Chapter 16
Transportation Improvements Financing
CHAPTER 16

TRANSPORTATION IMPROVEMENTS FINANCING

As part of this long range plan, the costs of implementing the recommendations for highway and transit projects are compared with the funding expected to be available. This cost comparison clarifies the financial issues that may need to be addressed in the process of building the region’s future transportation system.

This plan’s financial analysis was developed in response to the requirements for a “financially constrained plan” that was introduced in the Intermodal Surface Transportation Efficiency Act (ISTEA), continued in the Transportation Equity Act for the 21st Century (TEA-21) and that is anticipated in upcoming re-authorization legislation. This plan considers both capital costs and operation and maintenance (O&M) costs associated with the preservation and continued operation of the existing transportation system, as well as the costs associated with the recommended improvements which are presented in this plan. It also projects revenues from all sources that will be available to pay for these improvements.

FUNDING EXPECTATIONS

Funding for transportation improvements is provided from federal, state, and local sources. Future funding levels expected for the planning period covering 2004 through 2030 were estimated based on past trends, and through consultation with the Ohio Department of Transportation (ODOT) and Kentucky Transportation Cabinet (KYTC). The estimates are based on the best available data. Due to the nature of estimating future conditions, assumptions are necessary but are done with care in order to present the most reasonable scenario possible. An estimated $7.53 billion ($5.92B in Ohio and $1.62B in Kentucky) is expected to be available over the 26-year planning period. Categorical estimates of expected funds are listed in Tables 16-1 and 16-2.

It is important to note that the funds identified in Tables 16-1 and 16-2 are, for the most part, funds that OKI or other local governments receive on an ongoing, annual basis, i.e., they are generally apportioned on a formula basis, and are therefore, repetitive and predictable. This table also includes an approximation of other additional funds that may reasonably be expected to become available on a competitive or discretionary basis, based on a review of the region’s recent history in securing these types of funds.

The following approach was used to estimate the amount of available funds for new capacity projects in the OKI region for the planning period from 2004 to 2030. Each state is estimated separately due to the nature of available data.
Ohio statewide estimates of total transportation dollars were provided by ODOT’s Office of Finance and Forecasting on a statewide basis for the years 2004 to 2015. OKI estimated the portion that is expected to come to this region based on historical data and consultation with ODOT personnel. Once the regional revenues were identified, the proportion of operation and maintenance (O&M) funds versus capital (major new) funds were identified. The Transportation Review Advisory Council (TRAC) information supplied by ODOT was used as a basis for estimating these figures. Capital (major new) funds are considered applicable to new or expanded transportation infrastructure and/or programs. The value of programmed Transportation Improvement Program (TIP) projects is deducted from the available resources before new or expanded projects are considered.

The available funds for Kentucky capacity projects are developed in consultation with KYTC. Annual estimates of the share of federal and state funds are developed based on factoring existing authorized TEA-21 and the Kentucky Transportation Cabinet funding levels. Federal revenue sources are assumed to be 12% higher than the existing plan and state revenues are estimated to be 5% higher. As with Ohio, the cost of programmed TIP projects is subtracted to determine the balance of funds available for new capacity plan projects. Funds for the replacement of the Brent Spence Bridge are assumed to be from new revenue sources designed to handle “mega projects.”

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Ohio transportation funds (from all sources)</td>
<td>$5,915,100,000</td>
</tr>
<tr>
<td>Operations and maintenance</td>
<td>$2,545,400,000</td>
</tr>
<tr>
<td>Capacity projects</td>
<td>$3,369,700,000</td>
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<tr>
<td>Value of programmed TIP projects</td>
<td>$326,900,000</td>
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<tr>
<td>Dedicated new capacity funds by TRAC</td>
<td>$1,507,500,000</td>
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<tr>
<td><strong>Balance for new capacity for plan (26 years)</strong></td>
<td><strong>$1,535,300,000</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Kentucky transportation funds (from all sources)</td>
<td>$1,617,600,000</td>
</tr>
<tr>
<td>Operations and maintenance</td>
<td>$676,900,000</td>
</tr>
<tr>
<td>Capacity projects</td>
<td>$940,700,000</td>
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<tr>
<td>Value of programmed TIP projects</td>
<td>$435,500,000</td>
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<tr>
<td><strong>Balance for new capacity for plan (26 years)</strong></td>
<td><strong>$505,200,000</strong></td>
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</tbody>
</table>
Figure 16-1
Ohio Transportation Funds

Ohio Capacity Project Funds
($3,370M)

- Balance for New Capacity for Plan (26 years) 45%
- Programmed TIP Projects 10%
- Dedicated New Capacity $ by TRAC 45%

Figure 16-2
Northern Kentucky Transportation Funds

Northern Kentucky Capacity Project Funds
($941M)

- Balance for New Cap for Plan (26 years) 54%
- Programmed TIP Projects 46%
FEDERAL FUNDING SOURCES
A significant part of the funding shown in Table 16-1 and 16-2 flows into the region from federal sources. This expectation is based on estimates of the region’s share of funds from programs authorized and appropriated by Congress. The region’s share of these federally funded programs is based on the assumption that current funding levels will be sustained each year through 2030. It is worth noting that this approach extrapolates funding into the future based on appropriations that have consistently been lower than authorized funding levels.

The current TEA-21 programs that provide funding for the region’s transportation system are described below.

Interstate Maintenance
The Interstate Maintenance (IM) program finances projects to rehabilitate, restore and resurface the interstate system. Reconstruction is eligible if it does not add capacity. However, high-occupancy vehicle and auxiliary lanes can be added. The match rate for this program is 90% federal and 10% state or local. It is administered by the states.

National Highway System
The National Highway System (NHS) consists of 160,000 miles of the nation’s major roads. It includes all interstate routes, a large percentage of urban and rural principal arterials, the defense strategic highway network, and strategic highway connectors. The match rate is 80% federal, 20% state or local.

Surface Transportation Program
The Surface Transportation Program (STP) is a block grant type of program. Funds from this program may be used by the states and localities for any roads that are not functionally classified as local or rural minor collectors or for transit capital projects.

Once the STP funds are distributed to the states, each state must allocate its funds as follows:

- Ten percent for safety construction activities, i.e., hazard elimination and rail-highway crossings
- Ten percent for transportation enhancements, which encompass a broad range of environmentally related projects, including improvements for pedestrian and bicycle travel
- Twenty-five percent by population among each of its areas over 200,000 in population (this is the source of OKI’s allocation)
- Twenty-five percent to the remaining areas of the state
- Thirty percent for discretionary use in any area of the state
Projects that receive OKI_allocated STP funds are initiated by OKI in consultation with ODOT or KYTC. The highways eligible for this category of funds include those that have a federal functional classification of rural major collector or higher. Other modal projects eligible for STP funds include capital transit projects, commuter rail, bus terminals and facilities, carpool projects, traffic monitoring, and bicycle and pedestrian facilities (above and beyond the transportation enhancement allocation).

In addition to OKI’s STP allocation, estimates are also developed for OKI’s share of the discretionary funds potentially available for safety construction activities, transportation enhancements, and a portion of the funds that can be used anywhere in the state.

**Congestion Mitigation/Air Quality**
The Congestion Mitigation and Air Quality Improvement Program (CM/AQ) provides funds for transportation projects in maintenance areas for ozone and carbon monoxide. These projects contribute to meeting the attainment of national ambient area air quality standards. The OKI region is eligible for these funds because of its designation as an ozone maintenance area. Transportation projects and programs are eligible for CM/AQ program funds if they are associated with documented emissions reductions and do not add to the existing roadway capacity.

**Bridge Replacement and Rehabilitation Program**
This program is authorized nationally for $16.1 billion. It enables the states to replace significant bridges that are unsafe because of structural deficiencies, physical deterioration, or functional obsolescence. Forty percent of a state’s bridge funds may be transferred to the NHS or the STP programs for purposes consistent with either program. The match rate is 80% federal, 20% state or local.

**Federal Transit Administration Funding**
The Section 5307 formula grant program makes funds available on the basis of a statutory formula to all urbanized areas in the country. Section 5307 funds may be used for highway projects in Transportation Management Areas (TMAs), all urbanized areas over 200,000, or any other area a governor requests if all needs related to the Americans with Disabilities Act are met, the Metropolitan Planning Organization (MPO) approves, and there is a balanced local approach to funding highways and transit.

For capital projects, the match rate is 80% federal, 20% state or local. Capital funds are used for transit maintenance, such as replacing buses, as well as other projects. For operating assistance, the match rate is 50% federal, 50% state or local.
local. Operating assistance is capped at a percentage of the total Section 5307 apportionment for each urban area.

The FTA Section 5309 discretionary program is a potential funding source for the recommended rail transit system. Funds are split 40% for “new starts,” 40% for rail modernization, and 20% for bus and other. The match rate is 80% federal, 20% state or local.

STATE AND LOCAL FUNDING SOURCES
Some of the Ohio Department of Transportation (ODOT) highway programs are listed below. A portion of the statewide allocation will be used for projects located in Butler, Clermont, Hamilton or Warren County.

Municipal Bridge Program
The Municipal Bridge Program (approximately $6 million annually in Ohio) provides funds for replacement and rehabilitation of bridges that carry vehicular traffic within municipalities. Bridges funded under this program must be at least twenty feet in length and may be on and off the federal-aid highway system. The match rate is 80% federal, 20% state or local and the funds may only be used for construction.

County Local Bridge Program
The County Local Bridge Program (approximately $24 million annually in Ohio) provides funds for bridge replacement and rehabilitation and is administered by the County Engineers Association of Ohio (CEAO). Generally, each county is limited to a $2.5 million program ceiling and funds are available only for construction purposes. The match rate is 80% federal with a 20% state or local match. Funding under this program may be permitted to 100% federal to the extent that toll revenue credits are available.

County Surface Transportation Program
The County Surface Transportation Program (CSTP) provides funding for local highway and bridge projects and is administered by the County Engineers Association of Ohio (CEAO). ODOT provides federal CSTP funds to counties each year through the CEAO. Funds are available for projects on local roads functionally classified as major collectors, interstates, freeways and arterials, and bridge and safety projects on any local road. A portion of funds is also available for rural minor collectors. Funds may only be used for construction purposes. The match rate is 80% federal with a 20% state or local match. There is approximately $20 million per year available statewide in Ohio.

Major Bridge Program
The major bridge program funds the rehabilitation or replacement of an exceptionally large or unique structure that carries a state, U.S. or interstate
route. Bridges that are eligible include all Ohio River bridges, all movable bridges, all continuous/cantilever trusses and all bridges greater than 1,000 feet long. Approximately $60 million annually is available in Ohio and is administered at the central office level of ODOT.

**Safety Program**
The Safety program is used to fund projects that improve the safety of Ohio’s transportation system and may be on state routes (state highway, U.S. highway, interstate) or local routes (city street or county or township road). Funds are used primarily for construction, but strip right-of-way acquisitions are also funded. Funding may also be used for both roadway and traffic control improvements. Funding is approximately $29 million annually in Ohio and ODOT will fund up to a maximum of $1 million on a local project.

**State Capital Improvements Program (SCIP)**
The State Capital Improvements Program (SCIP) was created in 1987 and originally allowed the State of Ohio to use its general revenues as debt support and issue up to $120 million in bonds each year. The program was reauthorized in November 1995 by an amendment to Section 2M, Article VIII of the Ohio Constitution and continues through 2006 when the program will need to be reauthorized again. The reauthorization also increased the limit on ODOT bond issues for highways paid with gasoline tax revenues to $220 million a year.

**Local Transportation Improvements Program (LTIP)**
The Local Transportation Improvements Program (LTIP) was created by the legislature in 1989 and provides an additional $60 million in gasoline tax receipts statewide each year.

Both SCIP and LTIP funds are distributed for local government capital projects throughout Ohio on a competitive and population basis among 19 districts established by the Ohio Public Works Commission. Hamilton County is a district by itself (District 2). Butler, Clermont, and Warren counties are in a district that includes Clinton County (District 10). Funding estimates from these two programs are based on the assumption that they will be renewed when they expire.

Through the two programs, the Ohio Public Works Commission provides grants, loans and financing for local debt support and credit enhancement. Eligible projects include improvements to roads, bridges, culverts, water supply systems, wastewater systems, storm water collection systems and solid waste disposal facilities.

In Kentucky, funds for both the State Projects and Rural Secondary Programs are derived from gasoline tax receipts, and are expended under the direction of the
Department of Highways. These funds may be used for the construction, reconstruction, and maintenance of state and county roads and bridges.

Another source of state funds is from Unspecified Programs, which encompass all the state revenue that Kentucky allocates to the OKI counties that do not fall into any of the established state programs. These allocations usually finance 100% of these projects. As illustrated in Table 16-2, this revenue is anticipated to be significant over the years.

**FUNDING NEEDS**

Recommended projects have been identified elsewhere in this document, primarily in Chapters 12 (transit) and 13 (highway). A recapitulation and the associated costs are provided below in Table 16-3 and Figure 16-3.

Table 16-3
Plan Expenditures

<table>
<thead>
<tr>
<th>Element</th>
<th>Cost ($M)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rail Transit</strong></td>
<td>291.4</td>
</tr>
<tr>
<td>Central Area Streetcar (at 50%)</td>
<td>66.0</td>
</tr>
<tr>
<td>Eastern Corridor Oasis Line (at 50%)</td>
<td>205.4</td>
</tr>
<tr>
<td>Preliminary design studies</td>
<td>20.0</td>
</tr>
<tr>
<td><strong>Right-Of-Way Preservation</strong></td>
<td>41.7</td>
</tr>
<tr>
<td>(I-75, Wason, I-71 N &amp; S, Southeastern)</td>
<td>41.7</td>
</tr>
<tr>
<td><strong>Bus Improvements &amp; Park-and-Ride</strong></td>
<td>110.0</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>80.0</td>
</tr>
<tr>
<td>Bike/pedestrian</td>
<td>20.0</td>
</tr>
<tr>
<td>ARTIMIS &amp; corridor studies</td>
<td>60.0</td>
</tr>
<tr>
<td><strong>Highway Capacity Improvements</strong></td>
<td>3,685.2</td>
</tr>
<tr>
<td>Reserved for corridor recommendations</td>
<td>265.0</td>
</tr>
<tr>
<td>Northern Kentucky</td>
<td>402.8</td>
</tr>
<tr>
<td>Southwest Ohio</td>
<td>2,255.0</td>
</tr>
<tr>
<td>Kentucky TIP</td>
<td>435.5</td>
</tr>
<tr>
<td>Ohio TIP</td>
<td>349.0</td>
</tr>
<tr>
<td><strong>O&amp;M</strong></td>
<td>3,222.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7,430.5</td>
</tr>
</tbody>
</table>
**ESTIMATION OF COSTS**

This plan makes the best estimate of total project costs. Where available, cost estimates are obtained from other planning partners in the region including KYTC, ODOT, county engineer offices, etc. Where necessary, planning level estimates derived from actual projects in the region are used to estimate project costs.

As mentioned above, costs for the replacement of the Brent Spence Bridge are assumed to be from new revenue sources designed to handle “mega projects.” Project costs for items in the Rail Transit Rail Vision Plan are not considered to be part of the recommendations of this plan and are not accounted for in this fiscal analysis.

**DEMONSTRATION OF FINANCIAL CONSTRAINT**

Federal legislation requires the *OKI 2030 Regional Transportation Plan* to demonstrate that its recommendations are “fiscally constrained,” that is, financial resources can be reasonably expected to be available to cover the costs of the plan. As outlined above in the “Funding Expectations” section, approximately $7.53 billion is estimated to be available for all transportation expenditures in the OKI region over the life of the plan. The estimated cost of the recommendations of this plan is an estimated $7.43 billion. Because the value (cost) of recommended projects in this plan (see Table 13-1) is less than the resources reasonably expected to be available, this plan demonstrates financial constraint.