



State Transportation Innovation Council (STIC)

2015 Fact Sheet

Construction

Construction Aggregates/Material Optimization

At least 41 states recycle concrete pavements and use the crushed material in new pavement applications to produce approximately 140 million tons of Crushed Concrete Aggregate (CCA). Pennsylvania currently limits its use of CCA to unbound applications in pavement structure, such as an aggregate source for sub-base material that meets PennDOT Publication 408 specifications. This initiative would review PennDOT's policies, specifications, design process, and any other constraint that hinders the broader use of CCA as an approved sub-base material. Although the objective of this initiative is to increase the use of CCA, processes must be established to ensure CCA material meets the same quality standards as aggregate from the quarry.

What are the benefits?

- Saves money since recycled material can produce lower bid amounts.
- Promotes recycling while maintaining the highest standards in the control and quality of material.
- Reduces waste and greenhouse gas production.
- Conserves natural resources.



What does the future hold?

The Construction TAG will coordinate with PennDOT in promoting the use of CCA in applicable projects.

This fact sheet reports on initiatives that have been explored by the Construction Technical Advisory Group (TAG) and reviewed by the State Transportation Innovation Council (STIC). Information on their concept and status are provided in this fact sheet.

Innovative Bidding (A+Bx)

This initiative proposes a new application of innovative bidding that encourages contractors to direct projects on a tight schedule. A monetary value is placed on the time component of a contract and added to the bid amount (A+Bx) where A=Traditional bid; B=Total time required to bid the project; and x=daily cost of inconvenience to the traveling public.

What are the benefits?

- Saves driving time and leads to fewer traveler inconveniences.
- Rewards contractors' creativity and innovation to complete projects in the least amount of time.
- Produces cost savings to PennDOT while not compromising quality.

What does the future hold?

The Construction TAG will work with PennDOT to identify pilot projects throughout the state to apply this new application of innovative bidding. Following the completion of the pilot projects, the TAG will conduct an after-action review to assess the initiative's feasibility on moving forward.

What is STIC?

Pennsylvania's State Transportation Innovation Council is a unique forum that blends together expertise and experience of various stakeholders to provoke discussions on how to deploy successful transportation innovations quickly. The main goal of STIC is to get innovation into practice as soon as possible so that users can reap the benefits of a smoother, safer, more efficient transportation system.

