Evaluation of Existing Conditions: DRAFT Review of Prior Plans, Task 1.1

This document includes summaries of prior plans, as identified in the Project Description, discusses their relevance to bicycle and pedestrian transportation, and identifies ways in which portions of the current plan will clarify issues raised or complement ideas made by the existing studies. The documents reviewed include regional-scale planning and policy documents, County-wide planning and policy documents, neighborhood plans, specific corridor studies, and specific sections of the Official Code of Louisville and the State of Kentucky Pedestrian and Bicycle Travel Policy.

The plans reviewed under this task have varying degrees of relevance, but taken in aggregate, they describe an emerging recognition of the importance of accommodating bicycling and walking in the transportation network. The concept of “Complete Streets,” which is being considered in communities nationwide, establishes that roadways should serve all modes, rather than being primarily designed for the use of motor vehicles, and that in order to achieve this broader aim, the needs of all types of travelers must be carefully considered. The regional plans cited below reflect the importance placed on bicycling and walking by the Kentuckiana Regional Planning and Development Agency as modes for serving localized circulation, for providing access to transit for longer trips, and, to a lesser extent, as long range commuting options themselves. The county studies and neighborhood plans reflect Louisville and Jefferson County’s own history of identifying the need for improved bicycle and pedestrian accommodation and how those needs have been identified for specific areas of the two Counties. The codes and ordinances reviewed reveal areas in which state and local laws may either assist or inhibit the objectives of accommodating bicyclists and pedestrians within the overall transportation network.

Regional Plans

Louisville Community Walkability Plan (2008)

The Louisville region has many pedestrian-friendly areas, among which is it's "historically rich downtown" that is very walkable and serves as a catalyst for the rest of the city. As residents seek better connections to areas beyond the downtown, more and more interest has supported safer sidewalks and intersections to connect to area parks, trails, and neighborhoods. With their Community Pedestrian Plan and Summit, citizens and elected officials have become interested in walking. Interest in health issues, energy and global climate all support the timing of this plan. The Louisville Government is committed under its Complete Streets Policy to making this a walkable city. Through the Mayor's Healthy Hometown Movement (MHHM) a comprehensive Walkability Plan was initiated. The purpose of this initiative is to "create a community-wide culture that encourages and supports healthy lifestyles by promoting increased physical activity, better nutrition, healthy public policy and access to needed resources." Public input played a significant role in the development of this plan. From on-line surveys to conducting four community workshops and a pedestrian submit a platform was provided for Louisville's citizens, community groups, developers, business community, appointed officials and Louisville Metro staff to participate in the development of this plan.

As Kentucky's largest city, Louisville offers a variety of recreational opportunities that attract pedestrians from communities across the city. Frederick Law Olmstead designed a system of parks and parkways in the 1900s which will be expanded to provide a 100-mile continuous multi-use trail around Louisville. The city is also developing a Community Pedestrian Plan that has preliminary survey results indicating that over 70% of its citizens "walk for recreation or enjoyment, and over one-third walk to work, school, or for shopping and entertainment." With missing connections and roadway facilities, distance and safety concerns Louisville has many barriers to walking to the 120 parks located across the City, or to suburban and rural communities located outside of the downtown district.

The key policies and planning documents that are critical for creating the walkable community include the Complete Streets Policy, Cornerstone 2020 Plan, and the Land Development Code. The key design and assessment documents include the Complete Streets Manual, The Louisville Neighborhood Walking Survey program, the Sustainability of Louisville Metro Roads for Bicycling and Walking, Bicycle and Pedestrian Facilities Design Manual, TARC Bus Stop Inventory and Plan, 2007, and the Louisville Retail Market Study, April 2008. The recommended improvements to these documents will help to enhance walkability for the City of Louisville, by addressing connectivity and pedestrian accommodation, the pedestrian context, and stakeholder input and coordination.

The Louisville Walkability Action Plan was created to provide the City with a tool to create a comfortable walking experience that is safe and enjoyable. The Action Plan is organized into four themes and is supported by a set of objectives that have short, medium, and long term time frames for implementation. The themes address one element that is critical to creating and maintaining a walkable community. These themes and objectives include the following:

1. Evaluating and planning for pedestrians; focuses on creating a single inventory of sidewalks, paths, connectors, and other pedestrian roadway facilities, assessing the condition of this network and planning network improvements based upon this evaluation.
    i. Objective is to ‘improve walkability within a specific timeframe” and to “create and maintain an inventory of the existing pedestrian network,” as well as “assess and prioritize routine maintenance, major repair, and expansion of the pedestrian network.”

2. Designing with the pedestrian in mind; which focuses on integrating Complete Streets concepts into all project planning, describing ways that safely and effectively provide for pedestrians and encourage walking. This theme also identifies methods to create walkable connections.
   i. Objectives are to incorporate Complete Streets design into the development review processes, enhance pedestrian throughput and safety through intersection design, traffic calming and direct route design, include full connectivity and accessibility in design standards and retrofits, implement pedestrian and school-based safety evaluation and engineering programs- Safe Routes to Schools and beyond, institute a health impact assessment for transportation projects and for new/ re-development applications, work with the Governor, State Legislature and Kentucky League of Cities to legalize impact fee set-aside at the time of development so funds can be used for walkability needs.

3. Building, funding and implementing the pedestrian network which covers the “tools, techniques and policies to fund, build and maintain the pedestrian network.”
   i. Objectives include creating a financial plan to expand and improve the pedestrian network, based on the overall pedestrian level of service goal, use existing and new sources of funds to finance pedestrian network needs; coordinate projects to use funds efficiently, develop incentive programs to retrofit existing retail setting for pedestrian access, develop incentive programs to create mixed-use areas in existing residential zones.

4. Creating a pedestrian-friendly community which focuses on promoting and sustaining walkability in the Louisville Metro area by the incorporation of programs which are pedestrian-friendly. A structure is established for the work done by both the public agencies and the community members.

   i. Objectives include creating a voice for pedestrian safety and walkability issues comparable to those for bicycle and motor vehicle travel, creating high profile pedestrian and school-based community safety education and enforcement programs – Safe Routes to Schools and Beyond, maintaining pedestrian-ways during construction and special events, enhance pedestrian travel with supportive amenties and transit service, establish community-based, governmental-supported programs that increase walking by Louisville Metro citizens, create and organizational structure to oversee the Community Walkability Plan.

Horizon 2030 – The Long-Range Transportation Plan for the Louisville (KY-IN) Metropolitan Planning Area

This Louisville (KY-IN) Metropolitan Planning Area (MPA) includes Clark, Floyd and a portion of Harrison counties in Indiana, and Bulitt, Jefferson, and Oldham counties in Kentucky. The strategies in the Horizon 2030 Plan promote a transportation system that can support the people and goods across a variety of changing environments. The development of the Horizon 2030 plan was a cooperative effort between member governments and the public in accordance with Federal regulations and guidance to improve the region's mobility. The approach to this update began with a review of the planning factors in the Transportation Equity Act for the 21st Century (TEA-21) and a thorough public review of the existing plan. TEA-21 and The Safe, Accountable, Flexible, Efficient, and Transportation Efficiency Act: A Legacy for Users (SAFETEA-LU) provide numerous planning factors and processes that were included in the

update. These include such items as economic vitality, increasing safety for motorized and non-motorized users, increased accessibility, protecting the environment, and enhancing connectivity. These aspects all combined to provide a means to identify improvements necessary by the year 2030.

The Horizon 2030 plan addresses various needs which include “operational improvements, system maintenance, adding capacity, increasing safety, and availing modal choice,” which all in turn should bolster the economy and offer users a more efficient and safe transportation system while preserving the existing infrastructure.

This plan helped to depict the relationship between land use and transportation by creating “investment areas” for proposed projects that were compatible with the 2030 land use patterns. These area types included “Established, Community, Transitional, and Preservation/ Rural,” each of which is based upon “future and current populations, developable land, density intensity and availability of other infrastructure.”

Under the regional priorities in this plan particular areas are addressed which include “Title VI/ Environmental Justice,” which identifies the needs, wants, etc., of the residents located in the Environmental Justice areas in order to mitigate project impacts. Freight corridors are also evaluated to better preserve neighborhoods and communities as well as enhance the movement of freight through roadway changes. The bicycle and pedestrian corridors are emphasized through the report’s discussion on implementing “modal options” for residents who live and work within the Louisville region. Alternate modes of transportation as well as connectivity are recognized as needing greater diversity. These alternative modes include such items as sidewalks, bicycle lanes, multi-use paths, transit, and ridesharing, etc. are critical to the commuter.

Horizon 2030 promotes bicycle and pedestrian projects to encourage the use of these modes in the Louisville (KY-IN) Metropolitan Planning Area (MPA). The focus for identifying the corridors is to implement a regional non-motorized network which connects the gaps in the system, and addresses the needs for bicyclist and pedestrians, as well as provide for prioritization of projects that are implemented. The approach includes prioritizing corridors to ensure bicycle and pedestrian facilities are considered in roadway projects in addition to stand-alone projects.

The development of this plan embodies the Transportation Policy committee's determination that there must be an appropriate balance of "system preservation, system expansion, and operational improvements, and alternative mode measures." Horizon 2030 is a tool that provides a list of projects, programs and strategies which can be implemented through the year 2030 to address mobility needs for the region.

Walkable Community Workshops, April 2004

The "Walkable Community Workshop" document identifies problems and solutions associated with "walkability" within five distinct locations within Louisville Metro, the City of Jeffersonville, Oldham County and Bullitt County. The sites varied from urban to rural settings which helped to address a broad range of situations and solutions which contextually could be applied to other areas of the region. A Walkable Community Workshop entails about four hours which includes a presentation that describes what makes a community walkable, provides for a walking audit of an area, and a brainstorming session where solutions are developed. These workshops provided a platform for participants to assist the region with making long-term changes towards improving the walkability for their community. While primarily pedestrian-focused, the workshops also included discussions of bicycle facilities and related needs.

Benefits were discussed for creating a walkable community, which included the following:

- Reduced Air Pollution
- Reduced automotive congestion
- Healthier citizens
- Increased property values
- Higher sales though increased foot traffic
- Lower crime rates from having more eyes on the street
- Increased safety for pedestrians and bicyclists
- Greater sense of community

Through five separate workshops in the KIPDA MPO region, similar problems were identified. A few of these problems were the following:

- Gaps in the Existing Sidewalk Network
- Bicycle Facilities and Amenities are Needed
- Too Much Traffic Congestion
- Buildings are Not Oriented to Pedestrians and Bicyclists
- Safety is a Major Concern
- Not Enough Multi-Use Paths in the Region
- Access Management Techniques are Needed
- Multimodal Connections are Needed in Order to Make using Alternative Modes more Attractive

Some of the solutions identified for improved pedestrian facilities included the following:

- Install sidewalks in a number of locations, i.e., along both sides of all existing roadways in the area
- Install crosswalks at each intersection
- Provide pedestrian overpasses over Breckenridge Lane
- Install multi-use paths

- Provide safety improvements i.e., improve lighting, make walking in the area safe 24-hours a day through design, enforcement, and lighting

Cornerstone 2020 Comprehensive Plan (2000)

This plan represents the vision of Louisville and Jefferson County to create a more livable, attractive, mobile, efficient and environmentally sensitive community. The plan provides for a number of goals and objectives for specific areas of focus which include Community Form, Marketplace, Mobility and Transportation, Livability and Environment, and Community Facilities. One of the planning considerations included in this updated plan was "assuring appropriate multi-modal means of access to the proposed development and proper assessment of the proposal for any adverse impact on the proper functioning of streets."

Under the Community Form Strategy, one of the objectives of this plan was to create specific planning districts with distinct boundaries which recognize specific patterns or forms of development. For instance, the "Downtown Form District" has a goal to create "a compact, walkable core and a lively and active pedestrian environment that fosters and increases the number of people walking on primary downtown sidewalks and ensures a more humane downtown environment." With a specific objective that recommends linkages be developed among the "downtown districts and surrounding neighborhoods to enhance the compact, walkable form of downtown." Another objective locates "open spaces to relate strongly to pedestrians and nearby buildings to ensure an active, livable and pleasant downtown environment."

The Mobility Strategy has goals and objectives which cover transportation and land use issues as they relate to an orderly development respectful of the environment, social and cultural resources and affords a choice of travel modes. Under the Land Use and Transportation Connection a goal for the "Pattern of Development," states that the community should "direct and encourage regional,

sub-regional, and local land use patterns that build upon Community Form goals, encourage compatible land uses, and establish connections between land uses and the mobility system." One of the objectives provides for "appropriate standards for the design and construction of public streets and residential areas that safely accommodate pedestrian, bicycle and transit modes as well as the private automobile."

Under the guideline for the Bicycle and Pedestrian Circulation Plan one of the goals "integrates bicycle and pedestrian facility planning into regional and local transportation planning programs." With objectives that include developing a circulation plan, creating a regional bicycle and pedestrian advisory committee, developing a regional bicycle and pedestrian plan, gaining political support, and establishing standards. Other goals include developing a comprehensive, convenient and direct bicycle and pedestrian transportation network, promoting bicycle and pedestrian safety, and promoting the use of bicycle and pedestrian facilities as both a means of transportation and a form of recreation.

The guideline for Site Design Standards for Alternative Transportation Modes offers goals that address access and separating uses while providing a cohesive network of streets, walkways and bicycle paths for an efficient circulation pattern, and encouraging bicycle circulation as well.

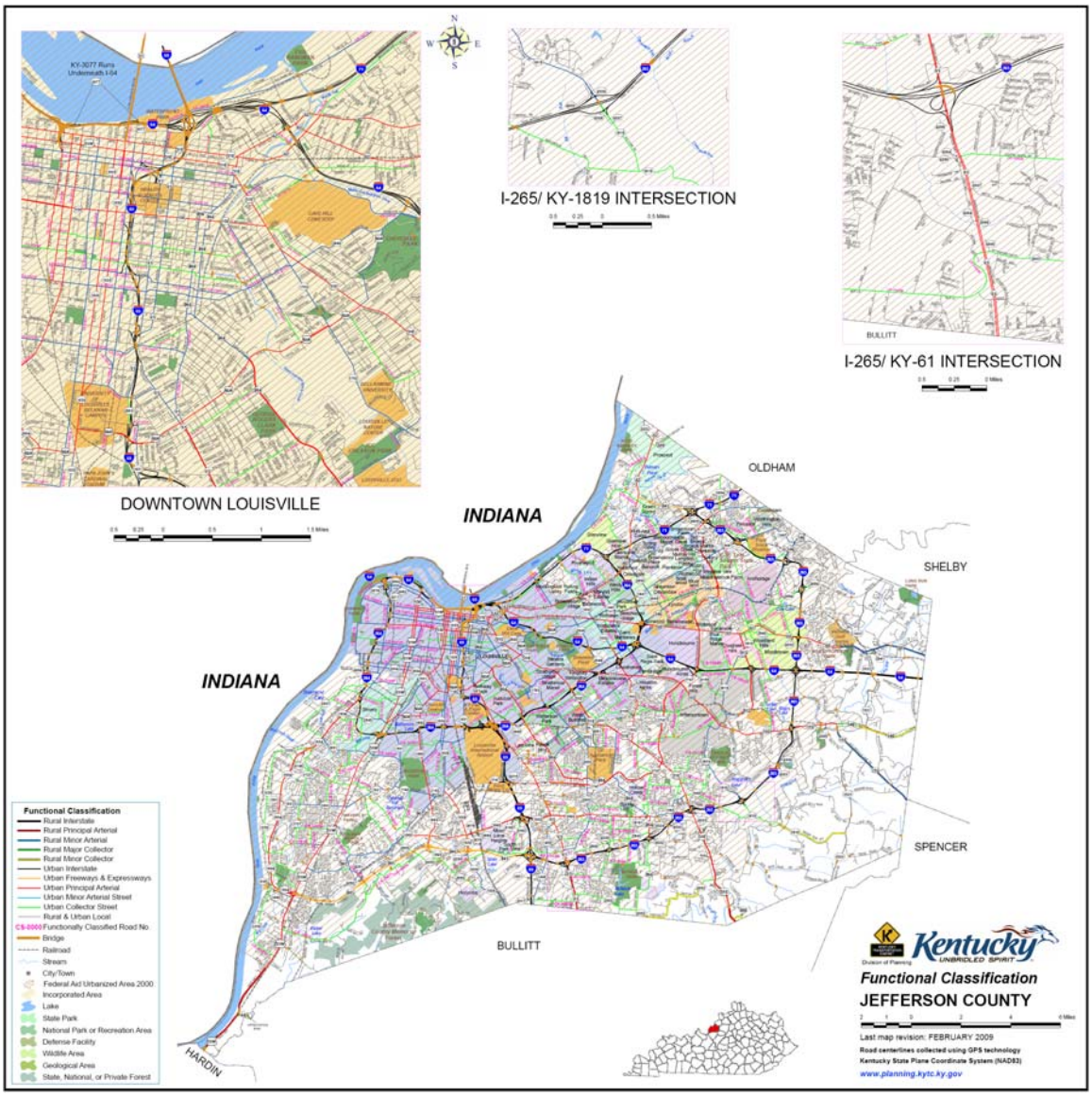
The Livability Strategy provides for guidelines that address environmental resources in terms of planning, protection, and development. A specific area of interest is the guideline for Public Open Space and Parks, which provides for a system of parks and recreational facilities that meets the needs of Louisville and Jefferson County. This is supported by objectives that establish a network of parks, easy access by all people, and establishing a comprehensive, coordinated bicycle and pedestrian system which connects the parks, greenways and recreational areas.

The Plan Elements of this comprehensive plan provide guidelines, intent, and policies that address the strategies mentioned earlier, from Community Form/Land Use, Marketplace, Mobility/Transportation, to Livability/Environment. The adoption of the Cornerstone 2020 plan by the legislative bodies will establish and map form district boundaries and the adoption of a new Land Development Code in which regulations relating to such items as minimum lot size to building heights will be removed from the zoning districts. "New form district regulations will be adopted which establish the standards described in this plan from compatibility of proposed uses or uses and the pattern and rhythm of development in the context of existing and emerging development in the area."

Louisville Complete Streets Manual (2007)

The goal of this Manual is "to develop a multi-modal network that manages the demand for travel and improves the efficiency of the community's transportation system as envisioned in the Cornerstone 2020 plan." Louisville's commitment to a "complete streets" policy provides for transportation corridors to be designed to be safe and convenient for all travel modes. The manual offers a guide for all development to provide a "complete street" which is defined as the roadway and the roadside. "Good design standards balance sound engineering judgment and user needs within the context or character of the environment." The complete streets policy has four distinct character classes, which are the physical context in winch the street resides. They include the downtown, traditional, suburbia, and rural. The activities within the roadside have four basic zones: the Edge zone, Amenity Zone, Pedestrian Zone and the Storefront zone. A preferred width for the pedestrian zone is seven feet, and a minimum of five feet to allow unobstructed passage for the pedestrians. Louisville has a variety of roadside "classes" with differing activity zones. The manual further describes the classification system for the streets and highways into arterial, collector, and local classes, as shown in the accompanying figure. These classifications determine the relationship between traffic mobility and land use. Jefferson County established sub-classes with a relationship established between the functional

class of the roadway and the character class. Under the thoroughfare system pedestrian facilities are to be safe and accessible to all ages and abilities. Another policy is included that provides for bicycle facilities to ensure that they are included in roadway design and construction along bikeway corridors identified by the Louisville Metro Bike Map. The KYTC Kentucky Transportation Cabinet further provides a policy noted in this manual that provides for bicycle and pedestrian facilities be incorporated into all new development. In terms of facility design and transit, Transit Authority of River City (TARC) states that all mass transit should be considered a bicycle facility as all of its buses are equipped with bicycle rack and allow cyclists to board, with a policy in the Complete Streets manual that states all transit facilities be a part of future roadway improvements and provided accessibility to all.



The design criteria for facilities for Louisville Metro are based upon two factors, "area character as established by the Form Districts, and functional classification." Pedestrian facility design is based upon the Title II and III of the Americans with Disabilities Act, and MUTCD criteria. In addition, sidewalks should be continuous and a minimum of five feet in the pedestrian zone. Crosswalks should be utilized to improve safety and refuges should be provided when there is a multi-lane intersection or turning lanes with longer than one signal. Slopes, surface and shared use paths crossings are all addressed as important issues for the pedestrian facility.

The bicycle facility design is based upon several criteria which include “the skill of the cyclist, traffic volume, road geometrics right-of-way width, mix of vehicle types, presence of on-street parking, sight distance, and the design and spacing of access points.” AASHTO’s Guideline for the Development of Bicycle Facilities and the KYTC Recommended Bicycle Facilities are also suggested guides.

This manual provides for bike lanes to be located on both sides of the two-way roadway, and located on the right-most lane. Shared lanes, pavement markings, transit design, transitions, intersections, and gateways are addressed specifically. These combined strategies and guidelines established by Louisville Metro detail the vision for enhancing transportation corridors. The implementation of this requires partnerships between KYTC District 5, Louisville Metro Public works, Brightside, neighborhood organizations small cities and Metro Parks.”

KIPDA Interchange –Bicycle/ Pedestrian Safety Study

The purpose of this study was to develop “a guide of best practices for improving bicycle and pedestrian safety through high speed, high volume freeway interchanges.” The study has five primary objectives which include literature search of policies and guidelines of bicycle and pedestrian safety at interchanges, conduct interviews with local stakeholders about these intersections, develop conceptual plans for case studies, develop a toolbox to accommodate multiple interchange types, and document and compile the study.

The first step of this project included data collection from “ten state departments of transportation (DOTs), eight cities and metropolitan planning organizations (MPOs), as well as five other agencies (national and international) were interviewed.” In summary there is no main source or guidelines for bicycle and pedestrian safety at these types of interchanges. The most leading edge practices on a regional and local level are in California, Oregon, and Florida.

Some of the common themes of these sources provided for the following guidance:

- "Moving pedestrians and bicyclist through the interchange on the same cycle as through traffic when possible"
- "Bicycle and pedestrian facilities should be carried all the way through the interchange, rather than being dropped on either end."
- "Reducing vehicle speeds and potential conflict points changing approach or departure angles, and placing crossings at 90 degree angles to improve visibility of bicyclist and pedestrians, using refuge areas for long crossing distances."

Although the literature provides some guidance for accommodating bicyclists and pedestrians, the interchange type will be site specific and will have important factors that influence the type of treatment that will be most effective in increasing safety of the interchange.

The second task involved conducting interviews with local stakeholders to ask what could be done to improve the safety of bicyclists and pedestrians at these interchanges in the area. There was certainly interest in improving the bicycle and pedestrian safety at these types of interchanges, and a belief that more people would walk or ride if there were safer accommodations.

The third task involved the preparation of conceptual plans for five representative interchanges. The five case studies represented interchanges commonly found in the region. These concepts all combined helped to create a "toolbox" for "retrofitting bicycle and pedestrian facilities for high speed, high volume interchanges." The toolbox includes a site inventory, a five step checklist with items such as treatments and signage, interchange sheets showing treatment options, a field measuring step, and a traffic analysis. The use of the toolbox will provide a method for the user to evaluate the appropriate treatment options

which will enhance the safety of the bicyclists and pedestrians on these high speeds, high volume interchanges.

Suitability of Louisville Metro Roads for Bicycling and Walking (2004)
This study was prepared due to a "need to evaluate bicycling and walking conditions on Louisville Metro roads and to identify and prioritize roads in need of improvement." Outcomes of this study provided strategies to address and improve bicycle and pedestrian facilities on Louisville Metro roads using level-of-service results, map, and analyses, crash statistics, land-use plans, etc. The results of this study indicated that many of the roads in the area need improvement.

The scope of the study included "arterial and collector roads because they carry the highest volumes of motor vehicle traffic at the highest speeds and often provide the worst service for pedestrians and bicyclist who choose to use them or have no other transportation choices." Road suitability measures which help the planners and engineers understand the 'friendliness" of the road, utilize techniques which model the level of service (LOS). This method of choice helps to predict particular user's comfortability on various road types and conditions.

The study discussed the Bicycle Level of Service (BLOS), Bicycle Compatibility Index (BCI), and the Pedestrian Level of Service (PLOS) as methods that were useful in such determinations. The BLOS models (as developed by Sprinkle Consulting) are used for bicyclists, and measures the comfort level of "sharing roadways, lane widths, motor vehicle traffic volume, and pavement surface condition." The PLOS model "rates the utilitarian function of the roadside walking environment not its aesthetic, social or cultural aspects; and it does not consider the surrounding context, such as the terrain, landscaping or type of adjacent land use.

The data collection included the creation of a GIS database for centerlines segments of expressways, arterial and collector roads and neighborhood streets. Traffic volumes, traffic speeds, and other items related to this study were collected from databases at the Metro Public Works, the Kentucky Transportation Cabinets (KYTC), the Kentuckiana Regional Planning and Development Agency (KIPDA) and Metro Planning and Design Services.

To facilitate the entries for LOS, scripts were written for ArcView GIS software. Calculations were performed for both the BLOS and PLOS computations for approximately 16.4 percent of the total miles of arterial and collector roads in Louisville Metro. This information was useful in identifying weak links in the road network, where bicyclists and pedestrians may not have suitable options to get to their desired locations. The other information studied included “sidewalk coverage analysis,” “barrier analysis” and various methods to improve bicycling conditions for roads that had potential.

The outcome of this data, analyses, and maps will help to plan and implement improvements to the existing system by accommodating bicyclist and pedestrians. The results of this study can be used as a benchmark, to track improvements for the road network as a whole. Improvement is needed on many Louisville Metro roads to better accommodate bicycling and walking for health benefits and viable modes of transportation.

Subarea Plans

Jeffersonville Gaslight Recreational and Workplace Bicycle and Pedestrian Master Plan

This plan serves as the non-motorized transportation master plan for the City of Jeffersonville, which was awarded a Recreational Trails Grant Program grant for the plan’s development. Major elements of the plan include the development of goals, objectives, and action strategies to include bicycling and walking conditions within the study area; identification and prioritization of bicycle and

pedestrian corridors/projects; identification of related programs and events; results of outreach to specific community groups (i.e., senior citizens, schoolchildren, and parents); review of recent crashes; and discussion of nearly 50 distinct facility design standards and related considerations.

The prioritization of potential projects was based on roadway functional classification, proximity to key destinations, and closing of existing gaps in the network. The identified routes were also studied as part of a potential future network of separated shared use paths. One model trail project, the Gaslight Recreational and Workplace Bicycle and Pedestrian Trail, was studied in more detail with a preliminary route identified.

Wolf Pen Branch – Neighborhood Plan

This neighborhood plan was prepared to identify the unique attributes that make up this area of northeast Jefferson County and prepare land use policies and standards which will help to protect the scenic, historic, cultural and environmental aspects. The study involved an analysis of existing conditions and the preparation of guidelines to manage the future development in the area. The character of the main corridor, Wolf Pen Branch Road, is narrow, winding, and scenic. There are no sidewalks or curbs along the entire length which provides a popular venue for walkers, runners, bikers and horse riders. By preserving this corridor, including the design speed, the neighborhood believes that this roadway provides one of the “best examples in eastern Jefferson County of a multi-use, multi-modal transportation corridor.”

Fern Creek – Small Area Plan

This plan provides a method for the management strategy for this fast-paced growth area. One of the goals of this plan for the Bardstown Road Corridor is to ensure no new bike paths are constructed along the road, as this roadway is considered a shared access bikeway. The plan proposes many bikeways and greenways within the Fern Creek study area as established by the Jefferson

County 1994 Bicycle and Pedestrian Circulation Plan and the 1998 KIPDA Bikeway Plan, both of which were prepared for the Louisville/Jefferson County Cornerstone 2020 study. Along these corridors these bikeways are considered shared access, but eventually they will be constructed as permanent facilities. The plan further details the development of a greenway corridor that will include a six-to-eight-foot-wide bikeway but would also serve to provide a non-motorized connection between the heart of Fern Creek and the proposed bikeway network. Overall this plan provides a vision for Fern Creek and its quadrants that comprise its boundaries. The success will greatly depend upon how the recommendations are implemented and the coordination between the leaders of this plan.

Old Louisville/Limerick Neighborhood Plans (Amendments)

This plan was prepared to study the current development for the area of Old Louisville and Limerick, in terms of land use patterns and zoning regulations. Historical evidence is used as a guide for this process, as these are two areas that not only have great cultural and architectural legacies but originally had a basic soundness for land use patterns. One of the recommendations developed as a part of this plan was to “create a pedestrian-oriented, compact neighborhood-shopping district at Fourth and Oak.” Another recommendation refers to prioritizing a study for public open spaces for neighborhoods with the next update of the city’s master plan. The Vision for these neighborhoods provides for their vitality, safety, and attractiveness that reflect the historic character. This vision is supported with a number of goals and objectives that address historic preservation, revitalization, and cultural aspects. One of these elements provided for “streets and thoroughfares that reinforce neighborhood cohesiveness and facilitates the movement of pedestrians and vehicles.” The study establishes unique Traditional Zoning Districts coupled with an updated Land Use Plan and Site Development Standards to further ensure future development patterns are in keeping with the overall vision for preservation for Old Louisville and Limerick.

Original Highlands Neighborhood Plan

The vision statement for this neighborhood builds on the historic aspect of being one of Louisville's first neighborhoods as well as being a diverse and affordable traditional community. Within this plan, mobility is discussed as one of the components critical to this plan. The neighborhood plan seeks to balance transportation modes, such as bicycling, walking, transit, shopping, etc. Sidewalks are noted as being critical for making the neighborhood walkable, as well as viable and attractive. Bicycle access and routes are equally noted, with a desire to connect to a greater system, such as to downtown and neighborhoods to the south and east. Bicycle boulevards have been proposed as and idea to calm traffic while allowing greater mobility. Another recommendation was to create a Parking District which would slow traffic coming through the neighborhood and allow cyclists to travel through intersections without having to stop at each one. The implementation of this plan, as with other neighborhood plans, requires coordination and the development of policy and programs to ensure that the recommendations are followed through and meet the vision for the Original Highlands Neighborhood.

Highlands-Douglass Neighborhood Plan (2006)

The vision for this neighborhood plan calls for a reinvestment in the infrastructure by expanding the transportation network of sidewalks, bike paths, and well maintained streets. This is further emphasized under the Mobility element which has recommendations to encourage bicycling, walking and safer access by adding sidewalks and adding a greenway along the right-of-way. Specific sidewalk connections are mentioned to create safer access to neighborhood facilities with new sidewalks on Dorothy, Eleanor, Village Drive, etc. "Bump outs" are a solution that is discussed to provide shorter "crossing distances, slowing traffic, and increasing visibility." Additions of crosswalks and bicycle racks and analysis of vehicular intersections are elements that contribute to the vision of

making this neighborhood plan provide for the improved mobility for the community.

Mockingbird Valley Neighborhood Plan (2006)

This community seeks compatible design for new development to protect its beautiful rural, historic character. The Mobility aspect of the plan discusses how the roads are low volume and allow bicyclists, walkers, and joggers to currently share the road. The desire is to add signage to make visitors aware of the multi-modal aspects of the roads. They further recommend that private roads remain private, and allow new private roads to be developed. They wish Mockingbird Valley Road to remain a two-lane scenic roadway with no curbs or gutters or sidewalks. Strategies to implement the plan include rezoning areas, creating a scenic roadway designation for all of Mockingbird Valley Road, and supporting the designation of placing this neighborhood on the National Register of Historic Places.

Clifton Neighborhood Plan 2000-2010 (2002)

The purpose for developing this plan was to address the following concerns and issues:

- Historic Preservation
- Affordable Housing
- Environmental Integrity
- Development of Social Capital
- Public Transportation
- Pedestrian and Bicycle Amenities

Under the transportation element of this plan, it is further discussed that the neighborhood would like to expand the bicycle routes and amenities to encourage people to travel to downtown, public parks, and the waterfront though the neighborhood. Alternative modes of transportation are also recommended in the plan to preserve the environment and reduce traffic within the neighborhoods.

Walking and bicycling and the use of trolleys and public transportation are recommended alternatives.

Issues are noted for Pedestrian Access, Bike Routes, and Amenities with some recommended alternatives or solutions. They discuss sidewalks with obstructions, disrepairs, or poor alignment and provide corrections to ensure the safety of pedestrians. Accessibility, adding and/or improving crosswalks, improving intersections for persons with disabilities, adding bicycle amenities, and encouraging their citizens to use their bikes or alternative modes of transportation are further addressed as important elements of this plan.

Bonnycastle Neighborhood Plan (2002)

This is a diverse neighborhood with commercial and various types of residential land uses. The desire to preserve the history, safety, attractiveness, and livable character is important to this community. Plan goals include the following:

- Ensure streets and thoroughfares reinforce cohesiveness, while facilitating movement of pedestrians and vehicles and providing adequate on-street parking.
- Preserve and expand alleys and sidewalks.

Prior to developing this plan participants identified neighborhood assets with some being described as “Gateway” and “Boundary marker” Assets which are areas to “preserve” where given descriptive measures for enhancement. Specialty paving and pedestrian amenities are strategies included in the specific intersection improvements noted as a “Gateway.” Preservation of the character of this neighborhood is also emphasized, with improvements to items such as on-street parking, “widening sidewalks and providing incentives for sidewalk awnings and pedestrian amenities.”

Following the identification of the preservation strategies and actions for the neighborhood assets, Form and Zoning Strategy for Traditional Neighborhoods

regulations were created. The creation of TNZD standards requires an amended zoning district map, a description of the boundaries, and completing the TNZD Plan which addresses land use, density, standards and guidelines. The plan will help to ultimately guide the future of development by building upon good planning from Bonnycastle and Olmstead.

Taylorville Road Area/ Urton Lane Study

This plan addressed the three main areas of Land Use, Form Districts, and the Urton Lane Extension, and other transportation projects. The Form Districts established by this plan include Suburban Workplaces, Special District neighborhoods, and Neighborhood Form Districts. Following this, a planning study was conducted to determine whether the Form Districts should change based upon the pattern of development. The study recommended a change for the Neighborhood District to a Town Center Form District which would allow a more dense development and the transportation network to be placed on a grid pattern with an emphasis on bicycle and pedestrian facilities. The process was then applied to project specifics with one of them being the Greenway Trail System. Based upon the alignment of the Urton Lane Extension a proposed trail could link Blackacre to Floyds Fork Park System, providing an asset to neighboring residences and compatible with the vision of the Tyler Rural Neighborhood Plan.

Tyler Rural Settlement District Neighborhood Plan

The Tyler Rural Settlement District Neighborhood Plan calls for preservation of the area's natural and rural character while providing adequate infrastructure improvements which support growth. Historic properties and structures are considered a valuable asset and they are enhanced with standards for greenspace, open space corridors, scenic vistas, etc.

The Mobility component of this plan is critical to meet the goals and objectives. The plan provides for effective mobility infrastructure respecting the natural

character of the neighborhood while offering linkages and various modes of transportation options. Currently infrastructure for other modes of transportation in this settlement area is limited to the motor vehicle. A master plan for pedestrian facilities and multi-use paths is recommended as a part of a community wide master plan effort. Recommendations serve the basis for the plan implementation for future planning efforts, code revisions, and new regulations.

Belknap Neighborhood Plan

The Plan is a guide for the preservation and continued revitalization of this neighborhood. As a primarily residential neighborhood the vision provides for it to remain high quality while providing commercial and amenity services to its core. The neighborhood is urban in character, and has historic architecture as well as tree lined streets which invite pedestrians. The Task Force analysis of transportation related issues cited some concerns which included the need to safely connect both sides of one of its major arteries, Bardstown Road, with pedestrian access. Another issue identified was that Dundee Road from Douglass Boulevard to Emerson Avenue was the only shared road bicycle route located in the Belknap neighborhood. A study is recommended to determine the feasibility for bicycle transportation on other neighborhood streets.

Transportation goals that came out of this study include ensuring accessibility while preserving the natural character and discouraging commercial traffic in residential areas. The recommendations that supported this provided for a community oriented plan to reduce speeding, using traffic calming devices, closing a road to through traffic, street cleaning to provide a safer experience for bicyclists, and encouraging bicycle route studies.

The intent of the provisions within this plan will help “guide the decisions of the executive branch of the City government and the associated agencies with

respect to improvements within the Belknap neighborhood." Guidance in the following activities is critical:

- "development of plans and policies as they relate to the Belknap neighborhood,"
- "provision of various community services such as fire, police, water, and traffic," and
- "preparation and review of budgetary requirements necessary to operation, maintenance and expansion of such community services."

Clifton Heights Neighborhood Plan (2001)

This is a neighborhood that has a small town character that is primarily residential. The vision is to preserve this charm and provide for a number of improvements that will benefit the growth of this community. Objectives include ensuring development is compatible, providing tree lined streets, improving accessibility, providing linkages, and creating an enhanced visual corridor. Following the planning process, specific areas were addressed, which included land use, transportation, and demographics.

Under the transportation element, sidewalk and pedestrian facilities and bikeways are addressed. The plan provides for sidewalk and street crossings, and emphasizes that they should be provided to activities centers. Additional sidewalks along neighborhood streets are also recommended to provide connections to commercial activities and transit stops.

The nearest bikeways are located on Zorn Avenue, which is the eastern side of this study area. Along this roadway, Class II bike lanes are to be added which provides for the exclusive use of bicycles. Another road, Franfort Avenue, is a Class III bike route. A multi-use path is being constructed along the waterfront and will serve both bicyclists and pedestrians.

The plan further details linear distances and costs for new sidewalk and pedestrian facilities by location to complete certain segments. In addition, it provides for the repair of existing sidewalks and maintaining all audio and visual crosswalk signals to maintain a safer experience for all pedestrians. Sidewalks in the surrounding area should be made more accessible to the visually impaired by improving crosswalks, ramps, and signals.

Linkages for the bicycle and pedestrian connections are identified to improve circulation between three distinct sections of Clifton Heights. By providing a small trail connection, establishing a neighborhood connection, and constructing a connection along the right-of-way, the neighborhood will be afforded greater accessibility and improved recreational opportunities for bicycling and walking. A number of goals and recommendations have been prepared that address the needs of pedestrians and bicyclists.

Smoketown/ Shelby Park Neighborhood Plan

This plan area is located southeast of Louisville's central business district and encompasses existing transportation networks. The planning process included a review of land use, transportation and other topics though a collaborative effort with neighborhood citizens, Louisville Development Authority, and local governmental agencies. The Traditional Marketplace corridor provides for low and medium intensity uses, such as small neighborhood shops. The sidewalks should be wide with amenities that promote pedestrian and bicycle traffic. Traditional Neighborhood Form District covers the largest portion of the study area. Under this District provisions are noted for development to be compatible with the existing pattern of development while making provisions for bicyclists and pedestrians.

Within the Gateways/Corridor Improvement section several "key" gateways are identified and improvements are recommended. Two corridors, Hancock Street and East Breckenridge Street, are also identified for public improvement.

Hancock Street is planned for a pedestrian corridor that would link or provide access to Shelby Park north. The capital improvements mentioned in this study address sidewalks, a unified signage system, and pedestrian lighting.

Other Plans

TARC - A Comprehensive Customer Service Survey

Comprehensive Customer Service Surveys were conducted to provide short term recommendations for improvements, and enhancements and to establish performance standards and targets. The information contained within this document is mostly related to transit services and does not provide for the addition of bicycle amenities.

Bicycle and Pedestrian Travel Policy

Kentucky created the Pedestrian and Bicycle Design Guidance Task Force to prepare this policy in response to the USDOT publication, Design Guidance Accommodating Bicycle and Pedestrian Travel: A Recommended Approach. The policy requires the Transportation Cabinet to plan and build all new and reconstructed roadways with pedestrians and bicyclists in mind. The policy guidelines give roadway planners and designers specific criteria to consider for accommodating pedestrian travel, including adjacent land use, existing pedestrian traffic, local pedestrian and bike plans, transit stops, and public interest and demand. The policy also encompasses several other objectives. Through providing alternative transportation options to the car, it is hoped to reduce vehicle miles traveled (VMT) and improve air quality in the state.

Conclusion

The purpose of this section is primarily to provide a context of existing plans, studies, codes, and ordinances and how they each may impact the efforts of the *Bicycle and Pedestrian Improvement Plan.* Taken together, the documents reviewed indicate that accommodation of bicyclists and pedestrians within Louisville and Jefferson County's overall transportation network has been repeatedly identified as an area of concern, whether on a regional, countywide,

neighborhood, or corridor-specific scale. This context sets the stage for the collection of data on existing conditions and analysis of connectivity needs, which are to follow in subsequent tasks of the plan.