

Appendix 9-C

Smart Transportation Themes

PennDOT's 10 Themes of Smart Transportation

1. **Money Counts:** All DOTs are currently operating in a hugely challenging financial environment. Cost inflation has been rampant, sharply eroding PennDOT's purchasing power. Meanwhile, high gas prices are resulting in people driving less for the first time since the 1970s. This leads to lower gas tax revenue, transportation's primary funding source. Smart Transportation provides us with an innovative approach to these challenges so that we can continue providing great service to the Commonwealth's residents.
2. **Leverage and preserve existing investments:** Previous generations of Pennsylvanians have made enormous investments in infrastructure. Those investments can be seen all over the Commonwealth, from old stone arch bridges to the cobblestone streets surrounding Independence Hall. As one of the oldest states in the nation, Pennsylvania has spent billions over the past 300 years building roads and highways, rail lines and runways, canals and ports. Smart Transportation asks us to place an emphasis on leveraging and preserving these existing investments when creating our programs.
3. **Choose projects with high value/price ratio:** Big, complicated projects are often considerably more expensive and have more damaging impacts, but may offer only limited increases in value over the smaller-scale and less expensive options. For instance, if a large potential solution costs \$50 million more than a simpler alternative, but only results in 15 seconds less travel time delay through a corridor, is it worth the added cost?
4. **Safety always and maybe safety only:** Safety for all users remains the most important consideration in planning and building our transportation system. Smart Transportation does not change this focus, but simply asks us to look for more innovative ways to continue improving our safety record.
5. **Look beyond level-of-service:** Conventional traffic performance measures, such as "level-of-service" (LOS), has dominated how we evaluate transportation problems and solutions; we should also begin considering other performance measures to evaluate project need and potential alternatives. These measures may include things like travel time, multi-modal access, or the economic development opportunities certain alternative might bring (or inhibit).
6. **Accommodate all modes of travel:** An efficient transportation system should consider the infrastructure necessary to support all modes of travel, including walking, bicycling, transit, and private automobiles. This is especially important in an era of \$4 gasoline, when many of our families are spending 30% or more of their income on transportation.

7. **Enhance local network:** Disconnected, sparse local street networks inevitably lead to significant strains on state roads. A highly connected local network, which provides residents a variety of route options for their daily needs, is necessary for state facilities to function as designed.
8. **Build towns not sprawl:** Transportation strongly influences existing and future land uses and the character of local communities. Smart Transportation asks us to consider the impacts of our transportation decisions: will they help create great places for people to live, or will they encourage sprawl? Will they help a municipality achieve their economic development goals? Does the project fit into the vision of the community?
9. **Understand the context; plan and design within the context:** Context-sensitive solutions (CSS) have been a part of the Department's vernacular for many years. CSS is an antidote to the "one size fits all" approach. It requires that all transportation projects be planned and designed with careful consideration of the local land use, economic, environmental, and social contexts.
10. **Develop local governments as strong land use partners:** PennDOT does not have the jurisdiction to make land use decisions—we must partner with local governments to ensure that transportation solutions are consistent with a community's land use goals, and that municipalities make land use decisions that take into account corresponding transportation needs and realities.