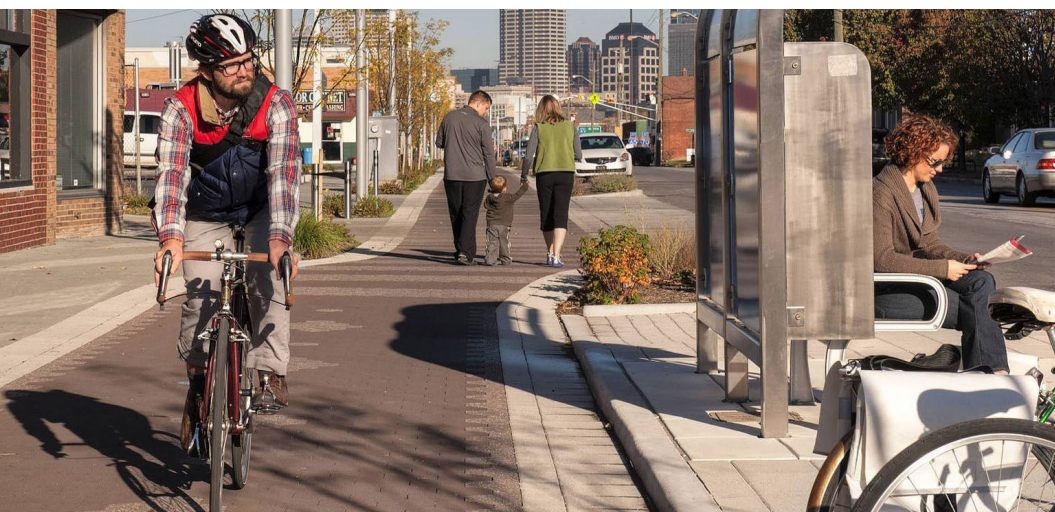




Web: <http://nitc.us>



## MAKING STREETS INTO COMPLETE STREETS

*Researchers created a manual to aid planners in adopting complete streets policies and designs.*

### The Issue

Traditionally, road design in the United States has been based on the simple principle of moving as many cars as possible. The “Complete Streets” movement, a new way of approaching street design, is gaining ground as more planners and engineers work to build road networks that are safer, more livable and welcoming to all types of travelers. To inform and encourage complete street redesigns, NITC researchers have created a manual to aid traffic engineers, transportation planners, elected officials, businesses and community stakeholders in re-envisioning their streets.

Principal investigator Marc Schlossberg and co-investigator John Rowell, of the University of Oregon, put together an evidence-based design guide featuring 25 complete streets from around the country. Policies that favor complete streets are being adopted all across the United States, but local officials have few documented guidebooks to help them think about how to retrofit streets based on best practices. This project’s aim was to fill this gap, making it easier for communities to use the evidence from other communities when making decisions about retrofitting their streets.

### The Research

When selecting sites for inclusion in the manual, Schlossberg and Rowell consulted with the directors of the National Complete Streets Coalition, the League of American Bicyclists and the Association of Pedestrian and Bicycle Professionals. The directors of these organizations offered guidance as to what content they thought would be most useful to their national constituencies of transportation professionals. In addition, the research team

### THE ISSUE

The “Complete Streets” movement is taking hold throughout the U.S., but there are few guidebooks providing examples of street redesign projects.

### THE RESEARCH

NITC researchers have begun to fill this gap by:

- Documenting 25 complete street redesigns from around the country;
- Providing before-and-after photographic evidence;
- Compiling relevant transportation statistics.

### IMPLICATIONS

The resulting full-color manual can help inform the decisions of policymakers interested in re-envisioning their city streets.

*Photo: Transit shelter and bicycle parking along the Indianapolis Cultural Trail in Indianapolis, Indiana*

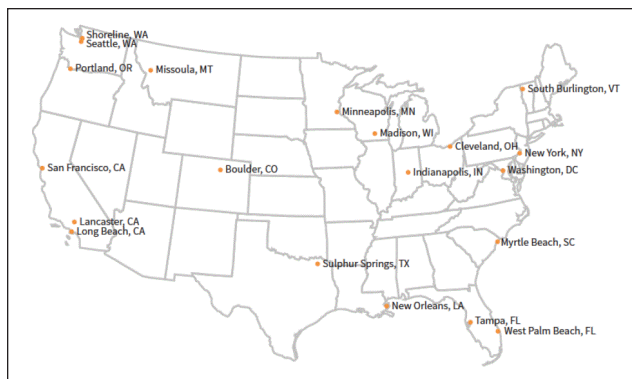
engaged engineers and designers from local and state government and the private sector who had been involved with similar street retrofit projects.

Through this process the researchers refined their approach, choosing to focus on the type of streets that could be found in almost any city across the country. The idea was to provide examples that many communities of different sizes, locations, and political tendencies could learn from, so the first criteria was that the street be a fairly typical street. The second criteria was to choose projects that had a placemaking quality, usually related to street-oriented commercial activity. In most cases, the street project had a partial goal of creating “place” that enhanced the economic vitality of street-oriented businesses, while also addressing transportation throughput and multimodal access.

Along with photographs documenting the context and before-and-after appearance of the redesigned streets, researchers included data about safety, economic factors, annual average daily traffic (AADT) and mode choices. Street design has an impact on transportation access, comfort and safety as well as placemaking qualities. There are often trade-offs between each of these factors, and guidebooks such as this one offer an opportunity for community stakeholders to understand how to think of these trade-offs.

## Implications

The result of this research project was a guide which includes some basic information about streets, some of the terminology engineers and planners commonly use, and other relevant concepts that can provide basic education to a range of professionals, policymakers, and stakeholders who are inevitably involved when redesigning streets is on the local agenda. The guidebook does not recommend a single strategy; rather, it demonstrates that designers can implement multiple strategies based on a street’s context and a project’s goals.



### Nationwide distribution of streets in the manual

This figure shows the locations of streets in the guide. Researchers sought to include a diversity of street types and locations, to make the design manual a nationally relevant and useful resource.

Many complete

street transformations include a “road diet,” in which a four-lane road with no median or bike lanes is turned into a two-lane road (one lane in each direction), a center turn median, and two bike lanes. Other strategies often include the addition of bicycle facilities and the enrichment of pedestrian infrastructure. Additional streetscape elements like street furniture, trees and parked cars effectively slow down traffic and make the street a more pleasant place.

The manual, called *Rethinking Streets: An Evidence-Based Guide to 25 Complete Street Transportations*, is designed to orient a wide variety of community stakeholders to the range of possibilities for street redesigns. The collection of completed projects can give readers understanding and insight as to what might be possible in their own communities.

## PROJECT INFORMATION

**TITLE:** Making Streets into Complete Streets: An Evidence Based Design Manual

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**PROJECT NUMBER:** 2015-539

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