



KS LTAP Newsletter

Fall 2015

A quarterly newsletter of the Kansas Local Technical Assistance Program (LTAP) at the Kansas University Transportation Center with funding from Kansas DOT and the Federal Highway Administration

Quick Build Strategies Can Help Communities Implement Complete Streets Faster

By Mehrdad Givechi, PE, PTOE

Streets influence everything from mobility and safety to the quality of life in our neighborhoods. When streets are designed with only vehicles in mind, the result is too often an unfriendly road environment for other users. Bicycling becomes more challenging, pedestrian walkways become less enjoyable, and congestion caused by an overabundance of single-occupancy vehicles slows down buses, making public transit less convenient and driving more frustrating. So how should cities address the design of streets, which all too often seem designed only for vehicles?

The term “Complete Streets” refers to streets for everyone. Such streets are designed and operated to provide safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. These streets make it easy to cross, walk to shops, and bike to work. They also allow transit vehicles to run on time and make it safer for people to walk to and from transit stops. In short, they offer a vision in which streets are not just thoroughfares for vehicles but pathways for all.

Between planning and implementation: mind the gap

Complete Street design has received a great amount of support over the last few years from many communities, with demand for timely implementation of the improvements exceeding the project delivery. Long periods of time can pass while project sponsors look for funding, develop construction documents, and implement the improvements. This can dampen the momentum and public excitement generated during the planning process.

One of the ways the Federal Highway Administration (FHWA) advances new technologies and practices is through the Every Day Counts (EDC) program—currently in Round 4 of its implementation. Three of the EDC strategies are highly relevant to the Complete Street concept, including **Road Reconfiguration (a.k.a. Road Diet)**, which was initiated under EDC Round 3, and **Community Connections** and **Safe Transportation for Every Pedestrian (STEP)**, initiated under EDC Round 4.

Related links:

- <https://www.fhwa.dot.gov/innovation/everydaycounts/edc-3/roaddiets.cfm>
- https://www.fhwa.dot.gov/innovation/everydaycounts/edc_4/connections.cfm
- https://www.fhwa.dot.gov/innovation/everydaycounts/edc_4/step.cfm

Low cost solutions allow more flexibility

To overcome this dilemma, many cities have looked to “quick build” (or “interim design”) projects that use low-cost materials, such as pavement marking, signing, delineators, and the like that can be installed quickly and easily from a construction standpoint. They may also include more sophisticated materials, such as landscape planters and temporary curbs.

These projects are more cost-effective than traditional projects that require substantial roadway modifications. Installations can be modified or removed as needed if the project goals and expected outcomes are not met. This approach helps with project phasing by extending improvements over longer distances or adding hardscape improvements as additional funding becomes available.



An example of a quick-build project with a drive lane, a buffer, and a bicycle lane. Lawrence Avenue at Princeton Avenue in Lawrence, KS.

Example of incorporating design elements into maintenance

There are many things cities can do to incorporate Complete Street design into low-cost, routine maintenance. Dave Cronin, City Engineer in Lawrence, says that his team has been able to include such design elements around the city. At Lawrence Avenue and Princeton Avenue, for example, Cronin said the city “used stripes to delineate a bike lane and a travel lane and parking, just as part of routine maintenance,” rather than undertake a more costly engineering project. In addition, the city recently reworked a stretch of 9th Street, a busy corridor, to convert it to a three-lane road with central turning lane and outside bike lanes.

The key to “quick build” projects is community outreach, an incremental design process, and evaluation of the improvements each time changes are made in the process. For many communities, the process may start with a planning study such as a corridor study, neighborhood plan, or active transportation master plan, during which early ideas can be tested. To help the momentum of these studies, “quick build” projects can be implemented with signing and marking within a short period of time to pilot ideas and provide long-term solutions. Cronin says that the rationale for these elements is that “it’s safer for everyone: drivers, walkers, and bicyclists,” and so the projects build on community outreach and earn community support.

As funding becomes available over time, amenities, hardscape, and other enhancements can be added to improve the design. Evaluation is also the key to documenting process, demonstrating success and lessons learned, improving the design, and building trust with community stakeholders. Cronin notes that it has become “an expectation from the community to include multimodal elements in design. It’s pretty standard that when we do a project, these are the things we look at.” Building on that success—and incorporating Complete Streets elements into standard urban design—can benefit all road users.

Lawrence, Kansas has taken a number of steps, with public input, to create a safer and more walkable environment for all road users. These measures include road diet in selected locations, installing traffic calming devices throughout many residential neighborhoods, creating an appealing downtown strip, and building the “Lawrence Loop”—a bike path built around the entire city in phases.

Related links:

- https://assets.lawrenceks.org/assets/agendas/cc/2016/07-19-16/ws_Kasold_Powerpoint_July_21_2016.pdf
- <https://lawrenceks.org/loop/>
- <http://www2.ljworld.com/news/2016/sep/19/speed-humps-and-traffic-calming-circles-be-install/>

Sources:

- *Promoting Healthy Communities through Active Transportation*, Developed by the Complete Street Council, ITE 2016 International Annual Meeting & Exhibit, August 16, 2016, Anaheim CA. Speakers:
 - Susan Henderson, Principal, PlaceMakers LLC, Albuquerque, NM
 - Fionnuala Quinn, Director, The Bureau of Good Roads, Oak Hill, VA
 - Peter Truch, Transportation Manager, Opus International, Kelowna, BC, Canada

- Alisa Arment, Project Design and Delivery Engineer, City of Seattle, Seattle, WA.
- Interview with Dave Cronin, City Engineer for Lawrence, KS. Conducted Feb. 13, 2018.

Suggested Resources on This Topic:

- Quick build strategies: https://b.3cdn.net/bikes/675cdae66d727f8833_kzm6ikutu.pdf
- Implementing Complete Streets: <https://issuu.com/streetplanscollaborative/docs/tu-guide-to-materials-and-design-v1/17>
- Quick build ideas from other cities: <http://www.street-plans.com/>
- Streets as public spaces: <https://www.pps.org/article/streets-as-places-how-transportation-can-create-a-sense-of-community>