

Planning with a Purpose...and Need:

Connecting with PennDOT and FHWA to Build the Foundation for Sound Transportation Projects

Drew Ames

Pennsylvania Department of Transportation

Scott Duncanson, AICP, LEED GA, ENV SP

Gannett Fleming, Inc.

Nicole Auker

Pennsylvania Department of Transportation

Barbara Shaffer, AICP

Federal Highway Administration

MARCH 3, 2021



Excellence Delivered **As Promised**

AGENDA

Learning Objectives

Purpose and Need Basics

FHWA's Planning and Environmental Linkages

Typical Categories of Needs

Applying PennDOT Connects/Taking Planning Goals and Visions to Needs

Questions and Answers

Learning Objectives

LEARNING OBJECTIVES

- Define Purpose and Needs
- Know when Purpose and Need is developed and who is responsible
- Identify Key Components of FHWA's Planning and Environmental Linkages
- Identify Typical Categories of Needs
- When to Apply PennDOT Connects/Taking Planning Goals and Visions to Needs

Purpose and Need Basics

PURPOSE AND NEED BASICS

- Regulatory Background
- Definitions
- When is Purpose and Need Developed
- Who Develops Purpose and Need

REGULATORY BACKGROUND

Applicable Laws

- National Environmental Policy Act (NEPA) of 1969
- Pennsylvania Act 120 of 1970

Applicable Federal Implementing Regulations

- Council on Environmental Quality (CEQ) – 40 CFR 1502
- FHWA, Federal Transit Administration and Federal Railroad Administration – 23 CFR 771
- 23 CFR Appendix A to Part 450 - Linking the Transportation Planning and NEPA Processes

PennDOT Guidance

- PennDOT Publication No. 319 – Needs Study Handbook

DEFINITION OF NEEDS

NEEDS = Key Problems to be addressed

- Tangible and fact-based
- Provide foundation for the purpose statement
- Focus on transportation needs

Needs are NOT solutions!

DEFINITION OF PURPOSE

PURPOSE = a broad statement of the overall intended objective to be achieved by a proposed transportation improvement

- Typically one or two sentences
- Needs provide the foundation for the purpose statement
- Can have a primary and secondary purpose
- May include goals and objectives – not a basis to eliminate alternatives
 - Community goals
 - Environmental goals
 - Regulatory compliance

WHEN IS PURPOSE AND NEED DEVELOPED?

Early - During Planning

- Reason for dedicating public funds
- Foundation for alternatives development
- Local government collaboration
- Documented in PennDOT Connects system

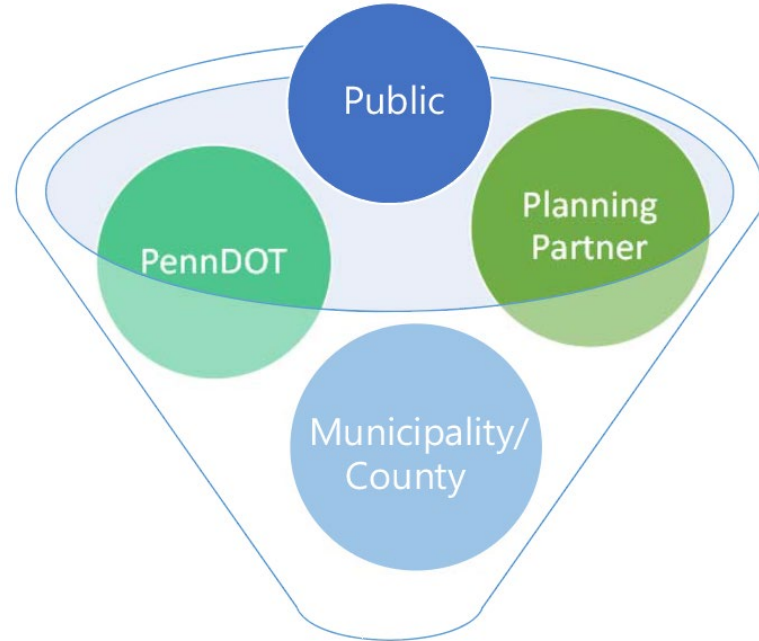
NEPA – Ensure Solid P&N

- PennDOT Connects -> Scoping form
- Foundation of NEPA process
- Basis for alternatives development/screening
- Not too broad/not too narrow



WHO DEVELOPES/PROVIDES INPUT ON PURPOSE AND NEED?

- PennDOT
- Planning Partners
- County/Municipality
- Public



WHO DEVELOPES/PROVIDES INPUT ON PURPOSE AND NEED?

For Environmental Impact Statements:

- Cooperating Agencies
- Participating Agencies
- Public

HOW IS PURPOSE AND NEED USED IN PROJECT DEVELOPMENT

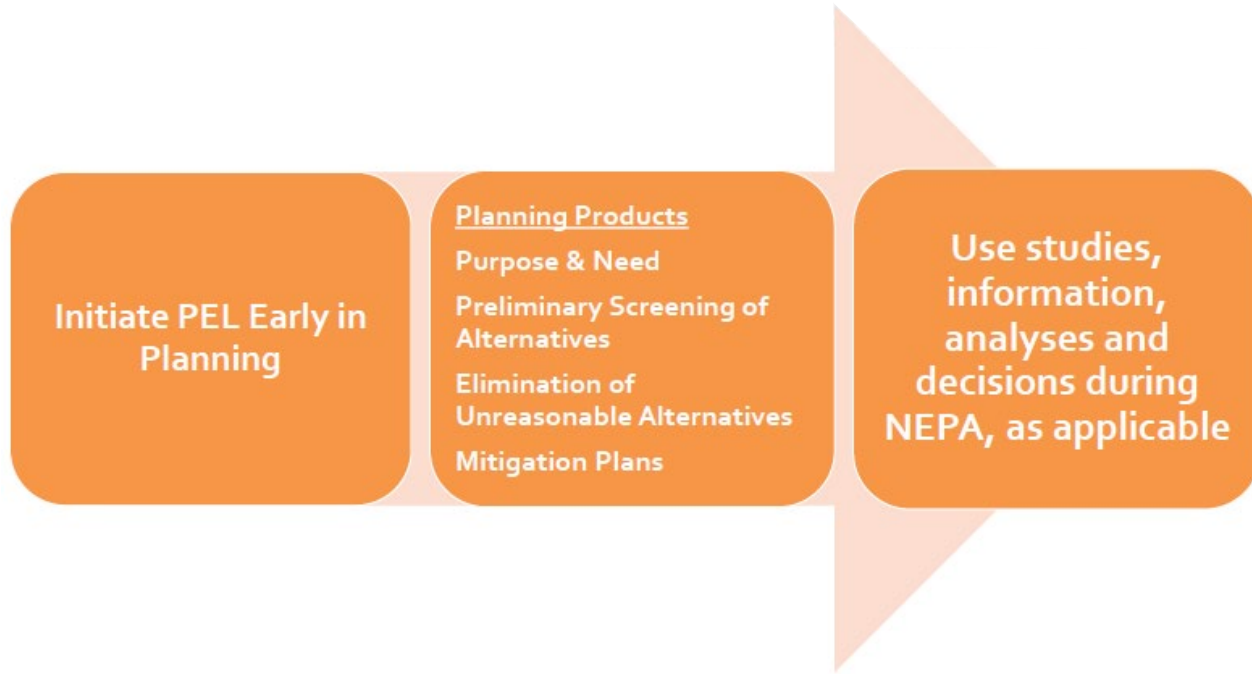
- Establishes reason for project
- Provides the foundation for alternatives development
- Enables screening of alternatives
- Assists in ultimately selecting an alternative
- Informs alternatives analysis for other laws

FHWA's Planning and Environmental Linkages









Excellence Delivered *As Promised*

PEL TODAY



PEL GENERAL CONSIDERATIONS

-  Follow the transportation planning process
-  Solicit participation by Federal and State resource agencies and Indian tribes
-  Provide an opportunity for public review and comments
-  Use reliable and reasonably current data and reasonable, scientifically acceptable methodologies
-  Involve the FHWA Division and FTA Regional Office, as appropriate
-  Prepare appropriate documentation

Each PEL authority has requirements that must be satisfied in order to use the planning product for a NEPA review.

FLEXIBILITY IN PEL APPROACHES

General Considerations	Desired Outcomes	Authorities
1. Follow the transportation planning process.	<ul style="list-style-type: none"> > Define Purpose and Need > Preliminary Screening of Alternatives and Elimination of Unreasonable Alternatives 	
2. Participation by Federal and state resource agencies and Indian tribes.	<ul style="list-style-type: none"> > Other Planning Decisions and Analysis 	→ 23 U.S.C. 168
3. Opportunity for public review and comments.		
4. Use reliable and reasonably current data and reasonable scientifically acceptable methodologies.	<ul style="list-style-type: none"> > Reduction of duplication by elimination of alternatives from detailed analysis. 	→ 23 U.S.C. 139(f)(4)(E)(ii)
5. FHWA and FTA review as appropriate.	<ul style="list-style-type: none"> > Planning Studies 	→ 23 CFR 450.212(a)-(c) & 450.318(a)-(d)
6. Documentation.	<ul style="list-style-type: none"> > Planning Information and Analysis 	→ 40 CFR 1500.4(j) & 1502.21
	<ul style="list-style-type: none"> > Programmatic Mitigation Plan 	→ 23 U.S.C. 169 and 450.214 & 450.320

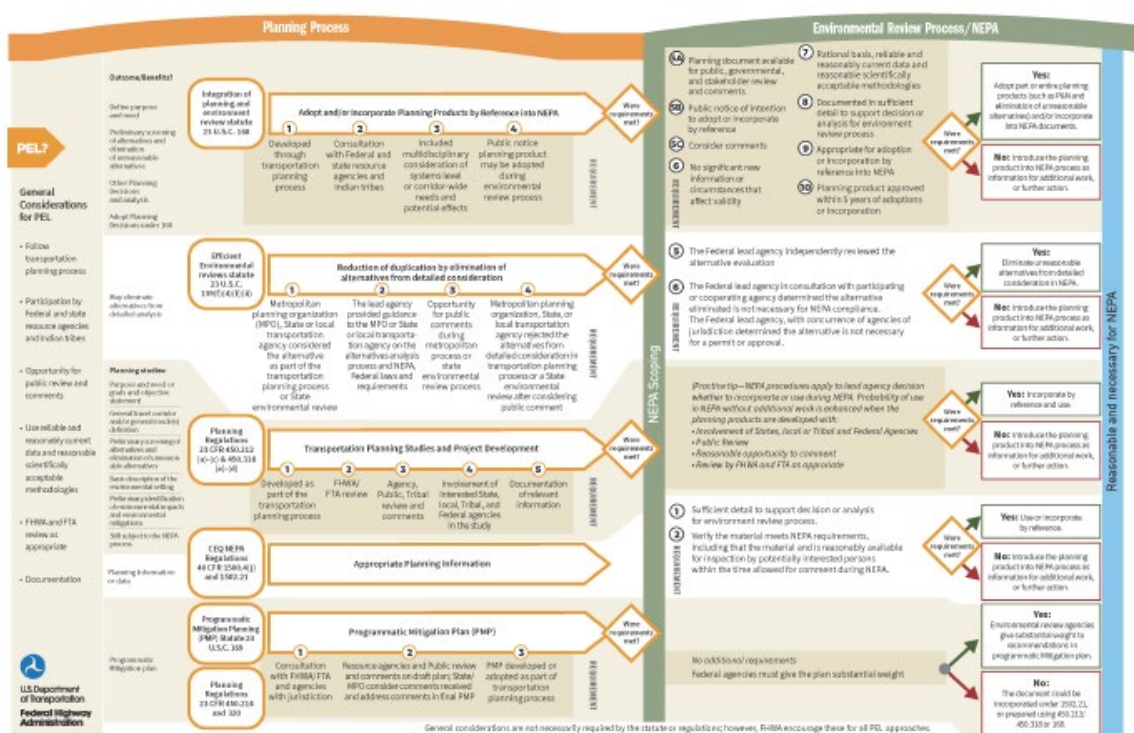
PLANNING PRODUCTS: PURPOSE AND NEED

- Develop a statement of purpose and need for a future project during planning that can be used in the environmental review process



- Consult with FHWA/FTA to ensure purpose & need can be used in subsequent environmental review processes

COMING SOON: FLEXIBILITY IN PEL APPROACHES



Typical Categories of Needs

CATEGORIES OF NEEDS

Congestion

**Facility
Deficiencies**

**System
Linkages**

**Modal
Interrelation-
ships**

Legislation

**Economic
Development**

Mobility

Safety

CONGESTION

Characterized by:

- Slower speeds
- Longer travel times
- Increased queuing

- Capacity – maximum traffic flow obtainable on a given facility under normal conditions
- Congestion occurs when traffic demand approach or exceeds the available capacity of the system.
 - Can be reoccurring or non-reoccurring



FACILITY DEFICIENCIES

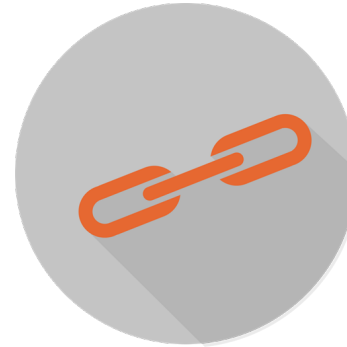
Existing system:

- In disrepair or deteriorated conditions and/or
- Has substandard geometrics



SYSTEM LINKAGES

- Missing connection between existing facilities to alleviate congestion or provides an alternate route
- Geographic areas
- Regional traffic generators
- Existing network and new geographic area
- Standard measures may not be available
- Rarely a primary need



MODAL INTERRELATIONSHIPS

- How transportation modes interact and perform with each other
- Lack of connections between roadway, transit, rail, pedestrian/bicycle, water and/or air modes
- Consider existing intermodal connection points



LEGISLATION

- Legislation direction - Federal or state legislation or local ordinance
- A specific highway corridor
- Special funding
- Public-private partnerships (P3)
- Incorporation of transit or pedestrian facilities
- Include specific discussion of legislation and how relates to project
- Should not be the primary need



ECONOMIC DEVELOPMENT

- Transportation infrastructure can influence community growth and facilitate land use changes
- Proposing projects to support planned development can be a need
- Existing or planned transportation facilities are rarely the sole factor for economic development



MOBILITY

- The ability to meet traffic demand and the level of ease in moving people, goods, and services
- Usually identified during the long-term planning process
- Accessibility - the ability of traffic to enter and exit a roadway from adjacent properties
- Rarely a primary need



SAFETY

- The reduction of serious injuries and fatalities based on accepted engineering practices
- Rarely the only need, often is related to another
- Motorized and non-motorized users
- Not enough to just state a safety problem exists
- Best stated as why the situation could pose a safety risk
 - E.g., congestion, poor sight distance, deteriorating pavement, poor bridge condition

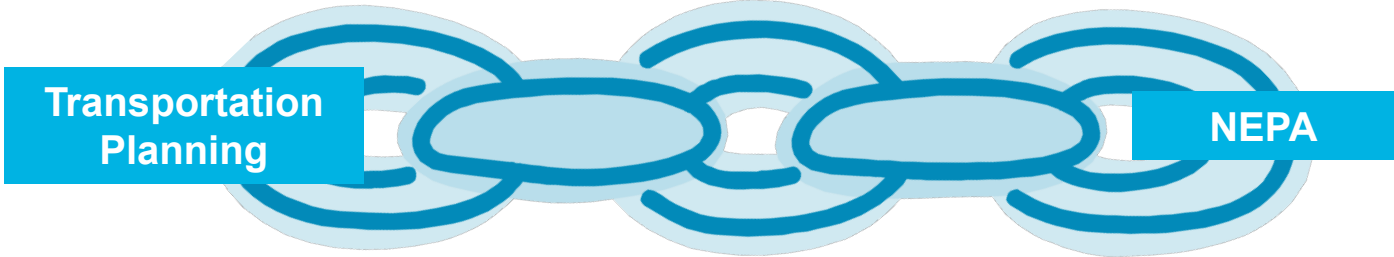


Applying PennDOT Connects/ Taking Planning Goals and Visions to Needs



Excellence Delivered *As Promised*

APPENDIX A TO 23 CFR 450



PURPOSE AND NEED

8. How can transportation planning be used to shape a project's purpose and need in the NEPA process?

A sound transportation planning process is the primary source of the project purpose and need.

23 CFR 450

The transportation planning process can be utilized to develop the purpose and need in the following ways:

- (a) Goals and objectives from the transportation planning process may be part of the project's purpose and need statement;

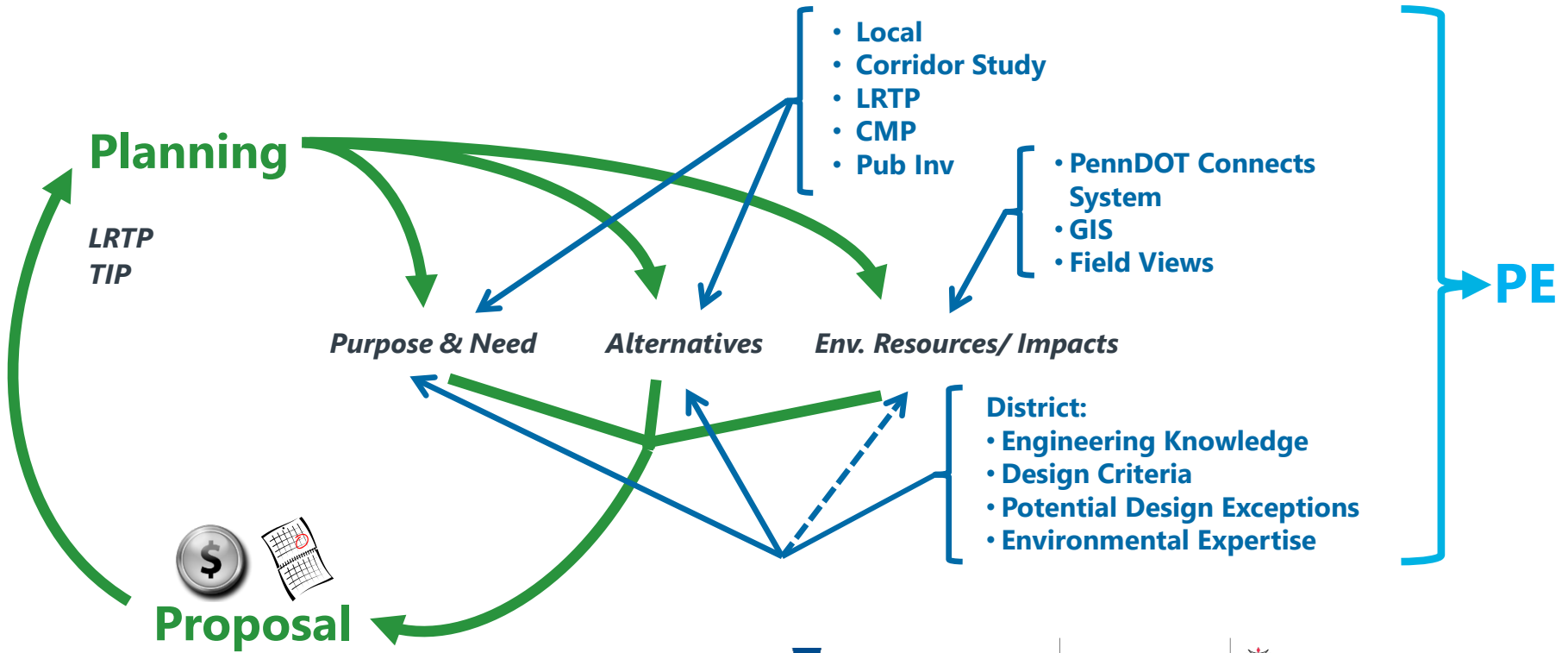
- (b) A general travel corridor or general mode or modes (e.g., highway, transit, or a highway/transit combination) resulting from planning analyses may be part of the project's purpose and need statement;

23 CFR 450 (CONT.)

- c) If the financial plan for a metropolitan transportation plan indicates that funding for a specific project will require special funding sources (e.g., tolls or public-private financing), such information may be included in the purpose and need statement; or

- d) The results of analyses from management systems (e.g., congestion, pavement, bridge, and/or safety) may shape the purpose and need statement.

HOW IT ALL FITS TOGETHER



WHERE DOES THE INFORMATION GO AND HOW IS IT USED?

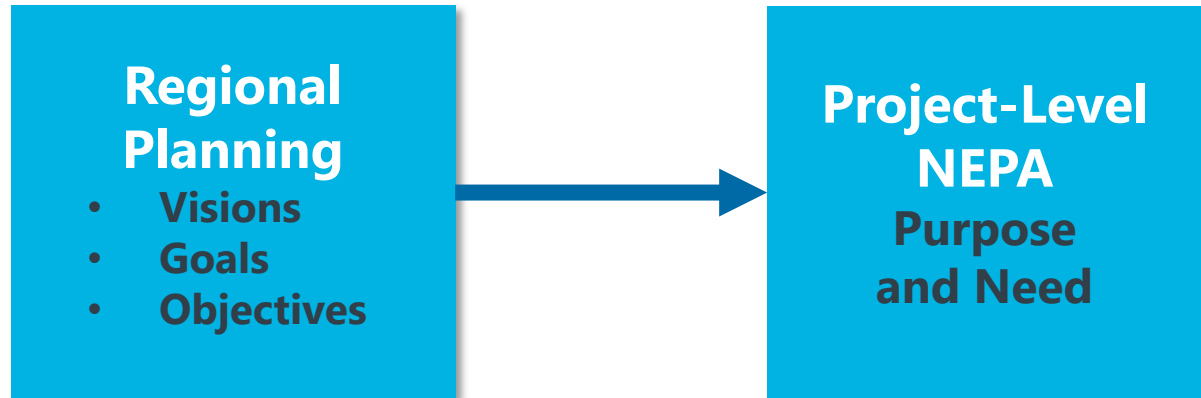
**Planning
Analysis and
Products**



NEPA ELEMENTS

- **Purpose and Need**
- **Alternatives**
- **Impacts**
- **Mitigation**
- **Public Involvement**
- **Interagency Coordination**
- **Documentation**

EVOLUTION OF PURPOSE AND NEED



2035 REGIONAL TRANSPORTATION PLAN

Vision

A safe, efficient, environmentally responsible, and multi-modal transportation system integrated with sustainable land use patterns to serve the mobility and accessibility needs of our residents, businesses and through-travelers.

Goals

1. Maintain the condition of our transportation system.
2. Improve the performance of our transportation system for all users.
3. Increase the availability and use of alternate modes.
4. Ensure safe and convenient access between communities and among modes.
5. Provide a transportation system that is committed to the environment.
6. Generate integrated, mutually supportive land use/transportation plans.
7. Provide adequate and timely funding opportunities for transportation.

3. Increase the availability and use of alternate modes.

Channel transportation funds toward alternate modes.

- Provide one-half regional CMAQ funding allocation to CAT, and other funding sources as appropriate.
- Advocate for increased and new funding opportunities to support a balanced, multi-modal network.
- Coordinate investments among local providers, park and rides, transfer facilities and other amenities to support frequent and convenient ridership.
- Invest in healthy, safe, walkable and interconnected communities.

Increase transit ridership and carpooling.

- Provide adequate funding to CAT to operate, promote and expand its system, as well as coordinate with neighboring transit systems.
- Improve current fixed route service to generate speeds and efficiency of bus movement throughout the region to be competitive with automobile travel.
- Expand the transit system to address non-traditional city-to-suburb and suburb-to-suburb commutes.

ESTABLISHING NEED

- Review available information and data
- Determine basis for action
 - Deficiencies
 - Safety
 - Capacity
 - Functionally Obsolete
 - Preventative Maintenance
 - Access Management
 - System Linkages
 - Transportation Demand
 - Legislation
 - Modal Interrelationships
- Document the needs

THE LINK

PennDOT Connects System

**PennDOT
Connects
Screening
Form**



**Categorical Exclusion
Expert System**

**NEPA
Scoping
Document**

PENNDOT CONNECTS FORM → NEPA SCOPING DOCUMENT

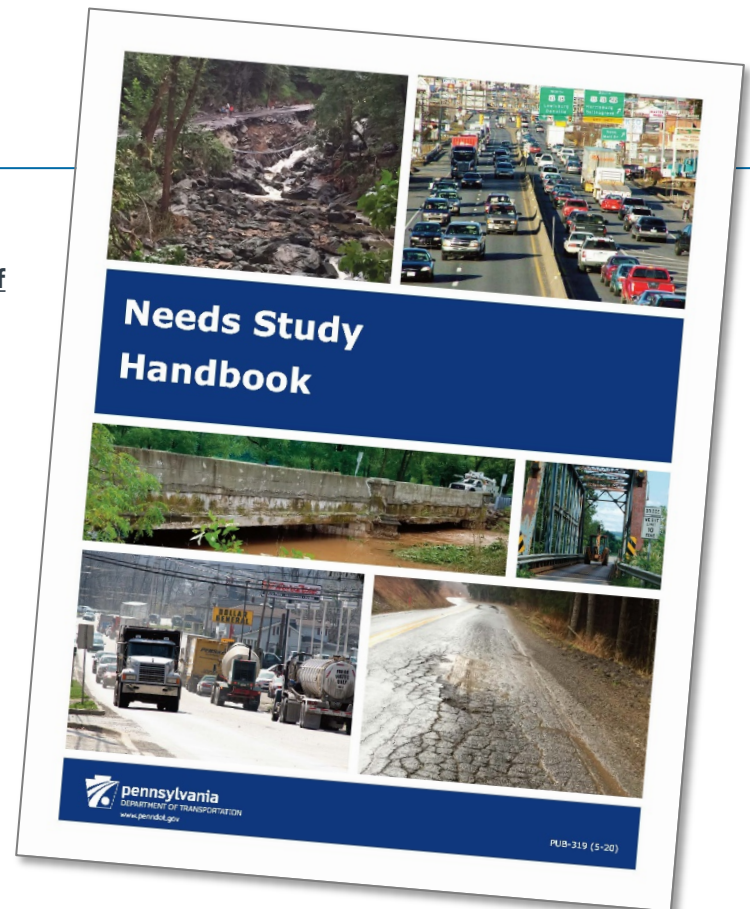
- Planners have the opportunity to influence direction of project
- Complete the PennDOT Connects form as appropriate
- Include *useful* information for programming and NEPA purposes
 - Garbage in, garbage out

NEPA SCOPING DOCUMENT

- Prepared in the CE Expert System
- Auto populates data as a starting point from a PennDOT Connects screening form if:
 - PennDOT Connects form has an MPMS number
- Data is a starting point but editable
- NEPA Class of Action

ADDITIONAL INFORMATION

<http://www.dot.state.pa.us/public/PubsForms/Publications/PUB%20319.pdf>



Excellence Delivered As Promised

CONTACT INFORMATION

Drew Ames, Environmental Planning Manager

PennDOT, Environmental Policy and Development Section

(717) 705-1481 - johname@pa.gov

Nicole Auker, Environmental Planner

PennDOT, Environmental Policy and Development Section

(717) 787-0460 - nauker@pa.gov

Scott Duncanson, AICP, LEED GA, ENV SP, Sr. Environmental Planner/Project Mgr.

Gannett Fleming, Inc.

(717) 886-5404 – sduncanson@gfnet.com

Barbara Shaffer, AICP, Realty Program Manager/Environmental Specialist

Federal Highway Administration, Pennsylvania Division

(717) 221-3704 – Barbara.Shaffer@dot.gov



*Excellence Delivered **As Promised***

Questions and Answers