Cities metro area. Currently under construction, the Central Corridor line (also referred to as the Green Line) will extend eleven miles at completion and will connect with the already existing Hiawatha LRT line, which runs north to south between Minneapolis and Bloomington. The

Compensation. All acquisitions complied with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

For the most part in the Denver region, local municipalities have taken the lead in offering additional assistance to businesses. The Denver Office of Economic Development (OED), through the Denver Business Assistance Center (BAC), was the primary point of contact for businesses seeking one-on-one help. According to the Denver BAC representatives, the majority of the program’s efforts are focused on helping displaced businesses either directly or indirectly affected by disruptions during the construction process.

The Denver BAC provides many services, including site selection assistance, small business financing, and other consulting services. The OED maintains a database of commercial properties, which was used to help relocating businesses, and also offers small business loans and access to state tax credits for qualified businesses. Businesses can further tap into OED’s extensive network of community partners for small business administration guaranteed loans and micro loans. Moreover, businesses are able to benefit from the full set of other services offered by OED, including one-on-one consulting, referrals to community resources, business development, and mentoring.1

Lessons Learned for the East Corridor

This case study focuses primarily on public sector efforts to provide technical assistance and financial resources to businesses affected by the Denver region’s large-scale transit public works project. The City of Denver’s OED has been particularly active in supporting small businesses affected by the construction process and appears to represent a model for other economic development agencies seeking to proactively address business needs during the construction phase of a new transit project.

At the same time, the Denver Mile-High TOD Fund (discussed in the Affordable Housing section), provides perhaps a more novel and innovative example of a nonprofit led effort to support business retention and attraction through equitable mixed use development on sites near transit stations in the Denver region. Although not focused on business retention explicitly, this $15 million loan fund supports future mixed use projects including affordable space for small businesses and community facilities. Refer to the Affordable Housing section for more information.

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neighborhoods to be served by the Central Corridor vary in character from primarily residential areas to established small business nodes with a mix of retail and office uses as well as pockets of under-utilized industrial land.

Although the Central Corridor is not yet complete, it is notable as the strongest example nationally of a functioning coalition of local governments, foundations, nonprofit organizations, business organizations, and chambers of commerce all focused on the goal of promoting equitable development along the Central Corridor and at each of its diverse station areas. Known as the Central Corridor Funders Collaborative (Funders Collaborative), this coalition of public- and private-sector agencies serves both as an information clearinghouse and as the coordinating body for efforts around business retention and economic development along the Central Corridor. Many of the practices adopted by the Funders Collaborative and its partners in relation to business retention build from lessons learned (positive and negative) in other regions such as Portland, Oregon and Seattle, Washington. In this sense the Central Corridor provides a unique opportunity to observe the effectiveness of various business retention and attraction programs as they are being implemented.2

A Community-Based Effort
In the aftermath of business dislocations caused by the development of the Hiawatha LRT line, a group of local funders and policy leaders came together in the Twin Cities to create a partnership of philanthropic groups to develop and support corridor-wide strategies for creating high-quality transit-oriented places with a mix of housing, jobs, and services. The focus of the Funders Collaborative is on capacity building and small business support along the corridor rather than on funding specific development projects. The Funders Collaborative includes partners such as the Annie E. Casey Foundation, the Ford Foundation, Living Cities, the Knight Foundation, the Metropolitan Council (regional MPO), and the cities of St. Paul and Minneapolis. To date, the Funders Collaborative has assembled over $10 million in funding commitments to support planning and business assistance efforts along the Central Corridor.

In a poll of local businesses involved with the Funders Collaborative, approximately three quarters of all businesses reported that they expected their business to be operating in its current location in five years. Sixteen percent reported that they did not expect their business to be in operation at this location in five years, and nine percent did not know if their business would be in operation at their current location in five years. Although businesses have responded fairly positively to the program, it is still in its early stages, and the effectiveness is yet unclear.3

Funding
The Funders Collaborative is investing in policy planning and project/program development. In total, 23 grants worth $2,201,170 have funded small business retention and

Minneapolis-St. Paul, Minnesota Tools & Techniques:

1) Build a coalition of interests for the specific purposes of serving as an information clearinghouse and the coordinating body for efforts around business retention and economic development

2) Support the coalition’s efforts in providing outreach and programs before, during, and after LRT construction
preservation strategies and actions. To date, grants totaling $281,200 for affordable housing investments have been made.

Another policy priority of the Funders Collaborative is to help create vibrant transit-oriented places, a category of grant support that has awarded 32 projects a total of $2,467,075. Much of this support has funded transit station area planning and implementation. Efforts to ensure effective coordination and collaboration garnered fifteen grants worth $652,374. This “joined up thinking” creates an environment of policy alignment that supports equitable communities and strong vibrant and diverse neighborhoods indirectly supporting regional housing priorities. It was understood that regionally, housing capacity for the development of equitable TOD was more established than community economic development tools. The practice of policy alignment is socially embedded as a core value in the Twin Cities region. The effects of the foundation’s investments into community development and capacity building should be systemic, long lasting, and durable given the long view taken by the Funders Collaborative.

### Ready for Rail

With major funding and support from the Funders Collaborative, the “Ready for Rail” initiative was created to assist corridor area businesses and property owners: 1) Prepare for the impact of light rail transit; 2) Survive during periods of construction; and 3) Thrive after the line becomes operational in 2014. Specific groups supported by Ready for Rail include a business resources collaborative (see Strategic Work Plan in the appendix of this report), a contractor and workforce inclusion group, and a job access group.

**Major Goals of the Ready for Rail Campaign include:**

- Minimizing the involuntary relocation or disruption of existing businesses;
- Reducing construction disruption;
- Strengthening the identities, appeal, and offerings of local business districts;
- Encouraging development that creates new jobs and workforce opportunities; and
- Encouraging training that prepares people for the expanded job opportunities available via transit.

In order to achieve these goals, the following programs and services are currently being offered under the umbrella of the Ready for Rail initiative:

- Construction information and liaison services between small businesses and construction crews;
- Management and marketing technical assistance;
- Small business loans and matching grants;
- Marketing campaigns and “Open for Business” publicity for the Central Corridor; and
- Business advocacy and referrals.
Lessons Learned for the East Corridor
The role of foundations in providing leadership and funding for the Ready for Rail Initiative has been critical. Without the creation of the Funders Collaborative and the evolving partnership between a broad and diverse range of private and public agencies, the coordinated effort to assist small businesses along the Central Corridor would not have been possible. This case study suggests an important role for philanthropic and nonprofit agencies in business retention and attraction efforts along the East Corridor. Additionally this case study also points to the need to define specific programmatic and policy tools well in advance of the construction process, and to create a clearly defined strategy for providing businesses with the technical and financial tools that they need to survive before, during, and after construction.

Portland, Oregon—Interstate Avenue Open for Business

Interstate Max Yellow Line
The Interstate MAX Yellow Line LRT is operated by Portland’s regional transit agency, TriMet. Originally opened in May, 2004, the Yellow Line extends 5.8 miles from downtown Portland through the city’s northern neighborhoods. Comprised of ten stations all located in low- to medium-density urban infill locations, the Yellow Line has exceeded ridership projections, provided much needed connectivity, and enhanced transportation choices for workers, residents, and businesses throughout North Portland.

Business retention, economic development, and workforce training were all explicitly addressed in early planning efforts, and as such, retention of existing businesses and attraction of new investment along the Yellow Line corridor have been seen as relatively successful. Although many of the neighborhoods served by the Yellow Line are more urban and less economically robust than the East Corridor station areas, the Interstate MAX is comparable in terms of the scale of transit service and provides one of the few case studies nationally of a successfully implemented business retention and attraction strategy focused on a light rail corridor.6

Interstate Avenue Open for Business
According to TriMet, when construction began on the Yellow Line in 2000, there were 105 businesses located along the Interstate Corridor, the vast majority small, owner-operated retail businesses. Many of these businesses were owned by people of color and catered to North Portland’s large African-American community. Through an extensive community outreach process and in close coordination with the Portland Development Commission (PDC), TriMet made business anti-displacement efforts a core priority of the Interstate MAX construction project and both TriMet and PDC continue to support business assistance efforts along the corridor.7
Portland, Oregon/Interstate Avenue Corridor Tools & Techniques:

1) Address business retention, economic development, and workforce training in early planning efforts.
2) Make business anti-displacement efforts a core priority.
3) Provide loan and grant programs targeting small businesses and developers.

**Construction Phase**

To minimize construction impacts, TriMet worked to maintain physical access to businesses along Interstate Avenue and worked in three- to four-block segments to minimize impacts on local businesses. TriMet and partner agencies also created an advertising campaign to support local businesses to attract customers. The campaign included print advertisements, financial assistance (loans and grants), technical assistance workshops, and a “Lunch Bus” that brought 14,000 people to Interstate Avenue restaurants.

To further address the needs of local businesses during the construction phase, TriMet and the PDC partnered with a local community development financial institution (CDFI) to provide small ($5,000 - $25,000) low-interest (3 percent) loans as well as one-on-one business consulting focused on financing, accounting, marketing and general management.

**Post Construction/Operations**

Despite ongoing concerns about the potential for residential and business displacement in North Portland, particularly as this relates to the Portland’s African-American community, as of 2012 TriMet reports that only one business failed as a direct result of construction-related disruptions with three businesses relocating to other areas in Portland. Moreover, over 50 new businesses have been added along the corridor, including a grocery store and an expansion of Kaiser Permanente’s Interstate Medical Offices.

Although TriMet and its partner agencies have been generally successful in retaining and attracting businesses along the Yellow Line, at present there are no specially targeted business assistance programs offered by PDC which focus on this corridor or any of the light-rail corridors in Portland. Rather, PDC manages a number of loan and grant programs targeting small businesses and developers in all areas of Portland. These programs are primarily funded through TIF revenue and Federal Economic Development Administration (EDA) monies. Certain incentive-based programs such as allowing developers to “buy down” interest rates on revolving loans in exchange for providing certain defined public benefits (e.g., jobs, affordable housing, affordable commercial space, etc.) could be adapted to have a targeted geographic focus along a transit corridor. However, this is not currently the case for the Interstate Avenue corridor.

**Lessons Learned for the East Corridor**

Early planning, business outreach, and community involvement efforts were critical to ensuring the relative stability of the small business community along the Interstate Avenue corridor. During the construction phase, targeted advertising campaigns and business assistance efforts were successful in helping small businesses overcome potential negative impacts associated with the light rail construction. In addition, the construction was timed and coordinated to limit potential effects on small businesses and surrounding neighborhoods. Going forward, it remains to be seen how increased development interest in the Interstate Avenue corridor could affect small businesses,
but at present the net result of the Yellow Line extension has been a stronger local economy benefiting both new and existing businesses.

One central theme is the early involvement of the transit agency in partnering with the economic development agency (PDC) and local nonprofit partners to ensure that the construction of the light-rail line met broad community objectives around economic development. The central role of the transit agency as a community partner will likely be an important element of successful business retention efforts along the East Corridor, especially as this pertains to the phasing and coordination of the construction process.

The Patton Park development in Portland, Oregon (described in more detail in the Partners section of this report) also offers an example of creating synergy between new affordable housing development and the need for small increments of commercial space to accommodate locally owned small businesses and community institutions.

**OTHER EXAMPLES**

A couple of additional examples from transit-oriented communities in California are described below.

**OAKLAND, CALIFORNIA—FRUITVALE MAIN STREET PROGRAM AND BUSINESS IMPROVEMENT DISTRICT**

The Fruitvale TOD, located along the Bay Area Rapid Transit (BART) system in Oakland, California, is perhaps the most widely studied case of a TOD in an inner-city neighborhood led by local community development corporation (CDC). The Fruitvale Transit Village has been both praised for its pioneering attempt to link TOD with community development efforts, and criticized for the lackluster performance of the village’s retail uses as well as its heavy reliance on federal and state loans and grants to achieve project feasibility.

Despite the large amount of attention directed to the transit village itself, less attention has been paid to the largely successful efforts of the Fruitvale Main Street Program and Business Improvement District to assist retail and office businesses along International Boulevard in the traditional business district serving the Fruitvale neighborhood. Led by the local CDC, the Spanish Speaking Unity Council, these efforts have been largely successful in helping local businesses to thrive even as development pressures have built in connection with the development of the transit village. In particular, the commercial Seven Directions Health Center at Fruitvale (Source: Pyatok Architects)
Business Retention and Attraction

LOS ANGELES, CALIFORNIA—LA METRO ORANGE LINE BUS RAPID TRANSIT BUSINESS ATTRACTION

The Metro Orange Line is a dedicated bus rapid transit (BRT) line operated by the Los Angeles Metropolitan Transportation Authority (Metro). The line extends east to west for fourteen miles between Warner Center in downtown Los Angeles and the suburban North Hollywood Red Line Metro subway station in the San Fernando Valley. With a dedicated right-of-way and well-designed stations that convey a sense of permanency, the Metro Orange Line operates in a comparable fashion to light rail systems. The Orange Line has exceeded the Metro LRT Gold Line in ridership in each year that it has been in operation. Although business retention and anti-displacement efforts did not figure prominently in this case, the Orange Line BRT has provided additional marketing support for existing small businesses at key stations and has also served to attract new businesses to formerly underserved locations.

In particular, the North Hollywood Orange Station has served as a catalyst for local economic development efforts with many small businesses in the area reporting increased customer volume and revenues associated with the station. In addition, new mixed use development is occurring within a half-mile radius of the station including over 200,000 square feet of commercial office space, 220,000 square feet of retail and food service uses, 800 housing units, and community facilities such as a health center and child-care center.

Lessons Learned for the East Corridor

The two examples in California above of the Fruitvale TOD in Oakland, and the Metro Orange Line in Los Angeles demonstrate success in building community within station areas and attracting new retail and commercial activity (in the case of the Fruitvale Main Street Program and Business Improvement District in Oakland and the North Hollywood station in Los Angeles, in particular). As with the previous case studies examined in this section, proactive efforts by local agencies and organizations have helped to create these successes. Providing marketing support to the Fruitvale Produce Stand corridor’s Dia de Los Muertos celebration has brought added interest to the area while reinforcing the district’s Latino identity and assisting small businesses to connect with a broader regional customer base.
Business Retention and Attraction

attract new businesses, as was done along the Metro Orange Line, is one example of taking the initiative to help businesses succeed. As partners in the East Corridor evaluate program opportunities for supporting local business retention and attraction, it will be important to develop a specific action plan listing activities, responsibilities, and potential funding sources and resources to support these efforts.

Business Retention and Attraction Footnotes

1. More information on these programs is available at: www.denvergov.org/oed/DenverOfficeofEconomicDevelopment/BusinessServices/BusinessAssistanceCenter
2. Much of the information for this Case Study was obtained through key stakeholder interviews conducted by BAE staff in the Twin Cities. In addition, extensive information on the business resources collaborative is available through the Central Corridor Funders Collaborative Web Site at: www.funderscollaborative.org/partners/business-development-group.
3. Ibid.
4. Ibid.
5. Ibid.
6. Tri Met staff were interviewed for this Case Study and additional on-line research was conducted by BAE relying heavily on the Tri-Met web site (trimet.org/about/history/yellowline.htm) as well as on reports and analysis from Policy Link (www.policylink.org/site/c.likXlMmNjrE/b.5136641/k.34E8/Improving_the_Built_Environment.htm).
7. Ibid.
8. Ibid.
9. Ibid.
Developing partnerships with other organizations, agencies, and businesses provides important opportunities to leverage the strengths, abilities, and resources of multiple agencies and organizations. Transit-oriented developments (TODs) support a variety of policies and goals related to housing, community development, transportation, and economic development. Opportunities to realize these policies and goals can be leveraged when multiple agencies and organizations come together and pool their resources. Partnerships are critical for bringing a wide range of interests and expertise together to deliver complete solutions.

The case studies presented on the following pages demonstrate that although the formation of partnerships and the scope of work may differ for each project, successful partnerships can be created and maintained when the following priorities are supported:

- **Internal Communication.** The partnership case studies described below demonstrate that transparency through communication between partners, including goal setting, assigned roles, and cross-collaboration, are key to maintaining successful partnerships.

- **Public and Interagency Involvement.** Leveraging local knowledge in addition to that of the partnering entities by engaging the community and other interested organizations will result in successful products and projects that are well-supported by the community. Partnerships can provide an important leadership opportunity for the community by addressing multiple community concerns at once. For example, TriMet in Portland, Oregon frequently relies on the community as an equal partner in the process to deliver successful TODs.

- **Early Planning.** Regional and local planning and transportation agencies are most successful when they develop policies and priorities early, even potentially before partners are identified, in order to guide decision-making in the future. These goal-setting policies should look beyond transit service to the surrounding station areas and larger communities and consider transportation, housing, and land use connections to transit that can be made in the future. The Valley Transportation Authority (VTA) of Santa Clara County, California provides an example of how agencies can plan for the future in regard to revenue generation, increased ridership, and TOD in order to identify the best potential partners.

- **Cultivating Expertise.** Partnerships can be the strongest when agencies share the same mission but differ in expertise. Partnerships help to leverage the strengths of different entities and sometimes result in the unexpected involvement of new entities in bringing broader community benefits. Portland, Oregon’s Patton Park project exemplifies the partnering of three typically limited organizations—an affordable housing agency, a transit agency, and a developer—to create a critical linkage between affordable housing, economic development, and transit.
DENVER, COLORADO—THE REGIONAL TRANSPORTATION DISTRICT FASTRACKS PROGRAM

Denver is currently engaged in a multi-billion dollar transportation project (FasTracks) led by the Regional Transportation District (RTD). While RTD’s mission is to provide public transit, it recognizes that supportive land uses reinforce ridership. In an effort to pair new transportation improvements with land use policies, RTD has developed an integrated strategy to work cooperatively with public agencies and private developers to shape built environments that promote livable transit-oriented communities. The strategy hinges on proactive planning and communication among RTD, local municipalities, and private developers.1

FasTracks is planning to build 122 miles of commuter and light rail in the Denver metropolitan region. As of 2012, there are 35 stations in service, and the number of stations is expected to more than double if the entire system is built as planned. A majority of the stations are located within the City of Denver, and approximately one-third are based in suburbs outside of Denver. The Denver region has already experienced notable development along the central and southeast corridors.

What are P3s?

A public-private partnership (P3) is typically a contractual agreement between a public agency and a private sector entity. P3s are designed to leverage the skills and assets of each partner to efficiently and effectively deliver services or facilities to be used by the general public. Each partner shares in the risks and rewards potential in the delivery of the service or facility.

For public entities, P3s have several benefits. They allocate lifecycle costs and risks of loss and delay to the private sector and allow the public sector to access private capital. In return, private sector partners share the profits associated with P3 projects and have the opportunity to increase those profits by realizing efficiencies and economies in the delivery of services or facilities. P3s often result in streamlined project delivery and infrastructure delivered at a lower cost than traditional project delivery methods. P3s are characterized by the following:

- They are used to provide both economic and social infrastructure.
- They involve the sharing of investment, risk, responsibility, and reward.
- They differ from privatization. The governmental entity often retains ownership and controls, and regulates and remediates non-performance.

Source: Adapted from the California P3 Infrastructure Group
Partnerships

Best Practices Research

Implementati    n support
coordination down the road among all players
in the development process, including local
municipalities and developers. The RTD
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cites as an intrinsic element of their success.
In addition, RTD leveraged resources from the
business community and beyond, through
partnerships with the Denver Metro Chamber,
Urban Land Institute, the American Planning
Association, and the Metro Denver Economic
Development Corporation. Moreover, the RTD
advanced the concept of corridor planning
and encouraged municipalities to develop
comprehensive visions for an entire corridor in
conjunction with single-station area planning.
Stakeholders were provided an opportunity to
consider a corridor in totality and identify with
how stations fit into a larger context.3

The Role of Local Municipalities—
Denver Area
Because the RTD does not have the authority
to make land use decisions, local municipalities
are responsible for translating RTD policies
through zoning and design standards, and can
facilitate land assemblage. In fact, one important
takeaway for the East Corridor and other
TOD in the central Puget Sound region is that
station area planning is a critical first step and
should be completed prior to the construction

RTD FasTracks

CITY: Denver, Colorado
CITY POPULATION: 2.9 million
PARTNERS: RTD (regional transit
authority), local municipalities,
developers, and business interests
AREAS OF WORK: Pedestrian access
and connectivity, land use and zoning
around transit centers, development
trending
TRANSIT LINKAGES: RTD FasTracks light
rail transit and high-capacity transit

Between 2004 and 2010, over 5,300 residential
units, 500,000 square feet of retail, and 2
million square feet of office were built within a
half-mile radius of existing stations.2

Partnership Model—Denver Area
The RTD has implemented strategies to
support development around future transit
stations. An innovative public-private
partnership model has emerged from this
process, which acknowledges the entities
involved in shaping the built environment,
as well as the levers for how these entities
contribute. The sections below describe the
roles of RTD, local governments, and private
developers in public-private partnerships (P3s).

The Role of the Regional Transportation
District—Denver Area
The role of the RTD, beyond implementing
transit infrastructure improvements, is to set
clear objectives, educate, and coordinate
among municipalities to ensure that land
use policies are consistent with the goals of
promoting livable communities. The RTD
created the Strategic Plan for TOD, which
laid out comprehensive goals and identified
how players in the development process
impact the built form. The Strategic Plan
for TOD was one of the hallmark actions
of the RTD’s implementation process. This
plan laid out fundamental TOD principles
and communicated RTD’s expectations,
establishing a clear framework for future
development of transit-oriented communities.

The RTD also launched a public outreach
campaign and built partnerships with
stakeholders to maintain sustained regional
support for TOD. While the initial purpose
was to educate the public and garner
developer interest, the open communication
that the RTD facilitated resulted in greater

cooperation down the road among all players
in the development process, including local
municipalities and developers. The RTD
communicated on an ongoing basis with
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takeaway for the East Corridor and other
TOD in the central Puget Sound region is that
station area planning is a critical first step and
should be completed prior to the construction
of infrastructure. Local municipalities proactively advanced station area plans and updated zoning and design policies to meet RTD and community objectives.

Local municipalities can also catalyze development by investing in infrastructure improvements at station areas. Streetscape improvements and upgrades to enhance the pedestrian realm provide a competitive advantage to station areas when attracting interest from the development community. In Colorado, local governments can use public financing tools like tax increment financing (TIF) to pay for these improvements. The RTD notes the presence of a TOD station area plan and commitments by local governments are part of their criteria for determining locations for development assistance.

The Role of Developers—Denver Area
Real estate developers need to realize a level of profit in order to undertake a project, and are responsive to both government standards and market forces. The economic recession and slow economic recovery led to a marked decline in new development from 2008 through 2012. In an ongoing effort to provide recent data on local markets and well-performing products, the RTD partnered with the Urban Land Institute to publish real estate market findings, which reinforced demand for different types of real estate. In addition, the RTD established a database for tracking new permit activity around transit, which provides insight about submarkets that are attracting new investment.

Roles in the RTD TOD Process

Roles in the RTD TOD Process (Source: RTD FasTracks, Strategic Plan for Transit-Oriented Development, 2010)
Partnerships

Joint developments that involve the use of RTD property, flexible land options (ground leases), strategic parking management, and access to grant funding are tools that the RTD utilizes to induce development in station areas. In an effort to demonstrate successful TOD, the RTD launched a pilot program to advance development using these tools to foster livable communities.

According to local economic development officials in areas outside of Denver, interviewed for purposes of this research, successful P3 developments around light rail stations are often driven by developers who are responding to market demand, and who perceive an opportunity to leverage public infrastructure investments to augment value to their own properties.

Examples of successful P3 initiatives frequently involved public entities and private property owners who stood to benefit from partnerships. For example, at the Dry Creek LRT station in Englewood, Colorado (Arapahoe County), the RTD, Colorado Department of Transportation, improvement districts, private owners, and others worked together to improve pedestrian access between the Dry Creek Station, located on the west side of Highway I-25, with development to the east. Previously, the design called for an at-grade sidewalk that would have required pedestrians to frequently cross a multi-lane roadway. Close collaboration among sponsors and property owners, with input from the private developer, were important factors for the successful completion of the bridge that facilitated unimpeded, grade-separated crossing for pedestrians to and from the station. An elevator was integrated into the bridge design to accommodate pedestrians with disabilities. Since the opening of the bridge, transit ridership has more than doubled, and the development on the east side, Vallagio at Inverness, has been widely cited as a case study of a well-designed, progressive, transit-oriented community. This example underscores how P3s can coalesce and advance capital projects that once completed, benefit both private development and public interests.

In Greenwood Village, Colorado, the Village Center Station is another example of a public private partnership that emerged from community goals to grow the tax base and create a focal point and gathering place for the community. The development occurred on 98 acres, located on both sides of Highway I-25. Multiple private development partners, including Shea Homes, the Madden Company, ING, Koelbel and Company, and others were involved in the project. In each case,
Land Leases and Flexible Land Options:

The use of land leases can be a mutually beneficial way to achieve public policy goals and private commercial goals. Land leases are especially attractive if public funds are included in the vertical development budget, which carries with it an obligation to pay state and/or federal prevailing wages anyway. A land lease means the owner (typically a public agency) would enter into a development agreement and grant the development rights to develop the site to their preferred (private, for profit, or nonprofit) partner. Unlike a sale, there is no lengthy foreclosure proceeding with the potential for delays and appeals.

Some public jurisdictions accompany the lease and development agreement with a license, which grants the public agency additional enforcement tools. The property, being publically owned, is therefore tax exempt but subject to the payment of Government Property Leasehold Excise Taxes (GPLET), which constitutes 12.84 percent on the imputed taxable rents (commercial or residential) in Washington state. The GPLET revenue is subject to distribution to the “junior” taxing districts. (If owned by a transit agency, then the distribution would cascade to city, county, school district, and port authority jurisdictions, for instance.) This revenue could be used as part of the value capture proposition advocated by the Growing Transit Communities Partnership and their stakeholders and is customarily used to finance public infrastructure improvements in the State of Arizona, for example. Such value capture would require the acceptance of the other taxing districts through an intergovernmental agreement.

Many developers like land leases because they don’t have to carry the cost of the land throughout the entitlement process, thereby reducing their cash outlay and risk. They prefer leases where the land owner agrees to subordinate their leasehold interest to the first mortgage debt. Some lenders will loan on leased land without such subordination, provided the loan can be assigned to a replacement developer with some ease and predictability. This structure is commonly used by port authorities in Washington state, which do not typically subordinate harbor and airport properties land to financing.
transportation and land use while simultaneously acknowledging that the execution of TOD also can create institutional challenges, with no one agency responsible for making TOD happen. The RTD’s active involvement in collaborating with local governments has been instrumental in translating TOD objectives into tangible results at the local level. The agency has also been proactive in improving its processes and has cited additional areas for improvement, including:

- Continuing efforts to promote the Strategic Plan for TOD and integrating these policies into the design process;
- Maintaining outreach efforts with partner agencies and organizations;
- Advancing corridor-wide planning early in the planning process;
- Tempering expectations created during the station area planning process with market realities;
- Considering alternatives to 1:1 commuter replacement parking, which developers cite as cost-prohibitive to development; and
- Improving communication during the design and construction process between RTD, local jurisdictions, and developers to ensure that projects actively reinforce TOD principles.

Similarly, the cities of Bellevue and Redmond have already adopted transit-supportive plans and enacted policies to support transit and TOD well ahead of the trajectory of private investment and development.

**PORTLAND, OREGON—THE USE OF P3S (DEVELOPER AND AGENCY PARTNERSHIPS)**

The Portland, Oregon region has pursued an aggressive strategy of linking transportation and land use that is very supportive of TOD at a number of levels. Public-private partnerships (P3s) involving a variety of public agencies and the private real estate development community are the primary vehicle for implementing development goals around light rail stations in the Portland region.\(^5\)

One critical element driving the success of P3s in Portland is a focus on adopting land use and zoning policies that are supportive of density and based on allowing developers to achieve “highest and best use” development, which meets developer expectations for financial returns. Legally-binding station area plans have been funded by TriMet and adopted by local governments before each MAX LRT line has opened for service. The station area plans include strategies such as prohibiting auto-oriented uses, and requiring minimum densities, parking maximums, and other design standards that support TOD.

**Patton Park Apartments Mixed Use Development—Portland, Oregon**

Within this context, Patton Park Apartments is the first major P3 mixed use project to be developed along the Interstate Avenue corridor. Patton Park is an affordable housing development with ground-floor commercial and community service uses in a five-story, wood-frame building on a 24,000-square-foot lot. The project is comprised of 54 units...
Patton Park Apartments (including two studios, 36 one-bedroom units, four two-bedroom units, and twelve three-bedroom units). One key element of project feasibility was the ability of the developer to provide surface parking with a low parking ratio at .6 spaces per unit. The ground floor of the project has 4,500 square feet of commercial space occupied by the offices of a housing trust fund, a day-care facility, and office area. These uses, in turn, support local community and economic development goals.

The key partners in this development included TriMet as the parcel owner, Portland Development Commission (PDC) as a major funder, and REACH Community Development as the project developer. The total 2005 development cost of the Patton Park Apartments was $12.1 million. In keeping with its policy of promoting comprehensive transit-oriented places, TriMet originally purchased the parcel directly adjacent to the North Killingsworth MAX LRT station prior to the completion of the Yellow Line in 2004. In 2006, TriMet issued a request for proposals to identify a developer that could achieve the agency’s stated goals of activating the street through ground floor commercial uses; providing affordable housing for families earning less than 50 percent average median income (AMI); and supporting transit ridership. The Portland Development Commission provided a one percent interest only (deferred) second mortgage. Low Income Housing Tax Credits (four percent-syndicated by Enterprise Community Partners) were also used to ensure long-term affordability.

The project has received strong community acceptance and is seen as model for future mixed use and mixed income development along the Interstate MAX LRT line.

**Lessons Learned for the East Corridor**

In the case of Patton Park and in many other examples of successful P3s in the Portland,
Oregon metro area, TriMet played a crucial leadership role in acquiring land and partnering with other public agencies and the private sector to support TOD. The agency’s underlying philosophy regarding P3s is to focus on creating holistic transit-oriented places that can help to build long-term, sustainable ridership, rather than focusing narrowly on transit system operations. The role of TriMet in these transactions as a proactive community partner stands in contrast to many other transit agencies that have more traditionally limited goals and policies focused narrowly on system efficiencies and agency finances. This model of transit agency collaboration and leadership in driving P3s could potentially inform future efforts on the East Corridor as Sound Transit considers its role in partnering with other public agencies and the private sector to promote complete transit-oriented places and to sustain transit ridership.

### TEMPE, ARIZONA—TOD COLLABORATIONS

The following examples from the Phoenix, Arizona metropolitan area provide insights into how successful partnerships and collaborations have formed to implement TOD in an existing context that has similarities to the East Corridor.

**Tempe Transportation Center—Tempe, Arizona**

The Tempe Transportation Center is a unique example of transit agency and city government joining together to develop a sustainable, multi-functional transportation center with a mix of public and private sector uses. Located a few blocks from Arizona State University (ASU), the Tempe Transportation Center is a Leadership in Energy and Environmental Design (LEED) Platinum building that demonstrates TOD principles in a less dense urban environment. The center provides areas for light rail and bus service, commercial and office space, the Don Cassano Community Room, and an indoor bicycle station with shower facilities known as the Bicycle Cellar. The Tempe Transportation Center was built through a partnership between the City of Tempe and Valley Metro, the regional transit agency, and is owned by City of Tempe. Commercial and office tenants lease space in the. The facility was made possible through close collaboration with ASU and is notable as one of the first Phoenix-area TOD hubs with multimodal bike and pedestrian facilities.
Phoenix/Mesa/Tempe, Arizona—Sustainable Communities Collaborative TOD Loan Fund

The Phoenix metropolitan region is engaged in one of the most ambitious efforts in the United States to reshape its urban landscape through investment in transit facilities along with related land use and community planning efforts. Motivated by the unique opportunity that this major investment represents, a number of prominent public, private, and nonprofit organizations formed the Sustainable Communities Working Collaborative, a partnership whose primary focus is to make TOD a reality in areas well served by mass transit. In addition to providing policy support and advocacy for TOD in the Valley, the Sustainable Communities Working Collaborative has created a revolving Sustainable Communities Fund to incent, leverage, and guide development of equitable TOD in areas well served by high-capacity transit. The Fund is initially capitalized at $20 million with investments from the Local Initiatives Support Corporation and the La Raza Development Fund, and efforts are underway to obtain additional equity investments, program related investments, grants, and loans from local and national sources. This Fund constitutes the Phoenix metropolitan area’s first financial tool focused on changing development patterns through an equitable TOD paradigm. The Sustainable Communities Fund may be used for:

- Affordable residential development at light rail station areas;
- Essential related development such as grocery stores, schools, child care, and health care facilities; and
- Project costs related to infrastructure development such as sidewalks and shade structures.

SANTA CLARA COUNTY, CALIFORNIA—JOINT DEVELOPMENT MODEL

The Valley Transportation Authority (VTA) in Santa Clara County, California provides bus and LRT services connecting the economically dynamic Silicon Valley region. The VTA has been proactive in promoting and implementing TOD for well over a decade with some notable successes and failures. The VTA is primarily engaged in partnerships with other public agencies and private for-profit and nonprofit developers in connection with its portfolio of agency-owned development sites around transit stations. The VTA is implementing fifteen joint-development projects around VTA stations, six projects around regional CalTrain commuter rail stations, and five projects involving VTA owned sites in other urban, infill locations.

The VTA Joint Development Model—San Jose and Santa Clara County, California

VTA gained national recognition for the Tamien Child Care Center, one of the first major examples of a community-oriented TOD supported by a transit agency. Located at the Tamien Light Rail Station in central...
Despite these early successes, development around VTA stations has sometimes fallen short of achieving densities that could be considered transit-supportive (e.g., the low-density development at the Whisman Station in Mountain View). In order to avoid these “missed opportunities” for TOD, in 2009 the VTA Board adopted a comprehensive joint development policy to guide the disposition and development of all VTA-controlled properties. The goals of the joint development policy, in priority order, are to:

- Generate revenues for the agency;
- Carry out transit-oriented development; and
- Increase ridership on the VTA system.

According to the VTA, a comprehensive evaluation of VTA’s real estate assets is performed on a regular basis to ascertain the assets most suitable for development and leasing. Factors considered in the ranking of these real estate assets include:

- Site size;
- Infrastructure and environmental development constraints;
- Land value;

San Jose, the center is built on a portion of a surface parking lot owned by VTA and is a nationally recognized model of employer-assisted childcare combined with transit. VTA also created an early precedent for active engagement in TOD partnerships when it supported the Ohlone–Chynoweth mixed use affordable housing project located on an underutilized park-and-ride lot adjacent to the LRT station in south San Jose.
Partnerships

Implementati     east Corridor

Best Practices Research

VTA Downtown San Jose Station, California (Source: Wikimedia Commons, 2009)

- Real estate market conditions; and
- Local jurisdictional policy goal, land use policies, and the regulatory context.

The joint development portfolio is evaluated by agency staff to determine those real estate assets with the most near-term development potential, and this subset of properties is in turn used by the VTA to target limited resources towards investments in infrastructure and development readiness at priority development sites.

Lessons Learned for the East Corridor

With more than fifteen years of experience entering into P3s to support TOD, the VTA Joint Development Policy offers a potentially useful model for other public agencies seeking to set clear policies for directing scarce resources to support high quality TOD on sites owned by the public sector. The mixed history of TOD around transit in Silicon Valley offers some transferable lessons to the East Corridor regarding how to rank and prioritize development opportunities. This in turn helps to ensure that the transit agency receives a strong return on its investments while also supporting the goal of creating high quality transit places.

SPRINGFIELD, OREGON—LANE TRANSIT DISTRICT EMX BRT LINE

The Lane Transit District (LTD) in Lane County, Oregon operates a bus rapid transit (BRT) system, called EmX, connecting the cities of Eugene, Oregon, home to the University of Oregon, and Springfield, Oregon, where the state capitol is located. The first line of EmX, referred to as the Green Line, began service in 2007 and currently has over 1.5 million boardings per year. The LTD is notable for having established a joint development partnership at the EmX Springfield Station, which has garnered attention as one of the first examples of a joint development project connected with a full service BRT line.

Lane Transit District EmX BRT Line

CITY: Springfield, Oregon
CITY POPULATION: 59,695
PARTNERS: Lane Transit District, nonprofit development partners
AREAS OF WORK: Joint developments
TRANSIT LINKAGES: EmX BRT Line
Partnerships

Despite the noted success of the EmX BRT system operating successfully in a relatively low-density suburban context (less than 200,000 people), P3s have been difficult to achieve along the BRT line based on the following factors:

- There is not as much research and validation of development potential and value associated with BRT as there is with LRT (based on national data);
- There has been a weak market for all residential and commercial real estate since 2008;
- Transit-oriented development and other non-traditional development types are not as well known to local developers; and
- Local banks and other lending institutions likewise have been conservative about funding TOD projects along the BRT line.

The LTD states that more time and effort is needed in research related to TOD potential along the BRT line, especially with regard to the synergy between employment uses and station locations. In the future, LTD staff intends to attempt to overcome local perceptions about TOD by focusing more on nonprofits as development partners with support from financial intermediaries, especially for affordable housing. The agency has already had some success attracting nonprofit and affordable housing uses to station areas based on the proximity to BRT services.7

Lessons Learned for the East Corridor

Based on discussions with LTD staff, the following lessons from the EmX BRT system have broad applicability to the East Corridor planning and development context:

- Bringing both the development community and the finance community into the transit planning process early, creating strong relationships, addressing concerns and risks, and making them more comfortable with TOD, could lead to more tangible results;
- Making transit planning also about development planning and considering land...
use and strategic goals of the local jurisdiction when locating stations is important;

- Finding ways to minimize financial risk (for example, controlling and assembling property either by the transit agency or city) and creating partnerships with developers could help to catalyze projects;

- Updating city zoning and policies to be more transit-supportive and improving the approvals process for TOD may help to incentivize development;

- Establishing advocacy and financial partnerships early in the transit planning process can help to show the diversity of support for TOD; and

- Keeping partners active throughout the long process to implementation is also critical to success.

**PLEASANT HILL BART STATION—SAN FRANCISCO BAY AREA, CALIFORNIA**

For much of its history Bay Area Rapid Transit (BART), providing high-capacity transit service to the San Francisco metropolitan area, has lagged behind other major regional rail transit providers in the area of P3s and TOD. Starting in 2005, however, the agency adopted a more flexible policy regarding replacement parking which has led to the development of several new TODs involving the use of ground leases and joint powers authorities (JPAs) to apportion risk and financial returns between BART, local public agencies and private development parties.

A JPA between a local jurisdiction and the transit agency (BART) provides a mechanism for shared funding and operations of shared parking in the transit area. This complex P3 structure has resulted in development of the Pleasant Hill BART/Contra Costa Centre TOD in Contra Costa County, CA. After nearly a decade of extensive land use planning and design efforts and with the support of funding from the County Redevelopment Agency, the implementation of this P3 has resulted in major new increments of office development, retail space, and market-
Partnerships

rate and affordable apartments. Perhaps the most critical element of the TOD was the County Redevelopment Agency’s financing of a $45 million parking garage to replace surface parking spaces for BART riders. BART's primary contribution was in the form of real estate in exchange for which it received replacement parking and a share (25 percent) of future ground lease revenues generated by private development activity. It should be noted that certain elements apportioning ground lease revenues between the redevelopment agency and BART will likely need to be renegotiated in light of the dissolution of California redevelopment agencies.8

Lessons Learned for the East Corridor
When considering TOD potential around East Corridor station areas, it is important to consider phased opportunity for redevelopment. This includes the potential future transformation of surface park-and-ride lots to mixed use developments with housing, employment, and commercial retail uses that can contribute to sustainable ridership. BART and its partners have found opportunities to leverage real estate in exchange for replacement parking and a share of future ground lease revenues as part of development agreements for TODs on former park-and-ride sites in station areas. This can be a model for Sound Transit and local municipalities on the East Corridor for how to create vibrant, equitable TODs in station areas over the long-term, particularly those with surface park-and-ride areas.

Partnerships Footnotes
2. Regional Transportation District, Denver, Colorado 2012.
3. Based on Plan and related documents accessed through the RTD web site as well as key informant interviews conducted by BAE staff in the Summer and Fall of 2012.
4. This TOD has been widely profiled in reports on suburban TOD, including by the Urban Land Institute. Information for this profile was obtained from on-line sources as well as from conversations with City staff.
5. Much of the information presented in this case study has been drawn from publications available on the Tri-Met Web Site: http://trimet.org/publications/. In addition, Tri Met staff and staff from the Portland Development Commission gave generously of their time in providing detailed information to BAE and OTAK staff on P3s in the Portland Region, including in particular Patton Park.
6. Detailed information on VTA’s joint development portfolio is available at: www.vta.org/realestate/devandleasing/portfolio.
7. OTAK staff conducted interviews with Lane County Transit officials, which informed this case study.
8. More information regarding this and other BART projects is available at: www.bart.gov/about/projects/index.aspx. In addition the final executed ground lease for this project is included in the appendix to this report.
TRANSPORTATION ACCESS AND CONNECTIVITY

Multimodal transportation access and connectivity are key factors in creating equitable TODs. Transportation access and connectivity have strong interrelationships with the other focus areas of partnerships, business retention and attraction, and affordable housing. When considering how to strengthen neighborhood livability in transit station areas, it is important to place a high priority on improving pedestrian, bicycle, and local transit access and connectivity. Careful management of automobile access and parking is also critical. Relevant transportation access and connectivity case studies were researched and are presented on the following pages. The examples researched reinforce the need for the following actions.

- **Strengthen multimodal access to and surrounding transit centers.** Considering access to, from, and within transit centers should include all modes of transportation and serve people of all abilities. Connections to and from transit centers and stations should be seamless from the street, and connections within centers and stations should be fast and intuitive. The design of station areas should provide safety and ease of movement for pedestrians, bicyclists, riders of connecting transit/bus systems, and kiss-and-ride (drop off) and park-and-ride passengers. Strengthened connections to the surrounding neighborhoods via complete streets, shared use paths, improved physical connections between multiple modes of transit, traffic calming and pedestrian crossing features such as bulb-outs, and other facilities should be addressed as part of all TOD projects.

- **Improve pedestrian safety and access.** Although most transit centers include pedestrian facilities such as sidewalks and crossings, the confluence of cars, buses, and trains in one area can lead to conflicts between pedestrians and vehicles. Design and implementation of TOD must consider pedestrians’ needs at every stage. This includes designing buildings and streets oriented to pedestrians and to pedestrian scale, providing continuous and direct sidewalks, installing pedestrian crossing devices (such as countdown signals, pedestrian refuge islands, curb extensions, etc.), and configuring pedestrian plazas adjacent to platforms for efficient and direct access. Clear signing and wayfinding for pedestrians are also important.

- **Carefully consider grade separated solutions.** Grade separation (such as bridge crossings above multi-lane roadways) can be beneficial for enhancing pedestrian and bicycle access to transit. However, if these facilities are poorly configured or designed so they are inconvenient to use, pedestrians and bicyclists may not use them and may continue to cross at grade. Each situation needs to be carefully studied for the right approach. In most cases adjacent to LRT and BRT stations, bridge crossings over streets should include integrated elevators to provide access to people with disabilities (instead of ramps, which require extensive space and can create barriers to use and access). For example, many of the Regional Transportation District pedestrian and bicycle bridges along the Fastracks system include elevators on both sides of the crossing. These facilities also provide covered crossings and passageways to protect pedestrians and bicyclists from inclement weather.

- **Create strong bicycling connections.** Bicycling serves as an important link for transit riders. If improvements and facilities are provided...
transportation access and connectivity

for bicycling, the reach of transit can be extended within a community. Protected bicycle routes to and from the transit center and avoidance of significant grade changes are important for accommodating access. Providing facilities for bicycle storage at transit centers as well as methods to transport bicycles on transit, can also enhance the linkage between bicycling and transit and reduce vehicle trips and vehicle miles traveled within and surrounding station areas.

why pedestrian access to transit is important
Public transit is dependent upon the quality of the pedestrian environment. A safe, accessible, attractive pedestrian environment not only encourages transit ridership, but also creates an efficient, seamless connection between the pedestrian and transit modes of transportation.

The Americans with Disabilities Act (ADA) requires that transit facilities, infrastructure, and equipment be accessible to people of all abilities. This includes the pedestrian infrastructure approaching stations and within station areas, including public streets and rights-of-way, as well as intersections and crossings.

Attention paid to the pedestrian environment through planning and design of the public right-of-way extends the ability of the transit system to capture new patrons and markets, and as such, supports long-term sustainability of the transit system.

Best Practices in Pedestrian Access and Connectivity in Station Areas
Improving pedestrian access and connectivity in East Corridor station areas will be an ongoing priority as these areas redevelop. The East Corridor Task Force and project management team requested that this report provide a brief summary of best practices in pedestrian access and connectivity in station areas. Key considerations as well as various types of tools and improvements for facilitating pedestrian access to transit are highlighted on the following pages. This information is followed by summaries of transportation access and connectivity best practice examples from North America.

how universal design and the ada relate to transit
Universal design was first termed by Ron Mace, founder of the Center for Universal Design, as “the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.” Universal design benefits people of all ages and abilities.

Designers apply universal design best practices and required standards of the ADA when developing plans for stations, station areas, and TODs. In many cases, applying the

universal design principles
The North Carolina State University Center for Universal Design outlines the following principles of universal design:

• Equitable Use
• Flexibility in Use
• Simple and Intuitive Use
• Perceptible Information
• Tolerance for Error
• Low Physical Effort
• Size and Space Appropriate in Context for Specific Use

Source: North Carolina State University Center for Universal Design
principles of universal design can alleviate the need for additional facilities or treatments to accommodate people with special needs. For example, if a pedestrian corridor can be designed for universal use by everyone, without stairs and below the maximum grades allowed by the ADA, there will not be a need for ramps. The requirements of the ADA apply to all public rights-of-way, transit platforms, signals, curb ramps, crosswalks, curb extensions, lifts and lift deployment, shelters, vehicles and paratransit service, signage and wayfinding, fare boxes, announcement systems, and other facilities and places used by transit patrons and the general public.

**THE ROLE OF COMPLETE STREETS IN PROVIDING ACCESS TO TRANSIT**

Every transit trip begins and ends as a pedestrian trip. However, in too many cases the design of roads and streets that lead to transit is out of sync with the needs of the people who are riding the trains and buses. Poor design and incomplete streets discourage people from using public transportation and can also slow transit service. A study in Houston found that three out of five disabled and elderly citizens did not have sidewalks between their home and the nearest bus stop, and fewer than ten percent of them used public transportation even though fifty percent lived within two blocks of a bus stop. A lack of sidewalks or pedestrian paths linking the entire catchment area of a transit stop forms a barrier to transit use by all members of the community—young and old, with or without disabilities. A strong movement to create “complete streets” is underway across the nation, and many communities have begun to prioritize creating streets that work well for all modes of transportation including public transit vehicles and their riders. Streets that are well designed for transit can encourage more people to get out of their cars and onto the bus. Communities are observing that that buses and trains carry more people at a lower cost than automobiles, and help ease congestion and air pollution. Improving access to transit also reduces dependence on more costly alternatives, such as paratransit or private transportation services.

Transit systems have also discovered that bicycling and transit go well together. Most transit agencies now provide bicycle parking at bus and rail stops, and many transit systems in the US carry passengers’ bicycles on buses and trains. This extends the range that customers can travel to reach transit — assuming the roads to the transit stop are bicycle-friendly. Some transit agencies are working in partnership with departments of transportation to improve bicycle facilities in areas surrounding transit stops and stations. Adopting and implementing complete streets policies helps to ensure safe and convenient access to public transit for all users. Complete streets policies help create the safe and convenient access to transit and smooth predictable transit trips that help make public transportation an attractive option.

**CASE STUDIES IN TRANSPORTATION ACCESS AND CONNECTIVITY**

The following case studies from Denver, Colorado; Burnaby, British Columbia; Portland and Beaverton, Oregon; Daly City in the San Francisco Bay Area, California; New Westminster, British Columbia; and Chicago, Illinois illustrate various best practices related to enhancing transportation access and connectivity in high-capacity transit station areas. Many of the case study locations were specifically selected because they are similar in context to the East Corridor.
Prioritizing Pedestrian Connections to Stations

The following types of improvements should be considered when planning, designing, and investing in facilities to enable convenient and safe pedestrian access in TODs. Thinking of pedestrians’ needs as a first priority in station areas is recommended. Refer to the Bay Area Rapid Transit (BART) Station Access Hierarchy incorporated in the BART Station Access Guidelines, which places emphasis on providing safe, direct, and convenient pedestrian access to BART stations in the use of land, right-of-way, and agency funding for station access and connectivity.

- **Well-connected and continuous sidewalks and pathways:** All public streets and roads leading to and surrounding the station should have continuous sidewalks of sufficient width to serve the number of projected pedestrians who will be walking to and from transit each day. Shared use paths can also provide access to stations for pedestrians and bicyclists, but are not a substitution for in-street facilities.

- **Pedestrian-friendly signalization and improvements at nearby intersections:** Signal timing should be set or adjusted to ensure sufficient time for elderly and other mobility-challenged transit patrons to cross streets (including wide arterial roadways) at a reasonable pace without risk of conflicting traffic; count-down signals should be provided to let pedestrians know how many seconds remain to cross before the traffic lights will change; a leading pedestrian interval can be provided at intersections to allow pedestrians a head start in crossings, making them more visible to turning vehicles; and various other types of features such as audible signal devices, curb ramps with tactile warning strips, and other elements required by the ADA all contribute to improving pedestrian access and connectivity to transit.

- **Median pedestrian refuge islands:** Installation of a raised island in the median of a roadway can significantly improve pedestrian safety and comfort by reducing the total crossing distance and limiting the number and types of potential conflicts between vehicles and pedestrians. With a refuge island in place, pedestrians can cross streets in two stages, focusing their attention only on the direction of on-coming traffic in each phase of the crossing. The median island can serve as a refuge from traffic, where pedestrians can wait for oncoming traffic from the other direction to clear, before making the second leg of their crossing. Medians and refuge islands can be installed at intersections with proper design, but are also commonly used to facilitate mid-block crossings.

- **Curb extensions or bulb-outs:** Similar to refuge islands, curb bulb-outs can significantly reduce the crossing distance and time for pedestrians. Curb bulb-outs improve intersection efficiency for vehicular traffic as well, by reducing the time required for pedestrian signal phases. Bulb-outs also enhance pedestrian safety by increasing the visibility of pedestrians waiting to cross (putting them more directly in drivers’ line of sight) and by encouraging reduced traffic speeds.
DENVER, COLORADO—PEDESTRIAN CROSSINGS AT RTD FASTRACKS STATIONS

With several Regional Transportation District (RTD) LRT lines running alongside freeways and major arterials, creating multimodal connections to LRT and bus stations has been a significant concern for system connectivity in the Denver metropolitan area. RTD has worked to develop several pedestrian and bicycle shared use bridges with connections between adjoining neighborhoods and transit centers. The Colorado Center Station Pedestrian and Bicycle Bridge is one of the more prominent examples of RTD’s transit connection efforts, connecting two neighborhoods together and a transit station along Interstate 25.

The Colorado Center Station Pedestrian and Bicycle Bridge is anticipated to begin construction in early 2013 and be completed in 2014. The bridge is critical towards the goal of a transit-oriented neighborhood as it provides access to a major LRT station as well as access between two neighborhoods. The bridge is referenced in numerous regional, citywide, and neighborhood planning and policy documents completed in the area over the last ten years. Interstate 25 had created a large barrier between two neighborhoods and crossing the interstate to access the Colorado Center Station as a pedestrian or bicyclist required maneuvering on a high-speed arterial. The bridge will provide access between neighborhoods and to a major LRT station for over 500 residents and 500,000 square feet of office and retail space within a half-mile radius.

The project was initiated by the City of Denver through a submittal for federal transportation funds administered through the Denver Regional Council of Governments (DRCOG) and was eventually funded jointly by the Federal Transportation Improvement Program (TIP) and the City of Denver, each investing four million dollars.

As discussed previously, planning and design of grade separated pedestrian and bicycle bridges requires careful study and analysis. In the case of the Colorado Center Pedestrian and Bicycle Bridge, the alignment design for the pedestrian/bicycle bridge was chosen after analysis and screening of several alternatives. In total, five different alternatives were identified.
The alternatives were compared based on numerous factors including visibility, access, usage, bridge span, infrastructure impacts, utility impacts, and obtaining right-of-way. Once the alignment was finalized, access and approach to the bridge was considered. The bridge will be elevated considerably due to the grade of the interstate and surrounding neighborhood. The design considered different ramp configurations for approach to both bridge approaches, including a helix, straight line, switchback, and elevator. The project partners (City of Denver, RTD, and others) looked at feasibility of each ramp configuration, considering constructability, impact to utilities and ROW, connectivity, and access. The partners then conducted several public meetings to gain an understanding of the alternatives for residents and potential users.

The final bridge design features a “long ramp” at each approach, providing the ability for ADA-accessibility, continuous bicycle movement (no dismount needed), and the greatest connectivity for residents and employees to and from the LRT station.6

BuRNABY, BRITISH COLUMBIA, CANADA—TRANSIT CONNECTIONS

The Metrotown SkyTrain station and bus exchange is located on the Expo Line in Burnaby, British Columbia, at the center of the Metro Vancouver region. It is situated between a regional mall, the Metropolis at Metrotown, and the Maywood neighborhood. Although the station has long been directly connected to the mall by an elevated pedestrian walkway, the surrounding high density residential neighborhood is largely disconnected, with limited bicycle and pedestrian access to the station site. To transfer from SkyTrain to local or regional buses at Metrotown requires passengers to cross over the elevated walkway and down to the ground level of the mall, where they may await their bus in a partially covered garage.

This Metrotown area, which is designated as a Regional Town Centre in Metro Vancouver’s recently adopted Regional Growth Strategy1, has also experienced considerable residential and employment densification over the past...
two decades. New residential towers have been built on the mall-side of Metrotown Station, and more residential development is planned for both the Maywood and mall-sides of the station area. Given these factors, and an aging SkyTrain station, TransLink developed a plan and established funding for a new station and bus exchange. The City of Burnaby, transit operators, and area stakeholders were partners in the planning process.

The station upgrades will begin in 2013 and include a new station house, reconfigured bus exchange, improved accessibility at the station along the elevated walkway to the mall, installation of fare-gates, and realignment of the British Columbia Parkway regional bicycle path. Other access improvements in the area within one-half mile (800 meters) of the station are planned and will be implemented as soon as funding is available from municipal cost share and area plan updates. Potential improvements discussed in the Metrotown Exchange Draft Functional Plan include provision of on-street parking, a retail façade to conceal the relocated layover facility under the mall, widened sidewalks, improved crosswalks, and signal phasing adjustments to favor pedestrian and transit movements.

The Metrotown Exchange Draft Functional Plan (March 2012) presented a preferred option for the recommended bus exchange expansion and reconfiguration. This plan would relocate the bus exchange from under the mall to the south side of Central Boulevard, at the base of the SkyTrain station. With a nose-to-tail bus bay alignment, the exchange will have capacity for five articulated independent arrival/independent departure bus bays plus one standard independent arrival/independent departure bus bay on the south side of the station and three articulated independent arrival/independent departure bays on the northwest side.

It is important to note that Metrotown Station has very different weekday and weekend ridership patterns than in many commuter-oriented transit networks. Rather than sharply peaked ridership during typical commute
hours (6-9 AM and 4-7 PM), Metrotown sees more bus and rail ridership on weekends and midday due to the overall heavy use of the station by the surrounding population and the regional connections it provides (11 routes terminating at Metrotown, and over 50 trips departing from the exchange every hour (a little under one departure per minute). At the peak hour, the bus exchange facilitates 800 to 900 boardings, with an average of 17 boardings per trip.

Four very high ridership bus transit routes serve Metrotown, including Route 49, which serves the University of British Columbia via Dunbar Loop (a corridor with no parallel rail service). With the reconfiguration of the exchange, a key improvement in access, connectivity, and integration of rail and bus services is that transfers between SkyTrain and buses will take place on the same side of the street (with escalators and elevators facilitating a connection between the elevated rail line and the street-level bus service). Transferring passengers will no longer be required to cross over Central Boulevard by walkway or at grade. The lone exception is Trolley Route 19, which will continue to serve the Metrotown Station from the existing bus transfer center under the Metropolis Mall.

Metrotown is designated as the City of Burnaby’s Regional Town Centre and is zoned to permit high density mixed use and commercial development around the Metrotown Skytrain Station and bus exchange. There has been a concerted focus on mixed use density around high-frequency regional and local transit connections in Metro Vancouver.

The rehabilitation of the SkyTrain Station and reconfiguration of the associated bus exchange have not yet been implemented, but transit ridership remains high, and the area is a regional center for TOD. Metrotown is the second busiest station in Metro Vancouver’s SkyTrain rapid rail transit system. It is an important transfer station, and a dense employment and residential center and retail destination in its own right. It is at the center of and has been a primary driver of substantial commercial office, commercial retail, and high density residential development in the area.

This station is an example of transit becoming so well integrated into the community that people use it for multiple trips each day. The
more trips people can make (to and from work, running errands, shopping, etc.) the more neighborhoods benefit with less traffic congestion and less environmental impacts. In the Metrotown example, Translink noted that the mall is so well-connected to transit that it’s not uncommon to see passengers carrying a gallon of milk or other groceries with them on the train or bus.

The elevated walkway between the elevated rail station and the second floor of the mall is the most highly used pedestrian access way for Metrotown Station. This connection has made pedestrian access to the mall extremely convenient and comfortable (protected from the elements), but has come at the cost of reduced street-level activity. With the relocation of the bus exchange from underneath the mall to under the SkyTrain station, pedestrian patterns may change and more people may cross at street level rather than on the elevated walkway, activating and enlivening the street, its sidewalks, and associated pedestrian and bicycle facilities. In addition to pedestrian wayfinding signs and maps, private sector investment in pedestrian-oriented design will greatly improve accessibility and the character of the street level in the Metrotown Station area.

Lessons Learned for the East Corridor
One of the key connectivity related challenges for implementation of East Link is to fully integrate the new service with the RapidRide B Line, Sound Transit ST Express bus services and local King County Metro transit services in east King County. Although no plan for restructuring local and regional transit services has yet been initiated for the East Corridor station areas, it is clear that both the Hospital Station and the Overlake Transit Center Stations will be major bus-rail and bus-bus transfer points and key nodes in both local and regional transit networks. All the Bel-Red Corridor stations will be key transfer points for travel between the

Proposed Metrotown Village Station Area Redevelopment Plan (Source: TransLink, 2011)
Crossroads and Bellevue communities along the NE 8th Street Corridor and Downtown Seattle and other destinations accessible via the Sound Transit Link LRT system.

A grid-based street and transit network, allowing passengers to transfer from bus to bus, between modes, and from bus to rail, can allow for more frequent service and more extensive geographic coverage than some other transit service models. However, for such an intermodal system to work, it is essential for transfers to be simple, safe, and fast, lest the transfer become a barrier or an inconvenience to riders that negates the benefit of time savings.

Seamless and convenient transfers depend not only on coordinating schedules, but also on the design of transfer stations and bus and pedestrian circulation patterns. Ideally, patrons can transfer from one vehicle to the next without leaving the same platform or station/stop. Where switching to a different platform or station/stop is necessary, care should be taken in design to minimize the distance that patrons must walk to reach the service they are transferring to. It is especially important to minimize obstacles, or changes in grade, such as stairs and street crossings that can present safety hazards and barriers.

A best practice in designing bus to elevated rail transfer stations—such as that envisioned for the Hospital Station in Bellevue—is to position bus stops in a location that will not require patrons to cross a busy arterial roadway to transfer from bus to rail or from rail to bus. TransLink, the regional transit agency for the Vancouver, BC Metropolitan Area has faced this station and service design challenge at many stations in its rapid transit network, which is largely elevated outside of downtown Vancouver and the Cambie Corridor. The recently adopted plan in Burnaby, British Columbia, demonstrates how to reconfigure the bus exchange and local circulation patterns to facilitate smooth transfers at the Metrotown SkyTrain Station.

**PORTLAND-BEAVERTON, OR—BICYCLE ACCESS TO TRANSIT**

**Bicycle Access to Transit and Secure Bike Parking**

Efforts by the cities of Portland and Beaverton, Oregon and TriMet (the regional transit service provider) have facilitated bicycle access to MAX LRT stations. There are a variety of bicycling facilities and approaches to bike parking that have been employed successfully in the Portland metropolitan region with the effect of enhancing station access and connectivity within transit corridors and station areas. These include secure bike-and-ride parking facilities at selected stations, bike stations (attended bike parking), and bikeways such as bicycle boulevards (also known as neighborhood greenways), cycle tracks, and shared-use off-street paths that expand the area accessible to regional transit stations and transit centers.

**Bicycle Boulevards or Greenways**

Bicycle boulevards are low-auto-traffic streets that have been optimized for use by bicyclists. A variety of traffic calming elements and signage are used to reduce car volumes and speeds, fostering a safe bicycling environment. Bicycle boulevards often include features that allow bicyclists to travel farther without stop controls, such as intersection treatments that allow bicyclists to continue through intersections, while cars are forced to turn. In 2009, the Portland Bureau of Transportation applied for and was awarded funding from the American Recovery and Reinvestment Act (ARRA) to add larger sharrows (shared-lane markings) to communicate the presence of bicyclists to drivers on 30 miles of existing greenways and to establish 23 new miles of new greenways complete with sharrows and directional signage.
One of the key greenway projects completed with ARRA funding in 2010 was the SE Mill Street Greenway, from SE 60th Avenue/Lincoln Street intersection to the Interstate 205 path on SE Mill Street. This route provides connections to Harrison Park and MAX Green Line Light Rail Stations at SE Division Street and SE Main Street via the north-south Interstate 205 Bicycle Path. The project enhanced bicycle and pedestrian safety and priority on routes accessing transit by:

- Turning stop signs on several cross streets to give the right-of-way to traffic on the bike boulevard;
- Installing new directional signage for bicyclists and pedestrians indicating the direction and distance to key destinations, including LRT stations;
- Improving signals and crossings; and
- Installing pedestrian refuge islands at key intersections.

Partners in the City of Portland’s Neighborhood Greenways Program working together on various improvement projects including the ARRA-funded work, include Portland Bureau of Transportation, the Portland Bureau of Environmental Services, Portland Fire and Rescue, Portland Public Schools (a primary sponsor of Portland’s Safe Routes to School Program), and TriMet.

**Cycle Tracks**

Cycle tracks are bicycle lanes that are physically separated from traffic, but located in the roadway. Cycle tracks are common throughout parts of Europe, but only a few cities in the United States have them, including Bend and Portland, Oregon; Cambridge, Massachusetts; and New York, New York, among others. They provide a buffer from traffic that creates a much greater level of comfort and sense of protection for bicyclists. Cycle tracks generally take two forms: paired one-way facilities on each side of the street, or two-way wider facilities on one side of the street.
Providing Access to Freeway Adjacent Stations

Major highways and freeways, such as SR 520, interrupt the street grid and can create barriers to multimodal access and connectivity within transit station areas. Where transit stations are planned adjacent to, or within the right-of-way of expressways, as is the case with the Overlake Village and Overlake Transit Center Stations in the East Link Corridor, the challenges of providing pedestrian and bicycle access to the stations is particularly acute. By virtue of location next to the freeway, space for facilities for bikes, pedestrian, and transit riders, and active land uses that benefit from immediate adjacency to the station are generally limited to one side of the station. Moreover, without a direct connection to stations from both sides of an expressway, the total area accessible within a five minute walk of the station can be limited to less than half the size of the transit accessible area.

Dedicated bicycle and pedestrian bridges or overpasses that provide direct access to both side of an expressway, are essential links that—if well sited and designed—can help overcome the barrier posed by adjacent expressways, and more importantly, open up new areas to potential TOD. However, these facilities can be costly, and if poorly designed, may be underused and have limited impact on transit ridership.

With the region’s strong focus on transit and non-motorized transportation networks, the Portland metropolitan area is home to some of the best examples of safe, efficient, and aesthetically pleasing expressway overpasses that provide direct connections to rail stations from non-motorized transportation networks. One such bridge is the I-205 overpass at the Parkrose/Sumner Transit Center in Portland, Oregon. The modern steel bridge, built in 2001 by TriMet, provides direct access to MAX LRT Station located in the freeway median from the I-205 multi-use path.

The Parkrose Bridge is integrated with the non-motorized travel network, providing direct connections to the I-205 multi-use path and to sidewalks on NE Sandy Boulevard. Minimal out-of-direction travel is required for either pedestrians or bicyclists to reach the bridge. Moreover, the minimal difference in elevation between the bridge and the neighborhoods on either side reduces the need for stairs, elevators, or circuitous access ramps.

Parkrose Bridge, Portland, Oregon (Source: TransLink, 2011)
In Portland, federal stimulus funds are being used to improve bicycle access to transit by establishing cycle tracks and buffered bicycle lanes on streets that lead to MAX Green Line LRT stations downtown. Portland’s first two-way cycle track on SW Moody Avenue from SW River Parkway to SW Gibbs Street linking the south end of downtown Portland to the burgeoning South Waterfront District, a high-density neighborhood developed on former industrial parcels along the Willamette riverfront. This key link in the regional transportation network uses bike priority signalization (the green light phase is on automatic recall and a bikes-only signal phase occurs during an all-way red phase for vehicles on SW Moody Avenue and cross streets). The SW Moody Avenue cycle tracks also employ the latest conflict avoidance features of bicycle/pedestrian interface design.

The development of high-quality feeder bicycle facilities is intended to bring new users directly to the transit system, while simultaneously allowing for improved conditions at locations where bicyclists cross the rail lines. Portland’s cycle tracks often use a row of parked cars to separate bicyclists from auto traffic, but other cycle track designs may use a physical barrier such as a curb or a narrow median, which can be more expensive to implement.

A report entitled Cycle Tracks: Lessons Learned presents findings from the Portland pilot project. It found that cycle tracks have a number of advantages over conventional bicycle lanes. Cycle tracks can:

- Reduce auto-cyclist accident rates;
- Remove the danger of “car-dooring” (incidents of people opening car doors into bicycle lanes); and
- Increase bicycle ridership.

According to the report, cycle tracks can also present a number of potential complications, including conflicts between bicyclists, pedestrians, and bus passengers. Notably, since bicyclists are not traveling alongside automobiles, “motorists may not be aware of their presence, leading to increased vulnerability at intersections.” The report suggests that some accidents may be prevented by moving the stop line back at intersections, using protected phases at signals, and prohibiting cars from turning right on red. Portland has used bike boxes on the street to facilitate left turns for bicyclists out of the cycle track.11

**Shared-Use Paths**

Shared-use, or multi-use off-street paths, typically designated as “Class I” bike facilities, are fully separated from traffic and often aligned along separate rights-of-way, such as old railroad lines. They are typically separated facilities (not located within street rights-of-way) for the exclusive use of bicycles and pedestrians with cross-flow minimized. As fully separated facilities, they are attractive to a wide variety of users, including pedestrians, bicyclists, joggers, inline skaters, and other non-motorized travelers. They are often designed at accessible grades and as such
Shared-use paths enhance regional recreation opportunities and are also an important part of the regional transportation network, providing access within and between communities and to and from transit stations.

Shared-use paths throughout the Portland metropolitan region provide direct and indirect access to transit and connectivity through transit station areas. The most geographically comparable example to the East Corridor is the Interstate 205 shared-use path. The path, constructed in the 1980s, runs adjacent to Interstate 205 and the MAX Green Line LRT corridor. The 16.5-mile path connects 15 neighborhoods beginning with the Clackamas Town Center, the region’s southeastern suburbs and Portland, via the north-south Interstate 205 corridor and the east-west Banfield LRT Corridor (also used by the MAX Red and Blue Lines).

In addition to paralleling the rail corridor, the Interstate 205 path serves as an integral link to multiple MAX Green Line stations along the corridor, including between SE Main Street and Clackamas Town Center Transit Center. With connections to major east-west cross streets, including bicycle boulevards that cross or meet the MAX Green Line between stations, the Interstate 205 path provides an important connection to the regional transit system, for bicyclists traveling within two to three miles of the corridor. One exemplary connection is the link that the Interstate 205 path provides between the MAX Green Line Stations at SE Division Street and SE Main Street to the recently completed SE Mill Street Greenway, which connects to Harrison Park and Portland neighborhoods well to the west of the Interstate 205 corridor.

Another example of a developed shared-use path in the Puget Sound region is the SR 520 Regional Trail, a ten-mile path that runs parallel to SR 520, connecting north Bellevue at NE 24th Street and 124th Avenue NE, Overlake, downtown Redmond, and the Sammamish River Trail. The SR 520 Regional Trail provides an important connection for Eastside cities by linking to the larger regional trail network.

In developing implementation plans for East Corridor station areas, it will be valuable to consider how to best integrate these facilities with existing on- and off-street bicycle networks in each station area. This includes providing direct connections from paths to bus and rail stations, and identifying opportunities for other shared-use paths, as well as for connecting to paths outside of the station areas to provide an integrated multimodal transportation network.

Cycling is a first choice for many short trips in Portland; freeing up capacity on busy TriMet rail and bus lines.
Bicycle Network Design
Choosing the type of bicycle facility or improvement that is appropriate for any given street or station area depends largely on the local context, including the existing traffic conditions and rights-of-way available on streets and paths. How individual street segments and stations fit into larger citywide and sub-regional bicycling networks also factors into the decision about what type of bicycle facility is needed.

The Regional Cycling Strategy for TransLink, the regional transportation planning and service agency for Metro Vancouver, British Columbia, Canada, offers an example of a simple cycling network design guideline that can help planners in the central Puget Sound region think about how station-specific bicycling facilities fit into the overall multimodal transportation system.

The figure on this page (Cycling Network Design Parameters) is from the Regional Cycling Strategy and shows the recommended guideline for spacing of bikeways for various classifications of bikeways. As shown, recommended spacing varies by geographic and land use context, from urban centers to non-urban areas.

In planning for and implementing plans for bicycling facilities within specific rapid transit station areas, a typology approach can be applied to correlate land use, traffic conditions, and topography in the area, with recommended facility type, spacing, and intersection treatments, varying based on street classification, traffic volumes/conflict environment, and neighborhood type (from mixed use urban, to low-density, suburban, single-use environments).

Consistent with planning practices in Portland and other areas of the Puget Sound region, and with complete streets policies, bicycle accommodations of one type or another should be provided on all roadways leading to station areas to ensure that it is possible to reach the station following a safe, convenient and direct route. A three-mile radius from station areas is considered to be an appropriate distance for planning bicycle access and connectivity.

Bike-and-Ride
Providing bicycle parking at transit facilities is a critical element in achieving high levels of bicycle access to transit. National studies show that a lack of adequate bike parking and other related services is a major deterrent to commuting by bike. Parking that is convenient,
secure, weather-protected, and plentiful provides a measure of predictability and comfort for those who want to travel by bike and transit. Wherever possible, bicycle parking should be conveniently located near bus stops and high quality bicycle storage is a must at rail stations and major transit transfer facilities.

While many of the on-street bicycle access improvements in the Portland metropolitan area have been implemented by local cities, TriMet has directly supported bicycle access to transit by investing in bicycle parking facilities. TriMet has parking capacity for 1,900 bicycles systemwide. In addition to providing standard bike racks for short-term bicycle parking at dozens of transit stations and stops throughout the system, TriMet provides secure bicycle parking to enable commuters to leave bikes at transit stations all day or all night without risk of threat or vandalism at three bike-and-ride facilities, including the Beaverton and Sunset Transit Centers in the City of Beaverton, and at the Gresham Central Transit Center on the east side of the metropolitan area.12

Each bike-and-ride facility offers enclosed, weather protected, key-card accessible bicycle parking for just pennies per hour. In 2012, the charge was $0.03 per hour from 8:00 AM to 8:00 PM on weekdays and $0.01 per hour at all other times. Users can purchase and use a cash debitable and reloadable key card at several locations throughout the transit system with initial payment of a $5 activation fee to BikeLink, a national nonprofit that operates bike stations and secure bike parking facilities and lockers at transit stations and other areas up and down the West Coast.13

Due to these targeted transit access improvements and other bicycle facility improvements over the last two decades, the Portland metropolitan region has seen a substantial increase in bicycling and transit ridership that corresponds to citywide improvements in transit service and bike facilities, including bike facilities designed to provide direct access to transit. Bicycle traffic in Portland, measured by counts on four Willamette River bridges has increased from 2,850 daily trips in 1992 to 17,576 trips in 2010 (a 616 percent increase), during which time the extent of the city’s bikeway network (including bike lanes, bicycle boulevards and most recently cycle tracks) increased from 79 miles to 299 miles (a 378 percent increase). During the same period, TriMet reports that ridership on buses, MAX (light rail) and WES (commuter rail) has increased for all but one year, with ridership growth outpacing other indicators of regional growth including population, and auto vehicle miles traveled (VMT) for the last ten years.

Lessons Learned for the East Corridor
Many of the bicycling and bike-and-ride facilities and programs described here as best practices are drawn from urban and suburban communities in the Portland metropolitan region that are similar in form, function, and
character to the East Corridor. Several of the region’s new bikeways serve the MAX Green Line, and the adjacent Interstate 205 corridor, a suburban highway similar in form to SR 520, which traverses Bellevue and Redmond. On the west side of the Portland metropolitan area, the City of Beaverton, which is home to two of the region’s three bike-and-ride facilities (at the Sunset and Beaverton Transit Centers) and bicycle access improvements envisioned in the Beaverton Civic Center, is similar to the East Corridor in that it is a growing suburban office and commercial, anchored by several high tech employment nodes.

There are a number of street design features that cities can use to improve bicycling safety and comfort, including: bicycle lanes, bicycle boulevards, cycle tracks, improved crossing treatments, signage, and traffic calming features. Additionally, education and safety training programs can help to get more people on bikes. Ultimately, getting more bicyclists on the streets is the best way to improve driver awareness and rider safety. Bicycle parking and end-of-trip facilities, such as lockers and showers, are also important to bicycle riders.

To increase the number of people bicycling to transit, it is necessary to improve both perceived and actual safety of the overall bicycle network. Since local jurisdictions control street design, this is an area where cities have a direct influence in improving access to transit.

The key lessons learned from the City of Portland’s approach to providing bicycle access to transit include the importance of addressing barriers to bicycling at each step in the process (including accessing transit by bicycle) and providing facilities that address the needs of bicyclists of all ages and abilities. This is especially relevant to consider in Bellevue and Redmond, where RapidRide and future Link light rail provide a new kind of regional mobility for non-drivers including children, teenagers, and seniors who may not be comfortable riding with traffic on busy arterial roadways. Where neighborhood greenways and cycle tracks can be created on the existing street network, they may help travelers of all ages and abilities reach transit stations and other key community destinations in each station area (such as libraries and community centers), while helping to expand access to areas more than one-half mile away from the stations.

Another key lesson from Portland’s approach to planning for bicycles and transit is that they can be complementary modes of transportation in the same corridor. In fact, planners in Portland are increasingly focused on improving bike facilities on key transit arterials and parallel streets to relieve pressure on crowded bus lines. By making bicycling the first choice for many local trips, the transit system is better able to serve passengers for longer intra-city and regional trips.

Finally, Portland’s experience integrating bicycling with transit confirms that not all customers who combine bike and transit trips have similar access needs. Some passengers use a bike at both ends of their trip. A 1997 TriMet survey of Portland MAX riders with bicycles, 3.8 percent of all passengers, found that riders traveled an average of two miles by bicycle on each end of their LRT trip. Others only need a bike to get to or from the station. Some are comfortable locking up to a rack outside. Many will only bicycle to transit if they can be sure their bike will be secure and weather-protected. TriMet and cities in the Portland metropolitan region have concluded that “providing a range of bike and transit options and facilities,” such as secure bike parking, short-term bike parking, and well-signed, low-stress bike routes to and from stations “can encourage more people to combine bikes and transit than could be accommodated on board transit alone.”
DALY CITY, CALIFORNIA— AUTO ACCESS, PARKING AND TRANSITION TO TRANSIT-ORIENTED DEVELOPMENT

Station Access Improvement Planning

The Daly City Bay Area Rapid Transit (BART) station, located on the border San Francisco and San Mateo Counties, has served as a major transfer point for Peninsula and South Bay commuters traveling to and from San Francisco since the BART system opened in 1973. Currently the station is served by four BART lines, five SamTrans bus routes, four Muni bus routes, three private shuttle bus services, and three paratransit services. A ten-lane freeway, six-lane arterial, and surface parking are located adjacent to the station. The BART Daly City Station Access and Improvement Plan sought to increase BART ridership, integrate local and regional transit service, improve bicycle and pedestrian access, enhance safety and patron experience, and determine the feasibility of transit-oriented development (TOD).16

Balancing the tension among providing off-street parking, doubling the capacity of the bus transit center, and constructing TOD on a limited site, the Daly City plan built on published BART priorities, policies, guidelines, and methods. Another plan, the BART Strategic Plan, called for improvements to station access by all modes through the promotion of alternatives to driving alone. With this as a foundation, the BART Station Access Guidelines, published in 2003, specify guiding principles and best practices to indicate how BART and its partners can optimize multimodal station access. The guidelines outline an access hierarchy with walking at the top of the hierarchy, followed by transit, bicycle, pick-up and drop-off, and vehicle parking. TOD was highlighted as one of the best ways to encourage walking to the station, along with pedestrian-oriented infrastructure and wayfinding improvements. This hierarchy of BART station access priorities is shown in the graphic on this page.

The 2003 BART TOD Guidelines prioritized locating the highest residential and employee densities around existing or future BART Stations and extending pedestrian, bicycle, and transit networks beyond the immediate station area to increase access.17 The BART Access Policy Methodology suggests a performance-based method for developing access and replacement parking strategies. The methodology considers the ridership impacts of access improvements and changes in the parking supply, fiscal health, access mode split, system capacity, supporting station access plans, and local and regional context.18 This methodology is a departure from the standard 1:1 replacement parking practice and recommends that parking supply be coordinated with other multimodal access goals in order to achieve higher ridership.
With this planning and policy framework, policy and technical advisory committees, neighborhood organizations, businesses, and BART worked together with support from Nelson\Nygaard Consulting Associates to create an existing conditions report, conduct multiple community meetings and community walks, and produce a final report and detailed traffic impact study. The final report provides detailed station access recommendations in line with the BART Access Guidelines and Strategic Plan, with an emphasis on pedestrian, transit, and bicycle access.

Multiple pedestrian, transit, and bicycle access alternatives were developed along with a replacement parking and TOD analysis for each alternative. Each alternative was then evaluated on the following subjective and objective metrics:

- Transit patron experience,
- Bus operations,
- Cost,
- Engineering feasibility,
- Parking impacts,
- TOD opportunities,
- Traffic impacts, and
- Ridership impacts of reduced parking, additional transit service, and potential TOD.

These evaluations found that the ridership impacts of additional bus transit service at the Daly City BART Station far outweighed the ridership generated by on-site parking. The final plan recommended eliminating 150 of 260 parking spaces in a BART-owned surface parking lot southeast of the station entrance to make way for an expanded bus transfer facility. Analysis utilizing the BART Access Policy Methodology confirmed that the additional transit service that could be accommodated with an expansion of bus bays would generate approximately 2,500 additional daily BART trips, a volume far exceeding the estimated 165 riders who might be lost as a result of the reduction in parking capacity.19

Although the model results were clear, increasing BART ridership and fiscal returns were only part of the evaluation. Neighborhood concerns about spillover parking after the loss of 150 BART parking spaces led BART to initiate discussions with a neighboring movie theatre moving toward a shared parking agreement. The recommended alternative provided the most convenient bus transit access and improved bicycle and pedestrian circulation within the site and to the station, without compromising vehicular or parking access to the station.
BART has applied its hierarchy of station access priorities (as shown in the figure on page 90) and its Access Policy Methodology to planning for station access improvements, TOD, and parking pricing and management in many station areas since 2007, including Daly City, South Hayward (Hayward, California), and MacArthur (Oakland, California). Neither BART nor the city with local jurisdiction have directly adopted the balance of TOD, parking supply and investment in non-auto access improvements deemed optimal for ridership or agency revenue. In each case, site considerations and local political interests have led planners to supply more parking than recommended as optimal purely by access model results. Nevertheless, in all cases, use of the access hierarchy and the performance-based Access Policy Methodology has focused planners’ and stakeholders’ attention on the impact of these key investment and policy decisions on ridership and BART’s capacity to fulfill its mission to provide regional transit service. This in turn has resulted in plans that begin to shift BART and local jurisdictions from an auto-access and commute-oriented service model towards a more urban service model, generative of new low-traffic development and efficient all-day transit ridership.

Lessons Learned for the East Corridor
Among the key challenges in planning access to high-capacity transit stations is to identify the impacts, benefits, and cost-effectiveness (in terms of cost per new rider) of alternative uses of limited funding for access improvements for different modes of transportation and alternative uses of limited land resources in the station area.

• How can parking be managed best to ensure that spaces are available for midday trips, when space will be best available on trains and buses?

• What would be the cost per new transit rider accommodated of investing in bicycle network improvements or additional feeder transit service as compared to the ridership expected to be generated by the development of new commuter parking lots at selected stations along the light rail corridor?
Will transit ridership on the line be higher if some of the land currently planned for parking facilities is made available for future TOD?

How dense must any TOD on agency property be to generate as many transit trips as the surface parking it replaces?

Several of the East Link stations east of Interstate 405 are being planned to accommodate some commuter parking (120th Avenue NE, 130th Avenue NE, Overlake Village, and Overlake Transit Center), but the funding and supply of parking for each station is not finalized. Sound Transit does not currently have an explicit 1:1 replacement parking policy. However, current financial policies adopted by the agency measure system finances as the key criterion for cost-benefit evaluation of proposed uses of agency property, such as provision of commuter parking or construction of transit-oriented commercial or residential development. The ridership benefits of TOD on agency property are not currently considered as a factor in evaluating the financial return on investment in station areas. However, the Sound Transit Board initiated an evaluation of this challenge in 2012, and is considering policies to better account for the financial and ridership tradeoffs between parking and TOD.

It is recommended that Sound Transit and the cities of Bellevue and Redmond work cooperatively to establish protocols for monitoring parking utilization patterns and transit rider mode of access, and to develop tools and metrics for evaluating the relative costs and benefits of future investments in non-auto access improvements and TOD. This can support an eventual transition from auto-oriented station areas to a more urban model that supports TOD and relies on non-auto modes for access to transit.

BART and its partners have faced just this challenge in planning for improved access to

The new two-way cycle track on SW Moody Avenue connects the South Waterfront District with Downtown Portland and MAX Light Rail. (Source: Portland Bureau of Transportation, www.swmoodyproject.com)
its stations, many of which were constructed in the 1970s under a suburban commuter service model that assumed most patrons would drive, park, and ride BART to Central City employment centers. Over the past fifteen years, to generate new ridership and new revenue to fund additional service, BART has planned and implemented several TOD projects on agency properties (in most cases on former surface parking lots) and made non-auto access improvements at selected stations. To facilitate decision-making, BART has adopted and used the BART Access Policy Methodology, as a ridership and revenue model to assess the impact of alternative access investments and TOD actions on transit ridership and agency revenues. The model has been a successful planning tool that has helped planners evaluate the appropriate balance of parking, TOD, and other access improvements for each station area.

NEW WESTMINSTER, BRITISH COLUMBIA, CANADA—SKYTRAIN MILLENIUM AND PROVIDING FOR SPECIAL NEEDS ACCESS

One of the key challenges in designing a high-capacity transit line and associated station area access improvements is to ensure that the system is accessible to people with special needs. Because transit is often the only or primary means by which seniors and people with mobility challenges and other special needs have to access medical facilities and services, direct, safe, and barrier-free linkages between stations and nearby hospitals and medical centers are all the more important. Effective planning and implementation of a rapid transit station in New Westminster, British Columbia and associated pedestrian connections have enhanced access to a regional medical center and supported more recent transit-oriented office and residential development.

The SkyTrain Millenium Rapid Transit Line, which opened in 2002, loops from the Expo Line in New Westminster to Vancouver Community College in Central Vancouver, via Lougheed Town Centre and Brentwood Town Centre. In planning the Millenium Line, the Province of British Columbia sited the Sapperton Station (the first station north of the existing Expo Line) and made associated pedestrian network improvements to ensure that the regional transit system would be directly accessible to patients and medical staff.
of the nearby Royal Columbian Hospital. After emerging from a tunnel east of the existing Expo Line in New Westminster, the Millenium Line follows an elevated alignment along the east side of the Canadian National/Burlington Northern Santa Fe railroad right-of-way, just north of the Fraser River. Although the area immediately around the station consists of light or heavy industrial operations and selected vacant parcels, the Province elected to build Sapperton Station primarily to serve the nearby Royal Columbian Hospital.

Royal Columbian Hospital is the oldest hospital in British Columbia, and one of the most heavily used hospitals in the region. Although Sapperton Station is situated just 500 feet (150 meters) from the front entrance to the hospital, there are significant barriers to reach the hospital from the street-level entrance to the station. Whereas the station and rail corridor are located at the same level as the river, the hospital is situated on a hill above. To reach the hospital, transit patrons would have to walk across two rail lines, four lanes of traffic on Spruce Street/Burnette Avenue, walk north on Burnette Avenue, and then climb a steep grade on Kearny Street.

To better and more directly connect the Sapperton Station with the Royal Columbia Hospital, the station was constructed with an elevated walkway from one level above the SkyTrain platforms, across the two sets of railroad tracks and Burnette Avenue, and a vacant parcel immediately to the west to a small plaza on the south side of Kearny Street, just south of the Hospital entrance.

While other access improvements and amenities in the station area are being planned, funded, and implemented by the city and/or private developers, as a part of the transit-oriented development of several key parcels, the pedestrian walkway was constructed along with the station itself as an integral part of the Millennium Line rapid transit project. This was important both to encourage transit use by hospital employees and patients, and from an equity-of-access perspective, as it provided—from the beginning—a direct, safe, and comfortable connection, accessible to persons with limited mobility.
The provision of this key piece of infrastructure with station development has also made the parcels west of the rail corridor more attractive for dense transit-oriented development, consistent with the Metro Vancouver Regional Growth Strategy. Since the Millennium Line opened in 2002, there has been little TOD in the area, but the pace of development is starting to pick up. A new twelve-story residential building recently constructed on a parcel immediately west of the station also benefits from a direct connection to the Sapperton Station via the existing pedestrian walkway. TransLink will soon be moving its agency headquarters into another new transit-oriented office tower that is currently under development in the Sapperton Station area.

**Lessons Learned for the East Corridor**

Among the key lessons learned is the importance of both aligning transit corridors and stations to serve—as directly as possible—major destinations, such as hospitals, medical centers, and senior housing complexes attract or generate a high volume of trips by people with limited mobility or other special transportation needs. Perhaps most important for consideration in implementation planning for the East Corridor in Bellevue and Redmond, is the importance of actively planning for and developing such destinations in close proximity to transit stations. For example, locating housing and services for people who are transit-dependent or have limited mobility in the immediate vicinity of new stations can enhance regional access and equity for residents, while reducing the need to provide costly long-distance shuttle connections.

**CHICAGO, ILLINOIS—FEEDER TRANSIT SERVICE**

In many systems, feeder buses comprise a substantial share of how riders connect to high-capacity transit (22 percent in Washington DC and 15 percent for BART in the San Francisco Bay Area). Demand for park-and-ride spaces is directly related to the quality of this feeder bus service. Generally ten-minute headways on feeder service are considered the minimum frequency customers will tolerate when accessing high-capacity transit service.

When the Chicago region was experiencing extreme demand at its park-and-ride facilities, Metra, the suburban rail system, offered subsidized bus passes with PACE, the region’s suburban bus system, and the Chicago Transit Authority (CTA). These passes allowed unlimited rides at a more than 50 percent discount, attracting many would-be parking patrons to utilize the feeder bus for access. In low density areas, where commuters may only occasionally need bus to rail service, on-demand shuttle on a van or cutaway can serve the need. PACE instituted a call-and-ride service that proved to be cheaper, in some cases, than the feeder service.

When demand is low, demand-response service can be more cost-efficient than fixed route service. The Dallas Area Rapid Transit in Dallas, Texas instituted a demand-response community service in 2003, announcing “on-call zones” replacing unproductive bus routes. This service is useful for customers without access to a private vehicle.

Many studies and public debates have evaluated the pros and cons of feeder bus services versus park-and-ride, including factors related to cost and environmental efficiency in providing access to transit, particularly in low density contexts. However, most industry experts agree that some level of feeder bus service must be provided for those who must, as well as those who choose to, use local bus for access.

The number of feeder bus lines and frequency of service to be provided to serve high-capacity transit are frequently debated. Operational cost efficiency is a concern. In general, ten to fifteen
passengers per revenue hour is the low end of what might be considered a productive local service and achieving this requires a land use density of between seven and fifteen dwelling units per acre, depending on the study cited.23 24

Bus ridership, and therefore cost efficiency, increases as density increases, with greater than 30 dwelling units per acre being a significant threshold. Environmental performance is also commonly questioned. Most studies have found bus to be the environmentally preferable choice based on CO2 emissions.25 26 If buses are able to achieve even modest ridership (as low as three to eight passengers at any given time), they are generally found to outperform auto access.27

Lessons Learned for the East Corridor
Decisions about local feeder service need to be made on a case-by-case basis with close evaluation of existing and planned land use and transportation services and factoring in parking management policies. King County Metro, Sound Transit, East Corridor cities, and other partners need to continue to coordinate planning and implementation efforts and work together to evaluate the best options for providing local bus service to connect riders to high-capacity transit lines.

Footnotes for Transportation Access and Connectivity
4. Ibid.
5. Ibid.
10. Portland Bureau of Transportation
12. For more information on TriMet Bike & Ride, refer to the TriMet Bike and Ride webpage athttp://trimet.org/howtoride/bikes/bikeandride.htm
13. Ibid.
15. Ibid.
19. BART, Daly City Station Access Improvement Plan (2011)
20. TCRP Report 153 Page 81
21. Ibid.


Assessment of Station Areas
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ASSESSMENT OF STATION AREAS

Key Needs and Opportunities in Each Station Area

The consultant team completed a high level assessment of needs and opportunities in each of the seven station areas that were the focus of Phase 1 work. The assessment was informed by a review of existing and planned conditions within each of the station areas, as well as evaluation of key needs and opportunities, developed in conversations with the project management team (PMT) and Growing Transit Communities staff.

Summaries of key needs and opportunities for the station areas are presented in tables on the following pages. Note that the two bus rapid transit (BRT) station areas in the Crossroads neighborhood at NE 10th Street and NE 15th Street were combined in the evaluation because of the close proximity between the two stations and the similar surrounding context.

This high level assessment of the station areas is meant to be general and preliminary. Detailed analysis, as well as development of recommendations, strategies, and tools, will be part of the Phase 2 work for selected station areas.

Conceptual illustration of a vision for Beacon Hill station area, Seattle, Washington.
HOSPITAL STATION AREA – BELLEVUE

General Description: The Hospital station area encompasses primarily medical (Overlake Hospital Medical Center, Group Health) and commercial land uses in proximity to the NE 8th Street and 116th Avenue NE. Sound Transit is proposing an elevated station with the light rail transit (LRT) alignment running in the BNSF rail corridor, east of the Whole Foods grocery store. Plan and code provisions were adopted for the area in 2009 supporting future transit-oriented development (TOD) uses. Previous plan amendments were undertaken for the area south of NE 8th in 2007 and did not incorporate the light rail station at the current location. Some of the property around the Hospital Station was not rezoned as part of the Bel-Red process (because the current station location was in flux). The City intends to further study this area to determine what transit-supportive land uses and intensities should be developed in the future.

SUMMARY OF NEEDS AND OPPORTUNITIES

<table>
<thead>
<tr>
<th>AFFORDABLE HOUSING</th>
<th>BUSINESS RETENTION &amp; ATTRACTION</th>
<th>PARTNERSHIPS</th>
<th>TRANSPORTATION ACCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• There are opportunities to add housing, including affordable residences, in areas that are largely commercial today.</td>
<td>• Many existing businesses are transit supportive, with this station serving as an employment hub as well as a place to access grocery and dining establishments and other businesses and services.</td>
<td>• Potential for partnership agreement(s) with hospitals, medical community, commercial businesses, residential developments, and others relating to a station area plan for the entire district.</td>
<td>• Need to think through access from the station to hospitals and other major transit-user destinations.</td>
</tr>
<tr>
<td>• Need to analyze what amenities are necessary to support housing.</td>
<td>• With the existing mix of small and large businesses (including big box), there are existing, non-TOD-supportive, auto-oriented uses in the station area, as well as vacant properties poised for redevelopment. The potential for new TOD businesses/urban retail uses coming to the neighborhood is high.</td>
<td></td>
<td>• What are the best ways to knit together the north and south halves of the Hospital station area currently separated by NE 8th Street?</td>
</tr>
<tr>
<td>• How might a catalyst project occur?</td>
<td>• Need to assess desired vertical form and potential for structured parking with new development.</td>
<td></td>
<td>• How can pedestrian and bicycle connectivity be strengthened from the elevated station area to the hospitals and other destinations (with accessibility for pedestrians with mobility and other challenges a major consideration)?</td>
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<tr>
<td></td>
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<td></td>
<td>• What is the best treatment for integrating pedestrian/bicycle trail within/along BNSF right-of-way, adjacent to elevated station and LRT tracks?</td>
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<td></td>
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<td>• Connectivity to Downtown Subarea—need to evaluate how best to capitalize on proximity of Wilburton/Hospital station area to Downtown Bellevue.</td>
</tr>
</tbody>
</table>
**General Description:** Today the 120th Avenue NE station area is a mix of commercial and light industrial uses. Entirely new TOD plan and code provisions were adopted in 2009 as part of the Bel-Red Corridor Plan. The station area includes the Spring District, which is the former 36-acre site of the Safeway Distribution Facility and is proposed for redevelopment into an environmentally sustainable, mixed use urban neighborhood. When fully developed, The Spring District will provide approximately four million square feet of office space, up to 1,000 multifamily residences, and ground floor retail spaces. The 36-acre development also will feature a 16-acre open space plan that will include a large park, turf athletic field, several plazas, and green spaces. While the Spring District development is poised to move forward, the timing of other redevelopment opportunities in the neighborhood is less eminent.

### Summary of Needs and Opportunities

<table>
<thead>
<tr>
<th><strong>Affordable Housing</strong></th>
<th><strong>Business Retention &amp; Attraction</strong></th>
<th><strong>Partnerships</strong></th>
<th><strong>Transportation Access</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- There are some opportunities for affordable housing in the station area. Need to analyze how best to integrate housing in what will be a largely office/commercial station area (housing is estimated to be approximately 20 percent of land use mix at build-out). - What neighborhood-serving retail uses are needed?</td>
<td>- Review of existing businesses and analysis of potential for retention. - Analysis of potential for attraction of new transit- and TOD-supportive businesses.</td>
<td>- A development agreement is in place between the City of Bellevue and Wright Runstad for the Spring District. The master plan for development was submitted in 2012. - There is a strong potential for other partnership opportunities, including public-public and public-private with involvement of the City, Sound Transit, and various other entities.</td>
<td>- Enhancing pedestrian and bicycle access east-west from station to Children’s Hospital will be important. - How can pedestrian and bicycle connections between the station area and surrounding neighborhoods be strengthened (as well as between station areas, such as from 120th to Hospital)? - How can feeder bus service be used to best connect surrounding residential neighborhoods and other transit-supporting land uses? - Street plan/connectivity – opportunity to provide more detailed guidance through a TOD transportation toolbox.</td>
</tr>
</tbody>
</table>
130TH AVENUE NE STATION AREA – BELLEVUE

General Description: Today the 130th Avenue NE station area is a mix of industrial and commercial uses. A new station area plan for TOD and supporting code provisions was adopted by the City of Bellevue in 2009. The station area plan calls for a mix of new land uses in the station area, as well as a new street grid with multimodal connections to the LRT station. With the overall purpose of facilitating growth of a vibrant neighborhood around the planned LRT station at 130th Avenue NE in the Bel-Red Corridor, the plan serves as a guide for redevelopment and the implementation of stream restoration, new parks, and transportation facilities. The plan is a resource that can be used by developers and to help guide public and private investments in the area. Further analysis should address the following question: what is the best approach to phasing of redevelopment in this station area, where LRT will not be in place until 2023? There are a few large parcels, but no specific site redevelopment proposals at this time. Station area plan: http://www.ci.bellevue.wa.us/130th-station.htm.

KEY ISSUES ADDRESSED IN THE 130TH AVENUE NE STATION AREA PLAN/REPORT INCLUDE:

- Redevelopment opportunities and phasing
- Affordable housing catalyst opportunities
- Park-and-ride lot alternatives
- Park and open space concepts
- Goff Creek improvements and other environmental enhancements
- Neighborhood pedestrian and bicycle connections to the station
- Land use and transportation impacts on vehicle miles traveled and greenhouse gas emissions
- Bicycle access

SUMMARY OF NEEDS AND OPPORTUNITIES

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<th>TRANSPORTATION ACCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is an opportunity for an affordable housing catalyst project in the station area; discuss potential sites/locations. What is needed to support implementation?</td>
<td>How can businesses that are TOD supportive be retained as redevelopment occurs (in the new development for example)?</td>
<td>Potential partnership between Sound Transit, City, and private sector on park-and-ride development.</td>
<td>How can feeder bus service be used to best connect surrounding residential neighborhoods and other transit-supporting land uses (e.g. schools) to the 130th Avenue NE Station.</td>
</tr>
<tr>
<td>Do adopted code provisions provide a sufficient level of incentives for affordable housing?</td>
<td>How can businesses be retained in the interim period when the redevelopment project is being constructed?</td>
<td>Partnership opportunity for Goff Creek restoration, to include City, Sound Transit, and adjacent property owners.</td>
<td>Planned park-and-ride—the level of projected parking needed in the station area should be quantified/clarified.</td>
</tr>
<tr>
<td></td>
<td>Review of existing businesses and analysis of potential for retention.</td>
<td>Partnership opportunities between the City and private property owners on development of the planned street grid. This would heighten the economic development potential and attractiveness of the area, and potentially be a catalyst for future redevelopment.</td>
<td>Street plan/connectivity—opportunity to provide more detailed guidance through a TOD transportation toolbox.</td>
</tr>
</tbody>
</table>
**NE 10TH/NE 15TH CROSSROADS BRT STATION AREAS – BELLEVUE**

**General Description:** These two RapidRide BRT station areas are surrounded by a diverse, healthy mix of commercial and residential land uses. A plan update for the Crossroads Commercial Area was completed in 2006-2007. The land use mix and density of the surrounding neighborhood is transit-supportive. The consensus perspective on these station areas is that needs and opportunities focus primarily around transportation access and connectivity, as further highlighted below. The Crossroads neighborhood that surrounds the commercial area is primarily a mix of multi-family buildings, transitioning more to single family away from the busy arterials of 156th Avenue NE and NE 8th Street. Crossroads Mall is not only an important commercial hub to the region, but also a neighborhood cultural center with a variety of community amenities and a venue for small events and concerts. Bordering the mall to the east is Crossroads Neighborhood Park, which features a community center and nine-hole, par three golf course, as well as other recreational opportunities. The RapidRide system connects the neighborhood with the nearby Overlake area and Microsoft Corporate Campus in Redmond.

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**SUMMARY OF NEEDS AND OPPORTUNITIES**

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<tbody>
<tr>
<td>• There are a variety of housing types in the neighborhood, including a good level of affordable housing options.</td>
<td>• The existing business environment is healthy and transit-supportive. There is a diverse, healthy mix of commercial land uses and existing businesses. The key will be to maintain the health of the many small businesses as time progresses.</td>
<td>• There are public-private partnership opportunities to improve pedestrian/bicycle access, going primarily east-west from 156th Avenue to Crossroads Park and Community Center/164th Ave NE).</td>
<td>• Need to improve access to BRT stations from adjacent neighborhoods (e.g. from single family neighborhoods to the west of 156th, currently separated by multi-family and commercial development).</td>
</tr>
<tr>
<td>• Existing residential and commercial densities are transit supportive.</td>
<td>• The variety of businesses, including many small businesses as well as larger stores, serves not only the surrounding neighborhood, but also the broader region. The diversity of restaurants in the food court and elsewhere has become a draw, particularly for lunchtime dining.</td>
<td>• How best can connections between Crossroads and Overlake Village be strengthened?</td>
<td>• There is a need for better pedestrian wayfinding in the Crossroads area, which would benefit the BRT line by highlighting key destinations and bridging language barriers.</td>
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<tr>
<td>• Infill development for housing (including senior and affordable housing) is currently allowed on the shopping center site and adjoining properties.</td>
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<tr>
<td>• Future infill development in the area, projected to occur gradually and to a limited extent, will need to fit into the existing land use framework and neighborhood character.</td>
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</table>
OVERLAKE VILLAGE STATION AREA – REDMOND

**General Description:** Overlake Village is a hub of urban activity, with excellent access via SR 520 and public transit to Downtown Redmond, Downtown Bellevue, Seattle, and the region. It is the third largest employment center in the region with about 46,000 jobs. People who work in Overlake have their pick of a wide variety of restaurants and shops. Business owners choose Overlake in part because of its unparalleled proximity to world leaders in software and digital media. Redmond adopted a new neighborhood plan and code provisions in 2007 (with amendments in 2009 and 2011) for Overlake Village calling for a multi-family housing as part of mid-rise and taller (if the market supports) mixed use developments, with housing at a range of incomes, including various levels of affordability and for families (two+ bedrooms). Subsequent plans for the 152nd Avenue corridor, street design guidelines for the neighborhood, and an implementation plan for co-located stormwater facilities and parks have been completed, and the first phase of implementation of stormwater facilities to support redevelopment in the neighborhood is currently underway. [http://www.redmond.gov/cms/](http://www.redmond.gov/cms/)

### AFFORDABLE HOUSING
- What are the best transition options to retain basic services such as grocery?
- How can small-scale and/or minority businesses be retained or attracted as part of new development and how can impacts during construction be minimized?
- What strategies/tools can create and maintain affordable space for small-scale and/or minority businesses?
- What kind of retail space is needed for an urban mixed use neighborhood and what are the best strategies to achieve this?
- There is demand for incubator space. What strategies might be feasible to provide this in new space in a dense urban environment?
- How best can the transition from the existing condition of an occupied site to a catalyst investment/redevelopment be addressed (in general from suburban to urban development with considerations related to relocating businesses)?

### BUSINESS RETENTION & ATTRACTION
- Need to understand and resolve the potential gap between available funding and funding needs for private and public sector investments.
- Need to address existing income stream from properties that may act as a disincentive for redevelopment.
- Need to fully engage critical though less active, private and public sector stakeholders, and address the potential for stakeholders to focus on individual interests and objectives over common objectives.
- What are the options for attracting investments for catalyst projects in an emerging market?
- Need to determine whether there is a gap, and if yes, how large between what developers can afford and what it costs to develop.
- What opportunities are there for partnering to resolve gaps in infrastructure funding (particularly for street grid and parks and other issues related to risk tolerance)? What combination of incentives, regulations, and finance mechanisms is needed?
- What are the best options for maintaining infrastructure after it is built?

### PARTNERSHIPS
- Need to evaluate priorities and the best options for providing clear, easy pedestrian access to the station.
- What improvements or services are needed to accommodate special transportation needs associated with enabling people who live at The Village at Overlake Station and Overlake Terrace to more easily access light rail and other transit?
- How can bus transit support access from neighborhoods to the light rail station—are there specific recommendations to inform service allocations in anticipation of LRT service to improve connectivity to neighborhoods?
- What are the most effective ways to increase connections to and from the walk shed and bike shed capture area around the station to neighborhoods in Redmond and Bellevue (including west side of 148th Ave, to the east of Bel-Red Rd, as well as Crossroads)?
- Options for long-term parking for bicycles, including aspects such as security and services need to be evaluated.
- Need to assess options for management of parking and shared parking opportunities for commuter and mid-day use.
OVERLAKE TRANSIT CENTER STATION AREA – REDMOND

**General Description:** Overlake Transit Center is a very busy multimodal hub for Sound Transit and King County Metro service, Microsoft Connector service, and a high volume of pedestrian and bicycle trips. The NE 40th Street/SR 520 interchange and surrounding area has very high volumes of vehicular and non-motorized trips. The City of Redmond is pursuing a variety of improvements (such as grade separation at NE 40th Street, pedestrian bicycle bridge connecting to the light rail station) to reduce opportunities for conflict and improve safety and overall operations. While some extra parking is planned at the station (150 stalls), it is expected that demand will exceed supply, particularly until the interim terminus is extended. The station area is predominantly occupied by the Microsoft Corporate Campus and other office uses, with some housing around the perimeter of the campus (primarily multi-family but transitioning to single family neighborhoods as the distance from the campus increases). Redmond adopted the updated plan and code provisions for both Overlake station areas in 2007, and amended portions of the plan and code in 2009 and 2011. Transportation connectivity is the key issue/need for this station area.

### SUMMARY OF NEEDS AND OPPORTUNITIES

<table>
<thead>
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<tbody>
<tr>
<td>• The station area is predominantly employment focused with the Microsoft campus and other office complexes surrounding the park-and-ride and station. There is some existing multi-family housing in the area, but overall new opportunities for new affordable seem somewhat limited.</td>
<td>• The Microsoft Campus master plan allows the potential for intensification of on-site development and may include the addition of new businesses and services that support employees; however for the most part, not a lot of change in the business setting is anticipated for this station area with the introduction of LRT.</td>
<td>• Opportunities for partnerships are strong with key entities being the City of Redmond, Sound Transit, King County Metro, and Microsoft Corporation.</td>
<td>• What are the most effective ways to increase the walk shed and bike shed capture area around the station?</td>
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<tr>
<td>• There could be the potential for new TOD on the transit center site, with the introduction of vertical parking structure, which also could include a variety of businesses and services available to daily commuters (such as a bike station/shop).</td>
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<td></td>
<td>• How should bus transit support access to the light rail station? Are there specific recommendations to inform service allocations in anticipation of light rail service to improve connectivity to neighborhoods?</td>
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<td>• Options for long-term parking for bicycles, including aspects such as security and services need to be evaluated.</td>
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<td></td>
<td>• Need to analyze options for management of parking at the Overlake Transit Center station for commuter and mid-day use.</td>
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</tbody>
</table>
Assessment Methodology and Criteria

As part of the process of the high level assessment and selection of station areas for further focus in Phase 2 of the East Corridor Implementation Support Project, the following list of questions was framed to serve as evaluation criteria. The consultant team jointly considered these questions and responses related to each station area with PMT members and Growing Transit Communities staff. Evaluation of each station area’s alignment with the questions/criteria is reflected in the matrix on pages 109-110.

The questions were developed based on an understanding of the key objectives of the East Corridor Implementation Support Project, and the key needs and opportunities in each station area summarized previously. These questions/criteria are not listed in order of importance. Some overlap exists between Criterion 1 related to the partnership principles and other criteria, but this allows important objectives to be reinforced with greater weight in the evaluation process.

1—Consistency with Livability Principles of the HUD/DOT/EPA Partnership for Sustainable Communities:
Which station areas provide the best opportunities to achieve the full range of livability principles of the Partnership for Sustainable Communities (see page 107) with focus on TOD implementation? For example, which station areas offer the best opportunities to improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services and other basic needs by workers, as well as expanded business access to markets.

2—Affordable Housing:
Which station areas offer the best possibilities for developing more housing affordable to a wide range of income levels? (Also see Consistency with Partnership Principles—Promote Equitable, Affordable Housing.)

3—Transit Service vis-à-vis Light Rail Service:
Given that these station areas will not experience operational LRT for another ten years or more, and that bus rapid transit service is, and will continue to be, serving several of these stations, which stations with current transit service levels will provide the best environments to understand high-capacity transit service, irrespective of mode?

4—Amount of Public Investment Needed:
Which station areas would benefit most from or are in most need of public investment and/or financing through various forms, as well as partnerships?

5—Small Businesses:
Which stations are in most need of strategies and implementation actions to retain and attract small businesses that are TOD-compatible/supportive? Where is the highest risk to existing businesses?

6—Level of Readiness:
What station areas are progressing to be most ready for redevelopment and implementation activities? Which station areas have the potential to be most ready by the time LRT comes on line in terms of completion of redevelopment activity?

7—Four Topic Areas:
Are there any of the four focus areas (affordable housing, business retention and attraction, partnerships, and transportation access and connectivity) that are more challenging and in need of being addressed in specific station areas? Where are these issues most challenging and what station areas offer opportunities to address multiple issue topics at one location (perhaps all four)?
The US Department of Housing and Urban Development (HUD), US Department of Transportation (DOT), and the US Environmental Protection Agency (EPA) have joined together to help communities nationwide improve access to affordable housing, increase transportation options, and lower transportation costs while protecting the environment through the Partnership for Sustainable Communities. The Partnership for Sustainable Communities works to coordinate federal housing, transportation, water, and other infrastructure investments to make neighborhoods more prosperous, allow people to live closer to jobs, save households time and money, and reduce pollution. The Partnership agencies incorporate the following six principles of livability into federal funding programs, policies, and future legislative proposals.

**Provide more transportation choices.**
Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation’s dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health.

**Promote equitable, affordable housing.**
Expand location- and energy-efficient housing choices for people of all ages, incomes, races, and ethnicities to increase mobility and lower the combined cost of housing and transportation.

**Enhance economic competitiveness.**
Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services, and other basic needs by workers, as well as expanded business access to markets.

**Support existing communities.**
Target federal funding toward existing communities—through strategies like transit-oriented, mixed use development and land recycling—to increase community revitalization and the efficiency of public works investments and to safeguard rural landscapes.

**Coordinate and leverage federal policies and investment.**
Align federal policies and funding to remove barriers to collaboration, leverage funding, and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy.

**Value communities and neighborhoods.**
Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods—rural, urban, or suburban.

*Source: The Partnership for Sustainable Communities*
Assessment Matrix

The evaluation matrix for selection of station areas to be carried forward for more focused work in Phase 2 is presented on the following pages. Two versions of the matrix are shown, one depicting the letter values given to each question/criteria and a second version showing the correlating point values.

The matrix shows how each station area aligns with the questions/criteria discussed earlier and assigns values of A, B, C, and D with correlating point values. Evaluation factors and assigned points were as follows:

- Excellent/High Potential  \( A \)  3 points
- Good/Moderate Potential  \( B \)  2 points
- Fair/Some Potential  \( C \)  1 point
- Poor/Little or No Potential  \( D \)  0 points

(or Not Applicable)

Rankings were totaled in a two-tiered approach, first by adding criteria 1 through 6, and then by separately analyzing the four focus area topics and totaling those rankings. This allowed the opportunity to look at rankings on the four focus areas separately from those related to the other criteria. The combined rankings resulted in the following priority order of station areas to move forward into Phase 2.

1—Overlake Village (Redmond)
2—130th Avenue NE (Bellevue)
3—Hospital (Bellevue)
4—120th Avenue NE (Bellevue)
5—Crossroads - Two BRT Station Areas (Bellevue)
6—Overlake Transit Center (Redmond)
### Station Area Assessment Matrix

#### Evaluation Factors
(Potential/Draft - Note: Listing Does Not Reflect Order of Importance)

**1. Consistency with Partnership Principles:** Opportunity to reinforce the HUD/DOT/EPA Livability Principles (Higher Ranking of “A” Shows Most Opportunity)

<table>
<thead>
<tr>
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<td>A</td>
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**2. Affordable Housing:** Which station areas show better possibilities for developing more housing that is affordable to a wide range of income levels? Which areas are most at risk of losing affordable housing with redevelopment?

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**3. Transit Service vis-à-vis Light Rail Service:** Opportunity to address bus rapid transit as well as light rail transit and local transit connections

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**4. Amount of Public Investment Needed:** Which station areas would benefit most from or are in most need of public investment and financing, as well as partnerships?

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**5. Small Businesses:** Which station areas are in most need of strategies and implementation actions to retain and attract small businesses that are TOD-compatible/supportive? Where is the highest risk to existing businesses?

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**6. Level of Readiness for Redevelopment and Implementation Activities:** Which station areas have the potential to be most ready by the time LRT comes on line in terms of completion of redevelopment activity?

<table>
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</table>

**7. Four Topic Areas:** Opportunities to address challenging issues related to the four topic areas, as well as opportunities to address multiple topic areas

<table>
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<tr>
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### Possible Evaluation Approach:

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<tr>
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(Potential/Draft - Note: Listing Does Not Reflect Order of Importance)

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</tr>
</thead>
<tbody>
<tr>
<td>1. Consistency with Partnership Principles: Opportunity to reinforce the HUD/DOT/EPA Livability Principles (Higher Ranking of “A” Shows Most Opportunity)</td>
<td>3</td>
<td>3</td>
<td>3</td>
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<tr>
<td>2. Affordable Housing: Which station areas show better possibilities for developing more housing that is affordable to a wide range of income levels? Which areas are most at risk of losing affordable housing with redevelopment?</td>
<td>1</td>
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<tr>
<td>3. Transit Service vis-à-vis Light Rail Service: Opportunity to address bus rapid transit as well as light rail transit and local transit connections</td>
<td>3</td>
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<tr>
<td>4. Amount of Public Investment Needed: Which station areas would benefit most from or are in most need of public investment and financing, as well as partnerships?</td>
<td>3</td>
<td>2</td>
<td>3</td>
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<td>2</td>
<td>3</td>
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<table>
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<th>Combined Scores</th>
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<th>12</th>
<th>14</th>
<th>18</th>
<th>10</th>
<th>7</th>
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</table>

| Four Topic Areas: Opportunities to address challenging issues related to the four topic areas, as well as opportunities to address multiple topic areas | X | X | X | X |

### Combined Scores

<table>
<thead>
<tr>
<th>Topics</th>
<th>Affordable Housing</th>
<th>Business Retention &amp; Attraction</th>
<th>Partnerships</th>
<th>Transportation Access &amp; Connectivity</th>
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| Combined Scores | 10 | 10 | 12 | 12 | 8 | 12 |

| Combined Scores | 25 | 22 | 26 | 30 | 18 | 19 |
Station Areas Selected for Phase 2 Focus

The Overlake Village station area in Redmond and the 130th Avenue NE station area in Bellevue showed the overall highest potential in the evaluation process when applying the criteria. Maps of these two selected station areas are provided at the end of this section for reference.

Focusing on the Overlake Village and 130th Avenue NE station areas in Phase 2 work of the Implementation Support Project will provide a variety of opportunities. After reviewing available information on existing and planned conditions in the station areas and getting input from members of the PMT and the East Corridor Task Force as a whole, the consultant team developed some specific observations pertaining to the selection of the Overlake Village and 130th Avenue NE station areas, and these are summarized below under each key focus area.

AFFORDABLE HOUSING

In the Overlake Village station area, the land availability within the former Group Health Cooperative site and other near term public and private projects (including construction of regional stormwater facilities) will help facilitate catalytic investment. The City of Redmond’s planning efforts with respect to the creation of an urban design plan for an urban street grid and shopping street show public support and willingness to accommodate needed private investment.

With respect to housing and the feasibility of equitable housing development in the 130th Avenue NE station area, the City of Bellevue has undertaken an intensive local area planning effort in the Bel-Red Corridor, 130th Avenue NE Station Area Plan, pre-planned a street grid, riparian habitat restoration, and community facilities to accommodate greater urban densities. This urban amenity infrastructure will support public and private investment decisions by property owners and developers in and around the 130th Avenue NE Station.

Additional observations:

- Key to the implementation of an affordable/equitable housing strategy for the 130th Avenue NE station area is the Bel-Red (BR) zoning designation of Residential Commercial (BR-RC 1; 2 & 3), which will support mixed use, mixed tenure, and mixed income development. Nearly 30 new city blocks are available to support these higher densities upon redevelopment. This locus of development and residential density will, in turn, support retail and services in abundance. This critical mass of housing will help support a wide range of housing types including mixed tenure (rental and ownership) options.
- The Cadman Sand & Gravel Batch Plant presents the opportunity for a particularly catalytic site that is within two blocks of the planned station area at 130th Avenue NE. The site is zoned BR-RC-1 in the Bel-Red Zoning Map. Land assembly and land banking of existing operating businesses for future redevelopment could entail acquisition of the development rights of the business with a lease back to the business operator providing the working capital necessary to relocate the business elsewhere. This use being industrial in nature, and while not entirely inconsistent with urban residential development services.
(witness the Granville Island Community on False Creek in Vancouver, BC, which accommodates a functioning concrete batch plant amid the urban retail and housing), conflicts with transit-oriented land use potential. Traffic patterns also need to be considered, with existing heavy truck traffic associated with the batch plant transitioning to a more pedestrian, bicycle, and transit friendly street environment over time. Moreover, the noise, particulate emissions, and vibration associated with the operations and attendant truck traffic could detract from the desirability of developing housing and limit the value proposition for developers considering investment in the area.

- The linkage of planned housing at the Overlake Village and 130th Avenue NE station areas to existing employment at the Microsoft Campus and Downtown Bellevue places residents within short commuting distances, making these areas attractive options for urban residents who want to live in Redmond or Bellevue, close to where they work, but are otherwise priced out of the market.

- With respect to quality of life, the riparian habitat corridors identified by the City of Bellevue for preservation and enhancement provide an opportunity for pedestrian and bike corridors separated from vehicular and train traffic. The 130th Avenue NE station area is well situated to provide urban wildlife and riparian habitat in close proximity to the planned urban development. This urban interface with nature will in and of itself be an attractive amenity providing opportunities for and supporting active lifestyles of area residents. Similarly, with the planned parks, public spaces, and urban trails in the Overlake Village neighborhood, a variety of community amenities will exist to support residents’ needs.

**BUSINESS RETENTION AND ATTRACTION/ ECONOMIC DEVELOPMENT**

Of all the station areas, Overlake Village has the highest probability of experiencing small business displacement both directly as the result of the construction and redevelopment process, and indirectly over time as the result of rising land values and commercial rents. Now is the time to act to preserve some of the area’s unique economic character given that the national case studies underscore that early planning and organizing efforts are key to creating equitable economic development outcomes around new light rail stations. Put another way, the types of financial, regulatory, and development tools that will need to be implemented in Overlake Village to preserve a certain level of small business diversity will require significant upfront planning and investment. In addition, with its proximity to the Microsoft campus and long-term prospects for a strong retail and food service market, the area presents the most opportunities (available land, partnership opportunities, and older commercial properties in need of redevelopment) for new business attraction, and catalytic economic development projects linked to this major regional job node.

In Bellevue, the picture is more mixed. Given the existing industrial and light industrial uses (including repair, machine shops, batch plant, and businesses catering to the design and building trades) in the 120th Avenue NE and 130th Avenue NE station areas, redevelopment likely will occur more slowly than in Overlake Village. As such, transit compatibility and supportability also will occur more gradually. Analysis should focus on gaining a more keen understanding of potential phasing of redevelopment and the presence of and
potential for attraction of transit compatible businesses in the station areas. It will also be important to assess potential opportunities for relocation of some of the uses to other parts of the region in favor of creating new mixed use TOD communities with a preference for higher-density residential, retail, and local serving office uses. Because TODs around the 120th Avenue NE and 130th Avenue NE station areas likely will take relatively longer to develop based on current market dynamics, there will be a strong need for interagency policy and coordination around long-term land use and economic goals for the Bel-Red Corridor.

Although the 130th Avenue NE station area lags in redevelopment activity, the area represents a significant opportunity to focus on how to implement and catalyze wholesale change with a complete reconfiguration of the existing land uses and a restructured economic base over a longer period of time than some of the other station areas. Under current plans, it is likely that many of the existing light-industrial, automotive and repair uses would relocate to other parts of Bellevue or other nearby communities while other small businesses may have the potential for remaining and forming part of the commercial base of a mixed use TOD community. The implementation work around business displacement and economic development for the 130th Avenue NE station area would be to identify the relocation needs of existing businesses while also setting the stage for new commercial development activity more geared to TOD over the long-run.

**PARTNERSHIPS**

For partnerships, the choice of Overlake Village in Redmond makes sense based on the sheer number of potential opportunities for interagency partnerships, public private partnerships, and the potential involvement of “anchor” economic and civic institutions. Overlake Transit Center could be developed as a stand-alone TOD/joint development project in the future, but the overall range of potential partners would be more limited.

In Bellevue, the 120th Avenue NE and 130th Avenue NE station areas both include a significant number of vacant or underutilized publically owned parcels that could present opportunities for using partnerships to spur new development. The Hospital station area also presents some opportunities, given that the area is potentially more “market ready” and offers some interesting prospects for interagency collaboration and the involvement of anchor institutions (most importantly the medical facilities themselves).

The majority of development opportunities within one-quarter-mile of the 130th Avenue NE Station are on privately-held parcels with land owners that have a range of perspectives on the area’s future development trajectory. Understanding the economic needs and goals of these private actors will be critical to creating successful partnerships between the public sector and private developers interested in implementing the City of Bellevue’s long-term vision for this area. Facilitating ongoing outreach to existing property owners and businesses in these station areas and others will also be important leading up to the time light rail service comes online.

There are a number of sites within one-quarter-mile of the 130th Avenue NE Station specifically that present early opportunities for catalytic development driven by inter-agency partnerships and private developers with expertise in brownfield and infill development in emerging urban areas.

A primary objective for implementation work associated with the 130th Avenue NE station area will be in conducting outreach to the
development community and formulating potential partnership models with direct applicability to the station’s land ownership patterns and development context. An assessment of station area businesses and potential timing of redevelopment activities also will be important.

TRANSPORTATION ACCESS AND CONNECTIVITY

When considering how to enhance transportation access and connectivity improvements to (a) directly increase transit ridership, and (b) to support the development of equitable transit-oriented development, the selection of the Overlake Village and 130th Avenue NE station areas affords several opportunities.

The Overlake Village station area is an ideal station to focus access and connectivity planning efforts in Phase 2 because the station area is divided by SR 520, is currently served by Metro’s B Line RapidRide Service, and will serve as a key transfer point for some B Line and local transit riders from neighborhoods south of SR 520. These factors are also true for the Overlake Transit Center, however there is more value in expending planning effort in the Overlake Village station area, for the following reasons:

- **TOD opportunities:** Overlake Village has a TOD-supportive master plan in place and more vacant and underutilized parcels that represent key opportunities for providing equitable TOD within walking distance of East Link.

- **Multimodal connectivity:** Creating a new street linking the station to the Overlake Village business district, a new bike/pedestrian bridge over SR 520, and new bike/pedestrian linkages through the heart of the district are major capital improvements identified in existing plans and necessary to support equitable TOD in the district. Implementation-related planning can help make these key elements of the plan happen. Implementation support will also evaluate and provide recommendations for enhancing local transit connectivity to the station area.

- **Parking:** Exploring opportunities for shared parking, as well as an optimal approach to parking management in the redeveloped Overlake Village neighborhood will be important. Bicycle parking strategies also need to be addressed.

- **Connections to the Overlake Village Park-and-Ride:** East Link will not directly serve the existing Overlake Village Park-and-Ride or the associated Village at Overlake Station, a 308-unit affordable housing complex that was constructed with the premise that residents would be directly connected to the regional transit system. Focusing on Overlake Village will provide the opportunity to help address the challenge of linking the residents of this affordable housing to East Link.

- **Opportunities to strengthen connections to Crossroads BRT station areas:** Focusing on the Overlake Village station area provides the opportunity to look at multimodal linkages between the BRT station areas at Crossroads and the future light rail station at Overlake Village.

The 130th Avenue NE station area presents an interesting challenge of evaluating how to support implementation of an entirely new street grid with multimodal connectivity to the station area. Focusing on the 130th Avenue NE station area in Phase 2, allows the following opportunities:

- **Complete streets design/best practices:** The fact that much of the street network in and around the 130th Avenue NE station area will be re-worked presents a unique opportunity for the City of Bellevue to
design and implement complete streets, incorporating high quality accommodation for pedestrians, bicyclists, and people with special mobility needs into new and existing streets and station access ways. A complete streets design toolbox could be developed for use at the 130th Avenue NE station area, as well as other station areas throughout the system.

- **Bicycle facilities**: As the 130th Avenue NE Station Area Plan notes, bicycle facilities are almost non-existent in this station area; but the plan calls for provision of new bikeways on 130th/132nd and other roadways, with connections to regional networks. Cycletracks are expressed as a preferred alternative for 130th/132nd. The design and operation of cycle tracks at and approaching major intersections is an important topic that could be addressed, perhaps as part of the complete streets toolbox suggested above.

- **Safe and effective connections**: It will be especially important to plan and implement safe and effective connections between new and existing elements of the transportation network in the 130th Avenue NE station area, and to existing facilities and networks outside of the station area—particularly south of Bel-Red Road. In particular, care should be taken in planning and implementation at the interface between new and existing streets and ways, where one type of pedestrian or bicycle facility meets another to ensure clear wayfinding and safe, conflict free intersections.

- **Connectivity beyond the station area**: Given that there are few residents currently living in the 130th Avenue NE station area, designing and implementing effective transit, auto, and non-motorized connections to areas outside of the conventional half-mile walking distance from the platforms will be essential, for:
  - Connecting current residents to East Link (and to the benefits of the new development planned for the station area);
  - Balancing ridership at the station; and
  - Expanding the market area for new and existing retail businesses in the station area.

- **Parking supply and management**: There is an opportunity to assist with parking supply and management planning and policy development for the 130th Avenue NE station area. Sound Transit has planned for some park-and-ride space to be developed at this station, so there is a need to look at how the park-and-ride function interacts with other planned TOD, and how the surface parking might transition to more intensive, transit-supportive mixed use development in the future.
Assessment of Station Areas
NEXT STEPS

Phase 2 of the East Corridor Implementation Support Project

The purpose of the Phase 2 East Corridor Implementation Support Project is to advance implementation and move forward with steps that have not already been completed by the Cities of Bellevue and Redmond in their respective plans. The consultant team will build on past work and take efforts to the next level, referencing and working from plans that have already been adopted and are in place for the two selected station areas for Phase 2:

- Overlake Village in Redmond
- 130th Avenue NE in Bellevue

The following scope of work has been developed in collaboration with the project management team (PMT) and Puget Sound Regional Council (PSRC) Growing Transit Communities staff to address the four key focus areas of Affordable Housing, Business Retention and Attraction, Partnerships, and Transportation Access and Connectivity (alphabetical listing not intended to represent priority) in the two selected station areas.

Description of Work Elements

Work elements 2.1 through 2.8 are described in more detail below, followed by a list of deliverables and the recommended work plan/timeframe for Phase 2. An initial and ongoing work element will relate to project management, team coordination and project communications:

2.1 Provide Ongoing Phase 2 Project Management and Facilitate Team Coordination and Project Communications

The project team will continue to help guide and facilitate coordination and communication efforts on the project as part of the execution of Phase 2 implementation support efforts. This will include monthly reports to PSRC, monthly meetings with the PMT, and briefings to the East Corridor Task Force, as well as ongoing coordination of the consultant team (Otak as prime consultants and BAE Urban Economics and Nelson\ Nygaard Consulting as subconsultants).
In addition to Work Element 2.1, the following work elements under each of the four focus areas will be completed as part of Phase 2. Some of the activities proposed for Phase 2 address several or all of these focus areas.

The “Partnerships” category has been expanded to include work related to overall transit-oriented development (TOD) implementation. The order of the four focus areas below (Overall TOD Implementation and Partnerships, Business Retention and Attraction, Affordable Housing, and Transportation Access and Connectivity) is not alphabetical in the scope of work because earlier work elements flow into and inform later work elements.

Each technical work element in Phase 2 will include recommendations related to time frames for implementation—the years that the actions should be completed within the period between now and initiation of light rail service. Recommendations in the Phase 2 Implementation Report also will address specific considerations related to roles and responsibilities, partnership and coordination, outreach and communications, funding mechanisms, and other needed activities, as further described below.

### OVERALL TOD IMPLEMENTATION AND PARTNERHIPS

The following work elements are proposed under the category of Overall TOD Implementation and Partnerships.

#### 2.2 Facilitate a Development Interests Outreach Program for Each Station Area

Working closely with the PMT and Growing Transit Communities staff, the consultant team will develop and facilitate an outreach program specific to the two station areas that involves regional development interests (developers, financers, real estate brokers/agents, builders, philanthropic organizations, nonprofits, and others). The outreach program will provide a forum for:

- Presenting the two station area plans and the status of sites and projects in these areas;
- Discussing marketing conditions and demands pertinent to the two station areas;
- Gathering recommendations and ideas for incentivizing, encouraging, and supporting redevelopment;
- Obtaining suggestions for infrastructure and public realm improvements to support redevelopment;
- Evaluating prototypical redevelopment phasing and site land use scenarios;
- Building interest and momentum in TOD opportunities;
- Testing potential implementation concepts; and
- Other activities as determined with the PMT and Growing Transit Communities staff.

The consultant team will design the specific program collaboratively with the PMT. We will explore options for involving existing local business and neighborhood interests in this outreach effort (in coordination with other Growing Transit Communities outreach efforts underway).

It is assumed that outreach efforts will occur over the course of one week for each station area (two weeks total), with work sessions with specific interest groups to be scheduled over these time frames.

#### 2.3 Develop an Ongoing Outreach Strategy/Program for Each Station Area
The consultant team will develop an ongoing outreach strategy/program for each station area (for outreach to businesses as well as the general community/neighborhood within and surrounding each station area). Recommended timeframes for outreach, a list of activities, potential organizational structure for outreach, roles and responsibilities, and other specifics will be described. The strategy/program will address suggested timing for outreach activities; the types of activities that can be implemented to engage stakeholders and community interests; and suggestions for managing and coordinating the ongoing outreach program. Recommendations will be provided specific to each station area. The consultant team also will provide support with other business/partner/stakeholder outreach and discussions during the course of Phase 2 work, dovetailing, but not overlapping with other Growing Transit Communities Partnership efforts.

2.4 Provide Guidelines for Family-Friendly Neighborhood, Site, and Unit Characteristics

The consultant team will identify family-friendly characteristics at the neighborhood, site, and building/unit scale for the two

Recommendations for creating family friendly TODs at the neighborhood, site, and unit scale will be part of the focus of Phase 2 work. (Source: Denver Housing Authority)
station areas to promote and encourage housing and characteristics that will attract and retain families. Several reference sources have been discussed among the consultant team and with the PMT. The consultant team will evaluate these for applicability to the East Corridor station areas. The consultant team will then define appropriate provisions and guidelines for family-friendly development characteristics applicable to the two station areas.

As part of this work element, the consultant team will evaluate public ownership (existing and future potential) in the station areas and associated opportunities and develop specific recommendations for catalyst public projects that can help move neighborhoods forward toward redevelopment. In conjunction with developing family-friendly development guidelines, the consultant team will provide a list of desirable amenities to incent development in station areas.

2.5 Identify Infrastructure Improvement Funding Opportunities

Recognizing the need for funding to implement various infrastructure improvements (streets, nonmotorized facilities, utilities, stormwater management, parks, etc.) in each station area, the consultant team will review existing funding structures (such as impact fee programs) and recommend additional mechanisms for funding to support various types of infrastructure projects in the two station areas, including new value capture program and district-based financing opportunities, grants, budget allocations, and other potential methods.

The consultant team will analyze the planned street network improvements in the two station areas and recommend a funding strategy for improvements according to potential redevelopment phasing, working closely with staff from Bellevue and Redmond. The consultant team will review current capital budget and transportation improvement plans for the two station areas and make recommendations to the cities for adjustments to budget assignments in future years based on the phasing analysis. The potential for a multimodal transportation impact fee program will be examined based on other models.

This work element will also address the following opportunities.

• **Overlake Village**—A strategy for district energy/eco-district implementation and clarification of applicable green building standards—The consultant team will evaluate opportunities for district energy/eco-district implementation with a focus on pre-feasibility needs, potential locations, ownership models, rough order of magnitude costs, and an implementation timeline. This will be framed to flow into a full feasibility study of district energy in the future and will provide recommendations for the feasibility study process. The consultant team will also provide a listing of current green building standards (LEED, International Sustainability Institute Envision, Greenroads, Living Building Challenge, STARS, and others) and information about applicability to redevelopment efforts in the station area.

• **130th Avenue NE**—Leveraging redevelopment activity—Modeling of revenue reliably projected to be derived from the Wright Runstad/Shorenstein Development of 120th Avenue NE Spring District to ascertain what capital...
may be available to secure sites in and around the 130th Avenue NE station area (this will serve as a source of local equity and could be used to option sites and pay the debt service on inter fund transfers or revenue bonds. (Similar opportunities in the Overlake Village area also could be analyzed.)

**BUSINESS RETENTION AND ATTRACTION FOCUS**

The following work elements are proposed under the category of Business Retention and Attraction.

2.6 Further Evaluate and Identify Specific Strategies and Tools for Retaining and Attracting Various Forms of Retail and Commercial Businesses/Uses as Redevelopment Occurs in the Station Areas.

For both station areas, the consultant team will review and assess existing businesses and the potential for retention. The consultant team will analyze the potential for attraction of new TOD supportive businesses and identify the specific types of businesses to each area and develop specific recommendations and economic development strategies for each station area. The consultant team also will develop specific guidance that could help developers program, design, and market/lease retail and commercial spaces in their buildings. The work will include recommendations for alternative types of spaces within new buildings that could meet a diversity of small business needs and adaptive reuse potential and models for reuse of existing buildings. The consultant team also will develop recommendations for marketing, branding, and outreach programs to attract new development to the station areas. For both station areas, the consultant team will:

- Develop recommendations for retaining businesses that could help to support the future vitality of the transit-oriented district.
- Provide recommendations for retrofit and adaptive reuse opportunities.
- Evaluate the applicability of loft/artist studio models (BelMar in Denver area and Art Space in Seattle and Minneapolis), particularly for the 130th Avenue NE station area.
- Evaluate and provide recommendations for phasing based on market, site assemblages, and other characteristics in relationship to business relocation scenarios.

Recommendations for business retention and attraction will be tailored to each station areas and presented in a toolbox approach with relative timing, roles/responsibilities and other factors identified for each strategy/tool.

The consultant team will evaluate and identify the potential for a commercial land trust or urban land trust entity to preserve small business and commercial tenancies in the East Corridor at affordable rents within the context of a commercial or urban/transitional land trust. The development and capitalization of a Transit-Oriented Development Loan Fund will be undertaken in 2013-2014 by a TOD Fund Manager pending contract award by PSRC. This element is intended to be aligned with the work of the TOD Fund Manager, ensuring that the 130th Avenue NE and Overlake Village station areas retain and attract a mix of small businesses.
**AFFORDABLE HOUSING**

The following work elements are proposed under the category of Affordable Housing.

2.7 Focused Analysis of Approaches to Providing Affordable Housing through Tax Exempt Financing Tools

Growing Transit Communities is analyzing affordable housing in the following ranges:

- 50 to 80 percent of Area Median Income (AMI)
- 30 to 50 percent of AMI
- Under 30 percent of AMI

There are three basic approaches to implementing affordable housing:

- **a) Land Use Requirement** (e.g. 10 percent of housing units provided will be @ 80 percent Area Median Income or AMI)
- **b) Tax Exempt Financing** (40 percent of housing units @ 60 percent AMI or 20 percent of housing @ 50 percent AMI facilitated by bonds with Low income Housing Tax or LIHTC credits and other equity/property tax exemption programs)

- **c) Deep Affordability** (100 percent of housing units below 80 percent, targeted to 30 to 60 percent AMI using 9 percent Low Income Housing Tax Credits/LIHTCs, State HTF Revenue; Fee in Lieu programs, etc.)

The consultant team will focus on area b) during Phase 2 and will evaluate opportunities for private developers to use other incentives/financing tools and incorporate more affordable housing into their developments. The consultant team also will evaluate potential for tax exempt financing. The analysis will be specific to evaluating the economic feasibility of using tax exempt financing in the two station areas; identifying gaps in economic feasibility of using this financing; and suggesting ways other local incentives/financing tools could help fill that gap to the extent needed.

This work element will include developing, modeling, and demonstrating specific tools showing how private developers can be incentivized to develop directly, co-develop (partner) or sponsor affordable and/or mixed income projects with nonprofits or the local housing authority, ensuring long term affordability. The goal is to produce a range of housing options with a shallow subsidy, which achieves a mix of units serving 40 percent of the households with incomes at or below 60 percent AMI or 20 percent of the households below 50 percent AMI.

While the array of tools to achieve these price points are established and used elsewhere, the purpose of this work will be to apply the financing sources to specific sites and evaluate/exemplify what it would take to engage private landowners/developers in this market segment. At the option of local nonprofit or public partners, specific properties may be further subsidized more deeply to attain deep affordability for households with incomes between 30 to 50 percent AMI to serve a wider spectrum of demonstrated local housing needs.

As an outcome of the outreach under 2.2, and through lessons learned and experience in other places, the consultant team will identify potential affordable housing opportunities in the station areas and provide recommendations for innovative public-private partnerships at specific locations where public land acquisition exists or is proposed.

For example, at the direction of the PMT to further explore potential opportunities, the consultant team may build a prototypical budget for a couple of high value sites: such as
a portion (three acres was mentioned) of the Cadman Sand & Gravel site; co-development of one of three of the Sound Transit sites identified near the 130th Avenue NE station area, and/or a site in the Overlake Village area. An opportunity study resulting from this effort could help crystallize development opportunities for retail, housing, and potential family-friendly developments in and around the 130th Avenue NE and Overlake Village station areas. These could be combined for synergy. A template for joint development agreements and analysis of the need for ongoing incentives also will be provided.

**TRANSPORTATION ACCESS AND CONNECTIVITY**

The following work element is proposed under the category of Transportation Access and Connectivity.

2.8 Analyze and Provide Recommendations for Strengthening Local Transit, Pedestrian, and Bicycle Connections and Provide Parking Management Recommendations

This work will build on studies and plans already completed by local jurisdictions and provide specific recommendations for next steps. After consulting with representatives from the Cities of Bellevue and Redmond, and reviewing existing plans and studies, the consultant team will take ideas to the next level and focus on specific issues, needs, and barriers to multimodal access and connectivity in each station area.

The consultant team will evaluate options and provide recommendations for strengthening local transit, pedestrian, and bicycle connectivity not only with the light rail stations, but also with existing affordable housing, key employment sites, neighborhoods and neighborhood centers, and other areas within and surrounding the station areas.

_Bicycle Cellar in the Tempe Transportation Center, an award-winning mixed use TOD_ (Source: Flickr, photo by Matt Johnson)
This analysis will also address projected transit use patterns such as identifying which stations surrounding neighborhoods and employment centers will be most drawn to for access to the system. The consultant team will reference other ridership studies and consider how to build capacity and ridership, leveraging the BRT system in the coming ten years before LRT is implemented. The consultant team will make recommendations for maintaining and strengthening existing and planned connections and addressing gaps in coverage to support access to high capacity transit.

The team will specifically analyze projected transit use patterns and connectivity needs within a local transit connection distance (local feeder bus service) from the station areas and nearby transit-oriented development (such as Overlake Village) as well as needs for access by pedestrians and bicyclists to and from these areas. The consultant team will evaluate local transit, pedestrian, and bike demand/needs associated with trips to and from the stations as well as trips associated with future TOD in Overlake Village and around the 130th Avenue NE station area. Recommendations related to transportation demand management (TDM) and other transportation programs and services also will be provided.

To support identification and evaluation of options for improving equitable access to East Link and RapidRide for residents of the greater Eastside, the consultant team will identify affordable housing and key employment sites/areas within three miles of each station, for which the selected station is the nearest point of access to East Link. The consultant team will then conduct a gap analysis to identify concentrations of existing and potential jobs and affordable housing units that are located within the three mile area of influence, but not within easy walking or cycling distance of each station (given current bikeway, path, and/or sidewalk networks), or within easy walking distance of an existing, frequent all-day transit route that provides a direct connection to the station. The consultant team will develop recommendations for strengthening existing connections and addressing gaps in coverage within the study area for each of the two stations, including recommendations for improving connections to RapidRide prior to the opening of East Link.

This work will also evaluate the role of parking in each station area and recommend phased and shared parking management strategies and approaches, including the potential for joint development agreements that might convert near term surface parking areas to future TODs. Parking management recommendations will include looking at how parking impacts connectivity of other modes (barriers to access) and TOD potential in the station areas. Based on best practices and a review of proposed plans for each station area, the analysis will identify the sufficient amount of parking for each station area and the various options for providing the levels needed.

As part of the parking analysis, the team will evaluate and provide recommendations regarding potential shared parking facilities/opportunities that might alleviate individual developers from providing parking and to serve general public needs such as to access future park space. This could be one of the strategies to advance affordable housing and affordable retail.

The consultant team also will provide recommendations for long-term parking for bicycles addressing such aspects of security and services, as well as for establishing a bike sharing program.
Proposed Deliverables
The following deliverables are proposed as part of Phase 2:

- **Work element #2.1**—Monthly reports to Growing Transit Communities and facilitation of monthly meetings with the PMT, as well as briefings to the East Corridor Task Force (agendas, meeting materials and information, and notes to the file)

- **Work element #2.2**—Presentation materials, hand-outs, coordination of logistics and invitations for outreach to development interests in each station area (to be conducted under work element #1 above), options for involving local business and neighborhood interests will be explored; memorandum summarizing results of the outreach efforts for each station area (draft and final)

- **Work element #2.3**—Recommended outreach strategy and program for each station area for ongoing outreach activities (up to the time of LRT implementation) in memorandum format (draft and final)

- **Work element #2.4**—Family-friendly development guidelines (draft and final)

- **Work element #2.5**—Infrastructure analysis technical memorandum with recommendations and strategies for funding infrastructure in the two station areas (draft and final)

- **Work element #2.6**—Business retention and attraction toolbox including marketing and branding strategies for each station area and addressing opportunities for preserving small business and commercial tenancies at affordable rents within the context of a commercial or urban/transitional land trust (draft and final)

- **Work element #2.7**—Affordable housing technical report and joint development agreement template, including specific site opportunity studies (draft and final)

- **Work element #2.8**—Transportation access and connectivity technical report of analysis and recommendations, including a toolbox to support ongoing implementation (draft and final)

Scheduling of each individual work element will be completed in the early stages of the project, in coordination with the PMT.

Work Plan
The chart on the following page illustrates the proposed general timeline and work plan for completion of Phase 2 work elements.
Work Plan for Phase 2

- **January**: Finalize Scope and Work Plan
- **February**: Analyze Specific Station Area Data and Conditions
- **March**: Prepare Draft Products (Incrementally Rolled Out)
- **April**: Finalize Products
- **May**: Planning and Logistics for Outreach
- **June**: Outreach Activities with Development Interests
- **July**: Analyze and Integrate

**Next Steps**

- Monthly PMT Meetings
- Task Force Briefing
COMMONLY USED ACRONYMS
IN THIS REPORT

ADA        Americans with Disabilities Act
AMI        Area Median Income
ARCH       A Regional Coalition for Housing
BRT        Bus Rapid Transit
CBD        Central Business District
CTOD       Center for Transit-Oriented Development
DHA        Denver Housing Authority
ETOD       Equitable Transit-Oriented Development
GPLET      Government Property Leasehold Excise Tax
GTC        Growing Transit Communities
HAP        Housing Authority of Portland, Oregon
HUD        Housing and Urban Development (federal agency)
LEED       Leadership in Energy and Environmental Design
LET        Leasehold excise tax
LIHTCs     Low Income Housing Tax Credits
LIFT       Local Infrastructure Financing Tool
LRT        Light Rail Transit
MAX        Portland, Oregon metropolitan area light rail system
PSRC       Puget Sound Regional Council
RTD        Regional Transportation District (Denver, Colorado area agency)
TIF        Tax Increment Financing
TOD        Transit-Oriented Development
ULC        Urban Land Conservancy (Denver, Colorado nonprofit)
ULI        Urban Land Institute
VTA        Valley Transportation Authority (Santa Clara County, California)
CONSULTANT TEAM EXPERTISE

OTAK, INC.  
Prime consultant, responsible for project management and coordination, development of recommendations for transit-oriented development implementation, land use and transportation planning, affordable housing analysis and recommendations, development of partnership models, infrastructure assessment and funding recommendations, and outreach and communications.

BAE URBAN ECONOMICS  
Real estate, market, and economic development specialists focused on transit-oriented development, business retention and attraction, development of partnership models, and affordable housing.

NELSON/NYGAARD CONSULTING ASSOCIATES  
Specialists in multimodal transportation including transit and transit-oriented development and transportation-related funding recommendations.

PUTTMAN INFRASTRUCTURE  
Specialists in district energy solutions and eco-district implementation  
(Will be involved in Phase 2 efforts.)