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Complete Streets in the Southeast: A tool kit

AARP Government Affairs, State Advocacy & Strategy Integration
Stefanie Seskin, National Complete Streets Coalition, Smart Growth America
Colin Murphy, National Complete Streets Coalition, Smart Growth America
Laura Searfoss, National Complete Streets Coalition, Smart Growth America
Craig Chester, Smart Growth America

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AARP, 601 E Street, NW, Washington, DC 20049

http://www.aarp.org/livable

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Introduction

Foreword from AARP

The State Advocacy & Strategy Integration (SASI) team has created this Complete Streets in the Southeast advocacy tool kit to assist AARP state offices in successful efforts to enact Complete Streets policies. We have highlighted examples of states and communities in the Southeast that are successfully engaging in policy adoption and implementation. AARP's public policy supports local and state jurisdictions pursuit of transportation plans that accommodate all users, including pedestrians and bicyclists.

Much of the nation's work on road safety has focused on the needs of the drivers and passengers of motor vehicles, but the notion of planning for Complete Streets addresses safety from the perspective of all users. Complete Streets are designed and operated for safe, comfortable and convenient travel by pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Such programs are augmented by transportation networks that provide a variety of services, thus allowing consumers a broad choice in how to travel safely and in line with their personal preferences, schedules, and budgets. The focus of Complete Streets initiatives has been on changing transportation agency policies and procedures so that these multimodal accommodations become a routine part of project development.

Using this tool kit

This document offers guidance and materials for use by Complete Streets supporters in the Southeast United States. It begins with an overview of Complete Streets and how the concept has been adopted to the Southeastern context. Some advice on building support for Complete Streets policies and practices is provided, followed by a brief discussion on the types of activities needed to implement Complete Streets successfully.

A variety of resources based in real examples from the Southeast complete the tool kit: case studies of six communities; useful fact sheets for each state; a link to a downloadable introductory presentation; sample letters to the editor and editorials; a document audit; a model implementation plan from Cobb County, Georgia; a template implementation plan; an excerpt from Charlotte, North Carolina's six-step decision-making process; and a worksheet to model that process locally.

Taken together, this tool kit provides readers with tools to effectively support the adoption and implementation of Complete Streets in their own communities.

About Complete Streets

Central to the creation of livable communities is the possibility for everyone, regardless of age or ability, to travel safely. Yet, many of our nation's roads do little to meet the needs of the growing population of older Americans. The U.S. Census Bureau projects that by 2025 nearly one in five Americans, or 62 million Americans, will be over the age of 65. While many of these older adults will continue to drive, some will seek other transportation options and find them lacking.

Complete Streets policies and practices offer the opportunity to improve the travel options of people of all ages. Planning, designing, building, maintaining, and operating roads that respond to the needs of all users will provide older adults a variety of options for getting around, whether

walking, taking public transportation, driving their own cars, or sharing rides with family and friends. By following a Complete Streets process, government agencies can balance the sometimes-competing requirements of older drivers and older pedestrians by slowing vehicles down where necessary, by creating an easily navigated multimodal network of streets, and by improving visibility.

Complete Streets is shorthand for approaching transportation decisions with the intent to provide safe, comfortable, and convenient options for travel by all modes—walking, bicycling, driving, and taking public transportation—and by all users, regardless of age, ability, income, race, or ethnicity. It is a collaborative process that involves multiple community agencies or departments—such as planning, public works, transit agencies, and health departments—and members of the public, including AARP members, smart growth organizations, bicycling and walking advocates, representatives of the disability community, business owners, and other stakeholders. Together, these groups work to shift the goal of transportation projects from "moving automobiles quickly" to "providing safe and efficient access for all users."

Most often, this shift is embodied in an adopted Complete Streets policy, which provides a vision of community mobility, sets new goals for transportation investments, and gives some direction in how to accomplish those goals. Such high-level direction should come from elected officials, with the support of community stakeholders. Planners and professional engineers then have flexibility in developing transportation solutions that best serve the policy's goals. A cooperative approach with street designers and traffic engineers is critical to effective policy implementation.

Complete Streets in the Southeast

The Complete Streets approach has been embraced by cities, counties, and states across the United States, including across the nine states that comprise the Southeast: Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee. Of the more than 600 Complete Streets policies in place across the country, almost 20 percent (a total of 115) can be found in this region. Almost every state has supported Complete Streets in some form at the state level; Alabama and Arkansas are the only states without policies in this region. Over 7.2 million people live in cities that have a Complete Streets policy.

According to an analysis by the National Complete Streets Coalition, three agencies in the region have exemplary policies:

- Fort Lauderdale, FL – Complete Streets Policy
- Birmingham, AL – Complete Streets Resolution
- Hillsborough County (Tampa, FL area) Metropolitan Planning Organization – Resolution 2012-1

All of these policies are a result of a growing understanding that streets need to do more than quickly move people in cars: they need to provide safe routes for people of all ages and abilities who are walking, bicycling, taking public transportation, or driving a car or truck to their destinations. They need to support local businesses by encouraging people to get out of their cars and look around. They need to be an asset to community members who want a high quality of life and appeal to tourists. Gradually, over time, these communities will transform their streets to meet the increasingly multimodal needs of residents and visitors and support the unique character of their neighborhoods.

Building support for Complete Streets

Complete Streets initiatives thrive with support from community members and organizations. In her recent book, *Completing Our Streets: The Transition to Safe an Inclusive Transportation Networks*, Barbara McCann, founder of the National Complete Streets Coalition, discusses three requirements for successful Complete Streets initiatives: political will; a clear path to change; and ownership within the transportation agency. Advocates can support all three. Below are some tips to enrich local efforts.

Activities to support Complete Streets

Connect with other community organizations. Complete Streets can offer benefits to almost everyone in the community, providing opportunity to build alliances with a variety of community organizations. Many local Complete Streets coalitions include representatives from schools, public health agencies, AARP, businesses, disability advocates, and bicycling and walking organizations. Meet with these organizations, share stories, and discuss the possible Complete Streets benefits specific to their interests. Connect with other community members to build a stronger case for Complete Streets to decision-makers. In the long term, it can mean future street projects better reflect the needs of all types of people and improve opportunities for funding from state and federal governments and foundations.

Use the media. A public communications strategy with consistent and positive messages about Complete Streets is important to build community and political support. The many partners in a local Complete Streets effort should use newspapers, radio, and TV to share their own stories and explain why safe, multimodal streets are important to them. In addition to letters to the editor, supporters can offer to write regular opinion pieces or regularly pitch stories to local reporters. While the many potential benefits of Complete Streets can be discussed, it is best to have one common message across all communications, such as safety or community character. Work with partners to discuss which messages make the most sense given local political context and pressing needs. Encourage local elected officials to submit opinion pieces or distribute press releases in support of Complete Streets efforts.

Celebrate success. Public, positive feedback for local successes, no matter how small they seem, is critical for agency ownership. Some organizations announce their own Complete Streets awards. In Lee County, FL, BikeWalkLee recognizes public and private local leaders through its annual “Complete Streets Champions” awards. State and regional chapters of professional organizations, such as the American Planning Association, often accept nominations for their own awards programs. So, consider submitting a recent plan or project. Often, local partners have ties to national organizations that can laud local efforts in national newsletters and media.

Prepare for both short- and long-term advocacy. Complete Streets is a long-term process to change internal practices and community streets. As such, advocates must plan for on-going activities that include both short-term commitments and long-term engagement. Some partners will be most interested in events, such as Open Streets[1], or participating in a specific street project process. Others will be able to invest more time into ongoing efforts, such as continued task force meetings or joining relevant community planning committees.

Be a resource. Advocates outside the transportation agency must rally community members when implementation activities are not occurring or inappropriate processes and designs are followed. However, they must also be able to help agency staff improve their methods. In addition to the resources provided by the National Complete Streets Coalition, become versed in the latest best practices by establishing connections to advocates in neighboring states or regions. Understand the limitations, in time and resources, that local agencies face and offer to lend a hand where appropriate, such as facilitating meetings, helping to write reports, and leveraging connections to garner political support on funding applications.

Communicating the Complete Streets message

In the greater Southeast, the following messages have been most successful in garnering support for safe, multimodal travel. Work with partners to develop consistent messages that show the importance of Complete Streets locally.

Community character can be enhanced through Complete Streets. Complete Streets is not a one-size-fits-all solution to street design. It is a careful consideration of current and planned buildings and travel needs, creating flexibility in design solutions. Complete Streets can support a community that is looking to support its downtown, as in Decatur, GA, or when transportation demands change, as when industrial traffic decreases or when population is expected to grow.

Walkable and bikeable neighborhoods are good for local economies. Business owners and homeowners alike benefit from investments in walking and bicycling. An Atlanta region study found that walkable urban neighborhoods attract new development and see a rise in rent premiums. Hilton Head Island, SC notes that bicycling leads to tourist spending almost as high as golfing does. A reconfiguration to Jefferson Avenue in the small town of West Jefferson, NC, helped spur $500,000 in private investment and a significant drop in commercial vacancies along the street.

Trails can be for recreation and transportation. While many multiuse trails are used for recreational bicycling, walking, and running, they can be a key connection for people looking to walk or bicycle for transportation reasons. Trails need to connect to destinations and homes, as well as to streets equipped with comfortable sidewalks and bike facilities. In communities where neighborhoods are more distant, well-planned trails are an attractive alternative to traveling alongside high-speed arterials.

Complete Streets are for your children, your grandparents, and everyone in-between. Humanizing those people who stand to benefit from Complete Streets is key to showing its importance. Share stories of mothers looking to bring their children to school and get some exercise at the same time. Encourage a person who uses a wheelchair to show how important accessible sidewalks are. Engage with older adults who want options to maintain independence as they age. The more decision-makers see the demand for safe, multimodal streets, the more they will consider other perspectives when making street design decisions.

Complete Streets are safe streets. Many regions in the Southeast suffer from high pedestrian fatality and injury rates. Many times, these deaths can be prevented through street design that considers the needs of people walking and bicycling, in addition to those driving. The Federal Highway Administration notes several common Complete Streets solutions as proven safety countermeasures: medians and pedestrian crossing islands, road diets[2], roundabouts, and

corridor access management.[3] In Georgia, road diets, medians and crossing islands are central strategies shared in Complete Streets trainings for transportation professionals.

Locally created educational resources

The below resources were developed by local organizations and agencies to promote and celebrate Complete Streets policies and practices appropriate in their state and local environment. While this list is not comprehensive, it includes tools worth emulating at each phase of Complete Streets campaigns.

Georgia
Complete Streets Workshops, featuring experts from the Georgia Department of Transportation, the City of Atlanta, Alta Planning and Design, and Georgia Bikes: http://www.georgiabikes.org/index.php/blog/313-cs-wkshps-success

Florida
A variety of resources on Complete Streets and related topics, including reports, articles, and other tools to model from BikeWalkLee: http://www.bikewalklee.org/resources.html

Louisiana
Complete Streets Policy Manual produced by Center for Planning Excellence's CONNECT Coalition, the University of New Orleans Transportation Institute, and AARP: http://www.smartgrowthamerica.org/documents/cs/resources/louisiana-cs-policymanual.pdf

Walk + Ride: A Resource Guide to Funding Pedestrian, Bicycle and Complete Streets Projects in Louisiana produced by the Center for Planning Excellence and the Louisiana Public Health Institute: http://cpex.org/downloads/pedbikefunding

North Carolina
Resources, trainings and responses to frequently asked questions, compiled by the North Carolina Department of Transportation: http://www.completestreetsnc.org/

West Jefferson, NC's successes are discussed in this video: http://youtu.be/7t1luy2QVGk

Charlotte, NC's East Boulevard stars in this informational video from the City: http://www.youtube.com/watch?v=RXcDFeKsMAk

South Carolina
Complete Streets Advocacy Manual produced by Eat Smart, Move More South Carolina: http://www.smartgrowthamerica.org/documents/cs/resources/eatsmartmovemore-sc-cs-advocacymanual.pdf

Tips from the Palmetto Cycling Coalition on partnerships and institutionalizing Complete Streets: http://pccsc.net/tips-for-local-complete-streets-advocates/

1 Open Streets temporarily close streets to automobile traffic, so that people may use them for walking, bicycling, dancing, playing, and socializing. For more information on the concept and how to plan an event in your community, visit http://openstreetsproject.org/.

2 Road diets are defined as projects that reduce the total number of automobile lanes, allowing that space to be reallocated for other uses, such as parking, bicycle lanes, and/or crossing islands. The “classic” road diet typically converts an undivided four-lane roadway into one with two through lanes and a center turn lane.

3 More information about proven safety countermeasures can be found at http://safety.fhwa.dot.gov/provencountermeasures/index.htm.

Implementing Complete Streets

To successfully implement Complete Streets policies, focus must shift to the inner workings of the transportation agency. Supporters are often tempted to look for success via upcoming projects: does the next project out the door include a bike lane and a safe crossing for transit users? However, a project-by-project focus requires a tremendous amount of time and effort, with no foreseeable end to this struggle. Though an overarching vision and goals may have been articulated in a Complete Streets policy, the day-to-day decisions a transportation agency and community leaders make in funding, planning, design, maintaining, and operating a transportation network have not likely been reviewed and revised to support Complete Streets.

The National Complete Streets Coalition has identified five kinds of activities to reorient a transportation agency's work to fully and consistently consider the safety of all users:

- **Planning for implementation**: Assessing current procedures and activities and planning for the full implementation of Complete Streets
- **Changing procedure and process**: Updating documents, plans, and processes used in transportation decision-making, from scoping to funding, and creating new ones if necessary
- **Reviewing and updating design guidance**: Updating or adopting new design guidance and standards to reflect current best practices in providing multimodal mobility
- **Offering training and educational opportunities**: Providing ongoing support to transportation professionals, other relevant agency staff, community leaders, and the general public so that they understand the Complete Streets approach, the new processes and partnerships it requires, and the potential new outcomes from the transportation system
- **Measuring performance**: Creating or modifying existing metrics to measure success in accommodating all users on the project and network levels

Planning for implementation

A thoughtful implementation process identifies all the systems, routines, silos, and assumptions that, together, have created the current transportation system that favors vehicular movement. Communities have found it easier to understand the world of possible activities by assessing and understanding the current procedures and processes; planning for clear next steps; and establishing a person or group of people who can help guide implementation efforts within and across departments and agencies.

This tool kit includes a template implementation plan that begins with an audit of documents, procedures and processes (see page 66). The audit also will help identify the departments, positions and/or outside partners who use those tools.

Complete Streets implementation should include strengthening relationships between city departments; between elected officials and departments; and between residents and transportation professionals. Some communities take their first steps in this process through a formal Complete Streets Workshop. Others bring people from different agencies, departments, and interest groups together as part of a committee or advisory board charged with implementing the policy.

Creating a formal implementation plan can capture the energy of the policy adoption campaign by engaging the many stakeholders in the shift to Complete Streets implementation. Civil servants and appointed leadership across the agency, from planners to engineers to maintenance staff, should be leaders in developing the plan with encouragement and help from an inclusive group of relevant agencies, community organizations, and elected officials. An implementation plan provides the opportunity to assess current practices, to identify needed changes, to assign responsibility for making those changes, and to create estimated timelines. The community can use the resulting document as a tool to communicate its work with other agencies, with elected leaders, and with the public.

An excerpt from Cobb County, GA's Implementation Plan is included in this tool kit (see page 72). A model for other communities, the plan identifies key areas for integrating Complete Streets into the everyday workings of the County, related documents in each, and opportunities for better coordination. Importantly, it sets clear immediate, mid-term, and long-term goals. The full plan is available at: http://www.smartgrowthamerica.org/documents/cs/impl/ga-cobbcounty-implementationplan.pdf

Lee County, FL developed a similar format for its implementation plan in 2010. With action areas, specific steps and outcomes, its plan was based on language in the County's Complete Streets resolution. It provides a template for future implementation reports by defining tasks early in the process. Download it from: http://www.smartgrowthamerica.org/documents/cs/impl/fl-leecounty-actionplan.pdf

A template implementation plan can be found beginning on page 68. It builds upon the findings of the Complete Streets audit by prompting a review of those documents, processes, and procedures for necessary changes and translating implementation goals into immediate, mid-term, and long-term tasks.

Changing process and procedure

Changing the everyday transportation planning and engineering decisions is essential for Complete Streets success. It is challenging, but it is the only way to guarantee that Complete Streets plans or new design manuals do not collect dust. Process changes will be most successful if the overarching Complete Streets goals are clear when developing the policy and if transportation staff members have embraced the new goals.

To change processes, implementing agencies must review the rules, procedures, and habits that have typically guided them. Facilities for bicycling, walking, and taking and operating public transportation are simply not in some plans, codes, manuals, and other guiding documents. They can—and must—be added. Completing an audit of these guiding procedures and documents is a good way to systematically identify barriers and new opportunities.

Implementing Complete Streets successfully requires inclusive decision-making processes. Simply bringing the right people together to discuss projects in light of Complete Streets is an important procedural step. It requires attention to who is involved with transportation projects as well as who should be involved. This entails bringing together departments and agencies that may not have worked closely in the past, as well as engaging with advocacy organizations and residents in a meaningful way.

Complete Streets requires that the maintenance and operation procedures be updated to look beyond automobile movement. Commonly, the only selection and design criteria for these projects are pavement condition and keeping costs low. However, such projects are often the most important—and frequent—opportunities to quickly create change within communities, since larger construction and reconstruction projects may take years to plan. Changes made during maintenance and operations adjustments are often inexpensive and tied to work that is already necessary. Transportation agencies may need to change their processes so they can plan ahead to take advantage of these opportunities. By aligning a repaving schedule with a transportation plan or adopted corridor plans, an agency can incorporate bicycle lanes, clearer pedestrian crossings, or improved parking at low cost. Further, community groups can be consulted ahead of planned repaving projects to suggest changes.

An agency committed to Complete Streets will need to make changes to the way it selects its transportation projects. Communities that rely on automobile Level of Service (LOS) should consider alternatives, such as relaxing LOS standards in some areas or at certain times; creating a different type of LOS that applies to all other modes; or switching to entirely different measurements such as Auto Trips Generated. Agencies, especially metropolitan planning organizations, can employ a points system in selecting projects that reward multimodal inclusion. Equity—ensuring projects are distributed across neighborhoods regardless of income or ethnicity—must be considered to avoid building out a great network in one neighborhood but not in the next.

The Nashville Area Metropolitan Planning Organization aligned its project selection with regional goals by emphasizing livability, accessibility, safety, and health in evaluating projects. The Candidate Project Application Form, which is required for projects to be accepted in the 2035 Regional Transportation Plan that governs spending, asks agency sponsors about sidewalks, crosswalks, bicycle lanes, transit accommodations, in addition to automobile improvements. Of the evaluation criteria then applied to projects, points are awarded specifically for multimodal improvements, crash reduction, health, and equity.[1]

New, systematic project development processes can unify and clarify decisions made for capital projects, large and small, and ensure Complete Streets outcomes. The Charlotte Department of Transportation created a six-step process in their *Urban Street Design Guidelines*. The process starts by evaluating the existing land use and transportation context of the project; moves on to identifying gaps and deficiencies and defining future objectives; and then recommends a street classification and deliberates the tradeoffs that might need to be made. An excerpt from the *Guidelines* is included in this tool kit on page 75. The tool kit also includes a worksheet modeled on Charlotte's process that prompts a local project team to consider existing and future contexts and consider all perspectives.

Reviewing and updating design guidance

If an agency's design guidance is not supportive of flexible, context-sensitive, and multi-modal approaches, it can be the largest barrier a community faces. A flexible design approach can empower planners and engineers to develop design solutions that balance the needs of many users and support the surrounding neighborhood. Such guidance goes beyond standard cross-sections to create new ways to connect land use and transportation needs, similar to the Charlotte model discussed above. Current best practice directs creating new street typologies that provide

greater nuance than is available through the traditional functional classification system, which defines roads exclusively by their function for automobiles.

Some communities choose to undertake a complete rewrite of their manuals, usually accompanied by developing new procedures and producing training for staff. However, design manual re-writes can be expensive and time-consuming, or even impossible for smaller municipalities. A growing number of communities have adapted national design templates, such as the Model Design Manual for Living Streets and Complete Streets, Complete Networks. These templates have done the "heavy lifting" in creating professionally tested designs and processes, based on deep research of best practices, and presenting the results in a compelling format. In some regions, such as Florida's Broward County, an active public health community has helped facilitate the process of adapting this model guidance for local agencies.

Others choose to augment in-house guidance with national and state resources. Traditional primary resources developed by the American Association of State Highway Transportation Officials offer the design flexibility needed to produce Complete Streets outcomes. However, other recent national guidance from other organizations is more nimble in responding to current trends and best practices. In August 2013, the Federal Highway Administration (FHWA) issued a memo encouraging agencies to use the Urban Bikeway Design Guide from the National Association of City Transportation Officials (NACTO) and Designing Urban Walkable Thoroughfares, from the Institute of Transportation Engineers and the Congress for the New Urbanism. These guides, according to FHWA, "help communities plan and design safe and convenient facilities for pedestrian and bicyclists." In late 2013, NACTO released its Urban Streets Design Guidelines, building on its bikeway guide to include the full public realm, interim design strategies, multimodal intersection treatments, and "design controls"—the underlying criteria that ultimately shape design decisions.

The design guidance used on city-initiated projects should be incorporated into the review and approval process for streets modified or built by private developers. Doing so ensures all new roadways and planned developments are aligned with the community's Complete Streets goals.

Taken alone, updating design guidance may not be enough to change the everyday workings of an agency. Trainings, changes to procedure, and creating an inclusive process are vital complements to design manuals.

Offering training and educational opportunities

A successful Complete Streets initiative requires ongoing education and training. Planners, engineers, consultants, and other agencies need a thorough understanding of new procedures. Elected officials need ongoing engagement to understand how the general policy goals will be translated into projects on the ground. Working with the public to learn what they want out of their streets and what is happening to their roads is essential for implementation to be successful.

Many communities employ a workshop approach to help transportation staff understand and embrace the intention behind Complete Streets. They hear how this approach works in other communities and how it fits into their professional goals and standards. The best messengers for these sessions are professional peers; engineers hear directly from other engineers, planners from other planners. Some workshops are designed to pull together additional agencies and

stakeholders, including transit, public health, advocacy organizations, and other community partners.

Agency staff may also learn more about Complete Streets by attending professional conferences, via webinars, or through on-the-job events that encourage inter-departmental dialogue. Additional technical training should be part of regular professional development.

Opportunities for elected officials, involved stakeholders, and the public to learn about Complete Streets in the community must be ongoing. Transportation staff and Complete Streets supporters need to be able to communicate how the proposed projects can benefit the community and nearby residents and businesses, as well as how incomplete streets negatively affect mobility and access to schools, offices, and shops. Regular updates on goals and successes are key. Activities, such as walking audits and bicycle tours, mini-workshops with high school students, field trips to neighboring communities, and other types of "experiential" learning, have been helpful in building support and camaraderie among staff, elected officials, and community members.

Measuring performance

Complete Streets success demands on creating and using new performance measures for transportation projects and the transportation system. Many commonly used measures reward improved automobile travel, without accounting for the impact on other modes or measuring the needs of those other modes in any meaningful way. Multimodal metrics help agencies ensure that their built projects are achieving their Complete Streets goals—and provide opportunity to celebrate successes. However, traditional measures can be difficult to change or adapt to multimodal needs, which has meant that very few agencies have tackled the creation of new performance measures in a systematic way.

There are relatively easy ways to demonstrate Complete Streets success. Communities can measure progress by simply counting the facilities they are building, such as blocks of new or repaired sidewalks; number of bus stops with shelters; miles of new bicycle facilities; and installation of pedestrian countdown signals. Communities can also account for maintenance activities such as repairs to curb ramps and repainted bicycle lanes or crosswalks. Tracking such facilities demonstrates that the community is making on-the-ground changes each year. If packaged and publicly available at the close of each year, these numbers can add to a community's efforts in improving education and awareness of Complete Streets.

A growing number of communities are counting the number of people walking and bicycling. Such counts traditionally have not been taken in most communities on a regular basis, though new tools and techniques have made this a more common activity today. Monitoring non-motorized data allows jurisdictions to monitor trends across the network and along key corridors.

Once a community has established transportation-oriented performance measures, transportation staff can work with other agencies and departments to link them to other community goals such as long-term improvement in public health and economic growth. Such measures require collaboration with and leadership from other departments, sectors, and often universities. Regular reports are both a communications tool and an accountability tool. Reports allow for transparency in the implementation process, support educational efforts about Complete Streets, and keep an agency on track. Reports are also a great way for communities to celebrate their achievements.

Such reports are shared via a department's website, presented to Council, or otherwise made public. They often include an annual update on performance measures set within the Complete Streets policy document or transportation plan. They may also provide an update on progress in implementation, based on requirements from the policy document or as decided during the implementation planning stage, and include information about newly planned or completed projects and funding allocations.

Since 2010, Lee County, FL has published annual reports on implementation of Complete Streets. Publicly available, the reports detail accomplishments of the last year, including changes to processes and plans across agencies and any awards granted for the County's efforts. Detailed and well organized, these reports are models for other communities across the country.[2]

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1 For more information, visit http://www.fhwa.dot.gov/livability/case_studies/kansas/index.cfm.

2 To read the reports, visit http://www.lee-county.com/gov/dept/sustainability/completestreets/Pages/ImplementationReports.aspx.

Case studies and fact sheets

Case study: Birmingham, AL

Background
Birmingham, Alabama, is home to more than 200,000 residents and its legacy within U.S. history is especially notable for significant events during the Civil Rights movement of the 1960s, including Freedom Rides. The city's remarkable history with public transit contrasts its present-day identity as the intersection of four major interstate highways and as one of the most dangerous places in the United States for pedestrians. According to Transportation for America's report *Dangerous by Design 2011*, the Birmingham metropolitan area ranked 16th among metropolitan areas with a high incidence of pedestrian fatalities.

The city is the economic and cultural center of the Jefferson County region and home to financial and medical districts. Three of Jefferson County's five largest employers are part of health systems, including the University of Alabama at Birmingham's Health Services Foundation, and located within the city limits.

While its overall population has declined by 13 percent since 1990, the city has experienced its largest population growth among its 50–64 year old population, with the largest increase among 55–59 year olds (approximately 40 percent). Over the same period, the number of residents aged 60–64 years old and 50–54 years olds grew by about 24 and 12 percent, respectively.

The city is diverse. More than 70 percent of its population is African-American. More foreign-born residents, primarily from Latin America, call Birmingham home compared with the state as a whole. Its residents are also becoming better-educated, evidenced by higher levels of education attainment: More than fourteen percent of residents hold a Bachelor's degree (13 percent increase from 2000 to 2011) and 8.6 percent of residents hold an advanced degree (22 percent increase from 2000 to 2011).

Birmingham found its original inspiration for a Complete Streets initiative from its Safe Routes to School efforts, which encourage active travel to and from school via educational events, encouragement programs, and changes to the street network around schools. As Nick Sims of Safe Routes to School of Central Alabama, puts it, "it's hard to argue against children walking to school." Through the city's walking school bus program, Safe Routes to School staff identified the safest routes for students to walk. According to Sims, in many cases, they were indirect routes with difficult crossings or no sidewalks. This work provided an opportunity to talk to the students and parents about the changes they would like to see, and it became a larger conversation about community walkability.

Birmingham has made definitive progress toward Complete Streets: passing a 2011 Complete Streets resolution; adopting language in the city's comprehensive plan; making changes to the city's subdivision regulations; and launching an expansive effort to build multimodal connections across the city's transportation network. Numerous organizations have banded together in support of this work, creating strong partnerships and driving change.

Building a collaborative spirit for change
At the groundbreaking of the Enon Ridge Multimodal Corridor project in 2013, Mayor William Bell characterized the Complete Streets improvements as a way to visualize not only physical, but also social, connectivity of Complete Streets. Connectivity—among nonprofit, business and civic leaders, and elected officials—is a common theme in Birmingham's Complete Streets efforts to date. Small-group conversations as part of the city's Safe Route to School program grew to a successful application for a $10 million federal grant and attracting $5 million in matching funds from regional and local entities to implement a regional Complete Streets vision.

Sims notes that Safe Routes to School work is "really looking at that one trip [to school] but it ends up speaking to functional transportation overall and how it can be a connection to a bus stop, grocery store, wherever that trip's going. But we start with a conversation about that child walking to school." Because of both its broad and immediate implications for improving the walking environment, Sims encourages any community considering Complete Streets to begin with a Safe Routes to School program. This approach does not begin as a large-scale campaign: it begins by spending time with a small group of people, relying on word-of-mouth and small-scale education about Complete Streets—and patience!—for support to grow.

Finding opportunity in disaster recovery
In 2011, a tornado ravaged parts of Birmingham, destroying homes, businesses, and city streets. City agencies and community leaders launched a "Roads to Recovery" initiative to reconnect neighborhoods and residents through a multimodal 30-plus-mile regional transportation network that includes repaired streets and new sidewalks and bicycle routes. The initiative would impact the lives of 250,000 residents, giving them better access to public transportation, employment centers, retail districts, hospitals, and other facilities.[1]

To help achieve their vision, the city submitted a $30-million application to the U.S. Department of Transportation's TIGER program, a competitive grant program that rewards innovative projects, collaboration among stakeholders, and job creation. A public-private team, led by the Jefferson County Health Department and United Way of Central Alabama, asserted that the projects would "[enhance] Birmingham's economic competitiveness with a safe and connected transportation system" and leverage connection to a major new Intermodal Transportation Facility downtown.

That proposal netted the city $10 million in federal monies to create 4.5 miles of the network via the Enon Ridge Multimodal Corridor and the Civil Rights Heritage Trail, linking major employers, schools, transit, and neighborhoods. The project connects to the larger, regional Red Rock Ridge and Valley Trail Greenway system. The health department, Alabama Power, CSX Corporation, local and regional foundations, among other local organizations, pitched in too, providing $5 million in matching funds. This community support meant that many of the proposed projects—even without federal monies—will be realized. Dana Gresham, U.S. DOT Assistant Secretary for Governmental Affairs, described the coalition of organizations supporting this grant as "incredibly impressive."

Ryan Parker, Red Rock Trail Coordinator at the Freshwater Land Trust, characterizes the TIGER application process in this way: "It takes both private and nonprofits to pursue some of these opportunities; we found it's easier for us to convene some of the city departments at the same table than for them to have a meeting together in City Hall. Having a third party group to help to facilitate the process seems to be a best practice at this point." Sims and Parker hope to leverage

these relationships into a long-term taskforce to oversee Complete Streets implementation across the city.

Public support for Complete Streets is also apparent through other city initiatives, such as the Red Rock Ridge and Valley Trail Greenway Plan, Safe Routes to School, and a bike share feasibility study.

Creating a community of champions

The Jefferson County Health Department catalyzed the work through the Communities Putting Prevention to Work program of the U.S. Centers for Disease Control and Prevention. By considering the various stakeholders who stand to benefit from Complete Streets and collaborating with organizations doing similar work, Jefferson County Health Department, United Way of Central Alabama and Fresh Water Land Trust are broadening the base of Complete Streets supporters.

Business and civic leaders, such as the Birmingham Business Alliance, are beginning to carry the Complete Streets message too, noting the role of safe, multimodal streets in building a strong local tax base and drawing new businesses and residents to Birmingham. Elected leaders make a financial case to residents: that Complete Streets provides low-cost or no-cost travel options to all residents.

The discussion of equity has been especially important to make in light of concerns that Complete Streets improvements will benefit only the more affluent areas of Birmingham. The city's median household income is approximately $29,000, nearly one-third less than Alabama's median household income, and its median home value also is nearly one-third less than the state median ($85,900 compared with $122,700). Equitable access to job centers and schools, and even application of the Complete Streets approach to ensure streets serve residents who need low-cost travel options, helps to address what Parker calls "great need" in many parts of the city. "We're not trying to build a luxury for the City of Birmingham," he says. "We're trying to use bike lanes [for example] as a tool that builds wealth for the City of Birmingham, improves quality of life for the City of Birmingham."

Underlining the interplay between economic and equity considerations, leaders often discuss how Complete Streets projects will help with neighborhood revitalization and creating connections to employment centers in downtown Birmingham. By Parker's estimation, about two miles of Roads to Recovery projects will occur in downtown Birmingham, with more than 26 miles in nearby residential areas.

The economic message has garnered both public and financial support from the Birmingham Rotary Club for a park and trail connection spanning four blocks, called Line Park. This greenway along a former railroad cut will connect the city's new baseball park, an office and entertainment district in Lakeview, and Railroad Park. Operation New Birmingham Vice President Chris Hatcher explains, "Historically, we've had all these nodes of activity that are like islands. Making these connections makes for a more vital downtown and hence a more vital Birmingham." The Rotary Club committed to raise $2 million as its 100th anniversary project to fund this connection—and, according to Parker, is close to meeting its fundraising goal.

Coordination among supportive community organizations has been essential to the success of Complete Streets efforts in Birmingham. By harnessing their individual passions for creating safer

streets and better neighborhoods, they are beginning to speak with one voice when weighing in on political decisions.

Importance of engaged elected leadership

Advocates in Birmingham agree the city remains on the brink of full-blown support and interest in Complete Streets: leadership from Birmingham's elected officials and city staff is needed to blossom. Complete Streets is difficult to achieve, notes Parker, when political leaders do not see a need for safe walking and bicycling infrastructure firsthand or cite concerns about liability. Parker posits, "It's a chicken and egg thing. Do you put bike lanes in or do you put people out in an unsafe environment and show the need for bike lanes?"

However, through educational efforts from organizations such as the Freshwater Land Trust, among others, the community's response to this question has evolved over time. "We're finally getting to the line of thought where [people think], 'Oh, people aren't riding their bikes because roads are so unsafe. We've deterred that choice of transportation, it's been squeezed out,'" says Parker.

Both Sims and Parker believe more leadership from elected officials would ensure that Complete Streets work continues after completion of the Roads to Recovery project and that planning recommendations are connected to Public Works operations. According to Parker, "In our strong mayor system, once [Mayor Bell] gets on board with something, it'll get done. He's on board with the idea of Complete Streets, but he hasn't really taken the initiative to say, 'This is something we're going to prioritize.'"

Despite broader progress in changing attitudes toward Complete Streets, Parker has not seen much change in the city's streets—yet. Capital projects such as those included in the Roads to Recovery effort can take several years to move from conception to completion. Incorporating Complete Streets improvements into routine roadway maintenance and repaving is still a particular hurdle. Yet, promising signs exist. The city is taking inventory of its sidewalks and has hired a new city engineer.

Both Parker and Sims characterize the Complete Streets work associated with its TIGER grant as an opportunity, "a pilot, a test run, where [the city] can work out the kinks and [learn] it's not as scary, not as hard as it thought it was." The grant funds building Complete Streets projects in multiple contexts: along four-lane and two-lane roadways, on neighborhood streets, and streets that run through downtown. Parker hopes the projects of the TIGER grant create familiarity and comfort with Complete Streets work. These improvements provide "examples in the community. [We won't have] to point to another city and say, 'Look at what's done there.' We can say, 'Look at what's done here.'" To further demonstrate these projects' positive local impact, the Jefferson County Health Department and the University of Alabama-Birmingham plan to collect data on health and economic indicators.

Additionally, Public Works staff has approached Safe Routes to School staff to coordinate with their work. Sims focused on the city's ability to "replace broken sidewalks or mow an abandoned lot." In this way—with the program focused on education and outreach and the city focused on physical infrastructure—"we can work for a greater mutual benefit and partner on grants."[2]

Lessons learned

Nonprofits and government play complementary roles in advancing Birmingham's Complete Streets work, and instituting these partnerships early leads to quick impact and lasting change. Within Birmingham, grass-tops leaders were active in pursuing federal funding opportunities, such as applying for TIGER projects and for Transportation Alternatives Program funding for continued operation of its Safe Routes to School program. Many of these organizations provided matching or supplementary funds to help accomplish projects outlined in the grant application. These leaders hope to leverage these relationships into a more formal taskforce to oversee implementation—and continue to build relationships across the city. They have broadened their message and vision to connect with new and nontraditional partners. For example, Freshwater Land Trust shared the economic benefits of multimodal transportation with the Rotary Club, and in response, the Rotary Club committed to raising $2 million for a trail connection as its centennial project.

Safe Route to School programming serves as a catalyst for considering community-wide transportation choices. A project or program focused on a particular goal—such as helping children walk to school safely—often begins a broader, community-wide conversation about transportation choices. In Birmingham's experience, mapping safe walking routes to schools demonstrated the lack of necessary facilities to and from this common neighborhood destinations. According to Sims, parents began to make broader connections between the ability to walk to school and the walkability of the community. An organic public awareness came from small-group conversations and helped build grassroots support for future projects.

Pursue projects that provide a variety of local examples that can be referenced in Complete Streets implementation. The projects in the Roads to Recovery initiative provide examples of Complete Streets in different land use and transportation contexts throughout the city. Local examples help municipal transportation professionals learn how to take advantage of a Complete Streets approach regardless of the location or type of project. These projects also support the case that Complete Streets works: with attractive and safe facilities, more people in fact will walk and bicycle.

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1 Federal Highway Administration. (September/October 2013) "Along the Road." *Public Roads*. Retrieved 12/02/13, from http://www.fhwa.dot.gov/publications/publicroads/13sepoct/alongroad.cfm.

Case study: Broward County, FL

Background
Broward County is located in southeastern Florida, in the center of the Miami-Fort Lauderdale-West Palm Beach metropolitan area. As of 2010, the population was 1,748,066, making it the second most populated county in Florida and the eighteenth most populous county in the United States. The majority of Broward County residents live within 31 incorporated municipalities, the largest being the City of Fort Lauderdale with a population of approximately 165,000. Other major municipalities in the county include Pembroke Pines (p. 154,750), Hollywood (140,768), Miramar (122,100) and Coral Springs (121,200).

A majority of the developed land in Broward County follows a low-density, suburban development pattern, with concentrations of denser urban development primarily to the east of Interstate 95 in the cities of Fort Lauderdale, Hollywood, and Pompano Beach. Significant portions of Broward County west of Interstate 95 are characterized by residential subdivisions served by wide, high-speed arterial roadways that are oriented toward automobile travel.

As a result, Broward County, and the South Florida region as a whole, is especially dangerous for pedestrians and cyclists. According to Transportation for America's report *Dangerous by Design 2011*, more than 1,500 pedestrian deaths occurred in the region from 2000-2009. From 2008 to 2011, 40 bicyclists and 180 pedestrians were killed on roads in Broward County. Broward ranks second amongst all counties in the state in pedestrian and bicyclist fatalities - neighboring Miami-Dade County is first. Overall, the Miami-Fort Lauderdale metropolitan area ranks fourth in Transportation for America's pedestrian danger index.

Broward County is home to a large population of older adults with a growing percentage of individuals entering or in retirement age. These residents are particularly at risk on Broward's roads and are disproportionately represented in the share of pedestrian fatalities in the county. Through community survey feedback, many Broward residents over the age of 65 express a desire to live independently in their current communities. However, access to everyday needs often requires driving a vehicle, and physical limitations, costs, or other reasons may make aging in place impossible for some Broward residents.

Dangerous by Design also found that Broward's minority residents (whose rates of car ownership are lower) suffered disproportionally high pedestrian fatality rates. Bus riders are also particularly vulnerable, primarily because bus stops are often on wide roads far from crosswalks and marked intersections.

The need for safe, multimodal streets is further confirmed by Broward's tourism industry, its countywide bikesharing network, and expected population increases. The beachfront areas of Broward County are popular tourist destinations, and many of these visitors may not have access to private transportation. Expanding safe routes to connect popular destinations is a crucial component to the expansion and overall success of Broward-B Cycle, the county's bikeshare program. Finally, current projections indicate that by 2040, Broward County's population will grow by 250,000 people, which means all municipalities will need to identify ways and means to move more people beyond private automobiles.

The Broward Complete Streets Initiative
In 2012, residents and city leaders embarked on an ambitious plan to ensure the long-term safety and accommodation of all road users throughout the county and to address local problems including increasing traffic, an incomplete network of sidewalks and bike lanes, and less-than-ideal public health conditions. The aim of the plan, called the Broward Complete Streets Initiative, is to develop healthier and safer streets for multi-modal transportation use, which includes walking, biking, use of wheelchairs or assisted walking devices, and/or the use of public transportation throughout Broward County.

It was the primary task of Urban Health Partnerships, a South Florida not-for-profit organization, to lead the Broward Complete Streets Initiative, create a Complete Streets guidance document, and assist the Broward County Metropolitan Planning Organization (MPO) with its institutionalization. A Community Transformation Grant from the Center for Disease Control and Prevention (CDC) provided initial funding for the project. A critical component of the Broward Complete Streets Initiative included the creation of a multifaceted taskforce called the Broward Complete Streets Technical Advisory Committee (TAC). Urban Health Partnerships facilitated the recruitment, communication, and engagement of the TAC, which was assembled to provide the technical assistance in preparing the guidelines. The TAC was comprised of over 25 officials including urban and regional planners, public health professionals, educators, engineers, researchers, transit and transportation departments, city officials and government staff, bicycle and pedestrian coordinators, smart growth and sustainability partners, urban designers, and not-for profits, among other stakeholders.

Roads in Broward County do not fall under a single organization's responsibility. The Broward MPO has the ability to provide the foundation for Complete Streets policies and funding to warrant the implementation of Complete Streets across the county. The Florida Department of Transportation (FDOT), individual municipalities, and the Broward County Public Works department all manage their own networks of roadways. For this reason, it was critical for the Complete Streets Initiative and any of its outcomes to have the participation of multiple agencies and organizations.

The new Broward Complete Streets Guidelines was the result of six months of work to transform the Model Design Manual for Living Streets developed by Los Angeles County in 2011 into a customized document for use by all of Broward's local jurisdictions. By establishing uniform design guidelines to create streets for all users, Broward County aimed to provide the framework for a transformation of public infrastructure to help to address many critical issues that facing its residents.

Ultimately, it is the responsibility of local municipalities in the county to take the appropriate steps to change their current practices and implement Complete Streets. The intent of the Broward Complete Street Guidelines is to help facilitate the implementation of Complete Streets policies across all of Broward's 31 municipalities.

Public engagement
To gauge community interest in the development of Complete Streets in the county, the TAC coordinated and promoted an extensive public outreach plan in early 2012. A series of public workshops were held in three areas of the county during this four-month period. Volunteers from the TAC, Broward MPO, the Broward Regional Health Planning Council, Nova Southeastern

University, and other organizations and municipalities staffed these forums. The public forums provided multiple and convenient opportunities for residents to attend learn and provide input and feedback on Complete Streets. In addition to the three workshops, two focus groups were held with residents and stakeholders. In total, over 2,000 residents participated in the participatory planning process through these events.

As documented through the public workshops and focus groups, a majority of Broward residents currently travels with a car due to limitations in alternate forms of transportation. According to participants, there are currently not enough places to bike or walk safely or nearby public transportation options. A majority of the public workshop participants consistently reported high levels of interest in expanding sidewalks, adding public transit near their homes, marked bicycle lanes, more destinations within walking or biking distance, and a sense of safety while commuting without a car. The public workshops demonstrated significant interest in walking, biking, and transit amongst Broward residents across many diverse demographics, but concerns over safety and distance were frequently cited obstacles.

“Too much priority is given to cars and not enough to people. People should have the freedom to choose alternative modes of transportation and feel safe," said a participant in the Complete Streets public workshop held in North Lauderdale.

“Currently, everyone drives. I’ll end up moving to a city with higher walkability if we can’t change this, ” said a 24-year old participant in the North Lauderdale Broward Complete Streets public workshop.

To help facilitate effective public outreach, the Broward County MPO along with MPOs from neighboring and Palm Beach and Miami-Dade Counties developed an interactive, online tool to assist transportation planners and public information officers in creating effective public engagement programs. With the new “Transportation Outreach Planner”[1] tool, planners will be able to identify the demographics of a particular community, select appropriate public outreach strategies based on that information, and learn about the area’s history and any challenges they may face.

Policy progress on the local level
As of November 2013, numerous municipalities within Broward County have demonstrated commitment to implementing Complete Streets by formally adopting the *Broward Complete Streets Guidelines.*

- On February 15, 2012, 40 community stakeholders from the city of Deerfield Beach met with representatives from the National Complete Streets Coalition and Smart Growth America as part of a free technical assistance workshop to help the city develop a Complete Streets policy. In this interactive, daylong workshop, city staff and residents learned how everyday transportation decisions can promote streets that are designed to allow safe access for all users. That workshop was funded through a five-year Building Blocks for Sustainable Communities grant from the U.S. Environmental Protection Agency’s Office of Sustainable Communities,

  The city of Deerfield Beach officially adopted the *Deerfield Beach Complete Streets Guidelines* on August 20, 2013. This document is a local adaptation of the Broward

Complete Streets Guidelines. One of the city's main corridors, Hillsboro Boulevard, was redesigned under the new Complete Streets approach, with marked bike lanes, landscaping separating the sidewalk from the road and upgraded bus stop shelters. There are plans to expand the scope of this project in an upcoming reconstruction project along more portions of the roadway.

- On September 4, 2013 the City of Hollywood City Commission adopted a resolution that made a commitment to implementing the policies and practices of the *Broward Complete Streets Guidelines.* The city is planning a transformative reconfiguration of Hollywood Boulevard that, once completed, will feature wider sidewalks, replace angled parking with parallel parking, and add five-foot buffered bike lanes in each direction. A planned redesign of another local street, Sunset Strip, will add eight-foot sidewalks and buffered bike lanes. Other improvements being considered for both projects include crosswalks with LED lights in the pavement that activate at night when a pedestrian enters the crosswalk or when the walk cycle begins and upgraded bus stop shelters.

- The city of Fort Lauderdale adopted the *Fort Lauderdale Complete Streets Manual* in October 2013. This manual is a local adaptation of the *Broward Complete Streets Guidelines*. It formalizes a process for street re-design in the city and ensures that infrastructure investments will support the guiding principles of Complete Streets – connectivity, safety, livability, human health, economic development, equity, aesthetics, and context.

- The city of North Lauderdale passed a resolution supporting 'Smart Growth and Complete Street principles' on March 28, 2012.

- The city of Coral Springs conducted a walkability audit in May 2013 to examine the city's current walking environment, discover existing obstacles to walking, and explore opportunities for walking. The results support the city's efforts to create a vibrant downtown area.

Built projects

Since the development of the Broward Complete Streets Guidelines, FDOT District-4 has created a policy to explore "road diet" treatments on state roads with excess capacity. The agency also installed Broward's first buffered bike lane on A1A, implemented an "all walk" pedestrian signal in the city of Lauderdale By the Sea, and implemented lane reductions on parts of A1A.

Throughout the county, a number of Complete Streets implementations and pilot projects are underway or recently completed. In the cities of North Lauderdale and Tamarac, a pilot Complete Streets project was implemented as part of a reconstruction project. A local street was widened, but its travel lanes — two in each direction — are narrower. There are now wider sidewalks on both sides of the street along with bicycle lanes. In some areas, there is a two-foot buffer between the bike lanes and the travel lanes.

Many other municipalities in the county are experimenting with pilot projects that incorporate Complete Streets elements and/or in the process of drafting localized Complete Streets guidelines adapted from the Broward County manual.

Lessons learned

The majority of Broward residents currently travel by car due to limitations in alternate forms of transportation. However, many residents would like to see Complete Streets efforts expanded to include more sidewalks, public transit near their homes, bike lanes, more destinations within walking or biking distance, and a sense of safety while commuting without a car.

While national research shows positive health and safety outcomes result from a shift away from automobile dependence to active transportation, survey results from Broward County suggest the task will require a multi-sector, long-term commitment in the region to incorporate housing and land use policies as well as transportation.

The TAC was instrumental in effectively coordinating, promoting, and facilitating public outreach in the community. The diversity of this board also ensured that multiple stakeholders were involved in the planning and drafting of the Guidelines. The success of this body suggests that technical advisory committees and advocacy groups should be established in support of neighborhood Complete Streets to maintain momentum and implementation of Complete Streets in a community,

Complete Streets can assist with creating age-friendly communities, which is an important issue in Broward County, with its high concentration of older residents. Input from this demographic is essential in meeting the needs of this specific subgroup. Communities aiming to move Complete Streets forward must be aware of key demographics within their community and consider their specific needs – including youth, older residents, minority groups, and others.

Through effective public outreach, successful pilot and demonstration projects, as well as a growing awareness of the current challenges the county faces and benefits that Complete Streets can provide, Broward County is in the initial stages of transforming their road network to better accommodate all users, regardless of age or ability.

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1 For more detail, see http://mpotransportationoutreachplanner.org/

Case study: Decatur, GA

Background
Decatur is a four square-mile town located six miles west of Atlanta and is home to approximately 20,000 people. As the county seat of DeKalb County, Decatur specializes in government services, a sector that has grown more than 10 percent from 1970 to 2000. More than half of its daytime population is employed in the Public Administration sector, including DeKalb County and City of Decatur governments, Emory University, and the Center for Disease Control and Prevention.

With these anchor institutions, Decatur has higher-than-average income levels, with a median household income of $47,935 compared with Georgia's media income of $42,433. Nearly 20 percent of its residents make more than $100,000 annually.

Decatur's population is relatively young with a median age of 38 years and more than 40 percent are under the age of 18. However, the city also aims to be an attractive place for older adults. In 2012, adults aged 50 and older comprised almost one-third of the city's residency, with 11 percent aged 65 and older—an increase of 39 percent since 2007. The city's robust programming and recommendations in its long-range plans, such as enhanced mobility and lower housing costs, help its older residents age in place.

More than four decades of progressive investment have allowed Decatur to become a thriving community that promotes transportation choices and provides a high quality-of-life for its residents. Complete Streets has played a central role throughout these efforts, which evolved over the years from a focus on walkability efforts in its downtown district to promoting other modes of transportation and in other areas of the city.

Reviving downtown Decatur
Decatur's walkability work emerged as a response to population loss of its upper and middle-class residents in the 1960s and '70s—long before "Complete Streets" was coined. In pursuing revitalization, city leaders did not immediately focus on transportation—or economic development for that matter. Instead, as Peggy Merriss, Decatur's City Manager, puts it, they asked "How do we connect people, citizens, residents, to their community in a meaningful way?" Walkability and preserving the historic character of Decatur's downtown emerged among residents' priorities in the 1982 Town Center Plan. This document calls for "the kind of small town in which people can walk downtown to shop and do business in an atmosphere of intimacy and friendliness."

To jump start implementation of the Town Center Plan, Decatur delisted Ponce de Leon Avenue—a four-lane minor arterial and Decatur's main street—as a state highway, removing it from strict state guidelines, and allowing the city to add street trees and widen sidewalks. In 1996, with federal Transportation Enhancement funds, the city added additional signage, widened sidewalks, and upgraded traffic signals in its downtown area to prepare for the summer Olympics in Atlanta. At that time, Ponce de Leon Avenue also received a facelift with mid-block crosswalks and additional signage.

Between 1999 and 2004, automobile trips declined approximately 25 percent along Ponce de Leon Avenue and along several other streets in downtown Decatur, even as Decatur's population grew. Amanda Thompson, Planning Director of Decatur, suggests mixing land uses and using a Complete Streets approach contributed to this trend.

The Town Center Plan also embraced transit, focusing on making MARTA, the regional rapid transit system, stops attractive and accessible. An underground rail stop at Decatur Station is topped with a pedestrian plaza, which provides walking shortcuts to nearby Ponce De Leon Avenue and McDonough Boulevard. Though Decatur does not directly provide transit service, Thompson explains that the city aims to promote transit access through its street design, such as ensuring curb heights do not impede bus service.

Downtown Decatur has seen significant investment in the last 15 years. It added 729 new housing units between 2000 and 2008. Since 1999, more than 100,000 square feet of new retail space was added; for more than a decade, Decatur has required all downtown development to provide ground-floor retail space. Similarly, between 1996 and 2008, retail businesses and restaurants in this area more than doubled. In 2003, a private analysis of the City of Decatur revealed that there are more than 955 businesses and 9,820 employees operating within a one-mile radius of the city's downtown district.

Decatur's decades-long efforts to expand transportation choices and preserve its historic character are reflected in the city's 2008 Community Transportation Plan (CTP). This document also functions as the city's Complete Streets policy. It includes a street typology study that connects land use to ensure that future street designs match the uses of the street to the needs of travelers, by foot, bike, or car regardless of age or ability.

The CTP formalizes much of the city's previous work and provides a basis for its current and future work to balance the needs of people walking, bicycling, taking transit, and driving and to improve public health. It represents a community-wide desire to see the success of downtown Decatur replicated in the rest of the city. Thompson explains, "As people realized, 'we want more of [what's in downtown Decatur],' city leaders adopted a Complete Streets approach." The plan's implementation continues on a project-by-project basis, which Thompson ascribes to the limited capacity of a small city.

The 2010 Strategic Plan, which guides Decatur's long-term vision for growth and development, stresses transportation choices and mobility. It aligns them with achieving other community-wide goals, such as fiscal sustainability, in a changing economy and promoting in-fill development.

Thompson credits much of the success of Decatur's Complete Streets work to these plans, which she calls the "guiding policy and budget documents for the city [as well as a] communications and culture tool [to keep] city staff and elected officials on the same page about the type of projects we're trying to build."

Creating a community conversation

Thompson ascribes Decatur's "broad and deep" engagement in these planning processes as the means by which it continues to build understanding about the importance of using a Complete Streets approach. The city aimed to engage a majority of its population through activities that not only gathered input on what they wanted, but also educated one another about the reasoning behind their visions.

During the development of the 2008 Community Transportation Plan and 2010 Strategic Plan, city staff collected information through focus groups or roundtables; health impact assessments;

interactive activities, such as drawing on maps; and surveys asking residents to rank Decatur's progress toward promoting residents' ability to age in place.

Via these processes, residents understood the importance of Complete Streets as a health and wellness issue. Thompson says, "Our engagement around these projects is never just about transportation. Once you start talking about specific modes of transportation, it's divisive; once you start talking about the environment, it's divisive; once you start talking about economic development, it's hard for people to wrap their minds around." Health, on the other hand, resonates, because "everyone is concerned about their health or the health of somebody that they love; everyone can understand health and think it's important."

City workers engage with Georgia Department of Transportation (GDOT) staff too because GDOT approval is required for any city projects that receive state or federal transportation funding. Thoughtful outreach to GDOT results in fruitful relationships with state-level engineers, where the two agencies understand each other's concerns and needs. "You have to get to know the project engineer; what his or her concerns are; and what information he or she needs to feel comfortable making [a decision to support Complete Streets standards]," Thompson explains. "It might be someone higher up signing off on it, data, or examples from other places."

Robust community engagement created a community of Complete Streets champions—and fewer battles over individual projects. Decatur does not have any singular community organizations advocating for Complete Streets. "The champions of our change," says Thompson, "have been all the residents and businesses through these big planning processes." With so many residents who support Complete Streets as a means to achieve communitywide goals, Decatur rarely sees objections to individual projects. Thompson explains, "[Decatur is] not battling street-by-street because we've put time and effort into those earlier conversations—[making] it easier to have a specific, more detailed conversation about what a street should look like to support those goals."

Once projects are completed, the volunteers of Decatur's Active Living Board and Safe Routes to School program encourage use of the new facilities. These programs are particularly important in demonstrating the need for sidewalks, bicycle lanes, and crosswalks, among other improvements.

Leveraging opportunities for change

With 200 full-time staff, Decatur's small size allows easy coordination among city staff—another important component of successful Complete Streets implementation. However, its small size also translates into a small operating budget ($18 million annually) that does not allow many large-scale capital projects to occur at once. Instead, the city relies on annual city budget allocations and regional, state, and federal monies to fund its work, as well as bond revenue issued in 2006 to provide matching dollars for grant funding.

One grant-funded project is a planned two-way cycle track leading to Old Courthouse Square, fitting Decatur's recognition as a Bronze Bike Friendly Community by the League of American Bicyclists and supporting people of all ages who want to ride bicycles. Thompson likens this improvement to the equivalent of "getting your driver's license and going to the high school parking lot to learn how to drive and park. This two-way cycle track is the place where new cyclists will go to learn to cycle."

The majority of Decatur's improvements, including building usable sidewalks on every

neighborhood street and various traffic-calming projects, are funded through its existing municipal budget. The City Commission dedicates $150,000 annually toward its long-term goal of adding sidewalks to every neighborhood street. Though a relatively small amount of money, it has made lasting impact through incremental improvements. As of 2007, Decatur had more than 60 miles of sidewalk along its 74 miles of roadway: that's sidewalks on over 80 percent of all streets. The Commission also allocates $100,000 annually for traffic-calming and re-striping improvements. Thompson notes, "The general feeling in Decatur…is that investing public funds into sustainable transportation, rather than the status quo, is a better investment of those funds."

In addition to dedicated transportation funds and political and community support, Complete Streets success has come from embracing incremental, and sometimes interim, solutions—many of which are low-cost and easy to implement. These improvements, such as adding mid-block crosswalks or adding sharrows,[1] are accomplished with paint and often for less than $5,000 each.

To Thompson, "[The city government is] constantly being asked to solve problems, so we're constantly looking for opportunities to stretch our dollars and find synchronicities between projects." For example, when Decatur needed parking for construction vehicles during renovations of a local park, the city implemented a temporary road diet, converting Church Street from four lanes to two lanes during the renovations. A positive public response though created support to permanently implement the road diet. Thompson sees no need to wait to make a roadway safer and more convenient, even if financial or political realities necessitate that you start small.

Lessons learned

Invest in planning, especially with authentic and broad community engagement. Much of Decatur's Complete Streets success can be attributed to the city's emphasis on a robust, meaningful, public planning process. City staff and leaders consistently polled and educated Decatur's residents through a series of plans, including its 1982 Town Center Plan; 2008 Community Transportation Plan; and 2000 and 2010 Strategic Plans; together, these plans set a vision for a walkable, compact, and healthy Decatur and guide future projects and funding allocations. Through these planning processes, Decatur created a community of Complete Streets champions. The city's investment of time and resources to build consensus around the "why" of Complete Streets means the investments respond to community concerns, and there are minimal objections to individual projects. In communicating how a Complete Streets approach achieves Decatur's broader community goals, health emerged as a rallying message in the community, and the city's plans reflect that priority.

Modest, but ongoing, financial commitment can create a significant impact. Smaller communities may lack resources to tackle large projects, such as reconfiguring a major intersection, without outside support. As a city of approximately 20,000 residents, 200 full-time employees, and an $18 million annual operating budget, Decatur relies on modest annual budget allocations, as well as regional, state, and federal grants, to expand its Complete Streets network. Each year, Decatur's City Commission allots a total of $250,000 toward sidewalk improvements, traffic calming, and re-striping projects. This consistent investment resulted in a sidewalk network along more than 80 percent of the city's streets.

Experiment with interim or temporary improvements as opportunities present themselves. Another way Decatur expands its Complete Streets network within its limited capacity is through low-cost, interim, or temporary improvements. Decatur frequently uses sharrows as a low-cost, high-impact

way to advance the convenience of bicycling. The city estimates that most sharrows cost $5,000 or less. Low-cost improvements are a great step if a street cannot accommodate a bicycle lane or separated path or in the event that these facilities are planned but cannot be implemented for a few more years.

Decatur also has experimented with temporary road diets and with a supportive public response, then permanently narrowed some of its streets. Successful temporary improvements require champions in leadership positions, such as the city manager or Public Works director. These decision-makers oversee transportation work and can identify opportunities to make a street better for all users as part of these projects.

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1 Shared lane markings, commonly known as sharrows, help people on bicycles position themselves in the roadway to avoid being hit by an open car door. These markings also alert other road users that bicyclists are likely to be present and are commonly seed when the right-of-way is too narrow to accommodate bicycling-specific facilities.

Case study: New Orleans, LA

Background
In 2012, the City of New Orleans had an estimated population of 369,250, slightly less than one-third of the metropolitan area population of 1.23 million. These figures reflect the post-Katrina departure of around a quarter of New Orleans' population–more than 140,000 residents from Orleans Parish between the 2000 and 2010 Censuses. (In Louisiana, a parish is the administrative equivalent of a county; Orleans Parish has the same boundaries as the City of New Orleans.)

With its cosmopolitan colonial roots and vivid mix of cultures, New Orleans has always stood out among American cities. Home to an excellent port commanding the entrance to the continent's largest inland waterway, New Orleans' location made it a powerful city for the long period when water transportation ruled the world economy. Even as other transportation modes rose in significance, New Orleans maintained its prominence as a shipping hub with strong intermodal connections to railroads and highways.

While the region experienced a typical post-World War II urban pattern where the central city lost population to outlying areas, the population loss after Hurricane Katrina caused outlying parishes to gain population at a much greater rate than before, and many residents left the region altogether. But after the population bottomed out at a Census-estimated 223,000 in 2006, the city has been recovering residents. It's yet unclear whether the bulk of the increase is attributable to former residents returning or to new migrants moving from elsewhere.

Transportation context
To non-residents, the readiest image of the city might be of the narrow streets of the French Quarter and surrounding neighborhoods, with lively sidewalks and squares, balconies over the street, and numerous windows and doorways providing glimpses of life inside the buildings and courtyards.

Even though this image reflects only a small part of the city, New Orleans as a whole is a city made for walking and biking. Large swaths of the city feature a dense, well-connected transportation network with many sidewalks and few hills; it is an ideal environment for getting around under human power. People walk to work at about twice the national rate and bike to work at more than four times the national rate.[1]

The 15 percent of residents who commute by transit, on foot, or on a bicycle tend to be on the lower end of the income scale. [2] A 2012 University of New Orleans study[3] found that nearly a fifth of Orleans Parish households have no access to a car, and almost three quarters of people who walk or ride bicycles or transit to work have annual earnings under $25,000.

Poorer residents in New Orleans are also more likely to be injured while walking or biking. Though income information is not routinely gathered as part of crash reporting, researchers at the University of New Orleans have documented that more than half of Orleans Parish pedestrian and bicycle crashes happen in high-poverty census block groups, even though these areas are only home to about a quarter of the population. Many of the most dangerous corridors and intersections are in census tracts with high poverty, and the vast majority of crashes involving bicycles or pedestrians happen within a half-mile of high-poverty block groups.[4] Here, the safety

and equity needs of the transportation system go hand in hand.

Despite the large number of non-driving residents, for many years the city's transportation planning prioritized moving cars above all else. Extra lanes were squeezed into narrow roads and sidewalks were shaved down for a few more feet of space in travel lanes. Bikes were barely on the radar, with only a brief mention in the region's master plan as late as 2004 and no on-street lanes at all.

Turning disaster into opportunity

The city of New Orleans has been making the most of its ongoing recovery to rebuild its streets in ways that benefit all of its residents, regardless of how they get around. With direction from one of the best Complete Streets policies in the nation[5] and champions for multimodal transportation on City Council and in public agencies, the transportation system emerging since Hurricane Katrina promises to be safer, more equitable, and more fully connected than what was there before.

When Hurricane Katrina hit, whole neighborhoods were destroyed, thousands of lives and homes were lost, and miles of already strained infrastructure were pushed to a breaking point. Some 85% of the city's bus fleet was destroyed in the storm, leading to a collapse in transit use and making walking and bicycling even more essential for daily transportation.

Recovery presented a unique opportunity for New Orleans to realign transportation priorities and better serve all residents. Resources and expertise were available to assist in the rebuilding, and local officials who realized the value of a Complete Streets approach responded with plans to improve scores of roadways, including bringing sidewalks into ADA compliance and creating the first on-street bikeways in New Orleans history. Several early successes helped build support for a formal Complete Streets policy.

The influx of disaster relief dollars was not a panacea. Many federal funds could not be used for anything considered a "betterment" of a road—which included even simple changes to paint a different arrangement of lanes than what existed previously. Through targeted use of local resources, City officials worked to ensure that the numerous repair projects were not wasted opportunities to make streets work better for all.

On the other hand, the 2009 American Recovery and Reinvestment Act (ARRA) was a boon for Complete Streets improvements since it allowed for enhancements to the transportation system. In fact, this kind of use was encouraged in the ARRA grant competition. Four years into rebuilding, the region could point to multiple shovel-ready plans for walking, bicycling, and other safety improvements on the many road projects underway.[6]

City agencies found low-cost Complete Streets opportunities in more routine work too. In 2008, city engineers striped 3 miles of bike lanes, the first in the city, during a routine repaving project. According to Jennifer Ruley, a pedestrian and bicycle engineer with the Department of Public Works, "Fitting a bike lane onto this route was just a matter of reallocating space," and it helped demonstrate how inexpensively a street could be improved for many users. This was when the possibilities of Complete Streets began to resonate with City agencies and the wider community.

Equity as a rationale for Complete Streets

As the Complete Streets approach was taking root within the agencies, it also found a legislative champion. In 2010, Kristin Gisleson Palmer was elected to the City Council from a district

encompassing a diverse swathe of the city including the French Quarter and parts of Treme-Lafitte and the Ninth Ward. Elected on a strong equity platform, Palmer was selected to chair the Transportation Committee and soon became a leading voice on reforming the city's transportation system. Palmer convened a group called the Sustainable Transportation Advisory Committee (STAC) to inform the Transportation Committee's decision-making, and Complete Streets was one of STAC's primary work areas.

Palmer recognized the equity implications of Complete Streets, clearly grasping how the approach fit in with New Orleans' culture of walking and biking and addressed the disproportionate rate of injury experienced by poorer residents.

"You can't attribute the popularity of bikes to the influx of new people and the fact that people are all green," Palmer told *The Lens* newspaper in 2011.[7] "It is the fact that we are a poor city. People cannot afford to have cars and they get around on bikes. This has always been the case and now we are becoming more conscious of it. It's an equity issue. People should be able to get to work, school or the store safely, affordably, and in a way that is healthy to them and the community."

A strategic approach to policy

Even though city agencies were already moving ahead with an ad-hoc implementation of Complete Streets, STAC and Palmer saw value in formalizing the policy. They took a two-step approach to forging a strong policy with broad support.

As the first step, Palmer introduced a resolution simply expressing support for the concept of Complete Streets, charging the Transportation Committee with drafting an ordinance for consideration. Passed in August 2011, this gave the Council time to become familiar with the idea of Complete Streets, while allowing STAC and Palmer to gauge support for the idea. It also gave Complete Streets advocates in the region at large time to broaden their coalition and engage the community and agency personnel.

Among the groups STAC built a rapport with were the Department of Public Works, the City Planning Commission, the Health Department, development and transit authorities, utility boards, and advocates for people with disabilities, bicycle riding, and older adults. The local AARP office recruited community members to conduct surveys and audits of sidewalks and bicycling facilities, helping to document the need for Complete Streets while getting the ideas out to a wider audience.

Jason Tudor of AARP Louisiana described the strategic importance of getting city agencies on board with the development of a policy: "It's always important to go to the agencies it's going to directly affect first…elected officials will defer to the [agency]: they consider them experts, and they're the ones doing the work."

Step two was to cement the statutory support for Complete Streets. When the Transportation Committee came back to the full Council with a comprehensive Complete Streets ordinance in December 2011, it had the support of the community and key agencies. With unanimous approval, New Orleans' ordinance was the first local policy in the state of Louisiana, and one of the first in the southeastern US.

As an engineer, Ruley admits that she was skeptical at first about the importance of the policy side

of the equation, but now that it's in place she understands the value. The Complete Streets ordinance "has changed expectations: it won't go away when somebody changes jobs. It creates accountability. It means the default changes—it's no longer the exception that we accommodate bikes or pedestrians. Now we have to show a reason it *doesn't* apply."

Defining successful implementation

With the ordinance in place, the next step was to formalize the internal policies and procedures that integrate Complete Streets concepts into departmental decision-making.

Part of what makes the New Orleans ordinance so strong is the concrete steps it outlines for implementation. Responsibility for overseeing and coordinating the Complete Streets strategy is vested in a new entity, the Complete Streets Advisory Committee (CSAC). The Department of Public Works is statutorily required to provide sufficient staff and resources for CSAC to do its work, which includes updating internal plans, policies, and regulations; collecting and analyzing data to guide decision-making; training pertinent City staff on best practices; and evaluating and reporting on the progress of the Complete Streets program overall. Though the full CSAC didn't officially convene until late 2013, an acting committee got to work overseeing Complete Streets activity in the city almost as soon as the ordinance was passed.

An example of the new process at work is on display in the recently completed Esplanade Avenue road conversion. A 19th-century boulevard running from the Mississippi River and the French Quarter/Marigny neighborhoods to City Park, Esplanade is an important connection within the central part of the city. Because of the street's historic significance, widening was never an option, but over time, four travel lanes plus parking had been fit into its right-of-way. Around 10,000 vehicles per day used Esplanade, often at high speeds or with many aggressive lane changes—despite the narrow lanes and frequent intersections. A direct connection between many downtown and Mid City neighborhoods, the street is also heavily trafficked by people on foot or bicycles, though it's also one of the city's most hazardous streets for pedestrians and bicyclists.[8] "Esplanade has repeatedly surfaced in the crash data as a top crash corridor," says Tara Tolford, a transportation researcher with the University of New Orleans.

When the street was resurfaced in 2013, engineers opted to remove a travel lane in each direction while widening parking lanes, upgrading wheelchair ramps to ADA standards, improving crosswalk striping, and adding bike lanes.

While it's too early to measure specific safety outcomes, residents say that the street is noticeably more comfortable, for people on foot and bikes as well as drivers. The Regional Planning Commission estimates that daily pedestrian traffic on that stretch of Esplanade increased 169%, and bicycling 123%, between 2010 and 2013 (when traffic was down to one lane in each direction, but the bike lane was only partially complete).[9]

Preparing to pivot from recovery to an institutional approach

New Orleans has an impressive record in putting Complete Streets into practice, with more than 60 roadway segments in 5 years receiving pedestrian or bicycle safety improvements. To achieve this kind of coverage, choices about where to direct Complete Streets efforts have necessarily been opportunistic: reacting to what immediate funding and construction needs dictate rather than being guided by a more ideal planning process. Facing an eventual sunset for recovery-based funding sources, there has not always been time to ensure that all the work in the region is building

toward a coherent whole. "Most people would say the process is still a little ad-hoc," says Ruley. "But we're way better at anticipating the kinds of roadways that would get a particular treatment."

By formalizing its Complete Streets strategy through entities like the Complete Streets Advisory Committee, the City is positioning itself for a post-recovery future when accommodating every user of the road is the rule rather than the exception.

Lessons learned

Since the initial surge in building Complete Streets in New Orleans was born from a unique natural disaster, its path to Complete Streets implementation would be hard to replicate. But looking at its experience more generally, and especially at why and how a Complete Streets policy was adopted in the city, we do see models that other places can follow.

Be opportunistic. Once a community has decided that it wants to start pursuing a Complete Streets strategy, it should be prepared to take opportunities as they present themselves. This can happen before any statutory structure exists for Complete Streets, and it requires creativity and flexibility to respond to unusual or singular events and to see an occasion for change within routine plans and processes. Whether it be a disaster like Katrina, a windfall like a grant award or corporate relocation, or a more routine project like resurfacing a state highway, agency staff should know what it would take to quickly start putting Complete Streets into place.

An equity-based rationale for Complete Streets can be just as successful as a safety- or economics-based one. The reasons for pursuing Complete Streets in New Orleans are as varied and numerous as anywhere else, but equity was always central to the argument. Especially in poorer cities where some might see Complete Streets as a luxury better left to wealthy jurisdictions, this is a compelling lesson: Complete Streets benefit everybody, regardless of income or political power, and they can be especially important for the most vulnerable in society. This was an explicit part of the policy discussion in New Orleans, and it resulted in unanimous passage of one of the strongest Complete Streets ordinances in the country.

Back up success with a strong ordinance. Even if a jurisdiction is already seeing Complete Streets outcomes, do not assume that success will continue of its own accord. A good ordinance will solidify Complete Streets efforts and institutionalize the approach through internal policies and long-term plans. It also provides a statutory backstop when agency staff recommends Complete Streets improvements, especially during cross-agency projects in which all parties might not be on board with Complete Streets. An ordinance that outlines specific implementation requirements and procedural changes ensures consistent strategy through staff and administration changes.

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Case study: Greenville, SC

Background
Home to more than 56,000 residents in a 10-county region of more than 1.3 million people, the City of Greenville is a hub of economic and cultural activity in the upstate South Carolina region. From 2000 to 2010, the population of surrounding Greenville County grew 2 percent annually, adding more than 87,000 new residents and increasing the county's total population to nearly 500,000 people.

New regional industries—BMW, Michelin, and automobile parts suppliers—are calling Greenville home. Since 2000, Clemson University relocated several of its graduate programs to its Clemson at the Falls campus, making academia another component of the regional economy and a strong presence in downtown Greenville.

Greenville's population growth has underscored the need for Complete Streets in recent years. An influx of retirees necessitates that street design be re-evaluated for users of all ages; in 2010, nearly one-quarter of the city's residents were 55 years old or older, with approximately 13 percent aged 65 years or older.

By building relationships with business and community institutions and making a strong case for safety, especially for children, Greenville now advances its Complete Streets work annually through a robust project prioritization process. However, it took the city several decades to surmount objections over the costs of wider roads, as well as potential higher gas costs for residents from the conversion of a downtown bridge to pedestrian use as part of a park project. The conversion of this bridge proved to be a significant turning point in the city's Complete Streets work, which was formalized in a 2008 Complete Streets resolution.

Building a walkable community
Councilmember Amy Ryberg Doyle credits Mayor Knox White for catalyzing the community's Complete Streets effort. In 1995, Mayor White ran on a platform of converting a 4-lane, state-owned bridge to Liberty Bridge, a pedestrian bridge over Reedy River Falls Park, a $1 million project. The bridge, which connects several neighborhoods, pitted the city and many of its residents against the state Department of Transportation and another contingent of local residents. The long-term, community-wide discussion about the bridge overcame residents' objections to losing the bridge to automobile traffic, ultimately building broader public awareness and support for future projects.

Upon completion in 2001, the park, which Councilmember Ryberg characterizes as a "gem," helped downtown Greenville flourish. Soon the city saw the addition of new hotels, restaurants, and bars; a new minor league baseball stadium, Flour Field; apartments; facilities for Clemson University's graduate school programs; and several headquarters offices. As of 2011, Greenville has seen a total of $137 million in private investment.

Greenville's success with Reedy River Falls Park can be traced back to a 1978 project on Main Street. Redesigned with widened sidewalks, angled parking, and streetscaping, the project created momentum for future walkability efforts. More recent development has cemented this focus: destinations such as Flour Field and Publix grocery store use strategically placed parking

garages on the edge of downtown, and convenient connections by transit are offered. In these ways, Greenville preserves its downtown environment for pedestrians.

Greenville has seized opportunities for improving bicycling and walking networks beyond adding facilities to its street network. Off-street trails are an important element in the equation. The recently completed 17.5-mile Swamp Rabbit Tram Trail links several local destinations, including Greenville's center city, three school campuses, and Furman University. The trail is popular: a study for Greenville Health Systems by Furman University counted more than 400,000 users in 2012—an 11 percent increase from the previous year. The same study shows a shift from the most-used access points from Furman University's campus to East Bramlett Road, which runs between the middle and high school campuses of Legacy Charter School, suggesting that families and children traveling to school are a primary user group. Trail use by older adults, who represent 14 percent of all trail users, also increased from 10 to 14 percent from the previous year.

Walk-friendly efforts expanded to the city's neighborhoods in 1999, when the Public Works Department launched "InStep" (Neighborhood Sidewalk Targeted Expansion Program) to "create a safe walking environment for the public…and improve the aesthetic look of neighborhoods." According to Director of Public Works Mike Murphy, as of 2012, the city added or repaired more than 10 miles of sidewalks, connecting neighborhoods with nearby schools, parks, and community centers.

Greenville has completed several successful road redesigns, including along Church Street (U.S. Highway 29). The Church Street project reduced a dangerous six-lane divided roadway into a four-lane boulevard with landscaped medians, bicycle lanes, and wider sidewalks. When discussing these projects, Doyle notes that these roads continue to handle the same number of cars, but encourages drivers to move at slower, safer speeds. "We continually promote the data," she says.

The city has also pursued temporary or demonstration projects, including a Sunday Streets initiative, giving residents an opportunity to experience alternative ideas for how streets can be used to benefit the community. When Cleveland Park, the city's largest park, was closed to cars on Sundays, the event not only encouraged more active transportation and recreation—little kids loved riding their bikes in the street—but also helped to curb cruising (i.e., driving the same route) in the park. Streets also are closed to traffic in areas where the city's MobiRec, a city-owned van outfitted with a variety of sports and recreation equipment, sets up.

Greenville prioritizes trails, sidewalks and multimodal roads in its funding decisions. The city may provide 50 percent matches for sidewalk improvements in new developments, especially in the case of mixed-used developments. Collaboration with the water and sewer authorities allows the city to incorporate road improvements into utility upgrade projects. The city also uses bonds and its local hospitality tax for streetscaping, which posted a $2 million surplus in FY13. Some projects receive private funding; Greenville Hospital System paid $1 million to support the Swamp Rabbit Trail's construction in exchange for naming rights.

Leading in bicycle-friendliness

In addition to seeing the value of a walkable downtown, Greenville has capitalized on its location in the foothills of the Blue Ridge Mountains by promoting recreational bicycling and hiking. The community's strong biking culture is a source of pride: The League of American Bicyclists classifies the city as a Bronze-level bike-friendly community, and a new bikeshare program encourages short

trips by bike.

Despite bicycling's popularity, negative experiences with individual cyclists has caused some residents to pushback against bicycling infrastructure. Pamela Brown, an avid cyclist and volunteer at Bike Walk Greenville, explains this disconnect as a cultural difference: "Someone told me, 'Cyclists don't wave,' and that meant something to me—it's symbolic of that cultural difference. So I make a habit when I'm out to be the smiling, waving cyclist."

Councilmember Doyle relies on her children as symbols of the need for safer streets: "I have four kids, and the littlest is on the back of my bike. When I talk about my kids riding on the Swamp Rabbit Tram Trail, when I talk about my kids actually being 'street-ready' now, [other residents]…think of 'mother.' They understand my daughter with her pink bike is a reason to slow down, and they understand, 'Oh, we do have to share the road.'" Mayor White explains that Greenville has focused on creating good neighborhood schools, defining them as "schools that are easy to access…[which means] good sidewalks or good walking trails." He characterizes children walking to school as a sign of a healthy community, and Doyle's Walk on Wednesdays, or WOW, initiative encourages students to walk to school on Wednesdays.

Both Doyle and Brown serve on the Palmetto Cycling Coalition, a statewide nonprofit focused on "improving safety, providing access, and educating South Carolinians on the value and importance of bicycling for healthy lifestyles and communities." Through this organization, they have built relationships with other communities that have experienced the economic impacts of investing in cycling and walking infrastructure—especially to boost tourism. Hilton Head Island actively promotes bicycling to its visitors, noting that it makes them more competitive with other top resort communities. A study found that visitors to Hilton Head spent the most money on golf and the second-most on bicycling. Hearing those numbers from another city in South Carolina has helped Doyle and Brown champion the cause locally.

Appealing public transit

The community's employers have emerged as important allies in Greenville's Complete Streets work, especially in promoting public transit. According to Doyle, "I have reached out to local CEOs of small and large companies to be advocates. I will cross a cocktail party to make sure business leaders call the mayor or write a letter to the editor; I'm always [encouraging] people to write a letter to the Greenville News asking people to talk about the importance of good street design... Those kinds of people bending the ears of city planners and politicians is really impactful and gives credibility to the group."

GreenLink, the city-run, countywide transit provider, has been transformed into a true transportation asset for the city. Beginning in 2009, the city invested in 250 new bus shelters; added bike racks; installed wifi; and improved the bus transit center downtown. Ridership has grown approximately 15–20 percent annually since 2009, when it provided 650,000 rides. Between September 2012 and September 2013, GreenLink provided 998,000 rides.

GreenLink also promotes multimodal transportation choices along its routes. Beginning in 2008, it assisted the city with striping bike lanes to bus shelters and started a bike locker rental program. GreenLink installed eight bike lockers in four locations in downtown Greenville (in close proximity to bike lanes, bus shelters, or both), and plans to install 40 more as part of its 2012–16 strategic plan. GreenLink also provided the lion's share of capital—$121,000 of a $150,000 first-year budget—to

Upstate Forever, a regional nonprofit focused on sensible growth and protecting special places, for the operation of the city's bikeshare program. Bikeshare helps to solve the "last mile" challenge common among transit agencies: providing a critical non-motorized link between transit stops and destinations.

Transit's popularity has inspired businesses and community institutions to support bus service near their sites. St. Francis Hospital approached the city and offered to sponsor a bus in exchange for a route to its facilities. Clemson University sponsors an express route to its campus, which launched in September 2013. The city is currently considering a Bus Rapid Transit line in Verde, a large planned community located about 1.5 miles from downtown Greenville, to serve its residents.

Expanding the city's success

Because Greenlink and the Swamp Rabbit Tram Trail transverse city-county boundaries, Doyle and Brown would love to see Greenville's Complete Streets success spread beyond the city limits to Greenville County—home to more than 500,000 residents. Brown notes that at the county-level, balancing urban and rural needs and cultural dynamics adds complexity to her work with Bike Walk Greenville.

Both noted the need for more advocacy outside of City Hall. In 2010, the Greenville County Council voted down a proposed Complete Streets policy with a close 6-5 vote. Doyle posits that decision-makers lacked a broad base of support and held some common misconceptions about Complete Streets: "Beforehand, we had the votes. It was a confusing debacle about how every street needs to have a bike lane, and every country road needs a sidewalk." Constituents able to explain how Complete Streets complement the surrounding community through flexible design could have helped the discussion.

Bike Walk Greenville grew out of the need for a stronger advocacy community focused on biking and walking, not biking or walking. Brown's work helps decision-makers "[hear] from the public in a very different way" and share candid public opinion about road design. For instance, a Bike Walk Greenville volunteer developed a mapping tool for residents to catalog routes, destinations, and places where they want to see improvements to support safer, convenient walking and biking. More than 400 people have used the tool, and information from it will be used as part of the county's first pedestrian and bicycle master plan—another way to ensure Complete Streets work continues in the Greenville area.

Lessons learned

Long-term dialogue and community engagement yields public awareness and support for future work. In Greenville's experience, a high-profile public debate over converting a state-owned bridge into pedestrians-only Liberty Bridge as part of the construction of Falls Park, illuminated residents' concerns: increased traffic congestion and higher gas costs associated with using alternative routes. These concerns were consistently addressed by public leaders and city staff. Over time, this debate enabled a general understanding that a Complete Streets network can make the transportation system more convenient and accommodate less costly modes of travel. Ongoing dialogue and community engagement helped overcome misperceptions about Complete Streets, creating a pathway for future Complete Streets implementation.

Annual funding through municipal sources, as well as project-based funding through private entities, has helped ensure robust implementation. Many of Greenville's projects benefited from a

variety of funding sources—both through routine allocations through the city's Capital Improvement Plan (CIP) and other public sources, such as bonds and local taxes. However, in the case of trail links funded through the hospital system, or bus routes sponsored by St. Francis Hospital and Clemson University, private sources help ensure planned projects are fully funded—or even fund entirely new projects, such as new bus routes— thereby expanding the city's Complete Streets network.

Safety and recreation for children and the economic benefits of Complete Street are successful primary messages. Children have become a symbol for safer streets in Greenville, especially when the city and county residents voiced negative opinions about people riding bicycles. Observing school-aged children use the Swamp Rabbit Tram Trail or encouraging students to walk or bike to school creates an understanding for the need to share roadway space. Touting the economic benefits of these improvements also resonates with business leaders. Key to this strategy is using local examples from other South Carolina cities to demonstrate the potential benefits of their Complete Streets improvements.

Case study: Memphis, TN

Background
Centered on the City of Memphis and Shelby County, Tennessee, the Memphis metropolitan area spreads across approximately 500 square miles in ten counties in Tennessee, Mississippi, and Arkansas. Even in the multi-jurisdictional world of metropolitan politics, greater Memphis (known as the Mid-South) stands out for the extent of governmental entities it encompasses.

Of the more than 1.3 million metropolitan residents, around half live in Memphis proper—an estimated 655,155 in 2012. The City of Memphis itself is majority-minority, with African Americans making up almost two thirds of the population and whites less than 30 percent. The wider metropolitan area is more evenly split at around 45 percent each, black and white. In both the city and the region, people of Latino descent are a small but growing proportion, representing five to seven percent of the population. Median incomes are lower, and the proportion of people living in poverty higher, in the central city versus the region. In 2010, about a quarter of Memphis households had received food stamps during the prior year.[1]

Transportation context
Sitting on the Mississippi River and astride major railroad and highway junctions, Memphis has long been a multimodal hub. One of the lower Mississippi's major shipping centers, the city grew up around river traffic and built on its locational advantages as the area moved into the railroad, interstate, and air travel eras.[2] Today it remains a freight transportation leader, with FedEx and many other shipping and logistics firms driving the regional economy. The shipping industry helps make Memphis International Airport the second-busiest air cargo hub in the world and the Port of Memphis among the busiest inland ports in the county.[3] [4]

The city's focus on transporting goods, however, often came at the expense of local streets and sidewalks. Traditionally, transportation planning focused only on conveying automobiles and freight traffic as efficiently as possible.

Though it once boasted an extensive streetcar network, transit service in Memphis decayed after World War II as providers struggled to serve an expanding, low-density urbanized region. Then came interstates 40 and 55, followed by a growing number of beltways and spurs, carving up central Memphis and erecting barriers between city neighborhoods, while at the same time opening a far larger area of hinterland to development. The interstates and wide new arterial roads encouraged growth on the edges of the city, and the land area of the urbanized region grew much more quickly than the population. Houses, yards, and stores got larger, and cars allowed people to travel ever-greater distances for basic needs.

As the metro area sprawled and many residents moved out, the city's core entered a long period of economic decline and physical neglect. People who could not or chose not to drive found it increasingly impractical and even dangerous to move around the city on transit, on foot, or by bicycle. Deferred maintenance took its toll on sidewalks and streets. Low population densities limited transit's effectiveness and made it more expensive to provide essential city services—utilities, emergency responders, and buses all had to travel further to get where they were needed, and more miles of road meant more miles of maintenance.

As a result, Memphians currently have few viable alternatives to traveling by automobile. Where

sidewalks exist, they are often in very poor condition, do not accommodate users with disabilities, and put pedestrians right next to high-speed traffic.

Transit is limited almost entirely to conventional bus service, which struggles to efficiently knit together the sprawling city. A heritage streetcar system has run vintage trolleys on short downtown loops since the early 1990s. While it has significantly boosted overall transit system ridership figures and helped revitalize the area along its 2.5-mile route, the trolley is more oriented to shuttling tourists around the riverfront area and to the clubs of Beale Street than to moving Memphians between the places where most of them live, work, and shop.[5]

Many key routes are hostile places for bicycle riders, and until recently there were few alternatives on or off the street. The city did not have a single mile of marked bicycle facilities until late 2010. Past city administrations routinely ignored public demand for bike lanes even when there was little cost involved. This atmosphere of bureaucratic neglect helped the city earn *Bicycling* magazine's "worst city for bicycling" awards in 2008 and 2010.[6] For some, this negative national attention was a wake-up call that it was time to get serious about making streets work for everyone.

Bringing a regional coalition together around Complete Streets

Since 2010, a broad regional consensus has emerged to make Memphis' streets better and safer for everyone who uses them. A swell of grassroots energy intersected with the election of a new mayor who understood the importance of a multimodal transportation strategy to the city's vitality. The regional coalition that has developed around Complete Streets shows the power of cooperation between government, business, and community activists in helping a region to quickly change course in how it builds towards its future. This cross-sector collaboration has garnered national attention, improved the region's competitiveness, and helped it secure millions of dollars in infrastructure investment.

"Leave something that's a permanent taste of what's possible"

For years, dedicated Memphians had worked to improve conditions for walking, biking, and transit in the city, but the grassroots movement for safer, more vibrant streets coalesced in the Broad Avenue district in east Memphis.

Originally, the commercial corridor for a nearby manufacturing area, the district had been sliced up by interstates and arterials and fallen into neglect by the 1990s. Only a few active businesses dotted a landscape of boarded up buildings, fast roads, and poor sidewalks—an environment where nobody would walk or ride a bike if they could avoid it.

The Historic Broad Avenue Business Association and local partners including Livable Memphis hoped to turn things around in the district. After several years of design charrettes and stakeholder meetings, they decided the moment was right to demonstrate the district's potential as a mixed-use, multimodal corridor.

In November 2010, during a two-day festival they called "A New Face for an Old Broad," scores of volunteer organizers enticed residents out of their cars and into the business District. Pop-up businesses filled vacant storefronts and lots. Volunteers restriped the street with house paint to create best-practice bike lanes protected by diagonal parking, and improved the pedestrian realm with shortened intersection crossings, street furniture, and landscaping.[7] The idea behind the reconfiguration, says Sarah Newstok of Livable Memphis, was to "leave something that's a

permanent taste of what's possible."[8]

It was many Memphians' first experience with a Complete Street, and they loved what they saw. Organizers hoped maybe 5,000 people would show up over two days. They got 13,000, along with lots of press focused on the area's revamped look and feel.[9] City officials determined that the restriping (designed by local planning students) was to code and agreed to leave the new configuration in place until it could be replaced by more fully engineered permanent markings.

This application of Complete Streets concepts especially resonated when it became clear how much it catalyzed the district's rebirth: three years after the event, the Historic Broad Business Association reports 30 properties in some stage of renovation, with some 25 new businesses and $20 million in reinvestment attracted to the corridor since the planning process began. Pat Brown, a longtime area business owner, also credits the reconfigured street with boosting retail in the district. When the project began, "everyone was concerned bikes would take away from business, and we quickly saw it was helping business twofold," Brown says. "You did have people biking, but it also helped narrow the street and slow people down. All of a sudden, people were noticing your business that had never noticed it before because they were speeding by at 45 or greater."[10]

Building an alliance among businesses, community activists, and public-sector stakeholders
The 2010 election of Mayor AC Wharton was also a game changer in Memphis. In his previous role as chief executive of Shelby County, Wharton had spearheaded "Sustainable Shelby," a strategy outlining concrete steps and goals for increased sustainability in numerous policy and operational areas.[11]

As mayor, Wharton created the city/county Office of Sustainability, hired a bicycle/pedestrian coordinator, and appointed a new city engineer with a nuanced understanding of streets' role in a multimodal city and the public health implications of their design. Just as importantly, the Wharton administration cultivated community involvement in planning processes and actually listened to what people said about how streets should work in their communities.

In 2011, a wide-ranging coalition of stakeholders from across the region began to lay the groundwork for a formal Complete Streets policy. Business, neighborhood, and non-profit partners came together as the Memphis/Shelby County Complete Streets Coalition.

Livable Memphis and the local chapter of the Urban Land Institute sponsored a National Complete Streets Coalition Complete Streets workshop for practitioners and advocates in the city. The workshop brought more than 40 professionals together with two national experts in the field to learn the fundamentals of developing and implementing a Complete Streets policy. Participants worked through the nuts and bolts of the process, planning, and engineering changes involved. The workshop helped expand the coalition to include representatives from regional transportation and engineering departments, transit providers, utilities, developers, and urban designers. Neighborhood, public health, and bicycling and walking advocates were also at the table.

After the workshop, the expanding coalition formed a policy development committee chaired by John Cameron, the City Engineer, and Rusty Bloodworth, a local developer and real estate investor.

The Memphis Area Association of Realtors (MAAR), a chapter of the National Association of

Realtors® (NAR), added their support to the effort. Building on its history of advancing walkability and smart growth in the region, MAAR secured a $15,000 NAR Smart Growth grant in 2012 to help fund the local coalition's outreach, policy development, and education work.

With these key agency and private sector stakeholders at the helm, the coalition worked with city staff to draft a Complete Streets policy in the form of a mayoral executive order, which Mayor Wharton signed in January 2013.[12]

The coalition's next task, currently underway, is the preparation of a street design manual to guide future planning and engineering efforts with Complete Streets principles. Sarah Newstok of Livable Memphis says that even though the manual will officially be a document of the City of Memphis, it is being developed with help and input from many regional voices, so it will employ street typologies that are useful for jurisdictions throughout greater Memphis.[13] The work's value will be multiplied far beyond what it does for the City.

Implementation by increments

With a supportive coalition and a policy in place, perhaps the most challenging aspect is the actual day-to-day work of remaking the streets. The sprawling city did not get built in a year, and it won't get fixed with a few policy documents, no matter how forward looking. Creating Complete Streets in Memphis is only possible through what Kyle Wagenschutz, the city's new bicycle/pedestrian coordinator, calls "a mindset—through incremental changes over time we can begin to redefine the public space."[14]

Wagenschutz, whose position the city created in 2010, says that implementing a Complete Streets policy in a relatively poor city like Memphis has been "a work of innovation, a work of patience." But, they're already reaping demonstrable benefits through a series of inexpensive changes—and more importantly, achieving a change in mindset about how to do the work of making streets function better for everyone. According to Wagenschutz, "Complete Streets, for us, doesn't mean expensive streets. We want a policy that's affordable now, but sustainable in the future."

Memphis' success in implementing Complete Streets so far has sprung from community engagement, incremental change, and making the most of opportunities when they present themselves, such as piggybacking on routine sewer or repaving work. And the market takes notice when things happen. "We've been able to install more than 50 miles of new bike lanes over a 24-month span, all of those without a single line item in our local budget," reports Wagenschutz.[15]

Community engagement is central to the process. In planning the burgeoning bike network, for instance, the City reaches out to a network of community and neighborhood groups for their ideas on where new facilities should go, and this input forms the basis of future plans. That way, built projects begin their life with a group of local champions. By the same token, an isolated city bureaucracy isn't decreeing new bike lanes in places where nobody wants them.

The city is careful to prioritize projects that maximize connections between modes, leveraging existing infrastructure and services while working toward a more connected and accessible whole. Several notable projects are currently in the works.

The centerpiece of the current wave of Complete Streets projects is the planned Hampline, a two-way protected cycle track that's part of the city's work with the Green Lane Project. The 2.5-mile

connector provides the crucial on-street link between the Shelby Farms Greenline—a popular multiuse path on abandoned CSX railbed, opened in 2010—and Overton Park, a classical urban park that is the gateway to the Midtown street grid. Though the route's endpoints currently see more use by recreational riders, the Hampline opens the entire length to cyclists of all skill levels and creates a safer, more practical route from the city's eastern reaches into the urban core. Connected routes, like the 6.5-mile Greenline, are already using safety interventions like pedestrian hybrid beacons and crossing islands where non-motorized paths cross roadways.

Reap the rewards of regional cooperation

By demonstrating the ability of diverse stakeholders to fruitfully collaborate, the Complete Streets efforts have also helped to bring millions of federal and private dollars into the region.

In June 2012, USDOT announced a $14.9 million TIGER grant to build miles of multimodal connections and roadway improvements within Memphis and across the Mississippi River to West Memphis, Arkansas. The heart of the project is the repurposing of a century-old railroad bridge as a bicycling and walking connection across the Mississippi to West Memphis, creating a new set of modal links between the two downtowns. In addition to the TIGER grant, the $37 million connector relies on a mix of public and private funding from both sides of the river.

City, suburban, and rural stakeholders from across the metropolitan area are taking part in a planning effort called the Mid-South Regional Greenprint. Conceived in 2011 under a $2.6 million HUD Sustainable Communities Regional Planning Grant, the Greenprint will set out long-range plans for land use, housing, transportation, and green space. The process is bringing together groups and interests that have not always agreed, but who are interested in meaningful collaboration on a shared vision for the region. The kind of jurisdictional competition that often characterizes regional efforts has been remarkably absent so far in Memphis. If the process suffers from anything, notes Livable Memphis's Newstok, it is an excess of ideas and enthusiasm.[16]

Lessons learned

Establish an early success. Get something good on the ground, even if it is only on a single block. An example of Complete Streets at work as a well-functioning street that people can see, move around on, and feel for themselves gives the community and decision-makers something tangible to attach to a sometimes confusing concept. With an eye toward the longer term, work on crafting a good policy, building a solid coalition, and getting agency buy-in. As the Complete Streets effort evolves from opportunism to more of an institutional approach, a community can create lasting value by building good things every step of the way.

Grassroots energy can jumpstart a regional Complete Streets movement. Though the coalition working for Complete Streets in Memphis is now broad, has mainstream partners, and addresses systemic transportation shortcomings throughout the region, the movement got its spark from the hyper-local efforts of the Broad Avenue business owners and Livable Memphis. District-scaled groups can bring an enormous amount of energy and concentrated political influence to bear on issues within their communities. This can be key to establishing the early success discussed above, and it can also help build a track record of collaboration between the public and local agencies, building trust among stakeholders. The relationships fostered in the process can be the kernel of a larger coalition as interest in Complete Streets grows.

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Complete Streets fact sheet: Alabama

Alabama has a total of **15** Complete Streets policies at all levels of government. Its **14** municipal policies cover **589,320** people, or **12%** of the state population. Alabama has no state-level Complete Streets policy.

Population

Of Alabama's estimated 2012 population of **4,822,023**, 23% are under the age of 18, and 15% are over the age of 65. The over-65 share of the population is projected to grow to 21% by 2030, a 44% increase over 2012.

Some 59% of Alabama's population lives in urbanized areas. Median household income is $42,934 (versus a national median of $52,762) and per capita income is $23,483 (versus $27,915 nationally). About 18% of Alabama's population lives below the poverty line.

Commuting

More than **85% of Alabama commuters drive to work alone**, with fewer than 2% of trips to work made by walking, riding a bicycle, or using public transit. More than one household in five (23%) has either one or no private vehicle available. About 2,400 Alabama residents are frequent bicycle commuters.

Pedestrian and bicyclist safety

People who walk in Alabama have a disproportionately greater risk of being injured or killed than elsewhere in the country, according to Transportation for America's *Dangerous By Design 2011*. The state's Pedestrian Danger Index of 116.7 made it the fifth most dangerous state to walk in. This translates into an average of about 70 pedestrians killed annually, or a pedestrian fatality rate of 1.5 per 100,000 population. For pedestrian fatalities among people over age 65, the state ranks 46th.

On average, six bicycle riders are killed each year in Alabama.

Health

Alabama has a growing obesity problem, with 33% of adults qualifying as obese, along with 19% of children ages 10–17. Chronic diseases related to obesity and inactivity are also rising, with 12% of the population diagnosed with Type 2 diabetes and 40% with hypertension.

Jackson and Pike counties are in EPA designated air-quality nonattainment areas.

Affiliations, awards, and multimodal transportation grants

One Alabama city has been certified as a Bicycle Friendly Community by the League of American Bicyclists: Auburn. The state ranks 49th nationally in its Bicycle Friendliness.

Two TIGER grants for multimodal transportation projects have been awarded in the state: $4,728,507 for the City of Foley's Regional Infrastructure Pedestrian System (2013) and $10,000,000 for the Birmingham Roads to Recovery project (2012).

People for Bikes has awarded two grants in the state for bicycle projects: the Tarrant Aqueduct Trail and the Lake Trail at Oak Mountain State Park, both in the Birmingham area.

Complete Streets fact sheet: Arkansas

Arkansas has a total of **two** Complete Streets policies at all levels of government. Its **two** municipal policies cover **121,209** people, or **4%** of the state population. Arkansas has no state-level Complete Streets policy.

Population

Of Arkansas's estimated 2012 population of **2,949,131**, 24% are under the age of 18 and 15% are over the age of 65. The over-65 share of the population is projected to drop to 15% by 2020, a 3% decrease from 2012.

Some 56% of Arkansas' population lives in urbanized areas. Median household income is $40,149 (versus a national median of $52,762) and per capita income is $21,833 (versus $27,915 nationally). About 18% of Arkansas's population lives below the poverty line.

Commuting

More than **82% of Arkansas commuters drive to work alone**, with about 2% of trips to work made by walking, riding a bicycle, or using public transit. Almost one household in four (24%) has either one or no private vehicle available. About 1,500 Arkansas residents are frequent bicycle commuters.

Pedestrian and bicyclist safety

People who walk in Arkansas have a disproportionately greater risk of being injured or killed than elsewhere in the country, according to Transportation for America's *Dangerous By Design 2011*. The state's Pedestrian Danger Index of 76.7 made it the 14th most dangerous state to walk in. This translates into an average of about 39 pedestrians killed annually, or a pedestrian fatality rate of 1.4 per 100,000 population. For pedestrian fatalities among people over age 65, the state ranks 40th.

On average, four bicycle riders are killed each year in Arkansas.

Health

Arkansas has a growing obesity problem, with 35% of adults qualifying as obese, along with 20% of children ages 10–17. Chronic diseases related to obesity and inactivity are also rising, with 11% of the population diagnosed with Type 2 diabetes and 36% with hypertension.

Crittendon County is in an EPA designated air-quality nonattainment area.

Affiliations, awards, and multimodal transportation grants

Four Arkansas cities have been certified as Bicycle Friendly Communities by the League of American Bicyclists: Bentonville, Conway, Fayetteville and North Little Rock. The state ranks 37th nationally in its Bicycle Friendliness. The LAB has certified eight Bike Friendly Businesses in the state.

Two TIGER grants for multimodal transportation projects have been awarded in the state: $14.9 million for the Main Street to Main Street Multimodal Connector across the Mississippi River between West Memphis, AR, and Memphis, TN (2012); and $15 million for the Razorback Regional Greenway in Benton and Washington Counties (2010).

People for Bikes has awarded two grants in the state for bicycle projects: one for the Harrison BMX/Skate Park in downtown Harrison and another for part of a 30-mile greenway in Jonesboro.

Complete Streets fact sheet: Florida

Florida has a total of **45** Complete Streets policies at all levels of government. Its **34** municipal policies cover **2,621,366** people, or **14%** of the state population. Florida's state-level Complete Streets policy was adopted in 1984.

Population

Of Florida's estimated 2012 population of **19,317,568**, 21% are under the age of 18, and 18% are over the age of 65. The over-65 share of the population is projected to grow to 24% by 2030, a 33% increase over 2012.

Some 91% of Florida's population lives in urbanized areas. Median household income is $47,827 (versus a national median of $52,762) and per capita income is $26,733 (versus $27,915 nationally). About 15% of Florida's population lives below the poverty line.

Commuting

More than **79% of Florida commuters drive to work alone**, with around 5% of trips to work made by walking, riding a bicycle, or using public transit. More than one household in four (29%) has either one or no private vehicle available. About 52,000 Florida residents are frequent bike commuters.

Pedestrian and bicyclist safety

People who walk in Florida are at the greatest risk of being injured or killed of any state in the country, according to Transportation for America's *Dangerous By Design 2011*. The state's Pedestrian Danger Index of 182.8 made it the single most dangerous state to walk in. This translates into an average of about 516 pedestrians killed annually, or a pedestrian fatality rate of 3.0 per 100,000 population. For pedestrian fatalities among people over age 65, the state ranks seventh.

On average, 117 bicycle riders are killed each year in Florida.

Health

Florida has a growing obesity problem, with 25% of adults qualifying as obese, along with 13% of children ages 10–17. Chronic diseases related to obesity and inactivity are also rising, with 11% of the population diagnosed with Type 2 diabetes and 34% with hypertension.

Hillsborough and Nassau counties are in EPA designated air-quality nonattainment areas.

Affiliations, awards, and multimodal transportation grants

Florida has three Walk Friendly Communities: Gainesville, Tallahassee, and an honorable mention for Temple Terrace. Twelve cities have been certified as Bicycle Friendly Communities by the League of American Bicyclists: Boca Raton, Broward, Fernandina Beach, Gainesville, Lakeland, Miami, Orlando, Sanibel, St. Petersburg, Tallahassee, Venice and Weston. The state ranks 31st nationally in its Bicycle Friendliness. The LAB has certified six Bicycle Friendly Businesses and one Bicycle Friendly University (University of Miami) in the state.

Six TIGER grants for multimodal transportation projects have been awarded in the state:

- Lee County Metropolitan Planning Organization's Complete Streets Initiative ($10.5 million, 2013)
- University City Prosperity Project at Florida International University ($11.4 million, 2013)
- Fort Lauderdale Wave Streetcar project ($18 million, 2012)
- Multimodal improvements in downtown Tampa ($10.9 million, 2012)
- Snake Road improvements, Seminole Tribe of Florida ($3.7 million, 2011)
- Parramore Bus Rapid Transit, City of Orlando ($10 million, 2010)

People for Bikes recognizes St. Petersburg's two-way protected bicycle lane on First Avenue as a Green Lane and has awarded five grants in the state for bicycle projects: the USA Official BMX Training Facility in Riverview; the Florida portion of the East Coast Greenway; the Area C Mountain Bike Park in Orlando; the Ross Prairie Singletrack near Ocala; and the Venetian Waterway Park on the state's west coast.

Complete Streets fact sheet: Georgia

Georgia has a total of **12** Complete Streets policies at all levels of government. Its **8** municipal policies cover **406,838** people, or **4%** of the state population. Georgia's state-level Complete Streets policy was adopted in 2012.

Population

Of Georgia's estimated 2012 population of **9,919,945**, 25% are under the age of 18, and 12% are over the age of 65. The over-65 share of the population is projected to grow to 14% by 2020, a 20% increase over 2012.

Some 75% of Georgia's population lives in urbanized areas. Median household income is $49,736 (versus a national median of $52,762) and per capita income is $25,383 (versus $27,915 nationally). About 17% of Georgia's population lives below the poverty line.

Commuting

More than **79% of Georgia commuters drive to work alone**, with around 4% of trips to work made by walking, riding a bicycle, or using public transit. More than one household in four (26%) has either one or no private vehicle available. About 10,000 Georgia residents are frequent bike commuters.

Pedestrian and bicyclist safety

People who walk in Georgia have a disproportionately greater risk of being injured or killed than elsewhere in the country, according to Transportation for America's *Dangerous By Design 2011*. The state's Pedestrian Danger Index of 102.9 made it the tenth most dangerous state to walk in. This translates into an average of about 155 pedestrians killed annually, or a pedestrian fatality rate of 1.7 per 100,000 population. For pedestrian fatalities among people over age 65, the state ranks 38th.

On average, 19 bicycle riders are killed each year in Georgia.

Health

Georgia has a growing obesity problem, with 29% of adults qualifying as obese, along with 17% of children ages 10–17. Chronic diseases related to obesity and inactivity are also rising, with 10% of the population diagnosed with Type 2 diabetes and 32% with hypertension.

A total of 27 counties are in EPA designated air-quality nonattainment areas: Barrow, Bartow, Bibb, Carroll, Catoosa, Cherokee, Clayton, Cobb, Coweta, De Kalb, Douglas, Fayette, Floyd, Forsyth, Fulton, Gwinnett, Hall, Heard, Henry, Monroe, Newton, Paulding, Putnam, Rockdale, Spalding, Walker and Walton.

Affiliations, awards, and multimodal transportation grants

Atlanta is a member city of the National Association of City Transportation Officials.

Georgia has two Walk Friendly Communities: Atlanta and Decatur. Six cities have been certified as Bicycle Friendly Communities by the League of American Bicyclists: Athens-Clarke County, Decatur, Jekyll Island, Roswell, Savannah and Tybee Island. The state ranks 24th nationally in its

Bicycle Friendliness. The LAB has certified ten Bicycle Friendly Businesses and two Bicycle Friendly Universities (Emory and the Georgia Institute of Technology) in the state.

Five TIGER grants for multimodal transportation projects have been awarded in the state:

- Southwest Atlanta BeltLine Corridor Trail, City of Atlanta ($18 million, 2013)
- Augusta Sustainable Development Planning Grant, Augusta-Richmond County ($908,000, 2010)
- Downtown Dahlonega Complete Streets planning, City of Dahlonega ($720,000, 2010)
- Atlanta Streetcar, City of Atlanta ($47.7 million, 2010)
- State University Complete Streets, City of Fort Valley ($1.5 million, 2010)

People for Bikes recognizes two segments of protected bike lanes in Atlanta as Green Lanes and has awarded six grants for multimodal projects in the state: Complete Streets policy and planning work in Atlanta; the Connecting the City project to add bike lanes on three key corridors in Atlanta; the Blankets Creek Trail in Woodstock; connecting bike lanes near Georgia Tech in Atlanta; a greenbelt spur in Carrolton; and the Rogers Bridge Trailhead in north Georgia.

Complete Streets fact sheet: Louisiana

Louisiana has a total of **two** Complete Streets policies at all levels of government. Its **one** municipal policy, in New Orleans, covers **343,829** people, or **7%** of the state population. Louisiana's state-level Complete Streets policy was adopted in 2010.

Population
Of Louisiana's estimated 2012 population of **4,601,893**, 24% are under the age of 18, and 13% are over the age of 65. The over-65 share of the population is projected to grow to 18% by 2030, a 36% increase over 2012.

Some 73% of Louisiana's population lives in urbanized areas. Median household income is $44,086 (versus a national median of $52,762) and per capita income is $23,853 (versus $27,915 nationally). About 18% of Louisiana's population lives below the poverty line.

Commuting
More than **82% of Louisiana commuters drive to work alone**, with around 3% of trips to work made by walking, riding a bicycle, or using public transit. More than one household in four (28%) has either one or no private vehicle available. About 8,000 Louisiana residents are frequent bike commuters.

Pedestrian and bicyclist safety
People who walk in Louisiana have a disproportionately greater risk of being injured or killed than elsewhere in the country, according to Transportation for America's *Dangerous By Design 2011*. The state's Pedestrian Danger Index of 122.2 made it the third most dangerous state to walk in. This translates into an average of about 104 pedestrians killed annually, or a pedestrian fatality rate of 2.3 per 100,000 population. For pedestrian fatalities among people over age 65, the state ranks 31st.

On average, 16 bicycle riders are killed each year in Louisiana.

Health
Louisiana has a growing obesity problem, with 35% of adults qualifying as obese, along with 21% of children ages 10–17. Chronic diseases related to obesity and inactivity are also rising, with 12% of the population diagnosed with Type 2 diabetes and 38% with hypertension.

Six Louisiana parishes are in EPA designated air-quality nonattainment areas: Ascension, East Baton Rouge, Iberville, Livingston, St. Bernard and West Baton Rouge.

Affiliations, awards and multimodal transportation grants
Louisiana has one Walk Friendly Community: New Orleans. Two cities have been certified as Bicycle Friendly Communities by the League of American Bicyclists: Baton Rouge and New Orleans. The state ranks 29th nationally in its Bicycle Friendliness.

Two TIGER grants for multimodal transportation projects have been awarded in the state:

- Claiborne Corridor planning ($1.1 million, 2010)

- NOLA Streetcar – Union Passenger Terminal/Loyola Loop, New Orleans RTA ($45 million, 2010)

People for Bikes has awarded three grants for multimodal projects in the state: the Lafitte Corridor Greenway in New Orleans; a BMX track in Pineville; and the New Orleans Bicycle Encouragement Ride, the city's first post-Katrina bicycle event.

Complete Streets fact sheet: Mississippi

Mississippi has a total of **nine** Complete Streets policies at all levels of government. Its **eight** municipal policies cover **183,825** people, or **6%** of the state population. Mississippi's state-level Complete Streets policy was adopted in 2010.

Population
Of Mississippi's estimated 2012 population of **2,984,926**, 25% are under the age of 18, and 14% are over the age of 65. The over-65 share of the population is projected to grow to 20% by 2025, a 45% increase over 2012.

Some 49% of Mississippi's population lives in urbanized areas. Median household income is $38,718 (versus a national median of $52,762) and per capita income is $20,521 (versus $27,915 nationally). About 22% of Mississippi's population lives below the poverty line.

Commuting
More than **83% of Mississippi commuters drive to work alone**, with around 2% of trips to work made by walking, riding a bicycle, or using public transit. Almost one household in four (24%) has either one or no private vehicle available. Only around 1,000 Mississippi residents are frequent bike commuters.

Pedestrian and bicyclist safety
People who walk in Mississippi have a disproportionately greater risk of being injured or killed than elsewhere in the country, according to Transportation for America's *Dangerous By Design 2011*. The state's Pedestrian Danger Index of 107.9 made it the seventh most dangerous state to walk in. This translates into an average of about 56 pedestrians killed annually, or a pedestrian fatality rate of 1.9 per 100,000 population. For pedestrian fatalities among people over age 65, the state ranks 27th.

On average, seven bicycle riders are killed each year in Mississippi.

Health
Mississippi has a growing obesity problem, with 35% of adults qualifying as obese, along with 22% of children ages 10–17. Chronic diseases related to obesity and inactivity are also rising, with 13% of the population diagnosed with Type 2 diabetes, and 39% with hypertension.

De Soto County is in an EPA designated air-quality nonattainment area.

Affiliations, awards, and multimodal transportation grants
Mississippi has one honorable-mention Walk Friendly Community: Oxford. Two cities have been certified as Bicycle Friendly Communities by the League of American Bicyclists: Oxford and Ridgeland. The state ranks 36th nationally in its Bicycle Friendliness. The LAB has certified two Bicycle Friendly Businesses in the state.

No TIGER grants for multimodal transportation projects have been awarded in the state.

People for Bikes has awarded one grant for a multimodal project in the state: Open Streets Jackson, sponsored by Bike Walk Mississippi, which closed several downtown streets to motor vehicles for a day.

Complete Streets fact sheet: North Carolina

North Carolina has a total of **ten** Complete Streets policies at all levels of government. Its **seven** municipal policies cover **1,181,839** people, or **12%** of the state population. North Carolina's two state-level Complete Streets policies were adopted in 2000 and 2012.

Population

Of North Carolina's estimated 2012 population of **9,752,073**, 23% are under the age of 18, and 14% are over the age of 65. The over-65 share of the population is projected to grow to 20% by 2030, a 43% increase over 2012.

Some 66% of North Carolina's population lives in urbanized areas. Median household income is $46,291 (versus a national median of $52,762) and per capita income is $25,256 (versus $27,915 nationally). About 16% of North Carolina's population lives below the poverty line.

Commuting

More than **80% of North Carolina commuters drive to work alone**, with around 3% of trips to work made by walking, riding a bicycle, or using public transit. Almost one household in four (24%) has either one or no private vehicle available. Around 11,000 North Carolina residents are frequent bike commuters.

Pedestrian and bicyclist safety

People who walk in North Carolina have a disproportionately greater risk of being injured or killed than elsewhere in the country, according to Transportation for America's *Dangerous By Design 2011*. The state's Pedestrian Danger Index of 102.7 made it the 11th most dangerous state to walk in. This translates into an average of about 164 pedestrians killed annually, or a pedestrian fatality rate of 1.9 per 100,000 population. For pedestrian fatalities among people over age 65, the state ranks 27th.

On average, 22 bicycle riders are killed each year in North Carolina.

Health

North Carolina has a growing obesity problem, with 30% of adults qualifying as obese, along with 16% of children ages 10–17. Chronic diseases related to obesity and inactivity are also rising, with 10% of the population diagnosed with Type 2 diabetes, and 32% with hypertension.

Seven North Carolina counties are in EPA designated air-quality non-attainment areas: Cabarrus, Gaston, Iredell, Lincoln, Mecklenburg, Rowan and Union.

Affiliations, awards, and multimodal transportation grants

Charlotte is a city member of the National Association of City Transportation Officials.

North Carolina has four Walk Friendly Communities: Asheville, Cary, Charlotte and Davidson. Eleven cities have been certified as Bicycle Friendly Communities by the League of American Bicyclists: Asheville, Carrboro, Cary, Chapel Hill, Charlotte, Davidson, Durham, Greensboro, Raleigh, Wilmington and Winston-Salem. The state ranks 28th nationally in its Bicycle Friendliness. The LAB has certified nine Bicycle Friendly Businesses and four Bicycle Friendly Universities (Duke, NC State, UNC Greensboro, UNC Wilmington) in the state.

Six TIGER grants for multimodal transportation projects have been awarded in the state:

- Goldsboro Main Street Revitalization, City of Goldsboro ($10 million, 2013)
- Raleigh Union Station Phase 1B, City of Raleigh ($10 million, 2013)
- Raleigh Union Station Phase I, City of Raleigh ($21 million, 2012)
- LYNX Blue Line Capacity Expansion, City of Charlotte ($18 million, 2011)
- East Riverside Sustainable Multimodal Neighborhood Planning, City of Asheville ($850,000, 2010)
- Lexington Multimodal Transportation Station Area plan, City of Lexington ($700,000, 2010)

People for Bikes has awarded four grants for multimodal projects in the state: Blue Clay Bike Park in Wilmington; Highland Rail Trail in Gastonia; the Gateway Multi-use Trail in Kings Mountain; and trails in Rocky Knob Park near Boone.

Complete Streets fact sheet: South Carolina

South Carolina has a total of **13** Complete Streets policies at all levels of government. Its **nine** municipal policies cover **314,293** people, or **7%** of the state population. South Carolina's state-level Complete Streets policy was adopted in 2003.

Population
Of South Carolina's estimated 2012 population of **4,723,723**, 23% are under the age of 18, and 15% are over the age of 65. The over-65 share of the population is projected to grow to 22% by 2030, a 50% increase over 2012.

Some 66% of South Carolina's population lives in urbanized areas. Median household income is $44,587 (versus a national median of $52,762) and per capita income is $23,854 (versus $27,915 nationally). About 17% of South Carolina's population lives below the poverty line.

Commuting
Almost **83% of South Carolina commuters drive to work alone**, with around 3% of trips to work made by walking, riding a bicycle, or using public transit. One household in four (25%) has either one or no private vehicle available. Around 6,000 South Carolina residents are frequent bike commuters.

Pedestrian and bicyclist safety
People who walk in South Carolina have a disproportionately greater risk of being injured or killed than almost anywhere else in the country, according to Transportation for America's *Dangerous By Design 2011*. The state's Pedestrian Danger Index of 124.1 made it the second most dangerous state to walk in. This translates into an average of about 98 pedestrians killed annually, or a pedestrian fatality rate of 2.3 per 100,000 population. For pedestrian fatalities among people over age 65, the state ranks 36th.

On average, 15 bicycle riders are killed each year in South Carolina.

Health
South Carolina has a growing obesity problem, with 32% of adults qualifying as obese, along with 22% of children ages 10–17. Chronic diseases related to obesity and inactivity are also rising, with 12% of the population diagnosed with Type 2 diabetes and 36% with hypertension.

York County is in an EPA designated air-quality non-attainment area.

Affiliations, awards and multimodal transportation grants
Six South Carolina cities have been certified as Bicycle Friendly Communities by the League of American Bicyclists: Charleston, Columbia, Greenville, Hilton Head Island, Rock Hill and Spartanburg. The state ranks 34th nationally in its Bicycle Friendliness. The LAB has certified twelve Bicycle Friendly Businesses and two Bicycle Friendly Universities (Clemson and USC Columbia) in the state.

Four TIGER grants for multimodal transportation projects have been awarded in the state:

- Boundary Street Redevelopment, City of Beaufort, SC ($12.6 million, 2011)

- Broad Street Road Diet planning, City of Camden ($456,000, 2010)
- Linking Greenville's Neighborhoods to Jobs and Open Space, City of Greenville ($253,000, 2010)
- U.S. 17 Septima Clark Pkwy, City of Charleston ($10 million, 2009)

People for Bikes has awarded seven grants for multimodal projects in the state: two projects on the Swamp Rabbit Trail near Greenville; the East Bay Street Bicycle/Pedestrian Pathway in Charleston; Grainger Road Bike Trail in Conway; the Vista Greenway project in Columbia; Sumter Street Bike Lanes at the University of South Carolina; Patrick Randall Sawyer Multi-use Path in Hartsville.

Complete Streets fact sheet: Tennessee

Tennessee has a total of **seven** Complete Streets policies at all levels of government. Its **five** municipal policies cover **1,526,562** people, or **24%** of the state population. Tennessee's state-level Complete Streets policy was adopted in 2003 and updated in 2010.

Population

Of Tennessee's estimated 2012 population of **6,456,243**, 23% are under the age of 18, and 14% are over the age of 65. The over-65 share of the population is projected to grow to 22% by 2030, a 53% increase over 2012.

Some 66% of Tennessee's population lives in urbanized areas. Median household income is $43,989 (versus a national median of $52,762) and per capita income is $24,197 (versus $27,915 nationally). About 17% of Tennessee's population lives below the poverty line.

Commuting

Almost **84% of Tennessee commuters drive to work alone**, with around 3% of trips to work made by walking, riding a bicycle, or using public transit. Around one household in four (23%) has either one or no private vehicle available. Around 3,000 Tennessee residents are frequent bike commuters.

Pedestrian and bicyclist safety

People who walk in Tennessee have a disproportionately greater risk of being injured or killed than elsewhere in the country, according to Transportation for America's *Dangerous By Design 2011*. The state's Pedestrian Danger Index of 93.2 made it the 12th most dangerous state to walk in. This translates into an average of about 81 pedestrians killed annually, or a pedestrian fatality rate of 1.4 per 100,000 population. For pedestrian fatalities among people over age 65, the state ranks seventh.

On average, seven bicycle riders are killed each year in Tennessee.

Health

Tennessee has a growing obesity problem, with 31% of adults qualifying as obese, along with 21% of children ages 10–17. Chronic diseases related to obesity and inactivity are also rising, with 12% of the population diagnosed with Type 2 diabetes and 39% with hypertension.

Eight Tennessee counties are in EPA designated air-quality non-attainment areas: Anderson, Blount, Hamilton, Knox, Loudon, Roane, Shelby and Sullivan.

Affiliations, awards, and multimodal transportation grants

Memphis is an affiliate city member of the National Association of City Transportation Officials.

Tennessee has one honorable-mention Walk Friendly Community: Franklin. Three cities have been certified as Bicycle Friendly Communities by the League of American Bicyclists (Chattanooga, Knoxville and Nashville-Davidson County. The state ranks 17th nationally in its Bicycle Friendliness. The LAB has certified twelve Bicycle Friendly Businesses and one Bicycle Friendly University (Lincoln Memorial) in the state.

Two TIGER grants for multimodal transportation projects have been awarded in the state:

- Nashville Transit Signal Priority System, Nashville Metropolitan Transit Authority ($10 million, 2013)
- Main Street to Main Street Multimodal Connector between Memphis, TN and West Memphis, AR ($14.9 million, 2012)

Memphis is the home to one of the Green Lanes Project's pilot protected bikeways, and Nashville has a recognized Green Lane along 28th Ave. People for Bikes has awarded five grants for multimodal projects in the state: the Overton-Broad Connector and Greenline Connection projects in Memphis, as well as bicycle education and promotion throughout the city; the Laurel Creek Trails in Johnson County; and Raccoon Mountain Trails near Chattanooga.

Introduction to Complete Streets: Presentation

AARP and the National Complete Streets Coalition have developed a template educational presentation with specific examples from the Southeast. It summarizes the need for Complete Streets, highlights some of the benefits communities can achieve, includes photographic examples from the region, and shares best practices from within the region. The presentation is available for download at: http://www.smartgrowthamerica.org/documents/cs/resources/cs-aarp-southeast2014.pptx.

Local advocates and transportation professionals have developed their own presentations on Complete Streets. In Georgia, Georgia Bikes worked with the Georgia Department of Transportation, the City of Atlanta, and consulting firm Alta Planning and Design to facilitate a series of workshops on Complete Streets. More information about Georgia's workshops, including a link to download the presentations, is available at: http://www.georgiabikes.org/index.php/blog/313-cs-wkshps-success.

In Memphis, the local Complete Streets Coalition developed a 12-minute video and an accompanying PowerPoint presentation to cover the importance and benefits of Complete Streets. In addition, the Coalition members engaged audiences in real discussions about the topic. Over a dozen organizations, including the Memphis Area Association of Realtors and the Shelby County Health Department, hosted the presentation. The video is available to view online: http://www.youtube.com/watch?v=K0hlBfhMjlo.

To download the Memphis presentation, visit: http://www.smartgrowthamerica.org/documents/cs/resources/tn-memphisshelbycounty-cs-presentation.pdf.

Sample Letters to the Editor

Time for [your community] to Complete our Streets

To the Editor,

Over 600 communities in the United States have taken a stand to make streets safer and more convenient for everyone who uses them, but right now, [your community] isn't one of them.

These communities have passed Complete Streets policies, a cost-effective way to improve safety and accessibility for everyone using our roads. Whether you are walking, bicycling, driving, or taking public transportation, Complete Streets work for all people, regardless of age, ability, income, or how they chose to travel. A Complete Streets policy in [your community] would make streets that are safe and easy to cross on foot, comfortable and appealing to drive along, and safe for bicyclists.

In addition, the benefits of Complete Streets go beyond safety. This approach could make [your community] a more attractive place to live and visit. Streets that are safe and convenient to walk along attract visitors, promote business growth, and would add value to [your community]'s identity and character.

This year, let's work together to pass our own Complete Streets policy and join the ranks of communities across the country making their streets safer and more attractive. Let's pass a Complete Streets policy to benefit our residents and visitors for decades to come.

Complete Streets are a tourist attraction—and that's a good thing

To the Editor,

As we look for ways to make [your community] more attractive for visitors and residents, I encourage city leaders to consider Complete Streets.

Complete Streets are safe and convenient for everyone, including people walking, bicycling, driving, and taking transit. Every Complete Streets approach is unique, but often includes things like sidewalks, bike lanes, bus lanes, comfortable and accessible public transportation stops, and frequent and safe crossing opportunities.

These are all key parts of any great tourism destination. If we want visitors to get out of their cars and into our historic sites and shops, we need to make our streets safe, attractive, and inviting. A Complete Streets policy can help make that happen.

A Complete Streets approach would give visitors and residents more options for how to get around town. Many travelers seek out places where walking or bicycling are part of the appeal, and by expanding these options we could also reduce traffic congestion for those who chose to drive. No one wants to spend their vacation stuck in traffic.

[Optional paragraph] Some communities have even seen walking and bicycling become a significant part of their economy. According to the National Complete Streets Coalition, bicycling is a major draw for tourists in Hilton Head Island, South Carolina, where tourists spend almost as much to enjoy the island by bicycle as they do to golf there. And, in Atlanta, research indicates that walkable communities draw new businesses and improve rents. With our mild climate as an asset, Complete Streets could make our community a destination for tourists from around the region.

Let's make [your community] a great place to live AND visit. This year, I encourage city leaders to adopt a Complete Streets policy.

Sample editorial

Complete Streets would bring broad benefits to [your community]

One of our region's more insistent and overlooked safety hazards is the dangerous conditions that exist for people choosing to walk and bike. Today, a new approach to planning and building road projects in [your community] could help change that. The movement is called Complete Streets, and communities across the region are using these policies to make streets safer, to make travel in communities more convenient, and to invigorate downtown areas.

Complete Streets are streets for everyone. They are designed and operated to enable safe access for all users, including pedestrians, bicyclists, , and transit riders of all ages and abilities. Many streets in our region are not complete, meaning walking, bicycling, and taking public transportation on these streets is inconvenient and, too often, dangerous.

A Complete Streets policy can change that. By encouraging department of transportation officials to routinely consider the needs of people walking, taking transit, bicycling, and driving, this approach gives people of all ages and abilities more options when traveling to work, school, the grocery store, and to visit family.

There is no singular design prescription for Complete Streets; each one is unique and responds to the surrounding community. We may see features such as sidewalks, bike lanes, special bus lanes, comfortable and accessible public transportation stops, frequent and safe crossing opportunities, median islands, accessible pedestrian signals, curb extensions, roundabouts, and more.

These strategies can make streets safer for everyone who uses them, and they can also improve public health, create cleaner air, and support a more attractive environment for local business and tourism.

People who drive benefit from Complete Streets too. The approach can reduce traffic congestion by increasing the overall capacity of a transportation network. And many Complete Streets strategies are simple, inexpensive, and can be done in a relatively short timeframe.

Local businesses may also see benefits. When West Jefferson, NC reconfigured its Jefferson Avenue, ten new businesses opened and tourism has been up each of the last three years, reported the National Complete Streets Coalition.

Perhaps most importantly, Complete Streets can also help protect [your community]'s character. [Include a few examples of what your community is most proud of, and how Complete Streets would support it.]

As [your title/position], one of my key priorities is to help ensure the health and welfare of our residents and visitors. Complete Streets will help [your community] become safer, more vibrant, and more active. We should look for opportunities in our community to implement Complete Streets as fully as possible and thereby share in these benefits.

Complete Streets audit and implementation plan

Planning for implementation benchmarks current practices, involves the many stakeholders, identifies clear expectations for change, and assigns responsibility and deadlines for those changes. Cobb County, Georgia developed such a plan that other jurisdictions in the southeast can model. Their plan builds on the previously discussed document audit to identify areas for change and coordination and to create implementation goals with general timelines for follow-through. A template plan based on Cobb County's follows.

The success of a Complete Streets policy or initiative requires integration in the plans, regulations, standards, procedures, and processes that guide the transportation decision-making process. While there are many high-level commonalities, the details of this process vary by agency and are dependent on local culture and tools. Complete Streets supporters should work with their allies in transportation planning and engineering to understand the local process.

A good first step is to identify the variety of documents, procedures, and processes that are used—and by whom. Common areas where planners, engineers, and public works staff can integrate Complete Streets are:

- Transportation planning—conducting a comprehensive assessment of transportation needs, demographics, and travel patterns in a community or along a street to identify appropriate improvements for all users and modes
- Transportation design and engineering—updating practices and standards that guide the functional design of transportation network, streets, and intersections to provide safe, comfortable, and efficient movement for all users and modes
- Land use planning—making decisions regarding land uses, including form and zoning, that complement efforts to create a balanced, multimodal transportation network
- Funding—establishing prioritization and funding processes to support investment in projects that achieve Complete Streets goals
- Performance measurement—collecting and analyzing data to ensure project outcomes support a community's vision for transportation and other related issues, such as public health
- Maintenance and operations—ensuring ongoing activities to keep systems in good repair and operation provide appropriate opportunities to improve and maintain facilities for all users and modes
- Training—providing opportunities for professional development related to current best practices in Complete Streets

In the following template implementation plan, note the documents, procedures, and processes for each area that can facilitate integration and institutionalization in the second column. Then, fill in the third column with the departments, positions, and/or outside partners who use those tools.

To continue building an implementation plan, undertake a systematic review of a community's documents, procedures, and processes that guide transportation decisions. When reviewing these documents and procedures, consider how they address:

- The needs of people walking
- The needs of people bicycling

- The needs of transit users
- The needs of transit vehicles
- The needs of freight and commercial travel
- The needs of people driving automobiles
- The variations in user needs based on age
- The variations in user needs based on ability
- Integration and prioritization of walking, bicycling, and transit needs into decisions
- Context sensitivity
- Block size and intersection density
- Network connectivity for each mode
- Latest national standards for design
- Public input and engagement

During the review, note any places where modifications are necessary to better support Complete Streets outcomes. From those, identify needed actions, deliverables, and general timelines for work.

Integration area	Documents, procedures, processes	Owners and partners	Action required	Implementation deliverables and timeline
Transportation planning				Immediate:
				Mid-term:
				Long-term:
Transportation engineering and design				Immediate:
				Mid-term:
				Long-term:

Integration area	Documents, procedures, processes	Owners and partners	Action required	Implementation deliverables and timeline
Land use planning				Immediate:
				Mid-term:
				Long-term:
Funding				Immediate:
				Mid-term:
				Long-term:

Integration area	Documents, procedures, processes	Owners and partners	Action required	Implementation deliverables and timeline
Performance measurement				Immediate:
				Mid-term:
				Long-term:
Maintenance and operations				Immediate:
				Mid-term:
				Long-term:

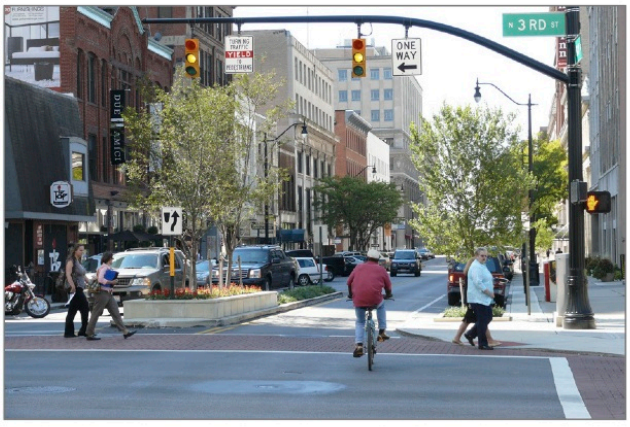
Integration area	Documents, procedures, processes	Owners and partners	Action required	Implementation deliverables and timeline
Training				Immediate:
				Mid-term:
				Long-term:

Implementation plan: Cobb County, Georgia

Best Practices	Related Documents	Coordination Status	Implementation Goals
Create a Unified Street Design Manual	Development Regulations, Engineering Procedures Manual, Comprehensive Transportation Plan, Zoning Codes, Bike & Pedestrian Plan	Currently no unified design manual exists. Greater flexibility in design is needed. Design should be context sensitive and surrounding coordinated with land uses (See Appendix E for Examples)	Immediate Use ITE CSS to supplement AASHTO guidelines and allow greater design flexibility and begin process for creating Cobb Street Design Manual
			Mid-Term Adopt Design Manual and apply to all County funded projects
			Long-Term Amend Development Regulations and Zoning Code to enforce Design Manual on "by right" development
Clearly Define Street Planning Process	Development Regulations, Engineering Procedures Manual, Zoning Code	Process is not codified in a single document. Process should include all users (Aging, Disabled, Transit, Advocate for Children)	Immediate Create a document that outlines the current street planning process
			Mid-Term Create and adopt a transparent planning process on all County funded projects (e.g. Charlotte, NC 6 step process)
			Long-Term Include adopted process in Design Manual for use in public and private funded projects
Project Prioritization	Comprehensive Transportation Plan, Bike & Pedestrian Plan, SPLOST Program	Projects are appropriately linked to Comprehensive Transportation Plan and the Bicycle & Pedestrian Plan	Immediate Focus prioritization of improvements on access to schools, major activity centers, ADA accessibility in conjunction with safety and congestion
			Mid-Term Link 5 year CIP to implementation strategies from CTP and Bike & Pedestrian Plan
			Long-Term Continue to update CIP based on updates of Transportation Plans

Train Engineers, Planners and Staff on CS Train Engineers, Planners and Staff on CS principles (cont.)	Institute of Transportation Engineers Context Sensitive Solutions, American Association of State Highway Transportation Officials Bicycle & Pedestrian Design Guidance, (Cobb Street Design Manual)	Currently there is not a Complete Streets training program developed for the County	Immediate Provide training through Local and National Complete Streets and CSS Seminars before a formal manual is written
			Mid-Term Continue to provide on going training. When the Design Manual is complete, conduct an orientation session with all personnel
			Long-Term Have new hires attend Complete Streets seminars and training, and Cobb Street Design Manual orientation
Research and Secure Appropriate Funding	Zoning Codes, Design Manual, Capital Improvement Plan, Special Purpose Local Option Sales Tax Program	Funding sources are clearly organized in Capital Improvement Plan and Special Purpose Local Option Sales Tax program	Immediate Apply for Transportation Enhancement and Safe Routes to School funding
			Mid-Term Amend zoning codes to provide incentives to developers that included bike lanes and public sidewalks in new projects. Monitor GDOT, ARC and FHWA for new funding opportunities
			Long-Term Determine what funding will be available after new federal transportation bill has been adopted. Create a funding appendix in Street Design Manual and update regularly
Inter-Departmental Coordination	Capital Improvement Plan, Comprehensive Transportation Plan, Bike and Pedestrian Plan	Coordination exists in County funded projects in initial planning. Additional coordination in the prioritization phase by coordinating plans with other departments and utility companies	Immediate Evaluate what current projects can be consolidated. Determine where road diets can be made on any current repaving projects
			Mid-Term Determine where sidewalk and bike lanes can be installed in conjunction with storm water, sewer, or utility projects

			Long-Term Continue dept. coordination and outreach to GDOT and utility companies so that projects may be combined
Performance Evaluation	Design Manual, Comprehensive Transportation Plan, Bike & Pedestrian Plan, Engineering Procedures Manual	The Engineering Procedures Manual does not require bike or pedestrian counts before or after infrastructure improvements	Immediate Amend the Engineering Procedures Manual to require pedestrian and bicycle counts before sidewalk and bike lane additions/improvements and/or road diets
			Mid-Term Conduct bike and pedestrian counts after major maintenance, construction, or road diets. Measure miles of sidewalk and bike lanes to track progress of expanding bike and pedestrian network. Measure transit ridership and land use changes along streets where improvements are made
			Long-Term Analyze data from bike and pedestrian counts and crash data to determine the effectiveness of improvements and make adjustments where necessary



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Process: Charlotte, North Carolina

Formally adopted by City Council in 2007, Charlotte's *Urban Street Design Guidelines* offers a comprehensive approach to planning and designing streets within the city. The document resulted from an understanding that to provide a high quality of life while accommodating future population growth, the city would need safe and convenient transportation options that included driving, but also bicycling, walking, and an increased use of public transportation. The *Guidelines* were based in professional best practices and developed with meaningful input from the public, private developers, and the city's emergency responders. In 2009, the U.S. Environmental Protection Agency awarded Charlotte with a National Award for Smart Growth Achievement in Policies and Regulations for the *Guidelines*.[1]

An exemplary—but commonsense—process for creating Complete Streets is detailed in the *Urban Street Design Guidelines*. This six-step process is used in workshops provided by the National Complete Streets Coalition and has been adapted and adopted by numerous other agencies across the country. An excerpt from Chapter 3 of the document is below, and a tool to model this process in any community follows.

> 3. APPLYING THE GUIDELINES
> The previous chapter explained that various stakeholders have different expectations of what makes streets "good" or even "great." To appropriately apply the Urban Street Design Guidelines (USDG), the plan/design team must assess the expectations of a variety of stakeholders in order for streets to best reflect their contexts and intended functions. This assessment is also intended to ensure that the resulting streets are "complete" streets--streets that provide for the safety and comfort of all users to the best extent possible.
>
> The purpose of this chapter is to explain how the perspectives of all stakeholders interested in or affected by existing or future streets will be incorporated into a new process for planning and designing streets in Charlotte's Sphere of Influence. The new process described in this chapter consolidates traditional city planning, urban design and transportation planning activities into a sequence of fact-finding and decision-making steps.
>
> The application of the new process for planning and designing streets is intended to support the creation of "more streets for more people." This overriding goal of the USDG will require achieving the following changes:
> 1. Ensuring that the perspectives of all stakeholders interested or affected by streets are seriously considered during the planning and design process for existing or future streets;
> 2. Defining a clear sequence of activities to be undertaken by staff, consultants and stakeholders;
> 3. Remembering that this will be a process that is much more geared toward what we want to happen in the future than just accepting what happened in the past or exists now;
> 4. Verifying that the inevitable tradeoffs affecting objectives, benefits, costs, and impacts are well documented so that the recommendations made by staff, consultants or stakeholders are based on understanding the direct effects on specific modes of travel and/or land use intentions; and
> 5. Always striving to create not only more streets, but also more complete streets that are good for all modes of travel, and even some great streets that are remarkable because of the very

effective and favorable ways that the adjacent land uses and transportation functions of those streets support each other.

The process described in this chapter provides a great deal of flexibility to those involved in the decision-making process, to ensure that the resulting streets are appropriately based on the existing and proposed land use and transportation contexts. This flexibility is intended to foster creative solutions by ensuring that land use planners, engineers, transportation planners and others work together to think through the implications of alternative street designs.

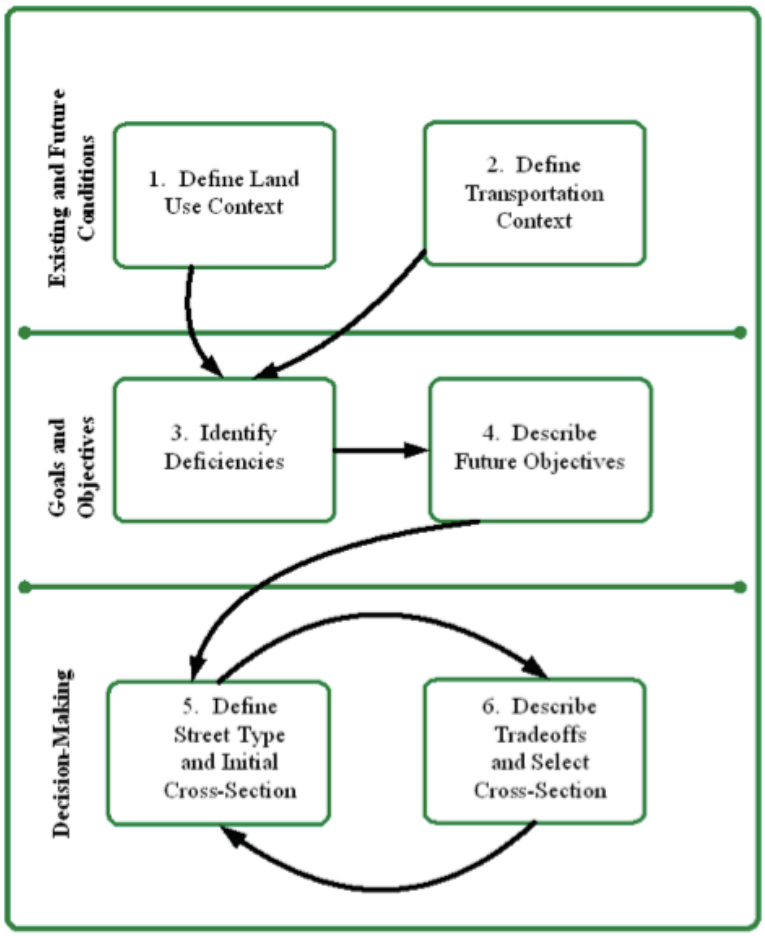

Figure 3.1. The Six-Step process for Applying Charlotte's Urban Street Design Guidelines.

1 For more information on the award, including a video, please visit http://www.epa.gov/dced/awards/sg_awards_publication_2009.htm#policies_reg.

Six-step process worksheet

This worksheet will help you apply Charlotte's six-step process to a single street or a collection of streets in an area. Per the *Urban Street Design Guidelines*, "three assumptions are built into the six-step process:

1. **The process will involve a variety of stakeholders.** The number of stakeholders and discussions will vary, depending on the magnitude and consequences of the street(s) to be designed.
2. **The resulting street will be as "complete" a street as possible**...
3. **The steps in the decision-making process will be well-documented.** The documentation will clearly describe the major tradeoffs made among competing design elements, how those were discussed and weighed against each other, and the preliminary and final outcomes. Thorough documentation will ensure that all stakeholders' perspectives are adequately considered in the final design."

The intent of this process "is to ensure that the existing and future contexts are given adequate consideration, that any related plans are modified to reflect the outcome, and that all perspectives are given equal consideration in the process."

The questions in this workshop are adapted from the *Urban Streets Design Guidelines* Chapter 3: Applying the Guidelines.[1]

Step 1: Define the current and planned land uses surrounding the street
Transportation and land use decisions are interrelated. The ultimate design of the street and the surrounding network should reflect the existing and expected community context. Responses to the below prompts will inform the design objectives determined in Step 4 and the appropriate street design proposed in Step 5.

- Describe the character of this corridor (e.g. rural, commercial, suburban)
- Describe roadway location
- Describe adjacent land use types and density
- Describe the urban design context (e.g., scale, setback)
- Describe any changes to the land use, per adopted plans or approved permits
- Describe any other major land use considerations

Step 2: Define the current and future transportation context
In considering the transportation context for the project, it is vital to look at both existing and expected conditions of the adjacent street network in addition to the street segment (or streets) being planned and designed in this exercise. Considering the network context ensures that problem spots are not simply moved elsewhere and, more importantly, that a connected network for all modes is developed. Responses to the below prompts will inform the design objectives and proposed design.

- Street type and right-of-way width
- Describe how street is used (e.g., Peach Road is major cross-town thoroughfare)
- Describe adjacent street features (e.g., disconnected local street network, numerous cul-de-sacs)

- Describe terrain or other features that define this street
- Speed limit and compliance (posted and operating speeds)
- Current daily and hourly traffic volumes
- Describe crash types and frequency on this road
- Describe sidewalk infrastructure and continuity
- Describe provided transit service and location of stops
- Describe bicycle facilities
- Describe this street within the context of the surrounding network, including streets, sidewalks, transit, and bicycle connections
- Describe any programmed or planned projects that would affect the street
- Describe the anticipated walking, bicycling, transit, and vehicular traffic volume
- Describe any other transportation considerations

Step 3: Identify deficiencies for all modes and the relationship between transportation and land use contexts

Clearly defining the context for the street and its larger network allows the project team to identify true deficiencies and needs that this project can address. Deficiencies for each mode and the relationship between the transportation and land use contexts should be discussed while responding to the below questions.

- Are there gaps in the bicycle or pedestrian network along the street? In the area?
- Are the existing walking and bicycling facilities insufficient in any way?
- Is there a need to provide more connectivity in the area?
- Does anticipated multimodal travel exceed current capacity?
- Is the amount and type of transit service appropriate for the land use? Are the stops or stations accessible and appropriate for the type of service and the surrounding context?
- Is the existing street network appropriate for the existing or planned land uses?

Step 4: Describe future objectives

The team first defines the objectives of this project in Step 4. Only by considering the above three steps can objectives be formed. The questions below synthesize input gathered from the community with existing policies, the intent to follow Complete Streets guidance, and information gathered in the earlier three steps.

- What existing policies might or should influence objectives for this street?
- What conditions are expected to stay the same? What conditions should stay the same?
- What do community members and stakeholder groups want for this street and its surrounding neighborhood? What do they want to stay the same? What would they like to change?

Step 5: Recommend street classification and test initial cross-section

With objectives that are based on an understanding of the transportation and land use context and have incorporated the desires of community members, the team can select the most appropriate street classification and, from there, an appropriate cross-section. The rationale for these choices should be documented, as should any recommended changes to relevant land use and transportation plans.

Next, the project team tests the selected cross-section against the land use and transportation contexts. Compare the cross-section to the defined objectives for the project. Does this design achieve those goals? Does it adequately balance the transportation needs? Does it fit appropriately in the existing and anticipated land use context?

Describe any additional constraints and concerns, such as lack of right-of-way and existing structures or trees, which may prohibit the use of the initially defined cross-section.

Step 6: Describe trade-offs and select cross-section
If the initial cross-section can be applied, then it becomes the recommended cross-section and the project moves ahead. Commonly, however, the initial cross-section will need to be refined to address the context and defined objectives in light of constraints identified in Step 5. The team should carefully consider the tradeoffs in adjusting the cross-section, taking into account the needs of each mode, the land use, and community members. It will not be a simple or quick process for every project. Larger-scale efforts will be more complicated and require more stakeholders.

The method for evaluating the tradeoffs should be documented, as should the discussion. Documentation is useful not only to recall points made during this iterative step, but also to provide information that could be useful for future projects with similar characteristics, constraints, and objectives.

The refined cross-section should again be tested, per Step 5, in an iterative process. If multiple alternatives are developed, stakeholders should be consulted for input.

A final cross-section is one that best matches the context and future objectives for the current project, the surrounding transportation network, and the land use context; it is the culmination of all the previous steps and public input.

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1 The *Urban Street Design Guidelines* are available to download for free from the Charlotte Department of Transportation: http://charmeck.org/city/charlotte/transportation/plansprojects/pages/urban%20street%20design%20guidelines.aspx.