

# **Chapter 10**

## **Expansion of Bicycle and Pedestrian Travel**



## CHAPTER 10

### EXPANSION OF BICYCLE AND PEDESTRIAN TRAVEL

Within the framework of regional multi-modal transportation, bicycling and walking provide substitutes for single-occupant vehicle (SOV) travel and a means of connecting with transit. Whether they replace SOV travel or support transit use, bicycle and pedestrian trips help reduce congestion and vehicle emissions. The use of non-motorized modes is especially valuable for replacing short-distance SOV trips, which have the highest rate of emissions. In addition to their transportation benefits, these modes also contribute to personal health and the quality of life.

At a national level, surveys consistently indicate that non-motorized modes would be used more frequently for commuting and other trip purposes — both by those who use these modes now and those who do not — if facilities were more widely available for safe travel. In the OKI region, bicycling and walking account for a little more than five percent of total trips, according to the 1990 Census journey-to-work data. The potential for greater use of these modes is indicated by the growth of both on-road and off-road cycling, community support, and advocacy groups. To increase the viability of biking and walking as travel modes, changes are needed in the way that transportation facilities are planned, funded, and built and in the way that areas are developed.

The most effective approach for increasing bicycling and walking is to expand facilities that enable these modes to be used safely, primarily by reducing conflict with motorized vehicles. The connectivity of these facilities would further increase their use. Safety is especially critical at crossings and intersections where modes interface, for these are the points where most bicycling and pedestrian accidents occur. The major facilities that provide for safe travel by non-motorized modes are the following:

- **On-road bicycle facilities** include shared lanes, wide outside lanes, bike lanes in urban areas, or paved shoulders in rural areas (see page 4-11 for descriptions). These facilities are needed for safe travel on bridges and viaducts as well as on roadways.
- **Separate off-road facilities** are shared use paths or trails (see page 4-11 for descriptions). These facilities are most useful for travel demand on a localized basis — such as connecting with schools or shopping areas — or where linear right-of-ways exist that can be used for shared use paths such as railroads, canals and stream conservancy easements. While existing facilities in the OKI region, such as the Little Miami Scenic Trail, are primarily used for recreation, their value for utilitarian trips will grow

as they penetrate urban areas as does the Great Miami River Trail in Hamilton and in Dayton.

- **Sidewalks** are needed for safe pedestrian travel, especially in residential neighborhoods and along transit routes.

Facilities that support bicycle and pedestrian travel may also be used for connecting with transit or park-and-ride lots, which potentially increases the use of transit and rideshare. Bicycle and pedestrian connections with other alternatives to driving alone can be facilitated by shelters along transit routes, lockers at transit stations, and bike racks at bus stops and park-and-ride lots, and mounted to buses.

Facilities that provide safe travel are of paramount importance, but the extent of bicycle and pedestrian travel is also determined by land use. Non-motorized travel opportunities are maximized by mixed-use development that integrates residential and commercial uses and provides short distances between common travel origins and destinations. In the OKI region, these development patterns are most prevalent in central business districts and older communities, which often have sidewalks that make them suitable for walking and an interconnected street network that facilitates bike travel. Suburban areas may have sidewalks for walking and suitable streets for bicycling, but their use is limited where connections between subdivisions or between residential and commercial areas or schools requires travel along arterials that do not have bike or pedestrian facilities.

Because of their development potential and available right-of-way, urbanizing areas represent a prime opportunity for building bicycle and pedestrian facilities to prepare in advance for future travel needs. This is occurring in northern Boone County, southeastern Butler and southwestern Warren Counties. The construction of bicycle facilities in Ohio's unincorporated areas is constrained, however, by state prohibitions on counties or townships using gasoline tax or license fee revenues for building paths for the exclusive use of bicycles or sidewalks for pedestrians. The construction of regional off-road trails — for which Ohio's abandoned rail and canal corridors provide unique opportunities — is highly dependent on local initiative and commitment. This can be a difficult obstacle for local communities with limited resources. Ohio guidelines require local governments to provide funds for the planning design, right-of-way acquisition and the 20 percent local share of construction.

While bicycle and pedestrian improvements are eligible for most federal transportation funds, a source of categorical federal transportation funds for bicycle and pedestrian facilities is the TEA-21 Transportation Enhancement Program, which funds a wide variety of projects in addition to those that support

non-motorized travel. To receive funds from this source, local projects compete with other projects for the state allocation. In 1998, the Ohio Department of Transportation created the metropolitan planning organization (MPO) set-aside for a portion of the state Transportation Enhancement allocation. An amount proportional to each of the 16 Ohio MPO's Surface Transportation Program funds is now allocated for MPO administration of local projects. Appendix A provides additional information on this process as well as a map and list of the funded projects.

## **BICYCLE RECOMMENDATIONS**

With the increasing flexibility of transportation funding, many local governments construct or otherwise help implement bicycle facilities (see Figure 10-1). Examples of the different methods used in the OKI region include the following.

- In Ohio's unincorporated areas, some counties and townships have facilitated safe on-road bicycle travel by widening outer lanes or paving shoulders as part of their roadway improvement projects.
- In some Ohio counties and at least one township, park districts have taken the lead in planning and funding off-road bicycle facilities.
- In Kentucky, the transportation cabinet (KYTC) has made progress in implementing facilities recommended in municipal bicycle (and pedestrian) plans.
- In Kentucky and Ohio, some counties have incorporated local recommendations for bicycle facilities into their thoroughfare plans.
- In Ohio, counties have supported local planning for off-road bicycle trails.
- In the OKI region, three counties, five townships, and 16 municipalities have developed bicycle plans or initiated the development of bicycle systems (see Chapter 4).

The *OKI Regional Bicycle Plan - 2001* contains additional information about bicycle needs for the region along with extensive specific recommendations for improving the safety and utilization of bicycle travel, and for integrating bicycle facilities into the planning and development of the regional multi-modal transportation network. The following principal recommendations are excerpted from this plan.

It is recommended that local jurisdictions develop bicycle transportation plans to promote bicycling as a mode of travel and provide an official plan to determine compliance for project funding requests.

For local governments, bicycle plan recommendations should be integrated into transportation and land use plans, county thoroughfare plans, capital improvement plans and reviews of major development proposals. For OKI, this includes a bicycle and pedestrian element within the long range plan and specific corridor major investment studies (including consideration of bicycle and pedestrian access to transit) as well as the Transportation Improvement Program (TIP).

It is recommended that cities and counties designate a Bicycle Coordinator who can integrate bicycle projects with ongoing transportation and development projects and coordinate these activities with other departments, adjacent jurisdictions and bicycling organizations. The Bicycle Coordinator need not be a full-time position, but should be knowledgeable about the transportation needs of bicyclists.

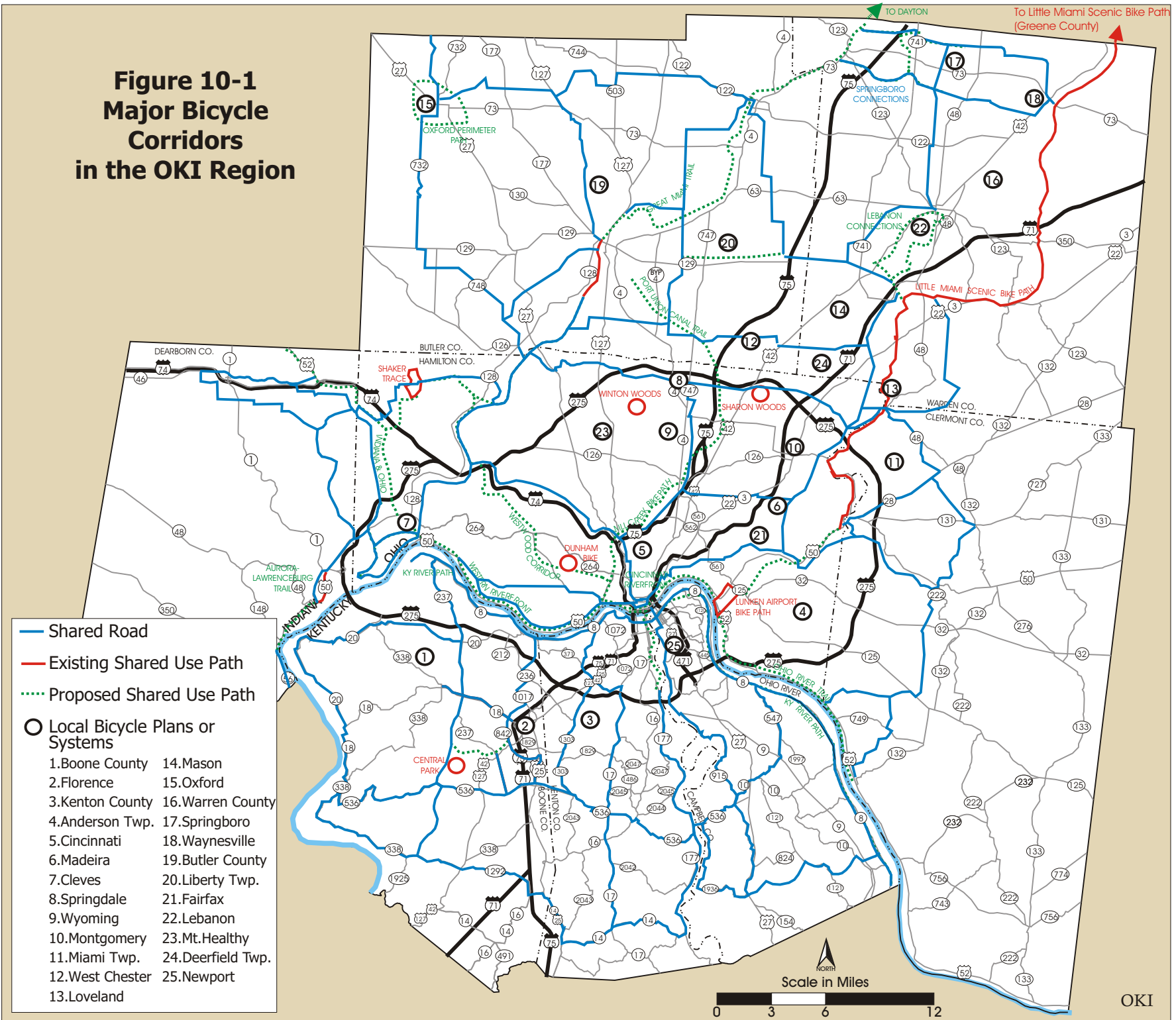
Local governments have considerable latitude for supporting bicycle and pedestrian travel. Optimally, the strongest community programs include a bicycle coordinator, an advisory committee, a facilities plan, promotion and educational programs, and enforcement of laws and regulations. Local efforts vary widely, but the fact is that local plans strengthen the potential for expanding bicycle and pedestrian travel, and local initiatives implement projects.

It is recommended that Transportation Improvement Program projects and amendments should be reviewed for their impact on bikeways and recommended bicycle facility improvements where appropriate. This should also consider points awarded for the intermodal integration and multimodal investment categories.

It is recommended that the sponsors of roadway construction, expansion or resurfacing projects incorporate bicycling and walking facilities into all such transportation projects unless exceptional circumstances exist.

To facilitate implementation of these recommendations, counties and municipalities should develop review processes in which the potential for bicycle and pedestrian improvements is considered from the beginning (the City of Cincinnati has such a process). OKI and state transportation agencies should review the potential for bicycle and pedestrian facilities in non-freeway projects (including bridge and viaduct projects) under consideration for inclusion in the Transportation Improvement Program. Pedestrian or bicycle facilities may be excluded from a project only if bicyclists and pedestrians are prohibited by law from using the roadway or the cost of accommodating pedestrians or cyclists is excessively disproportionate to the need or probable use (more than 20 percent of the total project cost).

**Figure 10-1  
Major Bicycle  
Corridors  
in the OKI Region**



It is recommended that work continue towards the implementation of the components of the Regional Trail Network as identified in the Regional Bicycle Plan.

It is recommended that roads identified in the *OKI Bike Route Guides* be maintained so that “recommended bike routes” are not degraded for safe bicycle travel, and “alternate bike routes” and “not recommended” roads are improved for safer bicycle travel.

The intent of these two recommendations is to tie the off-road trail network and shared on-road network to the OKI Metropolitan Transportation Plan. The suitability ratings consider traffic and road space and are adversely affected by urban growth unless improvements are made as development occurs. It should be further noted that the roads classified on the Bike Route Guides are not inclusive of all roads used by cyclists and that those not designated or shown still should be considered.

It is recommended that transit operators add bike racks to buses and at key bus stops. Intermodal transit centers and park-and-ride lots should also have covered bike racks or bike lockers.

Bike-on-bus services, represented by racks inside, or front-mounted to buses, are especially appropriate where river crossings and steep slopes limit bicycle travel. Over 200 of the nation’s transit systems now have bike-on-bus services that enable bicyclists to switch modes to complete commuting or long distance trips. These facilities are especially appropriate in this region because of local terrain and strong interest in bicycling. Recommendations for transit service being developed through the regional corridor major investment studies should incorporate bicycle access and parking.

It is recommended that a bicycle component be developed for the OKI regional geographic information system (GIS) that is capable of showing facilities by type, jurisdiction and status.

A multimodal transportation component of the proposed regional GIS will facilitate integration of the bicycle and pedestrian recommendations with those for the regional roadway and transit systems. The GIS will also help with mapping the system and tracking its implementation.

It is recommended that funding sources for bicycle facilities and projects be identified and documented to assist local governments implementing their planned projects.

While most highway and transit funding sources may be used for bicycle and pedestrian projects, the list of projects recommended throughout this plan far exceeds the funding resources available. Many bicycle/pedestrian improvements are most effectively implemented as an integral part of roadway or transit project funding and construction. Special projects to improve existing roadways, or extend the off-road trail system, may be more appropriately funded with categorical Transportation Enhancement funds. In addition there are other federal, state, and private sources available that may be suitable for specific local projects.

## **PEDESTRIAN RECOMMENDATIONS**

In 1993, OKI published a plan for encouraging pedestrian travel in the region, *Creating a Greater-Cincinnati Metropolitan Area Comprehensive Pedestrian System: You Can Get There From Here*. The report documents recent national legislation encouraging facilities for pedestrians and documents the growing conflict between pedestrians and motor vehicles. It also considers the effect that auto-oriented suburban development has had on discouraging walking, with increased distances between activities and the lack of sidewalks in suburban development.

The following pedestrian-specific recommendations from this plan are referenced here:

It is recommended that transportation facilities, including parking and transit, be located within walking distance of major shopping and office facilities.

This recommendation addresses the needs in suburban employment and commercial concentrations planned primarily for automobile access. These facilities should be incorporated as urban growth occurs, and retro-fitted in existing areas experiencing significant congestion.

It is recommended that transit stops be accessible by sidewalks which conform to Americans with Disabilities Act (ADA) guidelines.

While walking (or wheelchair travel) is a component of most trips, it is a more significant component of transit trips. Therefore, pedestrian considerations are needed while planning for both the transit service and the roadway system utilized.

It is recommended that curb cuts and building setbacks be minimized to reduce the conflict points at driveways and reduce the distance from the street to the buildings. Parking can be placed on the sides and rear of the buildings.

OKI has developed access management guidelines for the purpose of expediting traffic flow on arterial streets. Implementation of these principles also benefits pedestrian safety.

It is recommended that large parking lots and garages incorporate sheltered pathways directing pedestrians to the building entrances.

It is recommended that traffic-calming techniques be applied in residential areas to slow vehicular traffic and provide additional room for pedestrians.

It is recommended that developing areas be provided with sidewalks as they are built to eliminate the future need to retrofit neighborhoods and arterial streets with sidewalks. Local zoning and subdivision regulations should be amended to require pedestrian facilities and these codes should be enforced.

These three recommendations are most efficiently implemented as land is initially developed. The authority for implementation lies with local planning agencies.

It is recommended that a commitment be made to maintain pedestrian facilities, to remove debris and encroaching plant material, and repair deteriorated paving.

OKI will continue to facilitate bicycle and pedestrian travel through a variety of efforts that include providing technical assistance and information, continuing its regional planning efforts, serving on advisory committees, conducting planning reviews, sponsoring training workshops, modifying its RideShare program to include commuter cyclists in the Guaranteed Ride Home and other programs as appropriate, and identifying other opportunities to support greater use of non-motorized modes. The *OKI Regional Bicycle Plan*, updated and adopted in 2001, contains many specific recommendations for promoting bicycle facilities and planning in the region that, by reference, are incorporated into this plan.