



#### WHO WE ARE

Smart Growth America helps create healthy, prosperous, and resilient places to live for all people through research, advocacy, and direct community support. Our work spans housing and land use, transportation, and economic development to find solutions to communities' most pressing needs.

Learn more at www.smartgrowthamerica.org

The National Complete Streets Coalition, a program of Smart Growth America, is a non-profit, non-partisan alliance of public interest organizations and transportation professionals committed to the development and implementation of Complete Streets policies and practices. A nationwide movement launched by the Coalition in 2004, Complete Streets is the integration of people and place in the planning, design, construction, operation, and maintenance of transportation networks.

Learn more at www.completestreets.org

### **PROJECT TEAM**

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### Introduction

In 2025, Smart Growth America (SGA) conducted a Complete Streets Leadership Academy (CSLA) in Kentucky with support from the CDC's Active People, Healthy Nation<sup>SM</sup> initiative. This program connects state departments of transportation (DOTs) with local jurisdictions to implement quick-build demonstration projects on state-owned roads. Quick builds on state roads are an important tool to try new designs and materials, build partnerships between the local jurisdictions and state offices, and bring near-term safety improvements to the places that need it most.

The Kentucky Transportation Cabinet (KYTC or the Cabinet) participated in the 2025 CSLA as part of the Cabinet's ongoing work to bring Complete Streets across the state. This was a homecoming for CSLA—the first cohort in 2018 included Lexington. KY, and led to a quick-build demonstration project on Bryan Ave. Kentucky's current Complete Streets Program includes a state-wide policy and the Complete Streets. Roads, and Highways Manual, both adopted in 2022. The manual includes a section on "Tactical Urbanism, Pilot Projects, and Interim Design," with examples of projects that have relatively lower budgets and faster timelines than typical construction projects, many of which resemble the quick builds designed through the CSLA. In addition to the policy and manual, KYTC conducted a series of trainings for district staff and local jurisdictions to learn about the Complete Streets Program soon after the policy was passed. These optional trainings originally introduced many of the participants in this CSLA to the idea of Complete Streets and sparked interest for many practitioners to pursue this approach.



Participants conduct a walk audit of Boone Ave at the in-person workshop.

### **Definitions**

### Quick-build demonstration projects or quick builds:

Temporary installations to test new street designs that improve safety for everyone.

Learn more about quick builds

### **Complete Streets:**

An approach to planning, designing, building, operating, and maintaining streets that enables safe access for all people who need to use them, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities.

**Learn more about Complete Streets** 

### Metropolitan Planning Organization (MPO):

A regional organization that represents an urbanized area to support transportation planning and channel federal transportation funding to the jurisdictions within the region.

Learn more about MPOs

This program builds on SGA's experience running previous academies in Maryland in 2024, Tennessee, Connecticut, California, and Alaska in 2023, and many more. These academies are designed to build the partnerships necessary to improve safety on roads owned by states, which are the most deadly to people walking: 66 percent of all pedestrian deaths in the 101 largest metro areas occurred on state-owned roads from 2018 to 2023. Facing this challenge requires a lot of coordinated effort, and the partnerships built in these programs are one part of that solution.











KYTC Bicycle & Pedestrian Coordinators were active and enthusiastic partners in this process, and their dedication was essential to the success of this academy. The local jurisdictions that participated in this program were the cities of Bowling Green, Morehead, and Winchester. Each of these cities worked alongside their respective KYTC Districts: Bowling Green with District 3, Morehead with District 9, and Winchester with District 7. The local team compositions varied depending on the capacity and expertise of city staff, regional organizations, and community members.



jump to the case study

The team compositions were as follows:

- Bowling Green's team was led by <u>BikeWalkBG</u>, through the Metropolitan Planning Organization (MPO), and the city's public works team, in close coordination with the KYTC District 3 planning office.
- Morehead's project was led by a council member, working with a partner from the Kentucky <u>Department for Public</u> <u>Health</u> and Morehead city staff, along with KYTC District 9 planning.
- Winchester's project was led by Walk-Bike Clark County and local residents with subject-matter expertise, along with the city's public works and communications staff and KYTC District 7 planning.

Aerial view of Morehead. Source: Rowan County Tourism.



This report highlights how the Kentucky teams built partnerships, explored new approaches, and collaborated on quick-build demonstration projects. Organized around these themes, it shares key observations from the academy, offers proposals for KYTC to formalize and replicate the quick-build process, and provides case studies from each participating community. While the ideas are directed at KYTC, other agencies may also find them useful. The quick builds are set for installation later this summer, with results to be published in a follow-up. Project overviews are included in the Case Studies section below.

What does it take to install a quick-build demonstration project? A typical process for designing, installing, and monitoring a project includes:

- **Site context:** Identify a site with a problem that a quick build could address.
- Project design: Create a design that addresses the challenge at your site and gather the necessary materials.
- Installation: Build the project!
- **Engagement:** Involve community members through all phases of the project.
- **Data collection:** Monitor the project and compare results to baseline data.

### **CSLA Timeline**

### **CSLA Module:**

### March 2025

Select project locations Initial data collection



Virtual Session #1: introduction to Complete Streets

Virtual Session #2: deep dive on auick builds

### **April 2025**

Walk audits Initial design



Virtual Session #3: community engagement and data collection

Virtual Session #4: communications

### May 2025

Engagement Final design Permits



In-Person Workshop: walk audit, project design and feedback

Virtual Session #5: maintaining momentum after projects

### **June 2025**

Ongoing engagement, design, and permitting



Ongoing check-in calls

### **July 2025**

Procurement Installation Data collection



Virtual Session #6: final project presentations

# Part 1: Knowledge, skills, and training

The Complete Streets Leadership Academy is, at its core, a learning opportunity for participants to gain a deeper understanding of Complete Streets and to practice skills around designing and implementing quick builds.

Local teams present their project goals at the in-person workshop.



The CSLA is designed as a series of virtual trainings interspersed with activities that fit the project timelines to allow the local teams to strengthen relationships; as participants are learning these topics, they get to apply what they've learned to their quick-build projects and practice the skills they need to conduct more quick builds after the program. The centerpiece of the program is a two-day, in-person workshop where participants collaborate with each other and with the SGA team in real-time. The program was also an opportunity for SGA to observe which topics would be most helpful to include in future trainings based on participant response, and to shape SGA's ideas for KYTC and future academies.

### Participants learn about the following topics:

- Basic principles of Complete Streets
- Quick build planning and implementation, site selection, and placemaking
- Walk audit/site visit strategies and benefits
- Community engagement in planning and implementation
- Data collection for quick builds
- Communications strategies for Complete Streets
- Materials and installation details
- Maintaining momentum after a project

### **Observations**

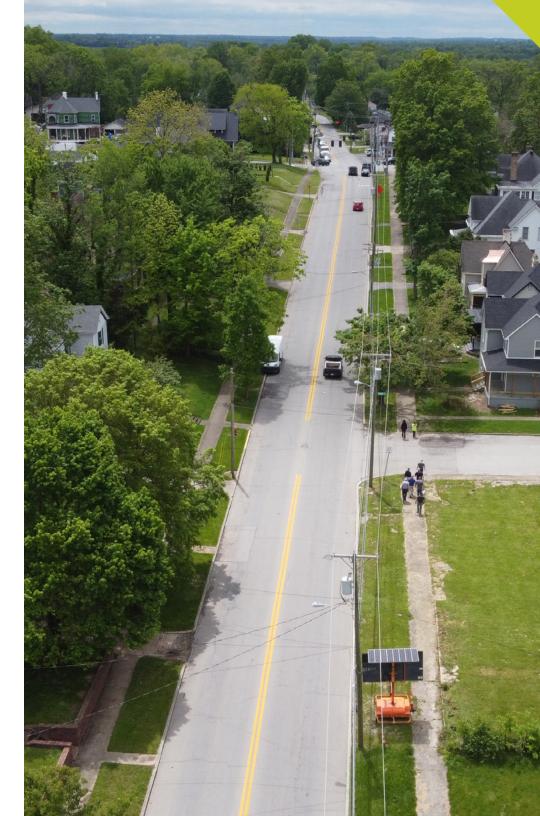
With Kentucky's statewide Complete Streets Program, many participants came to the CSLA with a foundational understanding of Complete Streets, while for some, this program was their introduction to the approach. But for all participants, this was the first quick build that they had worked on, although many had heard of "tactical urbanism" or other temporary approaches and were eager to try them in their own communities. The different starting points meant each team had slightly different goals for what they were looking to learn and practice.

Familiarity with Complete Streets also varied among KYTC district partners. KYTC District planning staff were the points of contact between the project teams and KYTC districts, all of whom had received Complete Streets training prior to the program, but with different amounts of buy-in and capacity. For example, District 3's key liaison had worked directly on Complete Streets projects before, whereas District 9 had few of these projects across their region. The districts also came into the project with varying levels of familiarity with quick builds: District 7 had seen these projects in Lexington, and District 3 had received requests for pilot projects in the past.

Within the districts, there was also an inconsistent understanding of Complete Streets and quick builds. Though the planning staff were the main participants, permit approval for these projects involved design, permit, and traffic engineers who had not been part of the CSLA trainings and had not necessarily attended prior KYTC trainings. In these cases, the planning staff had to explain the approach to their colleagues, and these differences in familiarity with quick builds led to vastly different project scopes across the teams.

Participants conduct a walk audit of Boone Ave.

Source: Austin Obenauf.



#### **WINCHESTER**

Winchester's team leaders were excited to use this project as a way to train city staff and local leaders in Complete Streets strategies. The project leads included a local resident with professional experience in Complete Streets and an active transportation expert from Walk-Bike Clark County. The program introduced Complete Streets to the city staff involved in the project, with the aim of setting a new foundation so that everyone would share a common understanding of this approach. The Winchester team also used this project to learn about the processes of working with KYTC, especially since District 7 had experience conducting Complete Streets work in nearby Lexington.

The in-person workshop, a key aspect of the academy, was held in Winchester, which the team used to engage city staff and local leaders in the project. Due to their existing knowledge of how cities can undertake this work, the team leads were able to push this project forward. Winchester's learning objectives from this program were to develop a foundational understanding of Complete Streets and to gain an understanding of what would be needed to institutionalize a Complete Streets approach.

### **MOREHEAD**

Morehead's project was led by a council member who had previously attended a KYTC training on Complete Streets and was eager to bring this approach to her city. Morehead hadn't done Complete Streets work before this program, so this was an opportunity for city staff and other elected officials to learn about the benefits of Complete Streets and to start developing processes to implement this approach. This team's learning from the program was focused on building familiarity with quick builds in city staff and in KYTC District 9.

#### **BOWLING GREEN**

Bowling Green's team and its partners at District 3 had the benefit of previously working together on active transportation projects. The District planning chief is supportive of Complete Streets, and the engineering team has experience designing roads with a Complete Streets approach. The city also came in with both experience in designing facilities for people walking and biking, as well as an established culture of prioritizing these projects. This team used the CSLA to learn about design and installation details for quick builds, including the types of materials best suited for this work and the spacing required for installing them on different roads. One of Bowling Green's project sites was introduced by a resident who doesn't use a car, and before the CSLA project had concluded, that resident brought another site with challenges for people with disabilities to navigate to the attention of the city and MPO, which they plan to address. With the input from this resident and the walk audit conducted at the project site, the city and MPO teams are more aware of the challenges faced by people who walk and bike, particularly ADA access issues at intersections.



Community engagement in Winchester. Source: Clark County.

# Proposals for knowledge, skills, and training around Complete Streets and quick builds

Quick-build demonstration projects can be more successfully implemented when teams have a strong understanding of Complete Streets and related topics. The following ideas can support KYTC in conducting more quick builds in other districts. Local jurisdictions and other states looking to further their Complete Streets expertise can use these ideas as well.



- 1. Host mandatory recurring trainings within KYTC on Complete Streets topics and quick builds. Broad familiarity with Complete Streets concepts and applied strategies will make it easier to build buy-in from everyone at KYTC who can be involved in quick-build projects, from planning staff to permitting teams. Holding these trainings across teams and in all districts will help standardize KYTC's approach to Complete Streets and quick builds and will give communities across the state the opportunity to benefit from this learning. By scheduling recurring trainings, the topics can be more focused after an introduction, and new hires can be part of the process. Investing in continued trainings can also demonstrate to district staff that Complete Streets is a priority for leadership and an important approach throughout the Cabinet.
- 2. Host public-facing trainings and develop informational materials on Complete Streets topics and quick builds. KYTC can also look to develop additional public-facing trainings or other materials to support local jurisdictions' staff, residents, and elected officials in learning how to work with KYTC to implement these projects. Incorporating quick builds into Complete Streets trainings can create tangible projects with near-term outcomes as a result of the learning process, which can help bring more people on board with the approach.

  Citizen transportation academies can be used to increase knowledge and foster partnerships between cities and state DOTs.

Participants work on project design at the in-person workshop.

# Part 2: Relationships and coordination

One of the most important outcomes of the Complete Streets Leadership Academy is building relationships, especially between local jurisdictions and state transportation departments. Installing quick-build projects on state-owned roads in partnership with the cities those roads run through requires close coordination. These projects move quickly, so it's essential that teams determine who is responsible for what part of the work, such as installing the project, maintaining the materials, and measuring the project's impacts. In past CSLAs, some local teams worked directly with their state DOTs for the first time, turning someone that was previously only emailed occasionally into a partner with shared goals. For others, teams with existing relationships between local staff and DOT districts led to projects that could stretch resources further, because trust and the ability to coordinate were already in place.

### **Observations**

In Kentucky, a range of existing coordination levels resulted in significantly different project scopes across the teams. Bowling Green's strong coordination helped lead to a larger project scope. In Morehead and Winchester, the team leads worked to bring others in to build support for more Complete Streets projects in the future. Across all teams, SGA observed increased communication between local teams and the KYTC districts, as well as greater familiarity with each other's work and processes.

#### **BOWLING GREEN**

The existing coordination between the city, MPO, and state allowed the Bowling Green team to pursue projects in multiple locations: KY-231/Morgantown Road and the intersection of Smallhouse Road and KY-231/Scottsville Road. The team quickly decided that the city would install the Scottsville Rd project, and KYTC would install the Morgantown Rd project, which would help stretch the budget to cover two sites. The team was also able to coordinate these responsibilities because they had an idea of how much it would cost, as recent work meant they already had estimates of similar materials that they could use with enough confidence to commit to two project sites. Regular weekly meetings helped the entire team collaborate closely throughout the process. The shared understanding of the importance of Complete Streets and the value of quick builds also helped, since the team's goals were internally aligned. But even this cohesive process wasn't entirely perfect, as some stakeholders weren't involved until later in the process, including elected officials and nearby schools.

### **MOREHEAD**

Morehead's team was an example of shared goals bringing people to the table, helping them stay there through challenges, and adjusting project expectations based on their community contexts. District 9 was not as comfortable with Complete Streets projects as the other teams; as a result, it was difficult to communicate the importance and potential impacts of this project to other staff members in the district. (See the differences between districts in constructing alternative intersections on this map.) The Morehead

team prioritized keeping District 9 involved in the project, altering the project goals in the process to meet them where they were. The project subsequently shifted from testing safer crossings at US 60 to trying a simple temporary installation on a state route. Prior education around Complete Streets for district staff from KYTC, as well as more explicit support for this work from KYTC Central Office, may have better facilitated communication around Complete Streets between the Morehead team and District 9. As for coordinating resources, District 9 offered to conduct a speed study to measure vehicle speeds on US 60 at the project location and to lend temporary signage to alert drivers to a change in traffic pattern, but the city decided the size of the sign couldn't fit at the site.

### **WINCHESTER**

Winchester's local team strengthened relationships among city staff and with local advocates, with the hope of working together more on community engagement around Complete Streets in the future. Some city staff initially lacked buy-in for Complete Streets, but through persistence and using the in-person workshop and walk audit in Winchester to organize additional meetings between city staff and SGA to discuss the project, the team leads were able to establish full support from city staff The Winchester local team was also very adept at gathering input from the community and disseminating the project through local media, serving as an example to the other two communities. The coordination built within the team and with District 7 enabled Winchester to include some long-term improvements in their quick-build project, as described in the next section.

## Proposals for relationships and coordination

Quick builds are opportunities to build relationships, and in turn these relationships can influence the scope of the quick-build projects. KYTC can use these ideas for building relationships and coordinating resources when organizing future quick-build projects, and local teams can use these ideas to shape their plans as well.

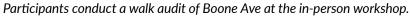
- 1. Not every quick-build project will be about street design change. If your goal is to build relationships that don't yet exist, your project scope will likely be less ambitious. But keep in mind that this is a process, and that the first project is just the start. More ambitious projects will come as a result of building strong working relationships.
- **2. Find opportunities to share resources.** Find ways for KYTC and local governments to share key resources—like staff time, data collection tools, and signs—including within KYTC itself, such as through a central resource library.
- 3. Coordination and dedication benefits from commitment, which comes from the top. By supporting quick-build projects, KYTC leadership can lend credibility to local leaders and set expectations for district staff to support these projects, too. KYTC leadership supporting these projects can encourage district staff to dedicate their time and resources to these projects. Similarly, city leaders can use their support for quick builds to allow city staff to focus on this work as well.

# Part 3: Using quick builds for lasting results

Though quick builds are temporary, they have the potential to lead to long-term change on city streets and state routes. These projects can inform upcoming projects through evaluation and data collection around the installation, such as in <a href="Howard County.">Howard County.</a>
MD, where the benefits of a temporary multi-use path helped reinforce the need for a permanent improvement. They can build public support for a capital project, like in <a href="Airway Heights">Airway Heights</a>, WA, or remain in place until construction, like in <a href="Nashville">Nashville</a>, <a href="TN">TN</a>. Quick builds can even be used as an opportunity to make some permanent improvements while construction crews are working there anyway, such as in <a href="Maryland">Maryland</a> where Bel Air and Hagerstown's quick-build projects included upgraded crosswalks.

### **Observations**

The project sites for the three teams, especially those in Winchester and Morehead, were selected with an eye to the potential for quick builds elsewhere in their cities after CSLA concluded. Part of the goals of these communities were to demonstrate the value of these projects to community members: both the idea of doing something temporary and the concept of reconfiguring streets for safer outcomes and increased physical activity. By selecting locations and project designs that were likely to have broad support due to the existing need and perceived impact of the intervention, the teams were thinking about how their projects could affect the community's perception of Complete Streets far beyond one project site, for better or worse. Winchester's project location did not have the right-ofway constraints that other state-owned roads did, which gave the city more room to work with temporary materials. The Morehead team had some interest in testing a small roundabout or minicircle, but knew the pushback roundabouts get from their local community, so decided on a three-way stop with curb extensions instead, hoping that a future quick build could be an opportunity to introduce mini-circles once the community is already supportive of the guick build concept. Both Winchester and Bowling Green were able to include permanent improvements in their projects.





#### **WINCHESTER**

Winchester used the quick build to install permanent curb ramps at the intersection of KY-627/Boone Avenue and College Street. Though the project design is in progress, the selected location does not have adequate curb ramps, and any quick-build project at this location would need to address this issue. Fortunately, the city was able to cover this with their own budget, as temporary curb ramp options would have used up most of the subgrant budget. The city submitted design plans to KYTC for approval to install the curb ramps, since Boone Ave is a state-owned route, and the city installed the curb ramps by July 2025. This location would not have been on the city's radar to improve so quickly without the timeline of this temporary project sparking action. With the partnership with the district, there was a direct point of contact to someone who could provide updates and encourage the permit approval on behalf of the city.

### **BOWLING GREEN**

Bowling Green's project includes permanent improvements constructed by the city in coordination with the quick-build project. The Smallhouse Road and KY-231/Scottsville Road project site was chosen because a resident brought the dangerous conditions for people walking to the attention of BikeWalkBG and the city. To make tangible safety improvements and capitalize on the quick build's accelerated timeline, the city is installing permanent crosswalks and sidewalks at the dangerous intersection. As with Winchester, this site would not have been improved so soon without the quick build, and the city covered the permanent improvements through its own budget.

Multi-use path in Warren County. Source: BG-WC MPO.

#### **MOREHEAD**

Morehead's project site was initially chosen with the potential for long-term impact in mind. The District 9 participant originally wanted to find a project site that would align with their <u>current</u> planning work on KY 32, a study ending at US 60 in Morehead. This led to US 60 at Bridge Street being the only location District 9 was willing to consider for a project, and with only limited interventions, rather than the more impactful pedestrian safety improvements the local team had envisioned. Throughout the program, the SGA team and team leads discussed challenging District 9 to look at more creative alternatives in future planning work, knowing that this change in practice takes time. To achieve near-term safety benefits for Morehead, the team adjusted the quick build site to include both the state road and the adjacent local street, where the city would be able to add better pedestrian improvements and traffic calming. Though the project design did not end up reflecting the initial ambition of the Morehead team leads, all parties involved continue to be at the table, and there is a shared understanding of the importance of this work that can lead to better projects in the future. Additionally, the portion of the project on the locally owned road may be in place for a long time, depending on how it is received, so this may be a guick-build project that remains in place for the long-term.



# Proposals for using quick builds for lasting results

Quick-build projects are an opportunity to implement small-scale permanent improvements and to support planned long-term projects. The following ideas can help KYTC structure future quick builds for these long-term benefits. Local communities can use these ideas in working with KYTC on quick builds or can even for their own projects.

- 1. Quick build locations can align with both KYTC's project pipelines and local plans. Where small-scale improvements are already scheduled, the quick build can be installed alongside existing work. The quick-build projects are opportunities for KYTC to engage with adjacent property owners, local jurisdictions, and other partners on upcoming projects. At the same time, including a way for communities to submit requests for quick builds outside the existing project pipelines may provide opportunities for nearby residents to submit areas of concern that were not previously on the state's radar.
- 2. Use the measured outcomes from quick-build projects to inform other work. Creating a database of quick builds and lessons learned, such as those focused on speed reduction, community engagement, and safety improvement, can enable the measured effects of a project to inform other quick builds or even other capital projects. Turning each quick build into a data point can help build evidence and support for implementing Complete Streets strategies even more broadly.



A quick-build project on US 1 in Howard County, MD will inform future work. Source: Howard County.

3. Create a menu of quick build materials and strategies, including those that can be made permanent, to be referenced by KYTC staff and local partners. For example, crosswalks can be an interim measure with tape or a permanent installation with thermoplastic. Presenting strategies like crosswalks as opportunities for permanent improvement, if budget allows, can clarify the lines around a "temporary" installation and inspire creativity in what permanents can be done alongside a quick build. Once temporary safety countermeasures are established, this menu can be used to fast-track permit applications, create a library of templates, materials, and resources, and be used as a jumping off point for additional innovation, such as Connecticut's Capitol Region Guide to Community Quick-Builds and the Commissioner's Office Directive.

# Part 4: Working with small communities

State DOTs play a significant role in the transportation systems of smaller jurisdictions. States often own the highways and large roads in small communities, whereas large cities typically manage all of the roads within their jurisdiction and have the staff and funding to do so. Whoever owns the road has the final authority over maintenance practices and any proposed changes to the street design, including sidewalks and bike lanes. This has a big impact on small communities, especially when a state route doubles as a town's main street or when a highway bypass cuts through a neighborhood. KYTC manages roads in many smaller communities across the state, which is why the local jurisdictions were selected for the CSLA cohort, so that lessons learned can be applied more broadly throughout Kentucky.



### **Observations**

City size varied within the cohort, from Morehead's population of 7,000 to Bowling Green's 76,000, with Winchester in the middle at 19,000. Bowling Green was the only participating jurisdiction within a Metropolitan Planning Organization (MPO). In fact, the Bowling Green team leads were from the Bowling Green-Warren County MPO (BG-WC MPO). As MPOs are in large part intermediaries between state DOTs and smaller jurisdictions, the Bowling Green team already had extensive experience working together on large bike and pedestrian infrastructure projects. The MPO added additional capacity by assigning interns to support outreach efforts. However, as heard from the BG-WC MPO participants, involving an MPO in a quick-build project can present its own challenges, as not everyone in the MPO may be familiar with or supportive of Complete Streets and an MPO does not implement projects on its own, which requires more coordination.

Morehead and Winchester are much smaller cities, and neither is within an MPO. It is important to recognize the limitations that these smaller communities face when partnering with KYTC for a quick-build project. Winchester does not have engineering staff, so the city would not have been able to create the drawings submitted for permit approval without support from the SGA team and the local resident with engineering expertise. Morehead's team was so small that the KY Department for Public Health team member focused his support on this team to add to their capacity. There may be similar comparisons across KYTC districts: District 9 staff limitations within the planning department made it challenging for their participant to dedicate time to the quick build. On the other hand, District 3's planning team included the bike/ped coordinator, who was able to fold the quick-build project into his regular responsibilities.

Participants conduct a walk audit of Boone Ave at the in-person workshop.

## Proposals for working with small communities

The size and capacity of a community will greatly impact how a local team can participate in a quick-build project. KYTC and even other state DOTs can use these ideas, built out of observations from this program and SGA's other work, to support small communities' quick build efforts.

- 1. Tailor a quick-build program to different community sizes and capacities. KYTC supporting a quick build in Lexington or Louisville will be a very different process than in a smaller city. Working with smaller communities may involve providing additional training on foundational concepts, adjusting expectations for how polished the drawings need to be for permit approval, and even taking on some of the work within KYTC, such as data collection. Financial support for materials and staff time can also increase the capacity of smaller cities to conduct these projects. Creating suggested best practices for KYTC staff to work with small communities on quick builds can make it easier for district teams to know how to help.
- 2. Use quick-build projects as interim options for communities that can't afford a full build, but also can't afford to wait.

  Quick builds are less expensive than capital projects, and there are only so many full builds that can be completed in a year. To improve safety and access in these smaller communities before construction timelines or funds would typically allow, quick-build projects can be used as near-term options on state roads.



**3.** Scale up efforts and share resources with cohorts and partnerships. By using a cohort model to work with multiple communities simultaneously, KYTC can build efficiencies into the quick build process and help share expertise across the teams. Look to work with external partners for support, such as the state Department for Health, the Kentucky League of Cities, the Kentucky Association of Counties, and similar organizations.

# Part 5: Knowing and navigating the system

By designing and installing a quick-build project together, the local teams and DOT participants can learn to navigate existing processes and identify areas for future improvement. It's also a way for local teams to learn more about resources available at the state level; even with state DOTs publicizing their programs, databases, and other resources, it is easy for city staff to miss some of these tools, as SGA observed at the in-person workshop. One of the goals of this program is for state DOTs to be able to create a process to conduct more quick builds, to build the communications infrastructure between teams, and to create a process that is easy for the general public to find and understand.

### **Observations**

From the perspective of KYTC participants, the process was straightforward: a pre-permit review meeting introduced the quick-build concept and local team's goals to the KYTC permit review staff, and then the city applied for an encroachment permit, which gives the city permission to install their materials on the state's road. From the local team perspective, the process was less straightforward because they were figuring out how to design, install, and measure the outcomes of a quick build for the first time. Even with guidance and training from SGA, each community has to determine what this process looks like for themselves.

One challenge local teams faced in navigating the process was the inconsistent information they received from the different KYTC district teams and headquarters. For example, one district easily permitted flex posts and other barriers for delineating temporary bump-outs and multi-use paths, whereas another district would not allow materials other than paint for a bump-out. Part of what caused this difference was that district staff had varying levels of familiarity with guick builds; while some were introduced to the idea through the CSLA, others had already heard of these projects and were ready to use them to try something new. SGA heard from district staff that more specific design standards for quick builds from KYTC's Central Office would help bring everyone to the same page. For example, guidance on materials or interventions that can be used in quick builds based on road widths and speeds would be helpful in making their decisions. This goes hand in hand with leadership support, so staff have both the tools and the encouragement to pursue quick-build projects.

SGA also observed that while KYTC has a lot of resources that cities can use to plan and design quick-build projects, these tools are not always easy to find or use. One example of this is the KYTC Interactive Maps webpage, which KYTC partners presented during the in-person workshop. This tool includes KYTC's photolog of all state roads, traffic counts, and maps of bicycle and pedestrian facilities, but most of the local teams had not seen this resource before. Statewide information, like these interactive maps, can help local communities identify gaps in their active transportation networks and pursue funding, so long as they know where to look for the data. Another example is the KYTC product list, which teams used to pick materials for their projects. This list is comprehensive, but for teams looking to do their first temporary project, the wide range of materials made it challenging to narrow down their options within the project timeframe.

### Proposals for knowing and navigating the system

A clear process with easy-to-use resources can help everyone involved in a quick build navigate the process. These ideas can help KYTC create this process, with elements identified from this program and SGA's other academies. Communities can also use these ideas in developing their own process for quick builds on local roads.

- 1. Develop, publish, and advertise a standard KYTC process for quick-build projects. The process can be tailored to the size or type of community, such as MPOs versus cities while remaining applicable to all KYTC Districts. A written and easy-to-understand process, such as a flow chart, can help everyone navigate the steps and responsibilities for installing a quick build.
- 2. Expand approved materials list to include common quick build elements. KYTC maintains a list of approved materials that can be used on state roads, but they are mostly permanent infrastructure materials such as asphalt, concrete, and aggregates. A supplemental list of "experimental materials" includes a few quick-build friendly materials, but is not as widely disseminated or easy to understand. Including a specialized section for quick build materials in the approved or experimental list would simplify design and procurement for both KYTC and local projects.

- 3. Develop additional resources to support the quick-build process. This can include supplemental information for the materials list, such as pricing estimates, vendor details, typical lead times for procurement, and other relevant details to help teams plan their projects. It can also include tools like typical drawings for KYTC design engineers and permit staff to reference. A flowchart showing the steps, contacts, requirements, and necessary permits for a few common quick-build project types would help illustrate the process. Share these resources broadly so teams can start with a collective understanding of the information available from KYTC.
- 4. Emphasize community engagement throughout the process. Creating standard processes and more narrow options for materials and designs can help KYTC and local staff navigate this work, as well as help with transparency in communication, but the standard process shouldn't preclude community involvement. By engaging community members, local needs can be met quickly, and support for additional projects can be built. Quick builds can even be used as part of ongoing education about the benefits of Complete Streets, which can advance KYTC goals outside of temporary projects.

Participants conduct a walk audit of Boone Ave at the in-person workshop.



### **CASE STUDY**

### **Bowling Green**



Bowling Green, a city in southern Kentucky, participated in CSLA with BikeWalkBG, part of the Bicycle Pedestrian Advisory Committee (BPAC) in the Bowling Green-Warren County Metropolitan Planning Organization (BG-WC MPO). The city has an existing culture of building infrastructure for people walking and biking, thanks to leadership in public works. The city is located within KYTC District 3, which has experience with Complete Streets and support for this approach from leadership within the district.



The Bowling Green team presents their projects at the in-person workshop.



The Bowling Green team's goal for this program was to try their first quick-build project. Many members of the team had heard of quick builds or tactical urbanism and were eager to try this approach in their community. The team was also looking to address known safety concerns that residents had brought forward and to build momentum for more quick builds in the future.

The team included BikeWalkBG staff, a public works engineer with the city, and KYTC District 3 planning, and was supported by other city staff throughout the process. Some of the team had worked together before and the whole group was able to quickly set up a cadence of weekly meetings. This strong internal coordination was key to the successful process of this group and the large project scope they were able to pursue.

# Project site

The Bowling Green team decided to install quick builds at two locations: one at the intersection of Smallhouse Road and KY-231/Scottsville Road and one on KY-231/Morgantown Road. The Smallhouse Rd location was brought to BikeWalkBG and the city by a nearby resident who doesn't use a car and had experienced the significant safety challenges of the intersection. With only one crosswalk and unreliable call buttons for traffic lights, this intersection needed a lot of basic pedestrian safety improvements. The other location, Morgantown Rd, was recommended by District 3. There is a gap in the sidewalk along the 45 mph road, and KYTC staff at the nearby office have observed many people walking and biking along the unmarked shoulder. During the walk audit, the project team felt how uncomfortable it is to have to walk on the shoulder next to high speeds and heavy traffic. Since a sidewalk installation won't happen here for another few years, a guick build provided an opportunity for Bowling Green to implement some near-term safety improvements.

The team found they were able to pursue both project sites by calculating a budget estimate and delegating project responsibilities at the beginning of the program. Recent projects in the city had used similar materials, so with a rough idea of the project design, described below, the team could estimate how much materials would cost for each site. The team decided that KYTC could install the Morgantown Rd project and the city could take care of Smallhouse Rd. The city also decided to use this opportunity to install permanent improvements at the intersection: sidewalk extensions, curb ramps, and call buttons. A local organization, Operation PRIDE, volunteered landscaping work for further beautification of the Smallhouse Rd intersection.

### **SMALLHOUSE ROAD AND KY-231/SCOTTSVILLE ROAD**





### **KY-231/MORGANTOWN ROAD**









At the Smallhouse Rd site, the proposed design focused on updating the crossings to a higher standard of safety: adding three crosswalks to cover all four legs, fixing the call buttons and making sure they are accessible by installing sidewalks and ADA ramps, and extending the sidewalk to connect across an adjacent splitter island. Additional safety improvements include curb extensions with delineators to reduce the turning radii and shorten the crossing distance. The project also includes beautification strategies like art in the curb extensions, a painted crosswalk on the local road, and landscaping improvements. Narrowing the entrance to an adjacent bypass lane was briefly considered, but the city was not interested in changing this traffic pattern and was concerned this component would not fit within the budget.

The Morgantown Rd project turns the existing shoulder into a protected multi-use path from the end of the sidewalk at Lampkin Park to where the sidewalk begins again at Festival Drive. The shoulder is wide enough that this does not change the lane configuration on the road. Details of the design evolved over time to include art in the curb extensions by the driveways and to consider different materials for the buffer. The team considered flex-posts interspersed with rounded "armadillos," but decided on flex-posts with rubber curb stops based on KYTC input and cost.

### Share the Road. **Share your Thoughts!**

### We want to hear from you!

No matter how you move, your voice matters! The City of Bowling Green is navigating ways to increase safety and connectivity across our transportation network. Scan the QR codes below to share your feedback on proposed Quick

Build projects on Scottsville Road and Morgantown Road!

### **Smallhouse & Scottsville Road**





**Morgantown Road** 











Public engagement flyer for Bowling Green. Source: BG-WC MPO.

#### DATA COLLECTION AND ENGAGEMENT

- One of the project sites was based on the request of a nearby resident who relies on walking, biking, and transit, and had experienced the safety issues at the intersection.
- Flyers inviting community members to take an online survey were distributed at both project sites, with the support of the engaged resident at Smallhouse Rd and an MPO intern, who developed the survey and graphics.
- Bicyclist and pedestrian activity was recorded at both project sites by MPO interns.
- The city conducted a traffic study to measure the number of vehicles and their speeds using tubes and radar.
- A page on the MPO's website introduces the project and invites people to take a survey to submit their input on the project sites.

## What's next?

The Bowling Green team's next steps are procuring and installing the materials, painting the artistic components of the design, and continuing community engagement and data collection. The team is looking to conduct more quick builds in other locations, ideally reusing some of the materials selected for this project, such as the curb stops. By designing these projects for long-term improvements, many of the safety benefits of this project will last beyond the quick build.

### **CASE STUDY**

### **Morehead**



Morehead is a small city in eastern Kentucky that participated in KYTC's recent Creating Vibrant Communities (CVC) technical assistance program. Through this program, KYTC and several consultants helped the city envision a plan for downtown Morehead to connect transportation, land use, and economic development. By participating in CSLA, Morehead and KYTC hoped to build on this planning work to bring near-term improvements to the city, rather than having to wait for greater amounts of funding for larger projects.

The Morehead team had two key goals in this project: improve safety for people walking and build the necessary relationships to do so. US 60 runs through Morehead as Wilkinson Boulevard, and improving crossings along this road were part of the city's CVC plan. The CVC process revealed the community's need for



Morehead project design at the in-person workshop.



a safer and more comfortable crossing at US 60 because people who live in the neighborhood have to cross the highway to get to the rest of the city and city park and city hall are accessible only by crossing US 60. The Morehead team aimed to work together on shared goals throughout the process and to remain open to working together more in the future.

This team included a city council member, city staff from planning and public works, a representative from the KY Department for Public Health, a local resident group, and District 9 planning. The mayor, police chief, and parks department also participated throughout the process. The council member had learned about Complete Streets and was eager to bring this approach to Morehead, but the city staff had no background in this approach and the District 9 staff had only had the previous KYTC training with little evidence of applying Complete Streets principles to their work since. This proved to be a challenge, as a lot of work had to be done to get people on board with trying a quick build. For example, any reservations the District 9 planning representative had would make it a challenge for them to promote this project within District 9. This factored into the relatively limited scope of the Morehead project; keeping KYTC District 9 involved in the process was essential, which required limiting the site and scope of intervention to the district's terms.

# Project site

The city's central goal of improving pedestrian safety across US 60 narrowed the potential project sites on this highway. The site District 9 was willing to consider on US 60 was the intersection at Bridge Street. A KYTC planning project ends at this intersection, so the quick build could have let District 9 try something new at the intersection to incorporate into future design and construction work. Bridge St crosses Triplett Creek, connecting apartments, the city park complex, and city hall on one side of US 60 to Main Street and Morehead State University on the other. A challenge for people walking this route is the narrow bridge over Triplett Creek, which makes a nearby pedestrian walkway on a dam a more comfortable choice. This path doesn't go to the intersection, but if someone is walking in a straight line they will cross US 60 midblock, straight to Union St. As this is the most direct route, midblock crossings here are anecdotally common.



Installing a midblock crossing was beyond what District 9 could agree to, so the best case for this project would be to improve the safety and comfort at the Bridge St intersection so much that people would choose to cross there. The CVC proposal for this intersection included safety strategies like pedestrian islands, reduced turn radii, and shortened crosswalks. Though District 9 had been comfortable with these recommendations in the CVC report, when it came to trying these strategies with a quick build, there was an unwillingness to test any temporary lane reconfiguration that would impact the existing flow of traffic. The District 9 participant proposed reducing only one turning radius in the quick build installation, but did offer to measure vehicle speeds on US 60 and to consider adjusting signal timing to give people more time to cross the highway.





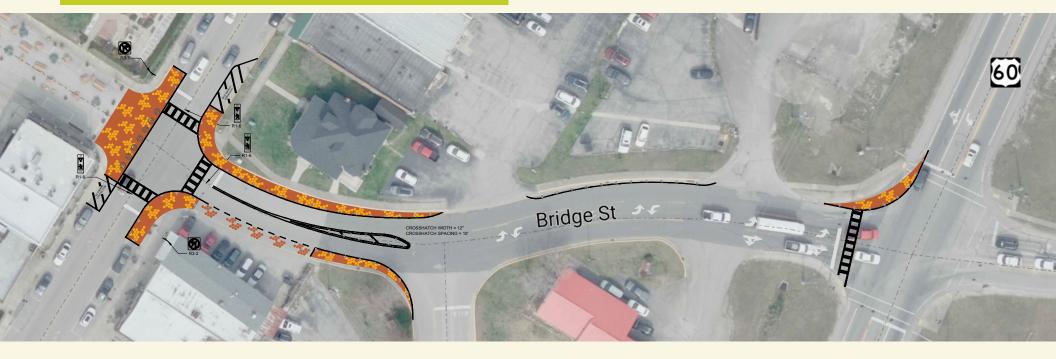




The Morehead team conducts a walk audit of Bridge St. Source: Troy Hearn.

Conversations with SGA revealed District 9's hesitation to try more with this project was due to a lack of buy-in across the district. The program participant said more tools or standards to reference in making these design changes would have helped. However, tools already exist to design intersections to be safer for people crossing, even intersections on higher speed roadways like US 60's 45 mph, but these tools did not appear to be in regular practice at District 9. The district's limit on scope impacted the project's ability to include pedestrian improvements in Morehead, and introduced some challenges to the collaborative process. Fortunately, KYTC headquarters team members helped address the concerns and maintain engagement from all parties on the project.

### BRIDGE ST FROM MAIN ST TO US 60/WILKINSON BLVD



To keep cooperating with District 9 while also getting quick build benefits to Morehead beyond one changed turn radius, the SGA team invited Morehead to expand their project site along Bridge St, turning the US 60 installation into an entry point for a new road configuration. East of the highway, challenges to working on Bridge St included unclear ownership of adjacent properties and upcoming construction project timelines: work at the water treatment plant and the university will change the sidewalks soon. West of the highway, Bridge St connects US 60 to E Main St and then turns into an open street, as an entrance to downtown.

The design for this site included lane narrowing on Bridge St, daylighting and reconfiguring the intersection at E Main St, and improving crosswalks. Both a mini circle and a three-way stop were considered, but the city selected a three-way stop out of concern that a roundabout would be unpopular with residents. The team is hoping that the quick build will be well-received by the community so that a temporary mini-circle may be possible in the future. The project will include art in the curb extensions, with one potential design of a hexagonal pattern reminiscent of the city's <a href="Turtle Walk">Turtle Walk</a>. The side of the intersection next to the pedestrian street will be brought in further with paint and planters, to provide more distance between traffic and the open street.



The Morehead team's next steps are procuring and installing the materials, conducting community engagement, and continuing data collection to measure the project outcomes. The team is planning on making adjustments to the installation to respond to community input, but to keep the project in as long as possible to maintain the safety benefits.

Decisions throughout the project were made with an eye on the shared long-term goals of the participants. By staying at the table, everyone worked together so that they could continue to collaborate after this quick build. By making design choices within the limits of District 9 and the community's preferences, the door to future quick builds in Morehead and more robust Complete Streets work in District 9 is still open. Some new ideas are already showing up; District 9 is open to crosswalk improvements on US 60, which they had not been open to before, and the city is interested in reducing the speed limit on Bridge St to reflect the new street design.

### DATA COLLECTION AND ENGAGEMENT

- Recent community engagement from Creating Vibrant Communities was used as the starting point to understand the existing needs and priorities of local residents.
- For baseline data collection before project installation, KYTC District 9 offered to conduct a pedestrian count and a speed study on US 60 and the city is measuring speeds on Bridge St and Main St. Speed data will be collected when the quick build is in place to provide a comparison.
- Project installation will include engagement opportunities such as working with a local art group to paint the bump outs and decorating the planters with elementary school students.
- The city is planning on using volunteer time to count pedestrian and bicyclist activity at the project site. Volunteers may conduct intercept surveys once the project is installed.



Aerial view of Main St. Source: City of Morehead.

### **CASE STUDY**

### Winchester



Winchester is a small, growing city in central Kentucky, within KYTC District 7. The Daniel Boone bike route, <u>USBR 21</u>, runs through the city, but there is limited bike infrastructure on the route. Even the sidewalk network has gaps and is in inconsistent condition, as the adjacent residents are responsible for their upkeep. The city staff is small, with limited experience in Complete Streets, so the goal of this project was to introduce this approach to the city through a quick build. District 7 has done a lot of Complete Streets work and their region encompasses Lexington, which has done <u>many quick-build projects</u>, so there was familiarity with this approach from the district and eagerness to try a quick build.





Community engagement in Winchester. Source: Clark County.

The Winchester team included local residents who were subject-matter experts in Complete Streets and transportation engineering, a representative from Walk-Bike Clark County, District 7 planning staff, and city staff from the public works department, planning, and the city manager's communications office. The leadership and experience from the local residents and Clark County staff were particularly vital in sparking the city's involvement in CSLA and setting high ambitions for the project. The team's goals aligned with the program goals: installing a quick-build project to improve safety on a state route, learning and improving the processes to do so, and building support for this work, especially from elected officials. The team also aimed to empower the community to be more involved in design projects and infrastructure improvement.

# Project site

The team selected KY-627/Boone Avenue and College Street as the project site. This intersection is in a residential neighborhood, but Boone Ave is wide, encouraging fast speeds and enabling trucks to bypass their designated routes by using Boone Ave as a shortcut to the interstate. This corridor is a primary route to the nearby junior high and high schools, and it cuts a dividing line between the city's Main Street and nearby amenities like the community center, library, and park. There is no bike infrastructure along this road, even though it's part of USBR 21, and this intersection lacks crosswalks and sufficient ADA ramps. By starting with this intersection, the team hopes to eventually build bike infrastructure and pedestrian safety improvements along the whole corridor. One of the local residents on the project team proposed this site as they live nearby and see the safety hazards every day.

Since one of the team's goals was to build support for the quick-build approach, they looked for a project with a scale and scope that would most likely be welcomed by the community. Other state routes through the city were considered, but those have less available road width and higher daily traffic, so would have been more challenging to install a temporary project that could garner lots of support. The Boone Ave site also had the benefit of being an easier entry point to the city and District 7 working together on a quick-build than the other options, due to these relatively lower constraints. The project site selected is located in a neighborhood where residents are actively engaged and have a track record of participating in efforts to improve road safety.

Aerial view of Boone Avenue and College Street. Source: City of Winchester.



### **KY-627/BOONE AVE AND COLLEGE ST**





# **Project design**

The project team started the process with an idea for the long-term vision of Boone Ave: slower speeds, safer crossings, and potentially a separated multiuse path for people to walk and bike. The design process involved both big-picture visioning of what a fully built capital project could do for Boone Ave and strategizing a range of quick-build projects, appropriate for different budgets, to get closer to that vision.

At the Boone Ave and College St intersection, the team proposed new marked crosswalks and bumpouts to shorten the crossings and slow vehicular speeds at the intersection. One of the new crossings does not have ADA ramps, so the team looked at installing temporary curb ramps as part of this project. For a larger quick-build, the design included temporary protected bike lanes on both sides of the street along the corridor, from Belmont Ave to Maple St as a way to narrow the roadway to slow vehicular speeds while also offering dedicated space for biking. Residents saw the design at a local meeting to offer input, which will further shape the proposed design.

Temporary curb ramps are expensive and would have taken up a significant amount of the project funds. The city decided to install permanent ramps at this intersection and to cover that work with their own funds. Coordinating with the District 7 partner in the project, the team was able to expedite KYTC's encroachment permit review to be able to install the ramps quickly. Without the focus on this intersection for the quick-build project, this improvement would not have been on the city's radar, and the shared commitment to improving this intersection for everyone enabled the city to take on this additional work and fit this project into their public works budget.



The project design for this site is still in development, and will be finalized with the input from a recent community meeting and confirmation of the materials cost. With the selection of a project site that can build support for more quick builds, the team hopes the momentum from this work can lead to more safety and active transportation improvements on Boone Ave and beyond, in partnership with District 7 and Walk-Bike Clark County.

#### DATA COLLECTION AND ENGAGEMENT

- Data on existing conditions came from a variety of sources across the team. The Clark County participant accessed the database of crash information and the local resident acting as a technical advisor was able to provide additional traffic data and roadway information from KYTC's GIS planning website. Public works partnered with the police department to position counters to collect a snapshot of daily vehicular counts and speeds.
- The team gathered public input on the project at a meeting near the project site, to learn more about the neighborhood's concerns with Boone Ave and to gather their ideas about the quick-build project. Though not all their concerns can be met with a temporary installation, the neighbors are hopeful this project can lead to more change.
- A page on the city's website introduces the project and invited people to take a survey to submit their input on Boone Ave conditions.





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