



## PLANNING ANALYSES

### BACKGROUND

PEL is a valuable tool for creating efficiencies in the transportation project development process that supports agencies' efforts to accelerate project delivery. PEL represents a collaborative and integrated approach to transportation decision-making that considers benefits and impacts of proposed transportation system improvements to the environment, community, and economy during the transportation planning process to inform the environmental review process.

This case study is a hypothetical example of how a State Department of Transportation (DOT) could develop a state planning and environment linkage (StatePEL) geospatial tool for internal use that brings together diverse datasets to identify environmental, community, and economic considerations early in the transportation planning process. The planning analysis can be used to inform the National Environmental Policy Act (NEPA) process.

### PLANNING CONTEXT

Before the State DOT began using its StatePEL tool, the agency would approach several resource agencies and request data to inform and support the environmental review process of a project. This process required time and resources, and created project inefficiencies. It was in this context that the State DOT's Office of Planning and Office of Environment joined together to develop a custom-built system that collects and integrates resource data relevant to planning and environmental review. The StatePEL tool uses an automated process to assist in the screening and evaluation of transportation projects and their potential impacts on the natural and human environment.

### STATEPEL

To create the StatePEL tool, the Office of Planning and Office of Environment discussed the types of data necessary for transportation planning and identified the resource agencies responsible for collecting and storing that data. The State DOT then negotiated with each of the relevant resource agencies individually to develop and sign memorandums of agreement specifically tailored to each agency's process and understanding of sensitive information that would be compiled into a secure database.

Now, the StatePEL tool allows users to input proposed project details, define the project area, and create a buffer zone around that area. The tool then analyzes a variety of factors related to the natural and human environment such as ecology, hydrology, land use, cultural resources, housing, and population characteristics in an area defined by the proposed project details entered into the StatePEL tool. Once the analysis is complete, the tool produces a report identifying potential project impacts and their likely severity. The report provides a solid foundation for the start of the environmental review process and enables the State DOT to screen numerous preliminary alternatives based on their likely impacts, either before or during the environmental review process. The analysis included in the report also can help agency staff to determine a project's appropriate class of action under NEPA, facilitate the development of the overall project development schedule and cost, and support documentation for NEPA compliance.



## BENEFITS OF THE STATEPEL TOOL

The State DOT has reported significant cost and time savings from the use of the StatePEL tool, stemming from reduced labor hours associated with gathering information and analyzing potential project impacts before initiating the environmental review. Similarly, due to the reliability of the report in estimating potential impacts, the resource agencies that provided data to support the tool have reported time savings in their roles as cooperating agencies under NEPA, as well as in the amount of time and resources spent to support their own permit reviews. By using the StatePEL report as a basis for early communication and coordination between the State DOT and resource agencies, the State DOT has produced better decision-making throughout the project planning and development processes.

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