

# **Corridor Two Regional Rail Feasibility Study and Alignment Alternatives**

## **TECHNICAL MEMORANDUM 7.1**

### **Transit Oriented Development Considerations at Station Sites**

**December 2009**

# **TECHNICAL MEMORANDUM**

## **Corridor Two Regional Rail Feasibility Study and Alignment Alternatives**

### **Transit Oriented Development Considerations at Station Sites Draft 10-22-2008**

#### **Introduction**

This Technical Memorandum on Transit Oriented Development Considerations is intended to complement two other technical memorandums produced as part of the Corridor Two Regional Rail Feasibility and Alignment Alternatives Study. A technical memorandum titled “Evaluation of Potential Rail Station Locations” dealt with identification and screening of potential sites for commuter rail stations along Corridor Two. Transit Oriented Development (TOD) consideration was identified as one of the criteria used to screen candidate station locations along the Corridor, and each candidate site was “scored” as to the potential of the site to encourage TOD and the capacity of the surrounding area to support TOD. The concepts presented in this memorandum can also be applied to potential station locations identified in the Corridor Two technical memorandum titled “Concepts for a Maximum Bus Plan.” That memorandum describes concepts for deploying high-capacity bus transit service along Corridor Two, either as a precursor to Commuter Rail or as possible long-term solution to mobility needs along the Corridor.

Recognizing that locally-adopted land use plans and local ordinances can have a major influence on whether and the extent to which TOD occurs, this Memorandum is intended to serve as a guide to local municipalities that are interested in maximizing the potential benefits of TOD, both for the transit system and the communities that it serves.

#### **Background**

A regional rail system for the Harrisburg-Hershey-Lebanon corridor is envisioned as providing scheduled transportation services between specific locations, where one can find residential, service, or employment destinations. As focal points for development and redevelopment, these locations can play an integral role in managing growth, encouraging job creation and economic development, addressing traffic congestion, and creating new housing options throughout the corridor if clearly addressed through development policies and regulations. These include the county and local development policies, zoning (land use) and land development regulations, and special planning and development initiatives, such as station area master plans. Where these planning tools encourage or perhaps even require development to connect to the available transit system, the resulting development is called “transit-oriented development” or “TOD.”

## *Principles of Transit Oriented Development*

TOD is a land use-transportation strategy that concentrates residences, jobs and services in nodes and recognizes transit as the primary travel option for commute trips outside the local node (or neighborhood); and it supports pedestrian and bicycle travel within the node and accommodates vehicular travel and parking as additional travel options. It typically requires development densities that support transit ridership; a combination of uses; and pedestrian-oriented design elements that address pedestrian preferences and activity. Terms commonly used in discussions of TOD and their definitions in that context are:

**Transit Station or Stop** – Rail and/or bus transit station or stop around which to focus development.

**Proximity** – a comfortable walking distance or radius from the station or stop that defines the area of a transit-oriented development. Some TOD planning sources list one-quarter mile as the walkable radius, while others support up to one-half mile.

**Development Density** – the concentration of homes and jobs per acre. Typically higher densities, i.e. increasing the concentration of homes and jobs along transit routes, support higher levels of transit ridership more transit frequent service.

**Land Use Patterns** – mixed use of land either within the node or within the transit system. Mixed land uses within a node combine a range of daily personal or business activities within easy walking distance. Mixed land uses within a transit system can concentrate jobs in major employment and/or service nodes linked by transit to residential nodes.

**Design** – of facilities and public spaces that are pedestrian-friendly in scale, features, and amenities of development and that accommodate safe travel by bicycle, transit, automobile and trucks, as appropriate. Streets in transit oriented development nodes balance the potentially conflicting needs of a multi-modal transportation system with pedestrian crosswalks, bike lanes, and dedicated transit lanes. While the travel modes rarely receive equal emphasis in station area design, establishing a pedestrian-friendly environment is critical to supporting transit use in any station area.

## **Model Comprehensive Plan and Ordinance Language**

Where communities are interested in pursuing transit, they should consider the location of proposed station sites and revise local comprehensive plan policies, zoning regulations, and subdivision and land development standards to support and permit TOD in these areas.

### *Model Comprehensive Plan Language*

The comprehensive plan should provide the goals, objectives and policies that substantiate the need and public purpose of TOD zoning districts, whether as a specific

zoning district or as a zoning overlay. The comprehensive plan should express the principles of integrated transit planning and land use planning. It should also identify the zoning ordinance as the primary implementation tool. The subdivision and land development ordinance can also be employed to guide the physical form of the station area.

The following examples of language from comprehensive plans illustrate a variety of land use, transportation, and housing policies that support transit oriented development.

## 1. King County, Washington

These excerpts from the King County Comprehensive Plan establish transit oriented development as a strategy for developing mixed use urban centers and expanding housing options.

### **Urban Land Use Policies on Urban Communities**

U-108 King County supports the development of Urban Centers to meet the region's needs for housing, jobs, services, culture and recreation and to promote health. Strategies may include exploring opportunities for Joint Development or Transit Oriented Development, siting civic uses in mixed-use areas, and leveraging or utilizing existing county assets in urban centers.

### **Housing Policies on New Housing Models**

U-454 King County should support transit-oriented development that expands housing opportunities at locations near frequent transit by engaging private and nonprofit entities in an investment/ development partnership. Public transit funds should be used only when it is shown that the public transit benefit of such investment is equal to or greater than the cost. King County should support efforts to incorporate affordable housing in transit-oriented development.

*Source: Comprehensive Plan of King County, WA 2004 (amended in 2006)*

## 2. Fairfax County, Virginia

The Fairfax County Comprehensive Plan recognizes the need to support land-use policies, specifically housing, with a multimodal transportation system that offers real travel choices for residents and workers.

**Transportation Goal:** Land use must be balanced with the supporting transportation infrastructure including the regional network, and credibility must be established within the public and private sectors that the transportation program will be implemented. Fairfax County will encourage the development of accessible transportation systems designed through advanced planning and technology to move

people and goods efficiently while minimizing environmental and community disruption. Regional and local efforts to achieve a balanced transportation system through the development of rapid rail, commuter rail, expanded bus service and the reduction of excessive reliance upon the automobile should be the keystone policy for future planning and facilities. Sidewalks and trails should be developed as alternative transportation facilities connecting mass transit, high density areas, public facilities and employment areas.

Objective 4: The County should encourage a diverse housing stock with a mixture of types to enhance opportunities for County residents to live in proximity to their workplace and/or proximity to mass transit.

Policy a. Increase the availability of housing to provide a diversity of housing opportunities in proximity to concentrations of employment.

Policy b. Encourage universal design in the development of housing and communities to expand opportunities for residents of all ages and abilities to live in areas near their employment, mass transit and/or desired services.

Objective 6: Fairfax County should have a land use pattern which increases transportation efficiency, encourages transit use and decreases automobile dependency.

Policy a. Link existing and future residential development with employment and services, emphasizing ridesharing, transit services, and non-motorized access facilities.

Policy b. Concentrate most future development in mixed-use Centers and Transit Station Areas to a degree which enhances opportunities for employees to live close to their workplace.

*Source: Comprehensive Plan of Fairfax County, VA 2007 (amended in 2008)*

### 3. Chester County, Pennsylvania

Chester County’s Comprehensive Plan provides a comprehensive model of land use and public transportation policies that promote transit in urban and suburban communities.

**1.0 Land Use Goal** - Preserve and enhance the diversified mix of urban, suburban, rural, and natural land uses through municipal cooperation and by concentrating development.

**Objective 1.1: Urban Landscape**

Strengthen urban centers to serve as mixed use centers of concentrated commercial activity, employment opportunities, institutions, and residential variety to increase diversity and provide a sense of community.

**Policies:**

- Improve the employment base in urban centers to adapt to a changing economy.
- Improve the diversity of businesses in downtown areas to increase stability during changing economic conditions.
- Increase the housing supply and variety of housing types for all households.
- Improve the road network serving the urban centers.
- Encourage public transportation and non-motorized travel options.
- Maintain and upgrade existing sewer and water facilities to address problems, and support revitalization and development activities.
- Acquire, develop, and maintain community and neighborhood parks.
- Encourage the expansion and location of institutions, such as schools, hospitals, churches, and community buildings in urban centers as focal points for community life.
- Protect and restore urban historic and natural resources.
- Use appropriate economic development to restore, revitalize, and enhance historic community and neighborhood character.

**Objective 1.2: Suburban Landscapes**

Concentrate new residential development in Suburban Landscapes and concentrate industries and offices at locations adequately served by necessary infrastructure and accessible to employees.

**Policies:**

- Encourage infill development among existing developments based upon infrastructure capacity and environmental constraints.
- Direct additional development to areas with infrastructure capacity.
- Improve the road network in suburban landscapes.
- Encourage higher density development which can support public transportation service and non-motorized travel to help reduce traffic congestion.
- Develop a permanent open space system linking existing areas and adding new areas.
- Locate employment centers where they are adequately served by the highway system and public transportation.
- Improve commercial centers and encourage mixed use development which incorporates residential, commercial, and office uses.
- Use appropriate economic development to create a strong suburban community character sympathetic with, and transitional to, the County's historic urban, rural, and natural landscapes.

**4.0 Transportation Goal** - Provide an intermodal system which optimizes mobility, strengthens the economy, protects the environment, and supports the vision for Chester County.

**Objective 4.2: Public Transportation**

Provide a public transportation system that supports the land use pattern, serves the needs of all users, and reduces the number of vehicular trips.

**Policies:**

- Support an affordable and accessible public transportation system that links urban centers, suburban neighborhoods, employment centers, and villages.
- Promote concentrations of housing, employment centers, and commercial areas to make public transit more feasible in the future.
- Connect public transportation routes and facilities with other modes of travel.
- Provide for the transportation needs of the elderly and special needs populations.
- Encourage the increased use of public transportation through improved facilities, including increased parking at stations, services, and operations.

*Source: Landscapes, The Comprehensive Plan of Chester County, PA*

**4. Transit Development Plan for the Lake-Sumter (Counties) MPO, Florida**

For communities or perhaps local governments that are interested in more specific language and action items, this excerpt from the Lake-Sumter MPO Transit Development Plan provides model language for land use from the perspective of public transportation.

**Goal 5: Coordinate public transportation services with planning efforts of affected local government and organizations.**

Objective 5.1 – Coordinate planning efforts to provide transit needs and improvements in growth areas by integrating into the development review process.

Objective 5.3 – Coordinate transit planning efforts into long-term planning efforts of the relevant local and state agencies, governments, and organizations.

**Goal 8: Encourage land use patterns that support and promote transit patronage through the clustering of mixed uses and other transit-oriented designs in medium and large scale planned developments.**

Objective 8.1 – Adopt and promote a model land development regulation that encourages transit patronage through transit oriented development.

Objective 8.2 – Identify opportunities to educate the real estate development community regarding the economic benefits inherent in mixed-use developments.  
 Objective 8.3 – Develop incentives for developers and major employers to promote public transportation (e.g. impact pact fee credits to developers for transit infrastructure).  
 Objective 8.4 – improve connectivity of sidewalks and bicycle facilities along existing and future public transportation corridors.  
 Objective 8.5 – Adopt and promote a land development regulation that requires transit amenities to be provided in new developments.  
 Objective 8.6 – implement bus, shelter, and bench advertising based on an approved contract with a vendor as a revenue source.

*Source: Lake-Sumter MPO Transit Development Plan*

### ***Model Zoning Ordinance Language***

The zoning ordinance is the principal tool for implementing land use policies either as a single district or as an overlay district for transit oriented development. The following three documents provide specific examples of how a community can guide the design and development of a TOD district or neighborhood. A brief review of the strengths of each ordinance is provided here, and a copy of each ordinance was made available to the Modern Transit Partnership on CD-ROM for sharing with interested municipalities.

1. **Transit Oriented Development Implementation by the Atlanta Regional Commission.** This document provides a good introduction to TODs, conventional alternatives, considerations before implementing TODs (i.e. Comprehensive Plan, Administration and Enforcement, and Public Concerns and Support), lessons learned, implementation guidelines, and case studies. Three model ordinances within the document offer specific examples of a residential TOD district, an employment center TOD district and a pedestrian overlay district.
2. **City of Columbus Zoning Ordinance, Article II Traditional Neighborhood Development, Chapter 3320 Traditional Neighborhood Development.** Although the title of the chapter refers to TNDs rather than TODs, this 32-page article of the zoning ordinance has a stated purpose of encouraging the development of transit-supportive mixed-use neighborhoods, providing appropriate densities and land uses within walking distance of the transit stop. This ordinance provides useful illustrations and definitions. One of the advantages to this model is the consistency with the Pennsylvania Municipalities Planning Code (MPC). Article VII-A of the MPC provides for the establishment of Traditional Neighborhood Development. Another advantage is that the overlay district would continue to be valid in the absence or withdrawal of a mass transit provider.
3. **Langhorne Station Area (TOD) – Transit Overlay Development District.** This 18-page transit overlay district contains four basic sections 1) TOD District

Boundaries, 2) Development Plan Modifications and Flexibility, 3) Permitted Uses, and 4) Development Requirements.

***Relationship to Subdivision and Land Development Ordinance***

The subdivision and land development ordinance establishes the standards for the size and shape of lots and the design and dedication requirements for public facilities. Therefore, the subdivision and land development ordinance should also be reviewed and revised, as needed, to encourage more compact, pedestrian-oriented development and street patterns.