



Performance Based Practical Design

Providing safe and practical transportation solutions for local communities in a quality-driven environment

What is Performance Based Practical Design?

Performance Based Practical Design (PBPD) is a new, more flexible approach to transportation planning that provides community-based and data-driven solutions to transportation needs. PBPD is recognized by the Federal Highway Administration (FHWA) and an increasing number of state departments of transportation as a valuable tool for making incremental improvements to existing conditions in an environment that is often constrained by available funding, timing, environmental and property impacts and other similar factors.

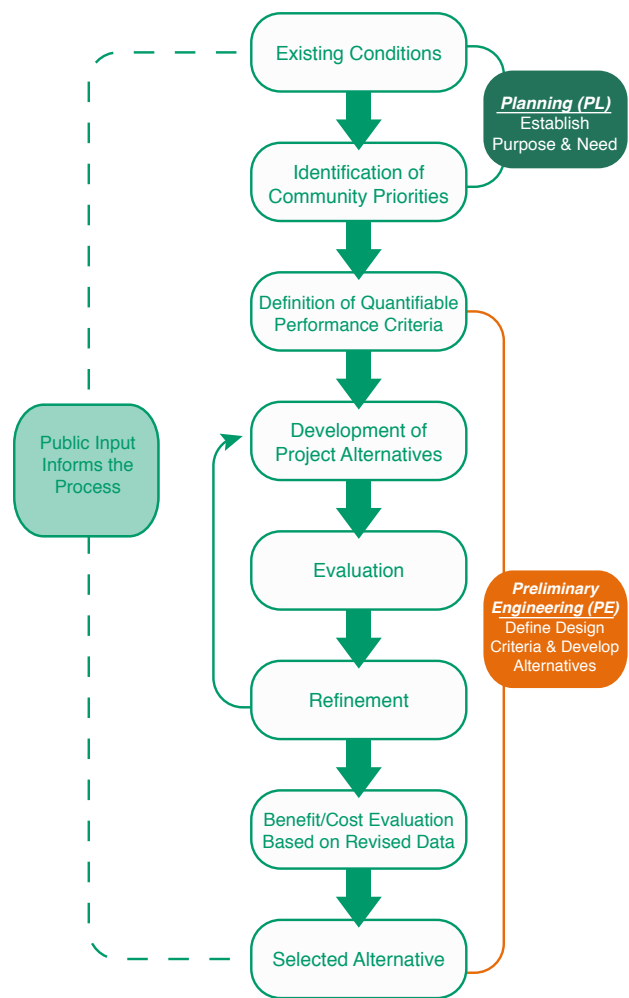
PBPD establishes a framework to solicit and receive community input that shapes cost-effective transportation solutions for local communities by applying data-driven measurements to improve existing roadway conditions. At the heart of the PBPD process is a partnership between local communities and transportation planners who work together to define and develop customized performance criteria and safety-driven solutions to various transportation challenges.

PBPD also places significant emphasis on data collection and evaluation. Throughout the PBPD process, transportation planners review data that enables them to refine their approach to addressing various transportation needs. Benefit-cost analyses weigh various outcomes and impacts of a potential transportation solution. By following the PBPD process, project teams can establish design criteria for a given set of transportation options that has effectively balanced competing needs with the resources available to meet those needs.

What is the difference between traditional project development processes and PBPD?

PBPD allows flexibility in how design standards are applied to a given transportation project. Traditional approaches to transportation projects often start from the point of view of first identifying all reasonable solutions to improving a roadway, then reducing the scope of the work based on cost, schedule, property and environmental impacts, community needs and other similar factors.

A PBPD process approaches transportation projects by first viewing improvements through the lens of the existing conditions, then identifying what solutions can be advanced that improve current conditions within the parameters of available resources and existing constraints.



How PBPD Works with ODOT's Project Development Process (PDP)

What is the role of public involvement in the PBPD process?

Public input is the cornerstone of the PBPD process. Local communities identify problems to be addressed and then work with transportation planners to define priority-driven results. For example, community members might indicate that a specific intersection is consistently congested at certain times of the day and their goal is to see improvements made that will reduce travel times and improve access to local destinations. Another community may indicate that while they do not see current problem areas in their neighborhood, they do not want travel times to worsen in the future as a result of growth that is taking place in their area.

The PBPD process takes this input from communities, incorporates appropriate standards for design and safety, which take into account existing physical and financial constraints, and provides for a data-driven outcome based on performance criteria and informed by the stated needs of the local community.

Transportation agencies using PBPD now have the flexibility to deliver solutions that better balance mobility needs with the needs of preserving and enhancing safety, community and environmental resources.

Why now?

When it comes to transportation, our communities' needs and expectations are changing, and PBPD enables the planning process to change with them.

Important concepts behind PBPD recognize that:

- Safety is the number one priority of any transportation solution and under no circumstance is ever to be compromised
- PBPD does not replace ODOT's Project Development Process. Rather, PBPD principles are incorporated into the process, allowing project development to effectively focus on the purpose and need of the project by using specific performance measures.
- Funding sources and staff resources are increasingly limited
- Our infrastructure is aging and we are facing increasing needs for repair, rehabilitation and replacement
- Transportation improvement designs are increasingly constrained by existing physical, environmental and other factors
- The collection of data used to evaluate the performance of specific designs is becoming more sophisticated and is increasingly reliable

