Chicago Metropolitan Agency for Planning

Meeting Notes

Planning Information Forum: Cost Efficiencies in Project Delivery
Friday, January 22, 2016, 8:00am-9:30am
DuPage County Conference Room, CMAP, 233 S. Wacker Drive, Suite 800, Chicago, IL 60606

Attendees (non-CMAP)

Name	Organization
Erin Aleman	Illinois Department of Transportation
Noel Basquin	Cook County
Bruce Carmitchel	Illinois Department of Transportation
Mike Connelly	Chicago Transit Authority
John Donovan	Federal Highway Administration
Pablo Faillaci	McHenry County
Henry Guerriero	Illinois Tollway
Jill Hayes	Cook County
Scott Hennings	McHenry County
Emily Karry	Lake County
Patrick Knapp	Kane/Kendall Council of Mayors
Jon-Paul Kohler	Federal Highway Administration
Ojas Patel	Illinois Department of Transportation
Brian Pfeifer	Federal Highway Administration
Issam Rayyan	Illinois Department of Transportation
Tom Rickert	Kane County
Chris Snyder	DuPage County

Summary of presentations

Chicago Metropolitan Agency for Planning (Lindsay Hollander). For the next comprehensive regional plan, CMAP is beginning to explore potential strategies, including those related to the financial plan for transportation. A strategy paper will be developed to consider different concepts for funding the transportation system, focusing on policy-oriented efforts that have the potential to substantially affect revenues and expenditures at the regional level. These concepts could include efficiencies that are used to lower the cost of operating, maintaining, enhancing, or expanding the transportation system. The purpose of the forum is to discuss ways to reduce the costs of roadway projects, with a focus on innovative construction practices, materials, and coordination.

Federal Highway Administration – Illinois Division (Jon-Paul Kohler and Brian Pfeifer). FHWA administers the Every Day Counts (EDC) initiative, a multidisciplinary, stakeholder-based effort to identify and rapidly deploy proven innovations for widespread use. Through this program, FHWA works to create implementation plans for various innovative practices, and disseminates information to stakeholders via staff training, case studies, technical specifications, and other assistance. In Illinois, EDC has promoted several innovative practices, including the use of warm-mix asphalt utilization, which reduces cost by decreasing energy consumption. Other innovations like 3D engineered models and e-construction increase efficiency and reduce project timelines. EDC also has been working on a new test to assess asphalt pavement performance in order to extend the life of the material; in 2016, IDOT will implement 11 pilot projects of this test. Longitudinal joint seals are also under experimental use as a low-cost ($2 per lineal foot) way to extend the life of asphalt pavement. Finally, IDOT is currently researching how pavement preservation techniques can reduce lifecycle costs. However, this effort is hampered by IDOT's tracking system, which makes it difficult to see how new technologies affect the lifecycle costs.

Illinois Department of Transportation District 1 Bureau of Design (Ojas Patel). IDOT has implemented innovations in a number of areas, including engineering, design geometrics, construction, and pavement preservation. Efficiencies have been gained through the transition to 3D modeling and use of GPS for roadway design, which eases the evaluation of alternatives. IDOT has also implemented accelerated bridge construction in a number of projects, which reduces project time and traffic impact. However, accelerated bridge construction can result in additional upfront costs – for example, a prefabricated temporary bridge was rented for use in order to reduce traffic impacts of construction. Another innovation utilized is bridge beam galvanization and metallization, which allows IDOT to avoid repainting beams. Innovative strategies, like crack sealing, micro-surfacing, longitudinal joint seals, and two-inch intermittent pavement patching help to extend the life of flexible pavements. For concrete pavements, strategies like full depth repairs, precast pavement panels, and diamond grinding are used.

Discussion

- Initial discussion focused on some of the innovations and efficiencies utilized by county transportation departments, such as echelon paving, heated joints, micro-surfacing, and recycled materials. However, it was noted that many innovations that save time might not actually save money, particularly those aimed at maintaining traffic during construction. In addition, many innovations are either too minor to be utilized in a long-range forecast, or already included in long-range financial planning assumptions.

- Many participants expressed that regulatory compliance resulted in added costs. Properly disposing of construction debris, managing stormwater, implementing complete streets policies, and providing accessibility for individuals with disabilities often result in significant expenditure in construction projects, especially in an environment when regulations and rules change over time.

- Issues involving utilities were discussed. Moving utilities can result in additional cost and delay. Issues with coordination with utility companies can exacerbate these costs and delays, and to some extent are governed by state statute.

- A participant noted that while funds for the transportation system are insufficient, the region should not settle for a poor user experience. Another noted that privatization of infrastructure, often cited as a way to reduce costs, does not necessarily provide high-quality services. Another participant noted that better integration of land use and transportation planning would reduce capital costs over time.

Considerations for next long-range plan

Based on discussion and presentations at the forum, ON TO 2050 should develop policy guidance to incorporate expenditure efficiencies in capital costs into the next financial plan. This language should acknowledge recent and anticipated advances in the construction industry that reduce capital costs via improvements in processes, materials, and technologies. The next plan should incorporate these cost savings into its long-term expenditure forecasts within the financial plan.