

## BACK TO THE BASICS

### Writing Purpose & Need Statements:



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September 7, 2016



Your Assignment to draft a Purpose  
& Need Statement feels like:

**Define the “universe”  
& give two examples.**



## Agenda

- Introductions
- The Why & What of a P&N Statement
- The P&N Building Blocks
- Group Activity:  
Writing a Draft P&N Statements
  - Urban Project Scenario

## The What & Why of a P&N Statement

- Improves the Quality of Decision Making
  - Clarifies and justifies the *expected outcome of the investment*
- Strengthens the link between  
Planning & Project Development & Delivery
  - Should answer these questions:
    - Why is there a Concern?
    - What do we want to accomplish?
  - Answers that should lead to the “How?”-----with a project that fits the Why & What.

## The What & Why of a P&N Statement

- Communication tool directed to the public, officials, & consultants
  - The “battle cry” for the project; Consistent Message!
  - Included in the advertisement for Design or Planning Services
  - Included in meeting notices, invitation letters, media advisories, etc.
- Legally required for projects that include NEPA documentation

## What is NEPA?

- The **National Environmental Policy Act (NEPA)** is a United States environmental law that promotes the enhancement of the environment and established the President's Council on Environmental Quality (CEQ). The law was enacted on January 1, 1970. As the bill was an early step towards the development of the United States's environmental policy.
- The *Legal Guidance* for Purpose & Need Statements comes from NEPA CEQ regulation, Section 1502.13.
- “...shall **briefly** specify the underlying purpose and need to which the agency is responding in proposing alternatives including the proposed action.”

## Purpose & Need Statements Less is *always* More.

- **Lord's Prayer** (66 words)
  - Most people know it.
- **10 Commandments** (179 words)
  - Many can recite them.
- **Gettysburg Address** (282 words)
  - Americans can talk about it.
- **US Regulations on the Sale of Cabbage** (26,911 words)
  - Nobody cares.

## Early Attempts: P&N Statements Good Summary, but not a good P&N

**KY 259; Item No. 3-7030.00, From Green River to Kyrock Elementary School**

The 1999 KY 101/259/79-US 60 Corridor Feasibility Study concluded that the primary need for this corridor is the development of a standard two-lane facility that will provide a safe and more reliable connection from the Ohio River to the Wendell Ford West Kentucky Parkway and I-65. Recommendations for the top priority segments of this connection included the completion of improvements from I-65 to Brownsville, and then initiating improvements from Brownsville to Leitchfield. With the improvements to the corridor from I-65 to Brownsville currently completed or underway, the next priority for improvement is slated as the section of KY 259 from Brownsville to Leitchfield. This project is part of that next priority and addresses four regional transportation goals.

**ACCESS:** This specific project provides an improved segment of the link between I-65 and the Wendell Ford West Kentucky Parkway. On a more local scope, the segment will provide the residents and businesses of northern Edmonson County with an improved access to the county seat of Brownsville, and to the regional activity center of Bowling Green for employment, educational resources, and medical care. This segment will also serve as access to the recreational resources of Nolli Laka and Mammoth Cave National Park.

**SAFETY & SECURITY:** In the 1999 KY 101/259/79-US 60 Corridor Feasibility Study, this segment of the corridor was identified as having a significant crash history. This specific improvement addresses the narrowness of the lanes and shoulder along with the vertical alignment and horizontal alignment, which have been safety concerns of the community, especially in light of roadway departure type of crashes.

**ECONOMIC STEWARDSHIP:** This specific improvement addresses the lane and shoulder width deficiencies of the existing facility as well as improves the horizontal and vertical alignment. Such an improved facility will provide access for the movement of freight through Edmonson County and thus increase the community's ability to attract industrial development.

**ENVIRONMENTAL STEWARDSHIP:** Improvements to the any existing transportation system disturb the human and natural environment. A "no build" option and its affects should be considered. This specific improvement should be designed and constructed in such a way to avoid the natural and historical resources in the area such as the Kyrock Asphalt mines, and a potential historic home across from Kyrock Elementary School. This improvement should also be done in a manner of preserving the community cohesiveness of Brownsville, Lindseyville, and Sweden and avoiding the community resource of Kyrock Elementary School.

We have too many high sounding words, and too few actions that correspond with them.

*Abigail Adams*

## SCOPING : P&N Statement “a better way”

### 3-112.10: KY 90, Summer Shade Bypass.

KY 90 is a rural minor arterial that is a major connection among Barren, Metcalfe, and Cumberland Counties as well as a primary access route to the recreational areas of Dale Hollow Lake and Lake Cumberland and the regional activity center of Glasgow. Improvements are on-going along the KY 90 corridor from the interchange with the Nunn Cumberland Parkway to the Barren County/Metcalfe County Line. Currently, this segment of KY 90 remains a narrow two-lane roadway with narrow or no shoulders and few passing opportunities. The roadway winds through rolling terrain and the congested area within the community of Summer Shade.

The purpose of this project is to improve the safety and connectivity for the movement of people and freight along KY 90 between Glasgow and Burkesville and to *provide continuity with the improvements already in place along the corridor.*

## HOW? The Elements of a DRAFT P&N Statement

- The Need
  - Supporting Data
    - Form and Function
    - Existing Conditions & Future projections
- The Purpose
  - Problem Statement in an “Active” format.
- Goals & Objectives
  - Describes other issues to be resolved

## KY 100 (Simpson & Allen Counties)

As part of the Kentucky primary highway network, KY 100 is a rural two-lane facility which connects US 31E near Scottsville in Allen County to I-65 near Franklin in Simpson County. KY 100 is functionally classified as a "rural major collector", linking the employment, education, governmental, and health service centers in Allen and Simpson Counties.

With the improvements to the KY 100 corridor from Franklin to Scottsville currently underway, the next priority for improvement is slated as the section of KY 100 from the intersection with KY 622 in Simpson County to US 31E in Allen County.

The purpose of this project is to improve safety and to provide better connection for travelers along KY 100 from the intersection with KY 622 to the intersection with US 31E as part of an overall improvement strategy for the entire KY 100 corridor.

•Goals and objectives identified by the project team include *improving safety, providing better access to employment opportunities, and increasing the potential for economic development.*

•In the short-term, these goals and objectives may be accomplished by spot improvements targeting improved safety and better access for trucks. Ultimately, the project team envisions an improved cross section for the entire corridor and would like to establish a consistent cross section to be used for short-term spot improvements.

## KYTC P&N Guidance

- Design Memo from 2005 (<http://transportation.ky.gov/Highway-Design/Documents/Purpose%20and%20Need%20Statement%20Guidance%20and%20Instructions.pdf>)
- Instructions in the Highway Design Policy Guide (<http://transportation.ky.gov/Highway-Design/Highway%20Design%20Manual%202015/HD-200.pdf>, chapter 202.6.1) also in HD103 (Key Decision Points).

## The P&N Building Blocks

- Project Status
- Capacity
- System Linkage
- Transportation Demand
- Legislation
- Social Demands or Economic Development
- Modal Interrelationships
- Safety
- Roadway Deficiency



### KY LONG-RANGE STATEWIDE TRANSPORTATION PLAN

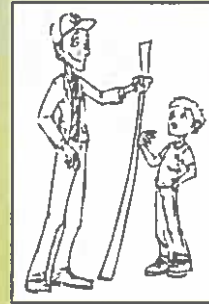
Project Goals, "The Stick";  
Measures the effectiveness of possible improvements (projects) to the system.



- Providing a *safe and secure* system
- *Maintaining and improving existing infrastructure* on a continual basis
- Ensuring *dependable, effective and efficient* facilities
- Improving local, regional, and global *connectivity and access*
- Including *all appropriate modes* of transportation within a *fully integrated system*

<http://transportation.ky.gov/YourTurn/Pages/draft-lrstp.aspx>

**KY LONG-RANGE STATEWIDE  
TRANSPORTATION PLAN**  
**Process Goals, "The Gatekeeper";**  
**Measures how we are delivering this  
transportation system**



Ensure that the process which develops and maintains the transportation system considers:

- **Dependable access to markets, jobs, and resources.**
- **The human and natural resources of the state.**
- **The efficient and flexible use of available resources to meet the transportation needs of the state.**
- **The use of transparent decision-making processes.**

<http://transportation.ky.gov/YourTurn/Pages/draft-1rstp.aspx>

**Project Identification Form (PIF)**  
**Describe the Project, its Origin, & Purpose**



- **Existing Conditions**
  - Form: Geometrics
  - Function: Traffic [Count & Classification]
  - Function: Crashes
- **Opportunities & Challenges**
  - Utilities, Right of Way
  - Environmental Issues
  - Economic Issues



**Planners:  
We are the “Keepers of the Stuff”**

- Current/Future Traffic Volumes & Classification
- Existing Roadway Information
  - Form (Highway Information System)
  - Function (Systems; Functional Classification)
- Crashes: Type – Location – Frequency
- Commercial-Industrial Development Needs
- Intermodal Connections (Ped, Bike, Transit, Freight)
- Cultural and Environmental Resources
- Project Info: 6 Year Plan, District Transportation Plan, and Specific Area/Corridor Planning Studies

**The Purpose & Need Statement is  
the basis for  
Project Decisions**

- Development of Alternatives including the “No Build” Alternative
- Screening Criteria for Alternatives
- Decision to move the Project forward.

## DRAFT Purpose & Need Statement

Remember:

- The Purpose & Need Statement is referred to as a “DRAFT” throughout the project development process.
- The DRAFT P&N is continuously evaluated as information is gained from the public involvement process and data analysis
- The Project Team can refine the P&N throughout the project development process

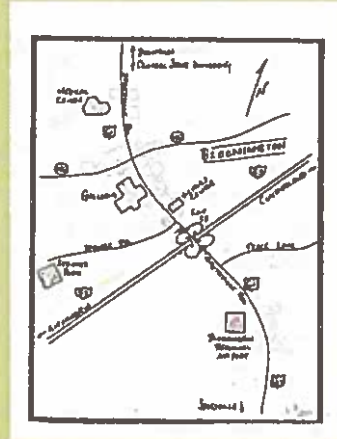
### Group Activity: Writing Draft P&N Statements



– Urban Project Scenario

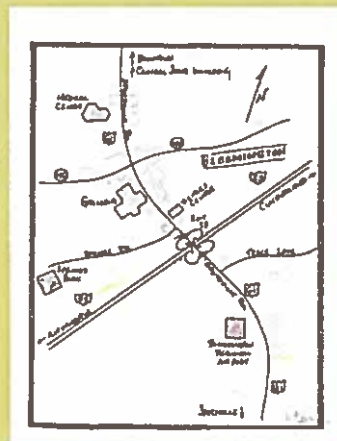
## Item 3-1.00, Reconstruct I-55/US 61 (Spotsville Road) Interchange

- Designed as a rural interchange when I-55 (1964)
  - Interchange currently handles over 30,000 vehicles per day
    - Traffic Volumes continue to increase
    - high percentage of trucks
  - Access to US 61, a major arterial leading to the heart of Bloomington & Central State University.
  - Capacity problems related to its existing "cloverleaf" configuration
    - Inadequate turning lane lengths
    - Weaving traffic on and off I-55
- High Crash Site (Critical Rate Factor greater than 1.0)
  - Most have occurred as traffic is trying enter and exit the cloverleaf ramps.
  - A large number of rear end crashes have occurred because of heavy traffic.



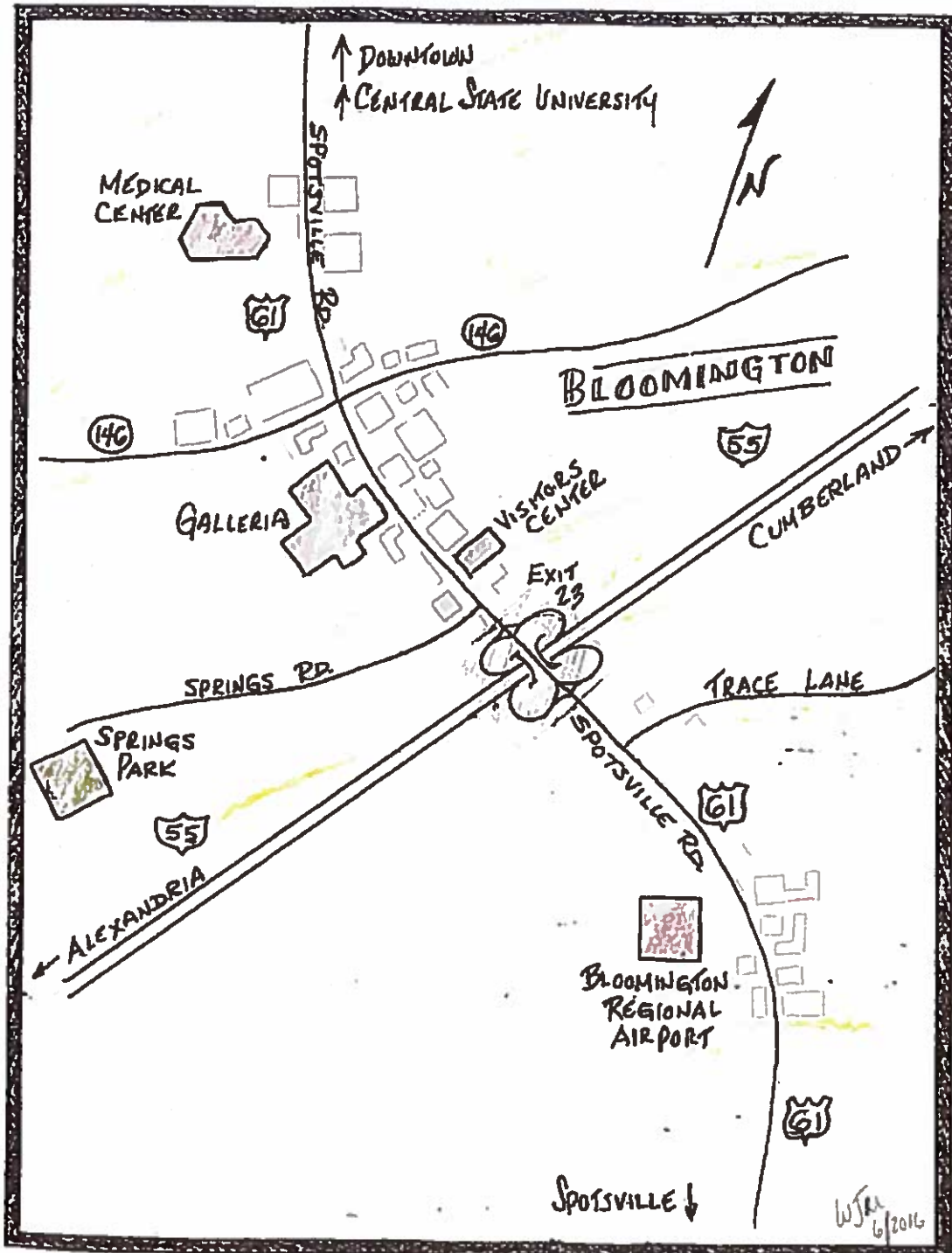
## Item 3-1.00, Reconstruct I-55/US 61 (Spotsville Road) Interchange

- US 61 (Spotsville Road)-
  - provides access to a massive district offering retail, healthcare, tourist services, and employment
  - increase in traffic from 19,000 vehicles per day to 35,000 vehicles per day in the past decade and traffic counts continue to increase
- Sidewalks on either side of the existing interchange.
- Emergency services traffic passes through this interchange
- Transit Route
- Bloomington Regional Airport



Any Questions?







**I-55; Item No. 3-1.00**  
**Reconstruct I-55/US 61 (Spotsville Road)**  
**Interchange at Bloomington**

Designed as a rural interchange when I-55 was originally constructed, the interchange of US 61 (Spotsville Road) and I-55 currently handles over 30,000 vehicles per day and is located along a major arterial leading to the heart of Bloomington. Spotsville Road is one of the busiest urban arterials in the city of Bloomington as well as the entire southcentral region of the state.

The corridor has seen an increase in traffic from 19,000 vehicles per day to 35,000 vehicles per day in the past decade and traffic counts continue to increase. I-55 carries nearly 50,000 vehicles per day (35 percent of the traffic consists of heavy trucks) and is a major linkage to the major urban areas of Alexandria to the south and Cumberland to the north.

The interchange has capacity problems related to its existing "cloverleaf" configuration and the inadequate length of the existing turning lanes on and off the ramps.

The "improvement of the US 61 interchange with I-55" has been identified as a high priority within the Bloomington MPO's Metropolitan Transportation Plan (MTP), and also has been listed as ranking #4 in the Highway District Office's Top Transportation 30 List of Needs in the recent District Transportation Plan.

The current and rapidly increasing future demands outstrip the facility's ability to move traffic at a reasonable level of service. During the afternoon peak travel period, the two signals at the ramps, the weaving of traffic on and off the cloverleaf ramps, and narrow bridge over I-55 creates an obstacle for traffic flow along Spotsville Road and for traffic entering and exiting I-55. At certain times, traffic backs down the ramps and along the shoulder of I-55.

US 61 (Spotsville Road) connects I-55 to the Bloomington Regional Airport, which handles both passenger and freight traffic and is located just south of the interchange.

Currently US 61 (Spotsville Road) has sidewalks along the northbound and southbound lanes of the highway. These sidewalks end at the Springs Road intersection to the north of the existing interchange, but also sidewalks exist along US 61 on the south side of the interchange with I-55. The Housing Authority of Bloomington has a 100-unit apartment complex located on Trace Lane for low-income residents who depend on walking and transit to access the retail area centered upon the Galleria for jobs and necessities.

The Bloomington Area Transit service (BAT) operates a route along US 61 connecting the airport, the Bloomington Galleria and other commercial development, and the Bloomington Med Center to the downtown and the campus of Central State University.

The operating hours for the transit service is from 6 am to 7 pm Monday through Saturday.

This interchange has been identified as a site with a high number of crashes and has a Critical Rate Factor above 1.0, which indicates the possibility of a transportation safety issue. Most of these crashes have occurred as traffic is entering and exiting the cloverleaf ramps of the interchange. A large number of rear end crashes have occurred along US 61 (Spotsville Road) during peak travel times.

Emergency services traffic passes through this interchange in an effort to reach the Bloomington Medical Center as well as access to local fire and law enforcement resource. Due to the frequency of crashes, this interchange is currently vulnerable to disruption, which can create delays in the delivery of emergency services to the community and the surrounding region.

The US 61 (Scottsville Road) Corridor provides access to a massive district offering retail, healthcare, tourist services, and employment that serves not only Bloomington, but also the entire southcentral region of the state. Congestion along Spotsville Road, especially at this interchange, has increased to a point where patrons are having difficulties with entering and exiting the businesses along the roadway, particularly the Bloomington Galleria. This is putting pressure on businesses to think about possible relocation to more accessible and less congested parts of town.

This proposed improvement will not affect any areas that have not already been disturbed in the past construction of I-55 in the early 1960's and the widening of US 61 (Spotsville Road) to four lanes in the mid 1970's. During those two projects, trees were planted along Spotsville Road and within the interchange as part of the federal construction contract.







## I-55; Item No. 3-1.00

### Reconstruct I-55/US 61 (Spotsville Road) Interchange At Bloomington

The US 61 (Spotsville Road) Corridor is a four lane urban arterial that provides access to a massive district offering retail, healthcare, tourist services (including the Regional Airport), low income housing, the regional university, and employment that serves not only Bloomington, but the entire Southcentral region of the state. The major access point of this corridor to I-55 is a rural interchange which has developed significant issues over the past decade.

- The interchange has capacity problems and traffic counts continue to increase, including a high percentage of heavy trucks
- There is a safety issue due to traffic entering and exiting the cloverleaf ramps onto I-55 and the inadequate length of the existing turning lanes on and off the ramps. A large number of rear end crashes have occurred along US 61 (Spotsville Road) during peak travel times.
- Emergency services traffic passes through this interchange in an effort to reach the Bloomington Medical Center as well as access to local fire and law enforcement resources. The frequency of crashes delays the delivery of emergency services
- Currently US 61 (Spotsville Road) has sidewalks which end at the Springs Road intersection to the north of the existing interchange, but also sidewalks exist along US 61 on the south side of the interchange with I-55. Some residents depend on walking and transit to access the retail area centered upon the Galleria for jobs and necessities.
- This project has been identified as a high priority within the Bloomington MPO's Metropolitan Transportation Plan (MTP), and also the Highway District Transportation Plan.

The purpose of this project is to improve mobility and safety of the connection between US 61 and I-55 while accommodating both motorists and pedestrians while considering the integrity of current economic assets in the area as well as previous enhancements.



John Mettelle



KENTUCKY TRANSPORTATION CABINET  
FRANKFORT, KENTUCKY 40622  
WWW.KENTUCKY.GOV

ERNIE FLETCHER  
GOVERNOR

MAXWELL C. BAILEY  
SECRETARY

MEMORANDUM

**TO:** State Highway Engineer, Deputy State Highway Engineers, Assistant State Highway Engineers, Chief District Engineers, and Division Directors

**FROM:** Marc D. Williams, P.E.  
Commissioner of Highways *Marc D. Williams*

**DATE:** January 24, 2005

**SUBJECT:** Purpose and Need Statement Guidance and Instructions

Attached please find the Kentucky Transportation Cabinet-Department of Highways guidance on the development and role of purpose and need statements for Kentucky Transportation Cabinet projects. This guidance was developed to improve the quality of our decision making in the development of transportation solutions for the citizens of the Commonwealth. Decisions that align themselves with the Cabinet's strategic goals and vision, specifically: improving safety, providing opportunities for future economic growth, improving our national competitiveness, and improving the overall quality of life of our public and within our communities. It was also developed to strengthen the linkage between planning and project development so that we are delivering projects that provide the value, need, and service demanded by our transportation system and those served by it.

The guidance is to be distributed to all appropriate staff and consultants. To assist in the distribution, an electronic version of the guidance will be provided to those offices listed at the top of this memorandum. In addition, a link to the guidance will be placed on the Department of Highway's web page within the Cabinet's web site. The primary user Divisions of the guidance are encouraged to place an electronic version on their web pages as well.

MDW:JM:JP

C: John Mettelle, CEPA

## **Purpose and Need Statement Instructions for KYTC Projects**

**Background:** Purpose & Need of a project is the first decision point of the shared decision making process. The Purpose and Need provides the foundation for successful decision-making and the basis for the evaluation and comparison of reasonable alternatives. Each project will have a purpose and need agreed to by the project team that will be utilized to establish the scope of the required work. The scope describes the physical boundaries of the project and defines what the project will deliver and what it will not. The project team will also use this purpose and need to develop alternatives and to guide their decisions. Historically, the predesign meeting was held to establish scope of the engineering work for a project. The project team must understand the importance of establishing the purpose and need in determining scope of the engineering and environmental work to deliver a project.

For projects where the Division of Planning has completed a planning study, the project team should review, revise and adopt the Purpose and Need presented in the study with consensus reached on all necessary modifications. In addition to these studies, the Division of Planning has completed or is completing "Project Identification Forms" which include project problem statements for most of our projects. These forms provide the first description of a proposed project including the history, background, and why we are proposing a project. The forms also provide information and factual data on the project location, project and community issues, cost estimates, and the problem that will be addressed. The resulting problem statement sets the foundation and framework for future decisions on the solutions for the problem identified.

A sound transportation planning process is the primary source of a project's purpose and need. The transportation planning process sets the tone for KYTC to define an area's transportation needs, decide which needs to address, and determine the timeframe for addressing the needs.

Decisions that result from the transportation planning process can be used in project development and NEPA if the planning process is consistent with the "3-C" principles (comprehensive, cooperative, and continuous) **and** when the planning study process, alternatives considered, and resulting decisions are thoroughly documented (including the necessary and appropriate examination through the applicable public involvement processes).

The transportation planning process can be utilized to develop a project's purpose and need in the following ways: (a) goals and objectives from the transportation planning process can be a part of the project's purpose and need

statement; (b) mode choice or choice of corridors based on an analysis conducted during the transportation planning process may be included as part of the project-level purpose and need statement; or (c) if the financial plan supporting a MPO's long-range transportation plan indicates that the reasonably available funding for a specific project likely will involve funding sources beyond traditional federal and state transportation funds, such information may be included in the purpose and need statement.

If the purpose and need identifies a corridor or mode based on some aspect of the transportation planning process, the environmental document should: (a) identify and summarize the study or analysis upon which the selection of the corridor or mode was based, and incorporate the analysis by reference or append it to the project environmental document; (b) make any such study or analysis available during the NEPA scoping process; and (c) summarize the reasons for selecting the corridor or mode in the discussion of the purpose and need statement for the EA or EIS, with an explanation of the planning factors that were used as the basis for selecting the corridor or mode.

A Purpose and Need Statement is necessary for developing all projects. It is a requirement on projects that include future NEPA documentation, an Environmental Impact Statement or Environmental Assessment. A well-justified purpose and need is also vital to meeting the requirements of Section 4(f) (49 U.S.C. 303) and the Executive Orders on Wetlands (E.O. 11990) and Floodplains (E.O. 11988) and the Section 404(b)(1) Guidelines. A clear, well-justified and defined purpose and need discussion explains to the public and decision-makers that expenditure of funds is necessary and worthwhile and that the priority of the project is warranted when compared to other needed highway projects. The intention of this guidance is to create a uniform approach within KYTC and with KYTC partners in developing Purpose and Need Statements for all projects.

**Legal Guidance:** The legal guidance for Purpose and Need Statements comes from the NEPA CEQ regulation, Section 1502.13—the Purpose and Need Statement “shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action.” Each federal agency has its own guidance on NEPA documentation.

It is important to note that the lead agency for an action (project) has the authority for and responsibility to define the purpose and need, specifically for the purposes of NEPA. FHWA Technical Advisory T 6640.8A and 40 CFR 1502.13 directs state DOT's to “identify and describe the proposed action and the transportation problem(s) or other needs which it is intended to address.” FHWA in July 2003 prepared and distributed additional guidance from CEQ on purpose and need that states:

**"In cases of a proposal intended to address transportation needs, joint lead or cooperating agencies should afford substantial deference to the Department of Transportation for transportation projects because our primary substantive expertise and program responsibility, and this is the same deference that would be owed to other Federal agencies in their areas of expertise and program responsibility".**

According to the FHWA memo, the statement above suggests that another Federal agency should only raise questions regarding Department of Transportation purpose and need statements when those questions relate to substantive or procedural problems (including omission of factors) important to that agency's independent legal responsibilities.

FHWA's technical advisories list 9 factors that may be helpful in establishing the need for a proposed action. Eight of those are relevant to this discussion and include: system linkage, capacity, transportation demand, legislation, social demands or economic development, modal interrelationships, safety, and roadway deficiencies. The ninth addresses project status, and is not relevant to this discussion.

All of the factors which are relevant in explaining a project's purpose and need should be as fully developed as possible and utilize as specific data as possible to compare the present, future no-build, and future build conditions. The data could include such factors as reduction in vehicle hours travel, improvements in travel speeds, reduction in traffic accidents, injuries and fatalities, savings in cost to the traveling public, enhanced economic development potential, increased tax base, improved access to public facilities and resources, etc. One should note that it is not sufficient to simply state that a project is needed to provide increased capacity and improve safety. You must prove that a need exists through supporting data.

This point is further emphasized when you use development, growth, and economic development in your purpose and need. Using these as a "selling point" for the project will require the identification of the associated positive and negative impacts. This includes a "hard look" at the identification of the indirect effects of a project's "selling points".

**Preparing the Purpose and Need Statement:** The Purpose and Need Statement sets the stage for consideration of the alternatives. It has three parts: The Purpose, the Need, and Goals and Objectives. The Purpose defines the transportation problem to be solved. The Need provides data to support the problem statement (Purpose). The Goals and Objectives describe other issues that need to be resolved as part of a successful solution to the problem.



The Purpose and Need Statement is intended to clarify the expected outcome of public expenditure and to justify that expenditure - What you are trying to accomplish and why you think it is necessary. As such, it should be the first step in the project development process. It will be used to guide the development of alternatives, and it will be a fundamental element when developing criteria for selection between alternatives.

It is important to understand FHWA terminology when preparing Purpose and Need Statements. The terms "Proposed Action", "Preferred Alternative", "Purpose", and "Need", are used frequently in FHWA guidance and NEPA regulations. These terms can lead to confusion if not understood. Definitions and descriptions of these terms are provided below:

**Proposed Action:**

A general proposal in its initial form that is intended to satisfy current or expected transportation needs.

**Preferred Alternative:**

The specific alternative, which the lead agency believes, would best fulfill its mission and responsibilities giving consideration to economic, environmental, technical and other factors.

**Purpose:**

- The Purpose is analogous to the problem. It is the "what" of the proposal.
- The Purpose is the problem statement.
- The Purpose should focus on the state transportation system. Other important issues to be addressed by the project such as local transportation systems, livability, and the environment should be identified as Goals and Objectives. As such, it may reflect other priorities and limitations in the area, such as environmental resources, growth management, land use planning, and economic development.
- The Purpose should be stated concisely in a single sentence.
- The Purpose should be stated as the positive outcome that is expected. For example, the purpose is to reduce congestion in the interstate corridor.
- It should avoid stating a solution as a purpose—as in—the purpose of the project is to build a bypass. Therefore, it should not be so specific as to "reverse engineer" a solution.
- Where appropriate, it should be stated broadly enough so that more than one mode can be considered and multi-modal solutions are not dismissed prematurely.

- Similarly, it should be stated broadly enough so that more than one alternative can be considered and alternatives are not dismissed prematurely.
- The Purpose should be stated in a manner so that a suite of intermediate steps could be posed as the solution, scaled to the needs of the community, if appropriate.
- The project Purpose should also include how the project addresses the Cabinet's strategic goals and vision:
  - Taking care of what we have
  - Making the system work better
  - Increasing capacity
  - Improving safety
  - Creating opportunities for future economic growth
  - National competitiveness
  - Supporting overall quality of life of our public

### **Need:**

- Should establish the justification and/or evidence that the problem exists, or will exist if under a set of assumptions and expectations (such as population projections or planned land use growth) are realized.
- Should be factually and numerically based.
- Should support the assertion made in the purpose statement. For example, if the purpose statement is based on safety improvements, the need statement should support the assertion that there is or will be a safety problem to be corrected.

### **Goals and Objectives:**

Project elements beyond the state transportation issues identified should be included in the Purpose and Need Statement as Goals and Objectives. The Goals and Objectives should balance environmental and transportation values. They should support early and effective interagency involvement in environmental issues to improve the outcome of each natural and cultural resource agency's mission while minimizing costs and delays. In addition, the Goals and Objectives could consider equally the project's schedule, cost, quality, quality of life, cultural resources, fish and wildlife habitat, public input, and regulatory input.

The Goals and Objectives will be different for each project and may include the following:

- Broad community or quality of life goals, for example - improving air quality, economic development, or creating an uncongested, pedestrian friendly downtown business district.
- Environmental goals such as avoidance and minimization of impacts and enhancement opportunities, for example – avoiding impacts to nesting

migratory birds or improving riparian habitat beyond what is required for mitigation.

- Regulatory compliance, for example - protecting wetlands or complying with the Kentucky Six-Year Highway Plan.

**Applicability:** A Purpose and Need Statement should be developed for all projects, regardless of funding source.

**Timing and Process:** The Purpose and Need Statement should be developed when the project concept is first identified, whether that is during the development of the Statewide Transportation Plan (STP), or other manner of initiation. However, it should be noted that a sound planning process is the primary source of a project's purpose and need. It is through the planning process that state and local government determine what the transportation needs of an area are, which of the transportation needs they wish to address, and in what time frame they wish to address them. That is what federal law requires from the planning process and what actually prevents projects that do not come from the planning process from going forward. In any event, a Project Team engaged to develop a project for construction must confirm the Purpose and Need information and data documented in the planning process as the first step in the shared decision-making process.

How/When/What can prompt that Purpose and Need to be altered or changed throughout the project development process:

- 1.) Change in conditions in the area – change in traffic, change in crashes, land use changes, deteriorating conditions of the infrastructure
- 2.) Change in community values
- 3.) Implementation or planned implementation of other transportation improvements that impact the items mentioned above

Regardless, these need to be discussed, documented, and consensus achieved before altering.

**Documentation:** The Purpose and Need Statement must be included in the permanent record for any proposal that is intended to result in the construction of a transportation facility. The documentation may be used in later environmental documentation and may be required for the project to enter onto the STIP for development and construction.

**Role of Purpose and Need:** Why do you need a purpose and need statement for a project? Consider the following to answer that question:

- It sets the foundation and framework for future decisions.
- It is the yardstick that we measure decisions against, particularly alternative solutions and decisions.
- Remember that it is more than an environmental issue or requirement.
- It serves as a logic check.
- It explains to the public and decision-makers why we are proposing a project.
- It will help determine whether a project is a want or a need.
- It justifies the expenditure of funds and why the level of environmental impacts are acceptable.
- It defines what can be considered reasonable, prudent, and practical alternatives.
- It is reexamined and refined as appropriate throughout the project development process.
- It is defined and refined by the project team, with input from the public and resource agencies.

In other words, the purpose and need is:

- The problem statement and justification for a project.
- The basis for project decisions.
- The basis for alternative development.
- The basis for the range of alternatives developed.
- The basis for screening criteria.
- The basis for alternative comparison and evaluation.
- Basis for the No-build discussion.
- Provides the reasons for moving forward.

**And that: The project description listed in the Cabinet's Six-Year Plan is not the purpose and need for the project. The project description serves as a placeholder for programming and budgetary planning purposes but should be revised (as needed) once the purpose and need is better defined.**

PDM. Typically, authorizations are made for each phase of the project development process: Planning, Design, Right-of-Way, Utility, and Construction.

During the design process, there may be changes that require additional funding requests. These requests should be dealt with in the same manner as detailed above. It may be advantageous to initially request enough funds to complete the early project development. Once the transportation decision is made, the PDM would request additional funding for final design.

#### **HD-202.6 PRE-DESIGN MEETING**

After project authorization, the PDM should hold a meeting to review the issues faced by the project. The primary focus of this meeting is to address the following:

- Purpose and Need
- Project Scope
- Schedule and Milestones
- Additional Resources
- Additional Mapping
- Environmental Overview
- Traffic Forecasting
- Public Involvement

HD-202.6.1 through HD-202.6.8 details these discussion points.

##### **HD-202.6.1 Purpose and Need**

A purpose and need statement is necessary for developing for developing all projects. It is a requirement on projects that will include NEPA documentation, an environmental impact statement, or environmental assessment/FONSI. A clear, well-justified purpose and need discussion explains to the public and decision-makers that expenditure of funds is necessary and worthwhile. The purpose and need statement shall be continuously evaluated during the development process and modified as needed based on information gained through the public involvement process. FHWA provides guidance for the development of a purpose and need statement in their Environmental Review Toolkit available online at:

<http://www.environment.fhwa.dot.gov/projdev/tdmelements.asp>

##### **HD-202.6.2 Project Scope**

The project should be clearly defined and should address the following:

- Type of project (New Route, Reconstruction, 4R [Resurfacing, Restoration,

<b>HIGHWAY DESIGN</b>	<i>Chapter</i> <b>ADMINISTRATIVE PROCEDURES</b>
	<i>Subject</i> <b>Preliminary Design</b>

**HD-203.1 OVERVIEW**

Once a project is in the Highway Plan, the Project Development Branch Manager (PDM) is responsible for the movement of the project through the design process. The first step in the process is preliminary design. The critical product of preliminary design is the transportation decision and rationale documented in the environmental document and reflected in the preliminary line and grade plans. Design is only one component of the preliminary design phase; therefore, the PDM must work together with other disciplines (such as environmental analysis) to complete this phase.

**HD-203.2 KEY DECISION POINTS**

There are key points during the development of all projects when decisions must be made by the PDM and the project development team (PDT). These decision points are required by NEPA, but are also critical in delivering any project. These key decision points are identified and discussed below.

- **Purpose and Need:** Purpose and need provides the foundation for successful decision-making and the basis for the evaluation and comparison of reasonable alternatives. For projects with completed planning studies, the PDT should use this as a starting point for further developing the purpose and need statement. For each project, the purpose and need will be utilized to establish the scope of the required work, including the study area and expected project deliverables. The outcome of this decision point is a draft purpose and need statement.
  
- **Range of Alternatives:** At the next point in the process, the PDT should develop a range of alternatives for consideration within the study area that meet the purpose and need of the project. Alternatives and corridors previously evaluated should be the beginning point. Alternatives and corridors eliminated during the development studies should not require further investigation, if each alternative was developed adequately with sufficient documentation and rationale for its elimination. Key environmental