6. Next Steps

This corridor analysis is a preliminary step towards identifying corridors in the Knoxville region with potential for developing higher capacity transit services or transit enhancements. Further analysis will be necessary to determine which, if any, of the analyzed corridors have the necessary ridership and land use, development and/or redevelopment potential to support higher capacity transit service and TOD. A feasibility study should be conducted to prioritize the corridors according to their potential for supporting enhanced transit services and feasibility of implementation, in addition to eliminating any corridors where development of higher capacity transit may be infeasible or merely impractical. If federal funding will be sought to implement transit enhancements in one or more corridors, an alternatives analysis based on FTA New Starts criteria will need to be conducted on those corridors in which transit improvements have the most potential for development.

Other possible funding sources for implementation of transit enhancements include:

- Local funding, from general revenues at the municipal or county level, or dedicated transit funding generated by a new tax. Property taxes and sales taxes are among the options typically used for local transit funding.

- Private funding or combinations of private and public funding scenarios such as tax increment financing or value capture mechanisms which capture a portion of the property value increase generated by the transportation improvement to secure funding to construct and operate the improvement.

- State transportation grants, either through existing state funding transportation funding programs or new grants provided by the state legislature.

- Federal funding programs administered by the State Department of Transportation or the Knoxville TPO, such as CMAQ funds, enhancement grants, safety grants or other grants that provide project funding for roadway and other transportation projects.

- Recent legislation passed in Tennessee allow for the creation of Regional Transit Authorities (RTA). RTAs are often an effective organization structure that can implement large scale corridor systems. RTAs often are structured to allow for the ability to tax or issue bonds allowing them to fund significant capital projects.

Nationally, more emphasis is being placed on developing passenger rail corridors. Therefore, corridors in Knoxville should continue to be studied to determine future potential.

There appear to be two distinct possibilities for high capacity transit in Knoxville. One would be a commuter or light rail project using local funding or through a New Start process or Small Start federal funding process. A second option would be development of bus rapid transit either using local funding or funding through the federal government's Very Small Starts program. Corridors with average daily ridership over 3,000 riders per day can be eligible for this program, which is restricted to projects with an initial capital cost of less than $50 million. A good example of a Very Small Starts program is the Kansas City Max Bus Rapid Transit project. This is the type of system that could be appropriate for Cumberland Avenue because it mixes separate guideway operations and on-street operations (where right-of-way is not sufficient to allow a separate lane). Currently none of the corridors reviewed has average daily ridership over 3,000 riders but if a preferred corridor can be identified, strategies including increasing bus frequencies and encouraging transit-friendly land use and zoning policies would position Knoxville to begin a process of creating high capacity transit operations.

Cleveland Euclid Corridor Bus Rapid Transit Vehicle

The following discussion provides an overview of the current state of federal transit programming for high capacity transit projects focusing on Small Starts and Very Small Starts.

Cleveland Euclid Corridor Bus Rapid Transit Station

The significant difference between New Starts projects and Small Starts and Very Small Starts projects is the size, scope, and cost of the project. New Starts projects involve new fixed guide-way transit systems through new corridors, which immediately make these projects very expensive and therefore associated with significant risk in terms of the relationship between their cost and their actual community benefit. Small Starts projects, in comparison, are smaller in scope, and less expensive. Specifically, Small Starts grants are capped at $75 million with total project costs of no more than $250 million. While no specific grant cap is given for Very Small Starts, total project costs for these projects cannot be more than $50 million, suggesting that the grant itself cannot be more than approximately $40 million, or 80 percent of the total project cost. Given the smaller federal investment, the degree of FTA involvement and the threshold for demonstrating the cost effectiveness of the project is much lower for Small Starts, and actually presumed for Very Small Starts projects.

Kansas City MAX Bus Rapid Transit Vehicle

Table 6-1 contains the basic technical prerequisites for BRT projects to be considered as Small Starts or Very Small Starts. As the table shows, for the most part, the prerequisites between the two categories are the same, with the cost of the project being the primary distinction between the two. While there is a distinction between the two categories regarding transit stations, the basic service requirements of ten- to 15-minute headways for 14 hours a day, perhaps the most challenging operational criteria that must be met, are the same for either category. The Very Small Starts category must demonstrate at least 3,000 daily boarding in the proposed corridor, whereas Small Starts projects are subject to a more rigorous cost benefit analysis.

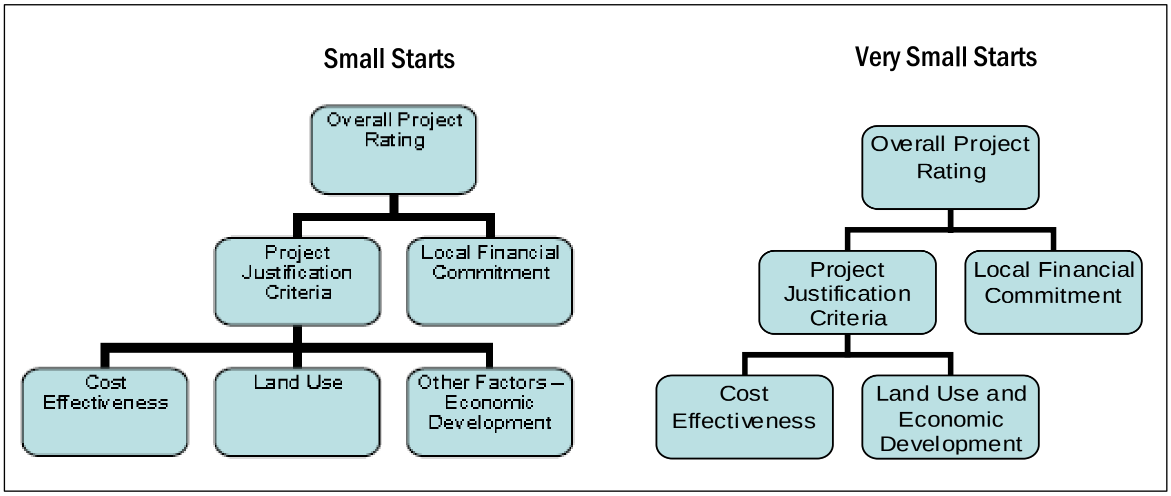
Kansas City MAX Bus Rapid Transit Station

Table 6-1
Technical Prerequisites

Small Starts	Very Small Starts
$250 maximum project cost/ $75 million maximum grant	$50 maximum project cost/less than $3 million per mile (not including cost of buses)
Substantial Transit Stations	Transit Stations
Signal Priority/Pre-emption	
Low Floor/Level Boarding Vehicles	
Special Branding of Service	
Frequent Service – ten-minute peak/15-minute off-peak headways	
Service offered at least 14 hours per day	
Demonstrated cost effectiveness in terms of user benefit	Existing corridor ridership exceeding 3,000 boardings per day

Figure 6-1, also provided by FTA, illustrates the basic structure for evaluating Small Start and Very Small Start projects. While the basic criteria categories are similar, the evaluation processes for each are different in one important way. While the criteria threshold for judging Small Starts projects is less than that for New Starts projects, Small Starts project still must perform the same basic evaluations for cost effectiveness, land use compatibility, economic development impacts, and local financial commitment as a part of their Alternatives Analysis in order to receive ratings in each category. These categories are *High, Medium-High, Medium, Medium-Low,* and *Low*. In order to be certified as a Small Start project and given approval to move forward to the project development phase, Small Start projects must receive an overall project rating of *medium*.

Figure 6-1
Evaluation Rating Structure



In contrast, due the small size of Very Small Starts projects, the FTA presumes that the project cost benefit, land-use compatibility, and economic development impact are neutral, and automatically assumes a medium rating for these projects. Further, as long as a Very Small Start project can demonstrate a legitimate local financial commitment, the FTA presumes a medium rating for this evaluation measure as well. The criteria for local financial commitment are:

- Funds are identified and available for the local share of the capital cost (at least 20 percent of total capital cost);
- The additional operating and maintenance costs of the project must be less than five percent of the agency's total operating budget; and,
- The agency is in reasonably good financial condition.

In essence, the FTA will automatically certify a project as a Very Small Starts project and allow it to proceed to the project development phase as long as it meets the technical prerequisites in Table 6-1 and can demonstrate the local financial commitment. In fact, FTA has identified these technical criteria for Very Small Starts because they ensure that projects produce "significant transportation benefits at a very low cost." Therefore, FTA has already determined that projects meeting these technical criteria are cost-effective and no further analysis is required. However, achieving the Very Small Starts designation does not imply a funding grant, but simply the ability to continue through the project development phase. Their funding will be determined primarily at the discretion of the administration and Congress as a part of the enactment of the President's budget.

Once a project has been designated as Small Starts or Very Small Starts, the project enters into the project development phase, which combines both preliminary engineering and final design. During this phase, the FTA and project sponsor develop a financial assistance package. This package, referred to as the Project Construction Grant Agreement (PCGA), defines the project, including cost, scope, and schedule; establishes the maximum level of federal financial assistance; and, defines the terms and conditions of that assistance. However, firm funding commitments, embodied in the

PCGA, will not be made until the project's development and design has progressed to the point where its scope, costs, benefits, and impacts are considered firm and final.

Small Starts projects must be ready to be implemented within the fiscal year that the project is recommended for funding and included in the President's budget, while Very Small Starts projects cannot be recommended funding until they are ready to be implemented. For almost all projects, specific funding recommendations and grants occur over several years, although projects with total costs under $25 million can be funded in one year. Again, as the Section 5309 grant program is discretionary, final decisions regarding which eligible projects are included in the President's enacted budget are made by the administration and Congress through the legislative process. A recommendation for funding in no way guarantees funding.