CHAPTER 4

BUS RAPID TRANSIT INITIATIVE

Bus Rapid Transit is recommended for Kenton County as a promising solution for reducing future transportation problems. To optimize BRT’s potential benefits and make it cost-effective to implement, efforts are needed now to foster transit-supportive development and preserve right-of-way. Local officials have responded to plan recommendations, but continued support and commitment are needed.

THE CONCEPT OF BUS RAPID TRANSIT

For the future, a Bus Rapid Transit (BRT) system offers a feasible approach for significantly increasing transit ridership by removing buses from congested traffic. The Federal Transit Administration is promoting BRT as cost-effective transit that combines the quality of rail transit with the flexibility of buses. BRT, which is already well established in some countries, is being pursued by a growing number of metropolitan areas in the United States.

A BRT hallmark is speed, especially in comparison to ordinary bus service. From design to operation, BRT integrates time-saving features for their cumulative effect on reducing overall travel time. During boarding, time is reduced by coach design that includes low-floors, multiple-doors, and fare systems that use prepaid or electronic passes. To further reduce travel time, BRT systems have exclusive lanes, pre-empt signals at major intersections, and well-spaced stations. Other appealing BRT features include coaches with wheel-chair accessibility, the use of “clean fuels,” and the system’s quiet operation, frequent service, and operating flexibility.

BRT’s flexibility allows it to operate on exclusive transit-way or in mixed traffic on ordinary streets. The exclusive lanes enable BRT coaches to avoid congestion and to move faster than ordinary transit or congested traffic, which attracts riders. In mixed traffic, where BRT operates in general traffic like any other bus, BRT picks up speed where pre-empt traffic signals are installed at major intersections.

For Kenton County, BRT could be implemented incrementally over a period of time as one component of the transit system. BRT stations would be served by park-and-ride lots and regular bus service. If light rail were implemented, BRT would be a feeder system to channel riders from the lower two thirds of the county. BRT is important for making transit a viable travel option and advancing toward a multi-modal system to meet transportation needs.
KENTON COUNTY SUITABILITY FOR BRT

Kenton County is well suited for a BRT system. BRT would insure mobility in the area receiving the bulk of new development, and conditions in Kenton County provide a unique opportunity for initiating a BRT system. As development’s impact causes increased congestion, transit will become a more attractive option in the future. At the same time, BRT is especially applicable to Kenton County because of the location, timing, and pattern of prospective development and the opportunities for exclusive BRT lanes.

Over the next thirty years in Kenton County, the area between I-275 and KY-536 is expected to absorb most of the county’s new development. Traffic will increase as the result of more development and the prevalence of large-lot residences. Under this projected land use pattern, access to jobs and services will require trips to other parts of the county or region. Given the county’s topographic constraints, traffic will be funneled to the major corridors that connect with employment and commercial centers.

The major corridors for vehicle traffic in the developing area are the same ones most appropriate for bus routes. In a BRT system, these major corridors would ideally have exclusive lanes to bolster transit speed. The fact that many of these major corridors are planned for capacity expansion presents a prime opportunity for developing exclusive lanes. In the course of acquiring right-of-way for highway expansion, right-of-way could also be acquired for future BRT lanes. By acquiring the needed right-of-way before it is converted into development, the construction costs and implementation time for a future BRT would be greatly reduced.

As the developing area’s major corridors drain north to the freeways, another opportunity for exclusive BRT lanes is presented by the potential use of the freeway shoulders during peak hours. If a BRT system were developed incrementally in Kenton County, the system’s operation could begin on the freeways where exclusive BRT lanes could potentially be implemented with little delay.

The major corridors in the developing area, combined with the freeways, are suitable for a BRT system that would connect the developing area with Cincinnati and other major employment and commercial centers. The fact that many of these corridors have segments where widening is planned adds to BRT’s feasibility. Widening provides an opportunity for exclusive lanes that would expedite BRT speed and attract riders, and riders may be further motivated to take BRT as a means of escaping the congestion anticipated from this area’s future development.
RECOMMENDATIONS: BRT

A BRT system is recommended as the future transit backbone for Kenton County. It is recommended as a long-term proposition that can be implemented incrementally in order to serve the developing area when it is more populated. For the system to significantly attract transit riders and provide a viable alternative to driving, initiatives need to be taken now to preserve right-of-way that will be needed later, promote development patterns that will support transit use, and proceed with studies as a basis for the system’s conceptual design.

The recommendations for developing a BRT system consist of two parts: an identification of recommended routes, and recommendations for advancing the system’s implementation. The recommendations for advancing BRT have already received strong support from county agencies.

Recommended Routes

The routes recommended for Kenton County’s BRT system form a framework bisected by north-south and east-west routes, as shown in Figure 4-1. As described in the preceding section, these routes function as major transportation corridors in the developing part of the county and present opportunities for preserving right-of-way for development as exclusive lanes that would enable BRT coaches to operate at higher speeds and attract more riders than would a conventional bus system.

The recommended routes are listed in Table 4-1, along with their mileage and their potential for exclusive BRT lanes. The interstate routes offer an immediate potential for exclusive BRT service on the shoulders during peak hours, as is currently done with bus transit in Minneapolis-St. Paul, and these could be the first operational links in an evolving BRT system. Among the non-interstate routes, there is a potential to preserve right-of-way for future development as BRT lanes for segments recommended for widening where the needed right-of-way has not yet been purchased. There is also the potential for an exclusive BRT lane in the CSX rail corridor along the existing rail line, which would facilitate the use of BRT between the KY-16/I-275 interchange and the Covington Transit Center.

All together, the recommended BRT system would extend for 44 miles. The routes would have stations served by park-and-ride lots and conventional bus service. Potentially, the system would extend into adjacent Boone and Campbell Counties and into the City of Cincinnati.
Figure 4-1. Recommended Bus Rapid Transit System
### Table 4-1. Recommended Routes for BRT

<table>
<thead>
<tr>
<th>East-West</th>
<th>Mileage</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I-275 between I-75 interchange and KY-16</td>
<td>4.8</td>
</tr>
<tr>
<td>Potential for BRT exclusive use of shoulder during peak hours</td>
<td></td>
</tr>
<tr>
<td>• KY-536 between Turkeyfoot Road (KY-1303) and KY-16</td>
<td>6.0</td>
</tr>
<tr>
<td>Potential for preserving ROW in conjunction with widening between KY-1303 and KY-16</td>
<td></td>
</tr>
<tr>
<td>North-South</td>
<td></td>
</tr>
<tr>
<td>• I-75 between I-275 interchange and Cincinnati</td>
<td>6.7</td>
</tr>
<tr>
<td>Potential for BRT exclusive use of shoulder during peak hours</td>
<td></td>
</tr>
<tr>
<td>• Turkeyfoot between KY-536 and I-275</td>
<td>5.8</td>
</tr>
<tr>
<td>Potential for preserving ROW for BRT in conjunction with widening between KY-536 and Richardson</td>
<td></td>
</tr>
<tr>
<td>• KY-17 between KY-536 and I-275</td>
<td>7.5</td>
</tr>
<tr>
<td>• KY-16 between KY-536 and I-275</td>
<td>7.8</td>
</tr>
<tr>
<td>Potential for preserving ROW for BRT in conjunction with widening between KY-17 and Hands Pike</td>
<td></td>
</tr>
<tr>
<td>• KY-16 (Winston Avenue) and the CSX rail corridor between the I-275 interchange and the Covington Transit Center</td>
<td>5.4</td>
</tr>
<tr>
<td>Potential for exclusive BRT lane in CSX rail corridor</td>
<td></td>
</tr>
<tr>
<td><strong>Total Mileage</strong></td>
<td><strong>44.0</strong></td>
</tr>
</tbody>
</table>

### Advancement of Implementation

In addition to recommending routes for a BRT system, this plan also makes recommendations for advancing the implementation of BRT. The recommendations involve taking initiatives now to make BRT more cost-effective and feasible in the future. If implemented, these recommendations would reduce future construction cost and support BRT potential for greater speed, connectivity, and ridership. The recommendations are as follows.

- **Adopt Transit-Supportive Land Use Policy**
  Given that land use affects transit ridership and that development is a slow process, land use policy is needed now to make the developing area better suited for transit by the time that congestion makes BRT a more feasible alternative. The policies needed would support the following development patterns.
  - Development should occur first in the BRT corridors. More specifically, areas with good access to the BRT corridors should be developed prior to outlying areas so that BRT could become a realistic alternative to driving.
  - Development in the BRT corridors should be at higher densities than what now prevails in the Kenton County Comprehensive Plan.
  - Development in the BRT corridors should include commercial and service facilities.
• **Preserve Needed Right-of-Way**
  By preserving right-of-way before it is developed, the cost of right-of-way would be less at the time of purchase, which in turn would lower the cost for constructing a BRT system and make implementation more feasible. For preserving right-of-way, the county subdivision regulations need to be amended to prevent structural facilities from being developed in prospective right-of-way (15 feet on either side of the corridors proposed for BRT).

• **Purchase Needed Right-of-Way**
  It is recommended that KYTC purchase right-of-way for BRT (15 foot strips on either side of a roadway) in the course of purchasing right-of-way for capacity expansion projects. This strategy could be applied to parts of Turkeyfoot (KY-1303), KY-16, and KY-536 (more detail in Table 4-1).

• **Conduct a Conceptual Design Study for a BRT System**
  This study would be a guide for constructing a BRT system and integrating BRT into TANK’s existing bus service. The study, estimated at $450,000, depends on county initiative. It would include an identification of locations for stations and park-and-ride lots and estimates of BRT ridership and cost. It would provide a basis for designing a BRT system to serve major travel destinations, including those in Boone and Campbell Counties, such as the airport and the Northern Kentucky University.

The recommendation for a BRT system has received strong local support, and some initiative has already been taken on the recommendations for advancing BRT.

- The Task Force supported the BRT recommendations without objection.
- The Northern Kentucky Area Planning Commission proceeded to formally request the Kenton County Planning Commission to amend the county Comprehensive Plan to support a BRT system.
- The Kenton County Planning Commission amended the county Comprehensive Plan to identify the recommended BRT corridors and to recommend sufficient right-of-way (at least 15 feet) on either side of the proposed BRT corridors for use as exclusive travel lanes, provisions for higher densities of residential development and mixed-use developments around proposed BRT stations, and the focus of development along the proposed BRT corridors.
- The Kenton County Planning Commission has begun the process for amending the county subdivision regulations to make them consistent with the amended county Comprehensive Plan and enable implementation of the amendments.