Plan & Project Development

An effective transportation plan is one that understands transportation needs, defines transportation priorities, and works within the parameters introduced to the planning process by state and federal guidance and regulations. The goal of a transportation plan is the development of both strategies and actions whose cumulative impact benefits the region, leading to the more efficient movement of people and goods.

A number of resources were relied upon for this update of the Louisville (KY-IN) Metropolitan Planning Area (MPA) Transportation Plan, *Horizon 2030*. From the creation of Regional Priorities, to a review of congestion analysis and the collection of public comment, several influences guided the update process, development, and identification of transportation investments included in *Horizon 2030*.

Regional Priorities

The Transportation Policy Committee (TPC) defined and adopted priorities to guide the development of the Transportation Plan update. These priorities identify important issues used to assist the TPC in assuring projects that support these priorities move forward.

Regional Priority	Description	Project Eligibility Requirements
Safety	Improve safety on roadways & interstates.	Stated project/program Purpose & Need addresses: 1.) existing transportation safety issues where a high number of documented crashes have occurred; or 2.) corridors where existing safety issues or the potential for future unsafe conditions may occur without the benefit of mitigating actions that have been identified through a safety study or other transportation study/analysis. Meets the criteria for using Hazard Elimination & Safety (HES)/Safety funding.
Congestion Management	Improve traffic flow on roadways & interstates during peak travel hours.	Stated project/program Purpose & Need is based on improving traffic flow on facilities that have been identified as having a level of service of E or F.
Travel Demand Management	Increase strategies that reduce the demand placed on roadways & interstates by single occupant vehicles.	Stated project/program Purpose & Need indicates the project/program will reduce the number of single-occupant vehicles in traffic flow during peak hours. Projects & programs considered for this priority are readily identified as Transportation Demand Management (TDM) strategies (high occupant vehicle incentives, transit, staggered work hours, telecommuting, alternate modes, etc.).
Air Quality	Improve air quality.	Stated project/program Purpose & Need is to improve air quality and the project/program meets the eligibility guidelines for CMAQ funding.
Freight	In support of economic development, improve mobility within designated freight corridors.	Stated project Purpose & Need is to improve freight movement in those corridors designated as Freight Corridors in the Horizon 2030 Transportation Plan update.
Alternate Modes	Improve mobility options through implementing alternate travel modes.	Stated project/program Purpose & Need is to provide additional and/or improve existing commuter/functional trip modal options (other than capacity adding projects for Single Occupant Vehicles). Any roadway improvement or construction project description that clearly states that alternate modes for functional trips are included within the scope of the project.

The diversity of priorities, ranging from relieving congestion, to supporting freight movement, to alternate modes, indicate the TPC's desire to increase transportation choices in *Horizon 2030*.

Identifying projects eligible for Regional Priority status was determined by the Project Review Subcommittee of the Transportation Technical Coordinating Committee (TTCC). The Subcommittee reviewed each proposed project and forwarded a recommendation through the TTCC to the TPC. Individual project information pages, found in the Project Information section of this document, identify those projects awarded Regional Priority status.

Investment Areas

Identifying future land use patterns is important in determining appropriate levels of resource investment. With *Horizon 2030*, a tool was developed to better depict the relationships between land use and transportation: Investment Areas, which illustrate 2030 land use patterns. This information proved valuable in proposing projects compatible with future residential and commercial land use. There are four Investment Area types:

- Established
- Community
- Transitional
- Preservation/Rural

Each type was defined based on current and 2030 planned land use, current and projected populations, developable land, density, intensity, and availability of other infrastructure, such as sewers. Local land use planning agencies (as well as infrastructure and comprehensive land use plans) were consulted and approved the final product before action was taken by KIPDA Transportation Committees. The approved Investment Area tool was then applied to transportation planning and project development. The application of these four density types may not be easily transferable to other non-transportation planning activities.

Investment Area Type	Description	Project Examples
Established	Existing land use density is at its maximum and is expected to remain the same through 2030. Examples of areas that are identified as Established are downtown Louisville, New Albany, and Jeffersonville. Such areas often contain office space, mixed with some retail and residential uses.	Project requiring little to no right-of-way, such as sidewalks, bicycle facilities, transit improvements, and intersection improvements.
Community	Existing land use density is heavy but not at its maximum. It is expected to stay the same through the year 2030. Such areas are often mixed residential and retail uses. Examples of these areas can be found in Fern Creek, St. Matthews, Newburg and Highview.	A mix of projects, including, but not limited to those that require little to no right-of way, such as sidewalks. in- tersection improvements, center turn lanes.
Transitional	Existing land use can be described as light but is anticipated to become heavier by the year 2030. Such areas are mostly large acre residential with a mix of retail and service uses. It is anticipated that the density will transition to either the Community or Established density patterns by 2030. Examples of this area type include: River Ridge Commerce Center, Blue Grass Industrial Park, parts of southeastern Jefferson County and central Clark County.	A full mix of projects as transportation infrastructure is being established. Expansion projects are appropriate. Preservation of rights-of-way is encouraged. Facilities for alternate modes are encouraged to extend beyond the capability of the expansion facility to manage traffic flow. Projects may include new roadways, added travel lanes, bicycle facilities, sidewalks, and transit.
Preservation/Rural	There is no or very little existing land use or planned development and it is not anticipated to change through the year 2030. These areas are often agricultural or large park land areas. Examples of these areas include Clark County	Projects should be limited to those that manage traffic flow, preserve infrastructure, and improve safety, such as correcting sight distance and bridge replacement.

Title VI / Environmental Justice

The *Environmental Justice Title VI Plan* (October 2004) specifies that in the course of updating the Transportation Plan, efforts will be made to identify the needs, wants, and concerns of those persons who live and work within the Environmental Justice areas. The EJ study areas were defined through the drafting of the *Environmental Justice Title VI Plan*.
The Title VI / Environmental Justice Plan states:

> When considering project impacts in Environmental Justice Study Areas, the overall transportation issue is to mitigate project impacts from becoming barriers to non-automotive transportation options.
> *(Environmental Justice Title VI Plan, page 4, October 2004)*

As part of project development, the sponsors were made aware of the study areas and the importance of including alternate mode facilities such as sidewalks and bicycle facilities and amenities in the context of their projects. Projects that intersect the Environmental Justice/Title VI areas were carefully reviewed by a group of persons who work and/or reside in them. Persons who took part in the review of projects were asked to comment on how they believed the projects would impact their neighborhoods. Once collected, these comments were forwarded to the Transportation Policy Committee for their consideration.

Freight Corridors

The Transportation Policy Committee has indicated its support of economic development and preservation of neighborhoods and communities with the adoption of Freight Corridors. A Freight Corridor is a roadway that is anticipated to carry significant amounts of truck traffic because of the access they provide to areas that rely upon the import and export of freight. In the Louisville (KY-IN) MPA, the interstate system has been identified as being part of the Freight Corridor system. Along with the interstates some of the major roadways in the area have also been identified as being on the Freight Corridor system.

Once identified as a segment of the Freight Corridor system, proposed improvements are to be studied and designed with an eye to improvements that enhance freight movement. Improvements such as increased turning radius or wider travel lanes are examples of how to make a roadway more conducive to freight movement.

The TPC also identified the enhancement of Freight Corridors in their list of Regional Priorities. Projects identified as Regional Priorities receive preferred status.

Bicycle and Pedestrian Priority Corridors

The Transportation Policy Committee has emphasized the implementation of modal options for persons who live and work within the Louisville (KY-IN) MPA. As part of the transportation plan update process, the TPC recognized the need for greater diversity in transportation strategies. In order to not only further the implementation of alternate modes, but also improve connectivity with existing roadway and transit options, the TPC adopted the Bicycle and Pedestrian Priority Corridors. Alternate modes are those modes of transportation that are alternatives to the personal automobile. These include sidewalks, bicycle lanes, multi use paths, transit, ridesharing, etc., that serve as a means for commuters to get to and from work, shop for groceries, or attend medical appointments (for more information please see the Alternate Mode Section.) Project

sponsors were provided maps of the Bicycle and Pedestrian Priority Corridors to consider in the project development process.

Public Involvement

The Transportation Policy Committee requested that a series of public events be held to afford opportunities for interested persons to comment and provide input. Beginning in June 2004 and concluding in October 2005, a range of activities were implemented that provided numerous avenues for persons to review draft documents and submit comments. The TPC requested that opportunities be conducted at three critical stages in the plan development process. The first was to present the projects found in the *Horizon 2025 Transportation Plan* (predecessor to *Horizon 2030*). Participants were asked to indicate what they liked and disliked; the second was to review the draft project list for the *Horizon 2030* update; and the third was the final draft Transportation Plan document. Each of the three public review periods lasted 30 days. Strategies included:

- Posting draft documents on the KIPDA web site
- Placement of draft documents in all Louisville (KY-IN) MPA public libraries
- Public meetings hosted by members of the Transportation Policy Committee
- Presentations to neighborhood, civic, and public agency groups

Significant opportunities were also provided for persons to submit comments. Comments could be submitted via email, standard mail, fax, and/or telephone. Notification of opportunities to review plan material and provide input included:

- Newspaper advertising in all area newspapers, the Louisville Defender, and ¡HOY!
- Direct mail and email notification to persons on the KIPDA Contacts List (approximately 7,000)
- TARC Interior Bus Placards
- Distribution of notification postcards by KIPDA staff and Committee members

Interested persons also had the opportunity to provide input at the beginning of each Transportation Technical Coordinating Committee meeting and each Transportation Policy Committee meeting.

All comments collected were provided to the Transportation Policy committee for an additional 30 day review period. A Public Comment Subcommittee of the TPC was also formed to more closely review the comments, draw any common themes, request further clarification of particular issues, and report on the disposition of the comments.

Public comments collected addressed both specific transportation projects as well as broad transportation issues. The project-specific issues were in support of, opposed to, or offered suggestions and modifications to a particular project. Those comments that addressed transportation in a larger, non-project specific manner, were generally supporting the idea of increased transit, pedestrian, and bicycle options in order to improve air quality, preserve green space, and offer greater travel choices.

Safety
Both the states of Indiana and Kentucky completed, in response to federal regulations, a Strategic Highway Safety Plan (SHSP) for their respective states. The goals of the SHSP are:

- "Reduce traffic fatalities to .98 per 100 Million-Vehicles Traveled (HMVMT) in 2008 and .92 HMVMT in 2010" - Strategic Highway Safety Plan, Indiana
- "To reduce the number of highway fatalities to no more than 700 by December 31, 2008" - Strategic Highway Safety Plan, Kentucky

The *Horizon 2030 Long-Range Transportation Plan* took strides in addressing safety issues through the establishment of a Regional Priority for safety issues. Projects which address Regional Priorities are awarded status in terms of both scheduling priority in *Horizon 2030* and funding priority in the Transportation Improvement Program. Crash data was collected from throughout the five county region. This information was mapped and the data was made available to project sponsors through the Project Development Package (PDP). The PDP was a compilation of several resources from which the project sponsors could utilize in the development of proposed projects for the *Horizon 2030 Long-Range Transportation Plan*. Safety and crash information was included in the PDP.

Congestion
Traffic congestion results when the number of vehicles approaches or exceeds the available capacity of a roadway or roadway system. In the development of *Horizon 2030*, both current and projected levels of congestion were identified using information from a variety of sources. Traffic counts and travel demand forecasting model traffic projections from the Indiana Department of Transportation, the Kentucky Transportation Cabinet, Louisville Metro Public Works, and KIPDA were used to determine which roadway facilities are, or can be expected to become congested. This information was provided to project sponsors for their consideration in formulating means (adding capacity, eliminating bottlenecks, reducing vehicular demand through alternate modes, or improving operations) of addressing congestion problems in the project development phase of *Horizon 2030*.

Air Quality
Due to the area's nonattainment status of the National Ambient Air Quality Standards, it must be demonstrated that implementing the programs and projects in Horizon 2030 does not worsen air quality or impede the purpose of the State Implementation Plan (SIP). When possible, transportation activities should contribute to the improvement of air quality. This can be achieved from transportation sources in different ways. Some of the most readily apparent are by reducing congestion through roadway widening, constructing alternate routes, providing more transit, bicycle, pedestrian, and ridesharing services and facilities, improving traffic signal efficiency, and detecting and clearing crashes/breakdowns more quickly. For additional information about the analysis to determine air quality impacts of *Horizon 2030*, please see the Air Quality section of this document.

Environmental Issues and Mitigation Strategies
In the development of the *Horizon 2030 Long-Range Transportation Plan* considerable consultation occurred with land use management agencies through a review of socio-economic projections, density, land use plan review, and a discussion of the natural barriers to development

such as slopes and flood plains. This consultation was conducted as part of the *Horizon 2030 Long-Range Transportation Plan's* Investment Area Planning tool.

Also in the development of the *Horizon 2030 Long-Range Transportation Plan*, clean air agencies were provided the opportunity to review the draft Transportation Plan through their membership on the Louisville (KY-IN) MPO committees and participation in the air quality conformity process.

Further review was conducted of the historic preservation, environmental and natural resources planning activities. The findings of the review were recognized in the update process. In the current *Horizon 2030 Long-Range Transportation Plan* a project map was created for each project that left a footprint. The individual maps included various data associated with the intent of this regulation. A quarter mile buffer was established in order to better understand the implications each project on the various issues identified. The issues identified on each project map included:

- Schools
- 100 year flood plain
- Wetlands
- Railroads
- Streams
- 500 year flood polain
- Superfund sites
- Historic and Archeological sites

Agency Consultation

The Participation Plan identifies the agencies for which consultation is to occur in the development of the Transportation Plan. In the development of the *Horizon 2030 Long-Range Transportation Plan* considerable consultation occurred with land use management agencies through a review of socio-economic projections, density, land use review, and a discussion of the natural barriers to development such as slopes and flood plains. This consultation was conducted as part of the *Horizon 2030 Long-Range Transportation Plan's* Investment Area planning tool.

Also in the development of the *Horizon 2030 Long-Range Transportation Plan* air agencies were provided the opportunity to review the draft Transportation Plan through their membership on the Louisville (KY-IN) MPO committees and participation in the air quality conformity process.

Finally, agencies were also enlisted in the identification of area wide environmental issues and possible mitigation strategies. The following agencies were asked to provide input based on their area of expertise and the potential impact and/or interaction they believe may occur as a result of the implementation of the projects and programs in the Transportation Plan:

- Louisville & Jefferson County Metropolitan Sewer District
- Indiana Department of Environmental Management
- Air Pollution Control District
- Kentucky Department for Environmental Protection
- US EPA, Region 4
- US EPA, Region 5
- Indiana Department of Natural Resources
- Louisville District Army Corps of Engineers

- Clark County Regional Water and Sewer District
- Louisville Waterfront Development Corporation
- Metro Louisville Parks Department
- Bullitt County Parks & Recreation
- Oldham County Parks & Recreation
- New Albany-Floyd County Parks & Recreation
- Clarksville Parks & Recreation
- Jeffersonville Parks Department
- Louisville District Army Corps of Engineers
- Clark County Conservation Team
- Clark County Soil and Water Conservation District
- Floyd County Soil and Water Conservation District
- Jefferson County Soil & Water Conservation District
- Louisville Olmsted Parks Conservancy
- Oldham County Conservation District
- USDA Natural Resources Conservation Service, IN
- USDA Natural Resources Conservation Service, KY
- Louisville and Jefferson County Environmental Trust
- Jeff-Clark Preservation Inc.
- Historic Landmarks Foundation of Indiana
- KY SHPO, Kentucky Heritage Council
- IN SHPO, Department of Natural Resources
- Jeffersonville Historic Preservation Committee
- Jeffersonville Main Street
- Charlestown Architectural Preservation Society
- Historic Landmarks Foundation of Indiana
- Historic Bethlehem, Inc.
- Develop New Albany, Inc.
- Main Street Preservation Association Inc.
- New Albany Historic Preservation Commission

Congestion Management Process

Horizon 2030 took from KIPDA's Congestion Management Process (CMP) a process of reviewing projects that are intended to mitigate existing or projected congestion by increasing capacity. The review was focused on determining if the identified congestion could be improved to an acceptable level by implementing alternate mode strategies instead of adding the proposed capacity.

Each project information page indicates whether a project was a CMP candidate and completed the CMP Project Level Review. A complete list of CMP Candidate Projects and the summary sheets for the Project Level Review can be found in an appendix to this document. Using the steps outlined on the following page, KIPDA staff conducted a project by project review of each proposal.

CMP Review Process	
Review All Projects	All projects proposed for Horizon 2030 were reviewed to see if they met criteria for being identified as candidates for the CMP project review. The KIPDA CMP requires projects which add capacity to be identified as CMPcandidate projects. Once a CMP candidate, a project advances to the next step in the process.
Finalize Listing	Projects proposing to increase capacity on roadways were identified as CMP candidates. A project that adds capacity is one which includes the addition of general purpose travel lanes, a new roadway or extension of existing roadway, the addition of a new interchange, and the addition of a lane on interchange ramps. Projects that proposed the addition of center turn lanes, or turn lanes in intersections do not meet the criteria for being identified as adding capacity and therefore, were not identified as CMP candidates.
Collect Data	Congestion data was collected for each of the corridors in which a CMP candidate project was proposed.
Project Review & Congestion Analysis	The project review occurred at two levels. The first was based on the analysis of congestion and the effectiveness of alternate mode strategies to mitigate it without the proposed project. The second was based on a culmination of theTPC's guidance developed for the plan update. Basically, the TPC wanted to not only consider alternate mode strategies in the context of relieving congestion, but also in terms of other issues not directly related to congestion relief. The congestion review was a quantitative process that analyzed the ability of the alternate mode strategies to mitigate the identified congestion. Strategies included bicycle facilities, pedestrian facilities, transit improvements, and rideshare services. The non-quantitative process encouraged the consideration of alternate strategies based on the Investment Areas, Title VI/Environmental Justice Areas, Bicycle and Pedestrian Priority Corridors, Freight Corridors, and the stated intent of a project to mitigate safety problems.
Finalize Analysis	Based on the congestion review and the qualitative review, the Findings and Conclusions recommended the following for each project: - Whether the project sponsor, because of the ability of alternate mode strategies to mitigate congestion, should revisit the need for the capacity-adding project. - Whether the proposed project project should proceed as stated because of the inability of the alternate mode strategies to mitigate the identified congestion. - Based on the non-quantitative measures whether a project sponsor should consider the inclusion of alternate mode strategies in the future planning and design of the project.

Project Development and Review

Project development identifies strategies used to address transportation needs and wants. The process began with several preliminary steps completed by the Transportation Policy Committee. The following tools were utilized during project development:

- Public Comment
- Regional Priorities
- Investment Areas
- Congestion Information
- Safety Information
- Bicycle and Pedestrian Priority Corridors
- Freight Corridors
- Title VI: Environmental Justice

After meeting to discuss various transportation issues, the sponsors of projects began reviewing information, identifying needs and wants, and proposing solutions for inclusion in *Horizon 2030*.

Once proposed projects were collected, the Transportation Technical Coordinating Committee (TTCC) formed the Project Review Subcommittee for the purpose of reviewing the proposals and providing information about each project. Each project was reviewed by two members of the Subcommittee to verify timing and costs as well as recommend Regional Priority status. A report was drafted by the Subcommittee and forwarded to the Transportation Technical Coordinating Committee. The TTCC reviewed the report and recommended its adoption by the Transportation Policy committee. The Project Review Subcommittee considered the following in their report:

- Estimated Project Cost & Open to Public Date
- Regional Priorities
- Investment Areas
- Bicycle and Pedestrian Priority Corridors
- Freight Corridors
- Title VI: Environmental Justice

Coordinated Public Transit Human Services Transportation Plan

The *Coordinated Public Human Services Transportation Plan* results from the effort to coordinate transportation efforts serving persons with disabilities, oder adults, welfare recipients, and eligible low income individuals in addition to addressing reverse commute activities. In the plan, strategies are identified to support the development and maintenance of Job Access/Reverse Commute opportunities, provide new public transportation opportunities to beyond the minimum Americans with Disabilities Act requirements, and maintain current services levels and expand existing service to persons with disabilities and older persons. The efforts put forth in developing the *Coordinated Public Transit Human Services Transportation Plan* is led by the Transit Authority of River City with guidance from the Regional Mobility Council, which is administered by TARC. The *Horizon 2030 Long-Range Transportation Plan* coordinates with the *Coordinated Plan* in identifying strategies and including them in the *Horizon 2030 Long-range Transportation Plan*.

Federal Guidance

Federal guidance provides the framework for completing the update of the Transportation Plan. The Transportation Equity Act of the 21st Century and the Safe, Accountable, Flexible, Efficient, Transportation Equity Act a Legacy for Users established a set of guidelines that are used when completing an update. Key to the update of the Transportation Plan in the Louisville (KY-IN) MPA are:

- The Transportation Plan is updated every 4 years.
- The Transportation Plan must be financially reasonable.
- Because of the Louisville Area's air quality status, the Transportation Plan must meet or exceed the targets established for it in the State Implementation Plans for air quality (SIP).
- The public must be afforded the opportunity to comment on the Transportation Plan prior to its adoption by the Transportation Policy Committee.
- The Transportation Plan must cover at least 20 years.
- The Plan process should demonstrate consideration of the needs and wants of low income populations and minority populations.
- Projects that are proposed to add capacity for single occupant vehicles must undergo the CMP project level review.

Conclusion

The final list of projects, programs, and strategies in *Horizon 2030* results from the culmination of the many steps in the plan development process. It represents the Transportation Policy Committee's decision as to which combination of transportation system improvements are to be implemented through the year 2030 to address mobility needs. That decision has been based on quantitative and qualitative assessments of current and projected travel conditions, regional priorities, public input, environmental concerns, financial constraints, and community impacts.

The diversity of the projects, programs, and strategies recognizes that since there is no single transportation "problem," there can be no single transportation "solution." Development of a plan is a complicated task; often, resolving competing and conflicting interests is a major component of the decision making process. *Horizon 2030* embodies what the Transportation Policy Committee has determined to be the most appropriate balance of system preservation, system expansion, operational improvements, and alternate mode measures.