T4AMERICA’S 2ND ANNUAL SMART CITIES COLLABORATIVE

Last year, Transportation for America (T4A) launched the “Smart Cities Collaborative” to build a forum for collaboration and provide direct technical assistance to 16 leading-edge cities advancing smart mobility policies and projects. The Collaborative addressed topics such as Automated Vehicles (AVs), Shared Mobility and Data Analytics. During this work it became clear that an overall theme was emerging – how technology and new mobility are creating the Street of the Future. This is the Smart Cities Collaborative theme and focus for the coming year.

Content and curriculum will be separated into four sub-topics; design, measure, manage and price. We’ll cover how the right of way and curb space are evolving, measuring and analyzing project, modal and system performance, managing public and private mobility providers in tandem and pricing road and curb space in service of long term outcomes.

DESIGN

With rare exception, city streets across the United States were and continue to be designed, operated and managed for use by the single occupant automobile. But transportation has changed and new demands create conflicts – ride share pick up and drop off, increased delivery in residential and commercial areas, separated and combined lanes for bike and transit use, pedestrian crossing and safety – are substantial, widespread and are currently being addressed on a piecemeal basis. Solutions are frequently Band-Aids, making amendments to the existing streetscape rather than fundamentally redesigning the street for the new needs.

Cities have recognized the need to redesign and reinvest in our streets as cherished public spaces for people, as well as critical arteries for traffic. And, as cities look to integrate innovative technologies and transportation models, readjust to shared mobility solutions and prepare for the coming wave of automation, there is significant need to reassess current street design guidelines.

The Collaborative will address the design implications of new mobility and how cities can adapt and evolve their infrastructure reallocating space and using technology to manage the public realm dynamically to accommodate new needs while meeting best practices for designing safe and complete streets.

MEASURE

Advances in technology have provided a wealth of detailed, real-time data that cities can use to measure operations and inform decision-making. A robust system of measuring performance will prevent cities from getting lost in the web of information and help anchor projects toward long-term outcomes. This data-driven approach ensures that new technologies are implemented in ways that tackle priorities and mitigate potential negative impacts.

The Collaborative will introduce participants to the fundamentals of data science and cover best practices in data collection and analysis. We’ll also determine and develop metrics that best indicate success for desired outcomes and how internal governance needs to change to reflect a data-driven approach and ensure that resulting analyses are fed back into planning and real-time dynamic operations.

Additionally, developing and using similar and shared metrics to evaluate projects will allow cities to compare the success of projects within their own jurisdictions and across cities, learn from each other.
and speed their development cycles. Consistent data gathering and sharing across cities will help cities discover the best applications of innovative technologies and better determine how to affect positive change in their own community.

MANAGE
The Collaborative will continue to serve as a forum for sharing strategies to effectively manage partnerships with the private sector and address how cities can get what they want, and need. We’ll cover what causes breakdowns in negotiations and the positive leverage points cities have at their disposal such as curb space access and high volume loading zone configurations as well as the negative incentives such as licensing requirements or enforcement strategies and work to develop standardized templates for agreements that can be adapted for each city’s needs. The Collaborative will also identify opportunities to ensure that new automated and shared mobility services deployed in their communities augment or incorporate transit systems and secure a future in which public transit continues to function as the core of an integrated, multimodal transportation system.

New strategies to manage curb space can also be a valuable tool to achieve the city’s wider transportation, land use and economic development goals and cities are thinking about the tools, strategies and levers of power at their disposal to more efficiently control this space while using it to drive their desired outcomes. We’ll examine ways cities are creating strong foundations to manage their curb space effectively by developing accurate inventories and explore various approaches such as performance-based parking, time of day management, dynamic pricing and other context-sensitive prioritization strategies. We’ll also address the organizational changes cities are making to help manage the curb more holistically, as different city departments often oversee parking, ride hailing, urban delivery or transit and rarely collaborate on curbside management.

PRICE
Automated vehicles, shared mobility and other innovations have tremendous power to transform mobility options and the essence of how our cities are designed and operate. Left unchecked, the private sector alone will not ensure that the benefits accrue to all parts of society or mitigate potential negative impacts, thus it is crucial for cities to engage proactively and create new tools to drive the outcomes they seek with emerging technologies and mobility options.

New mobility models and the coming wave of automated vehicles also threaten the viability of various revenue streams at the municipal level. Innovative pricing mechanisms will not only ensure cities have adequate funding for transportation but also present an opportunity to drive behaviors, manage demand and contribute to long-term goals. Cities around the world have implemented pricing policies in an effort to not only raise new sources of revenue, but mitigate congestion, reduce vehicle miles traveled, lower emissions, create safer streets and drive myriad long-term outcomes. The Collaborative will examine the results of these pricing programs and determine which tools and assets cities have at their disposal.

We’ll review various pricing strategies such as congestion or cordon pricing along with other effective schemes such as dynamically priced parking as part of larger curb management strategies. The Collaborative will explore the various hurdles that come along with the development of new pricing strategies - political, technological and financial - develop best practices for implementation and cover effective strategies to message new pricing mechanisms.
APPLY

The second year of the Collaborative will consist of quarterly in-person meetings where participants will discuss approaches to these topic areas and develop best practices alongside other city leaders. Participants will also engage in an open and informal environment with the private sector, academia, nonprofits and other experts from around the country. In between in person meetings, the Collaborative will host monthly online discussions to continue the conversation and keep participants up to date on how their peers are progressing with their project and tackling their challenges.

Cities selected to participate in the Collaborative must commit to open-sourcing their processes and lessons learned and to share their experience and knowledge with their peers interested in implementing similar technologies.

To apply for membership, applicants must identify at least one new mobility based project they’re committed to working on that is either in progress or would like to begin in the next six months. Examples include projects related to: shared mobility services, microtransit, first mile/last mile solutions, automated vehicles, data collection, aggregations or analysis projects, urban delivery, parking and curb management strategies, congestion, cordon or other dynamic pricing programs.

Applications must be submitted by a government official on behalf of a city, county, transit agency or MPO. Project specific partnerships may consist of more than one city or agency per project, but all partners should be from the same region. Similar to the first year, there is a fee associated with participating in the Collaborative that will be directly applied to fund each participant’s travel and workshop expenses.

Applications are due February 16th, 2018. To apply, visit t4america.org/smart-cities-year-two.

If you have questions, please contact Russ Brooks, Director of Smart Cities at 612.460.8181 or russ.brooks@t4america.org.