Complete Streets – Some Assembly Required

alta
PLANNING + DESIGN

Fifth Urban Streets Symposium
May 24, 2017

So you have a plan…now what?

Main Street/US 64 Downtown Streetscape - COMPLETED

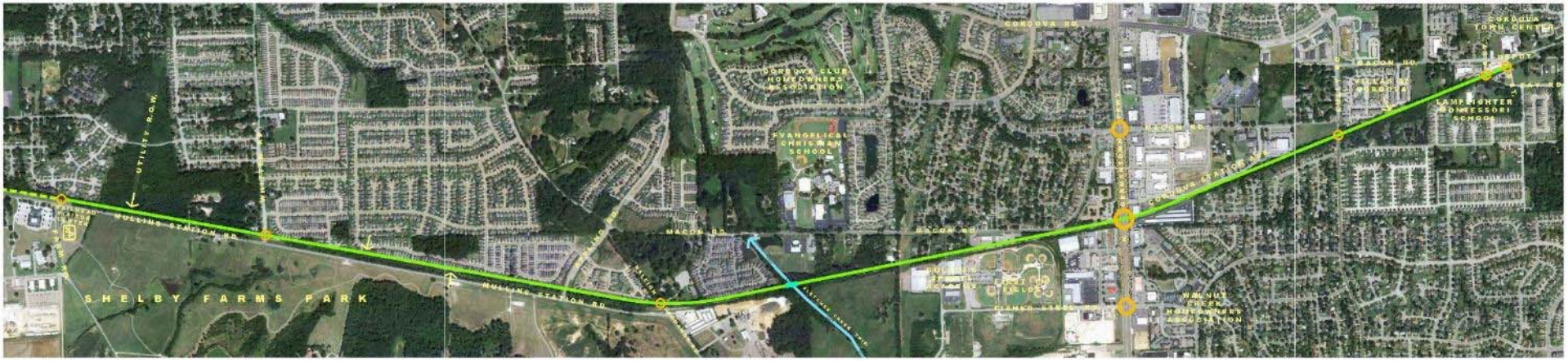
El Paso Avenue Complete Street – COMPLETED

Build it? Not so fast…

Pitfalls AFTER Planning:
The Usual Suspects

- Doesn’t conform to local/state standards
- Community resistance
- Agency resistance (especially with respect to motorized traffic performance)
- Constructability issues
- Funding constraints (including cost escalation)

Memphis, TN – Greenline, Germantown Parkway Crossing



LEGEND

- PROPOSED GREENLINE
- EXISTING GREENLINE
- GREENLINE - BRIDGE / TRESTLE
- STREET CROSSING - AT GRADE
- GREENLINE ALTERNATE ROUTE
- PROPOSED PEDESTRIAN ACCESS
- SHARED PARKING
- STREAM CHANNEL

1/2 MILE

0 1000' 2000' 3000'

SHELBY FARMS GREENLINE EXTENSION

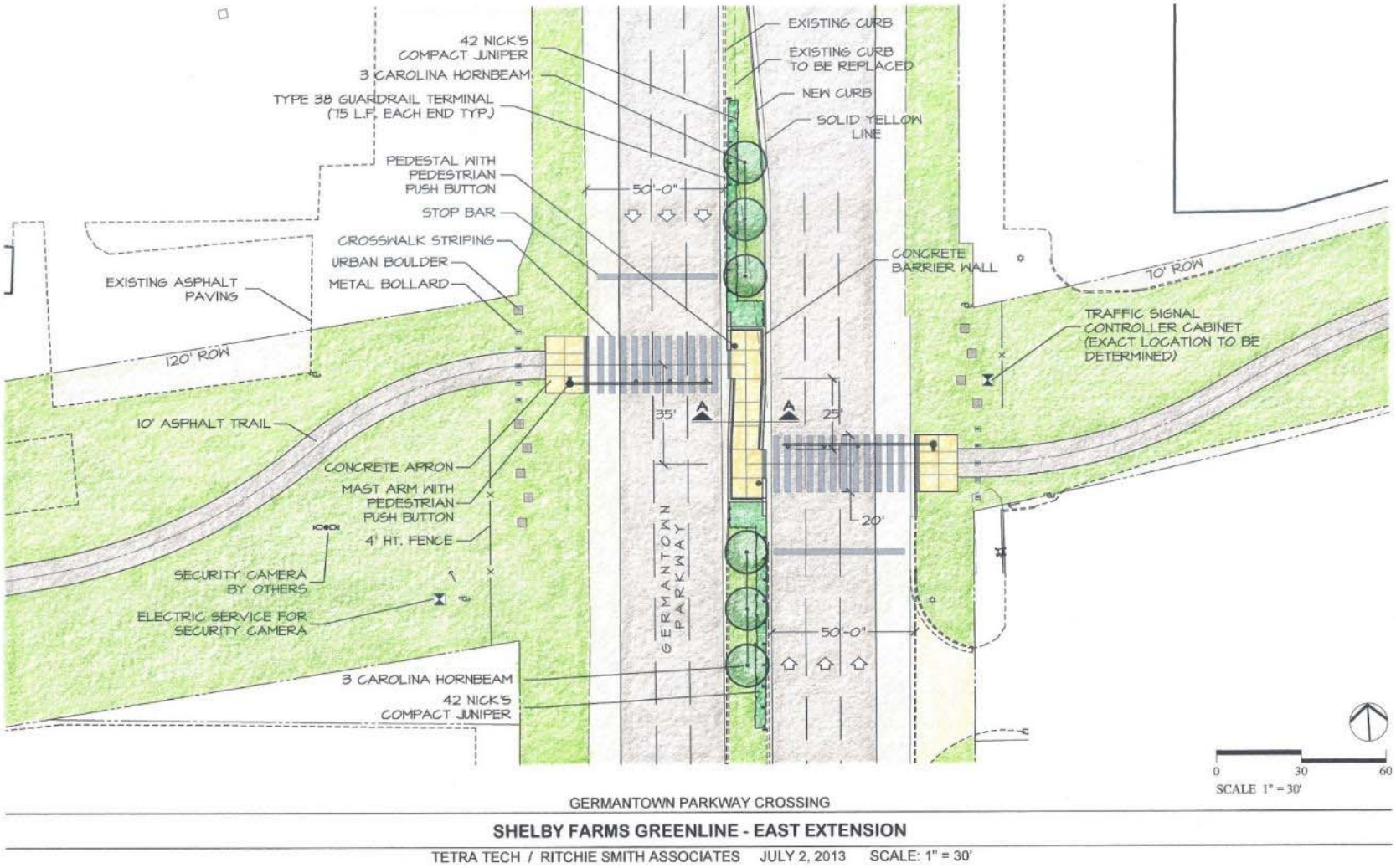
SHELBY COUNTY GOVERNMENT | SHELBY FARMS PARK CONSERVANCY

TETRA TECH | RITCHIE SMITH ASSOCIATES | TOLES AND ASSOCIATES | FUSS & O'NEILL | PSI | APRIL 16, 2012

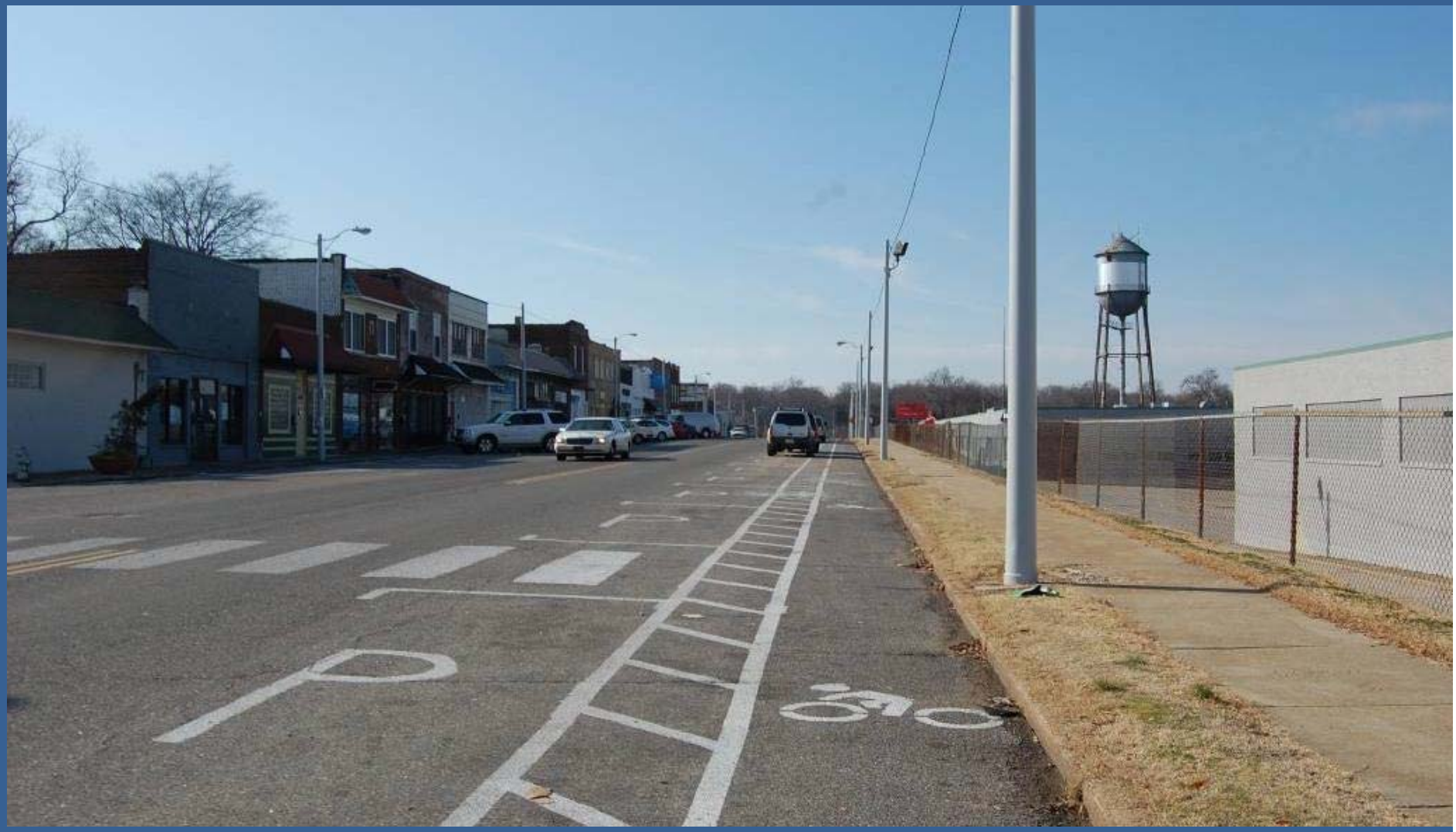
Memphis, TN – Greenline, Germantown Parkway Crossing

Eastern Extension of the Shelby Farms Greenline – Germantown Parkway Crossing
Six lane arterial, state road, 70,000 ADT

No Road too Big…



Memphis, TN – The Hampline



Jumpstarted with Tactical Urbanism

A New Face for an Old Broad

November 19 & 20 | Broad Avenue Arts District

http://vimeo.com/22106488

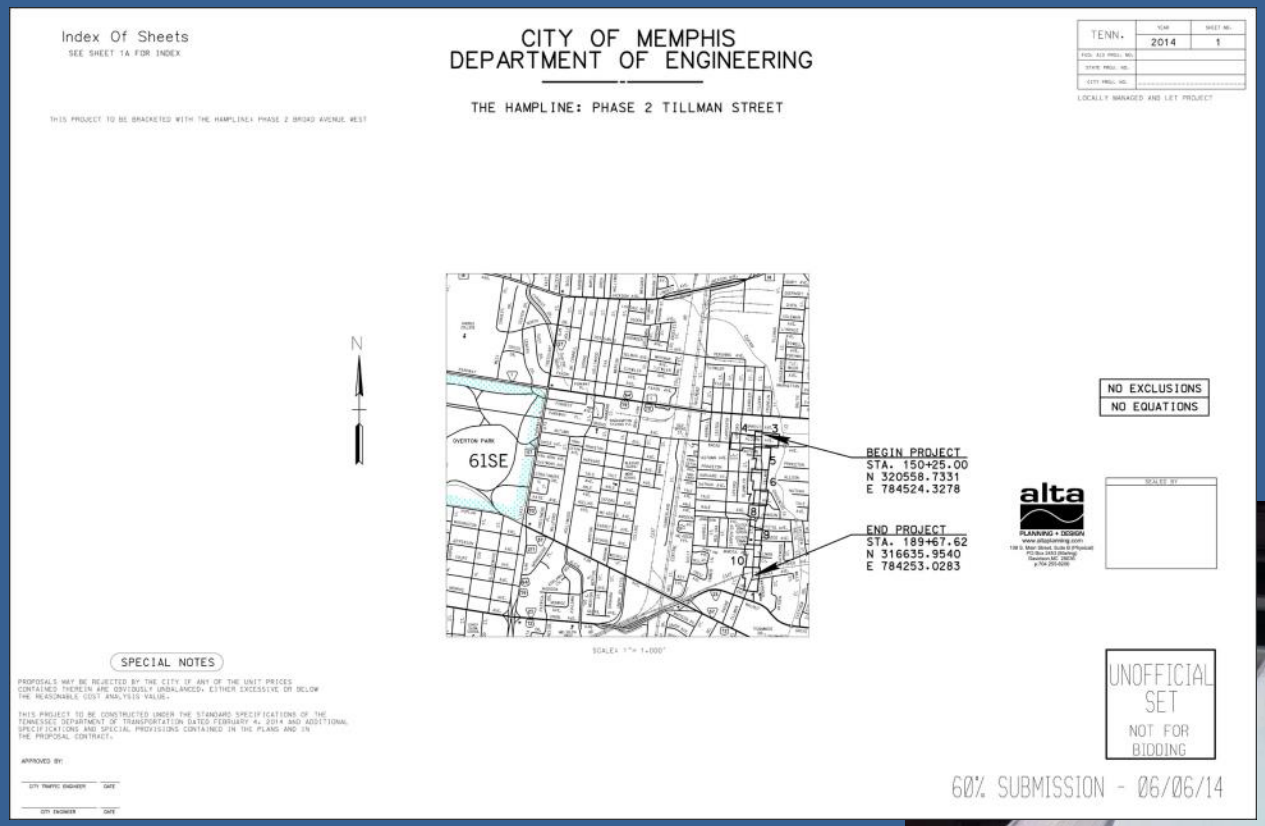
Arts District – Broad Avenue

Tillman Street

Challenges

- Funding (or lack thereof)
  - Solution – Crowdsource and foundation match paid for design; CMAQ grant paid for construction

Design



Index Of Sheets

SEE SHEET 1A FOR INDEX

THIS PROJECT TO BE BRACKETED WITH THE HAMPLINE: PHASE 2 BROAD AVENUE WEST

CITY OF MEMPHIS
DEPARTMENT OF ENGINEERING

THE HAMPLINE: PHASE 2 TILLMAN STREET

TENN.	YEAR	SHEET NO.
	2014	1
FED. AID PROJ. NO.		
STATE PROJ. NO.		
CITY PROJ. NO.		

LOCALLY MANAGED AND LET PROJECT

N

OVERTON PARK

61SE

BEGIN PROJECT
STA. 150+25.00
N 320558.7331
E 784524.3278

END PROJECT
STA. 189+67.62
N 316635.9540
E 784253.0283

NO EXCLUSIONS
NO EQUATIONS

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PLANNING + DESIGN

SCALE: 1" = 1,000'

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE CITY IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED FEBRUARY 4, 2014 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

APPROVED BY:

CITY TRAFFIC ENGINEER DATE

CITY ENGINEER DATE

UNOFFICIAL SET
NOT FOR BIDDING

60% SUBMISSION - 06/06/14

Challenges

- Funding (or lack thereof)
  - Solution – Crowdsource and foundation match paid for design; CMAQ grant paid for construction
- City engineering and state DOT didn't understand project
  - City has been brought along thru education and is now partner in advocating to TDOT

Hampline – segment opened Fall 2015

Payoffs – Broad Avenue Corridor

$20+ million
in properties purchased, built and/or renovated, completed and/or planned

New Businesses
bringing retail, bars/restaurants, medical/dental, spiritual and related services

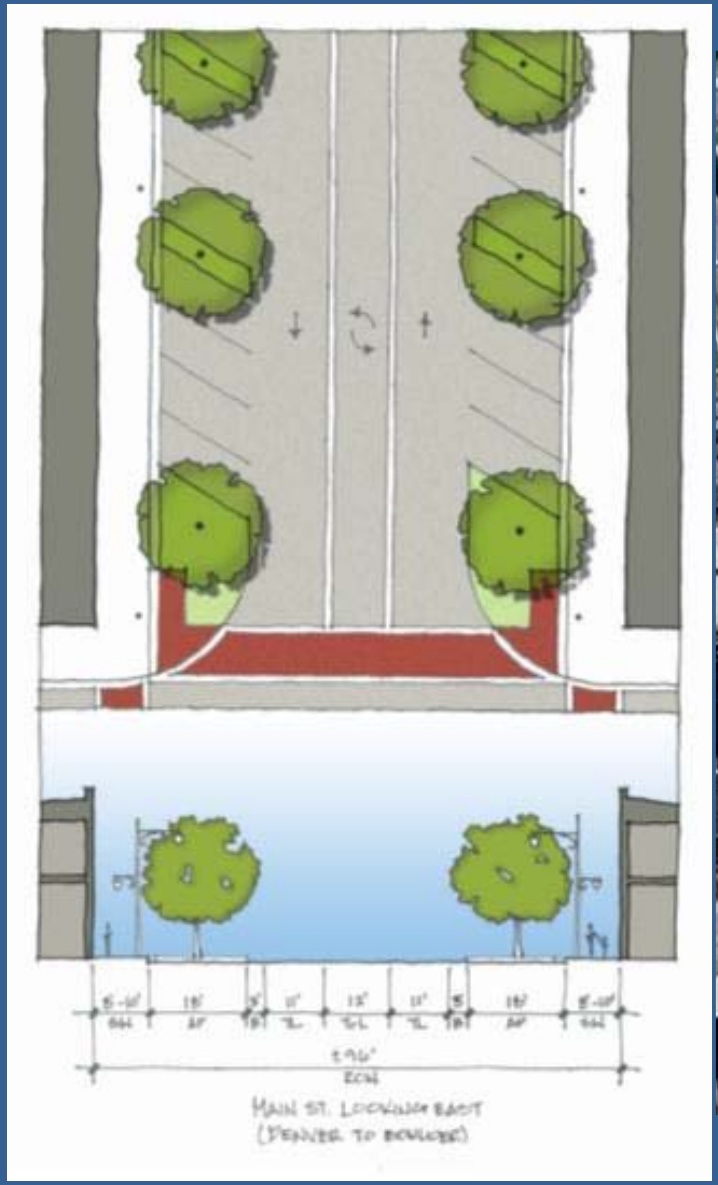
Water Tower Pavilion

ArtPlace America Grant Winner

- Water Tower becomes beacon
- Street and loading dock area are knitted together via terraced seating
- 500 foot linear park developed
- Community-based programming delivered

Russellville (AR) Downtown Master Plan (2011)

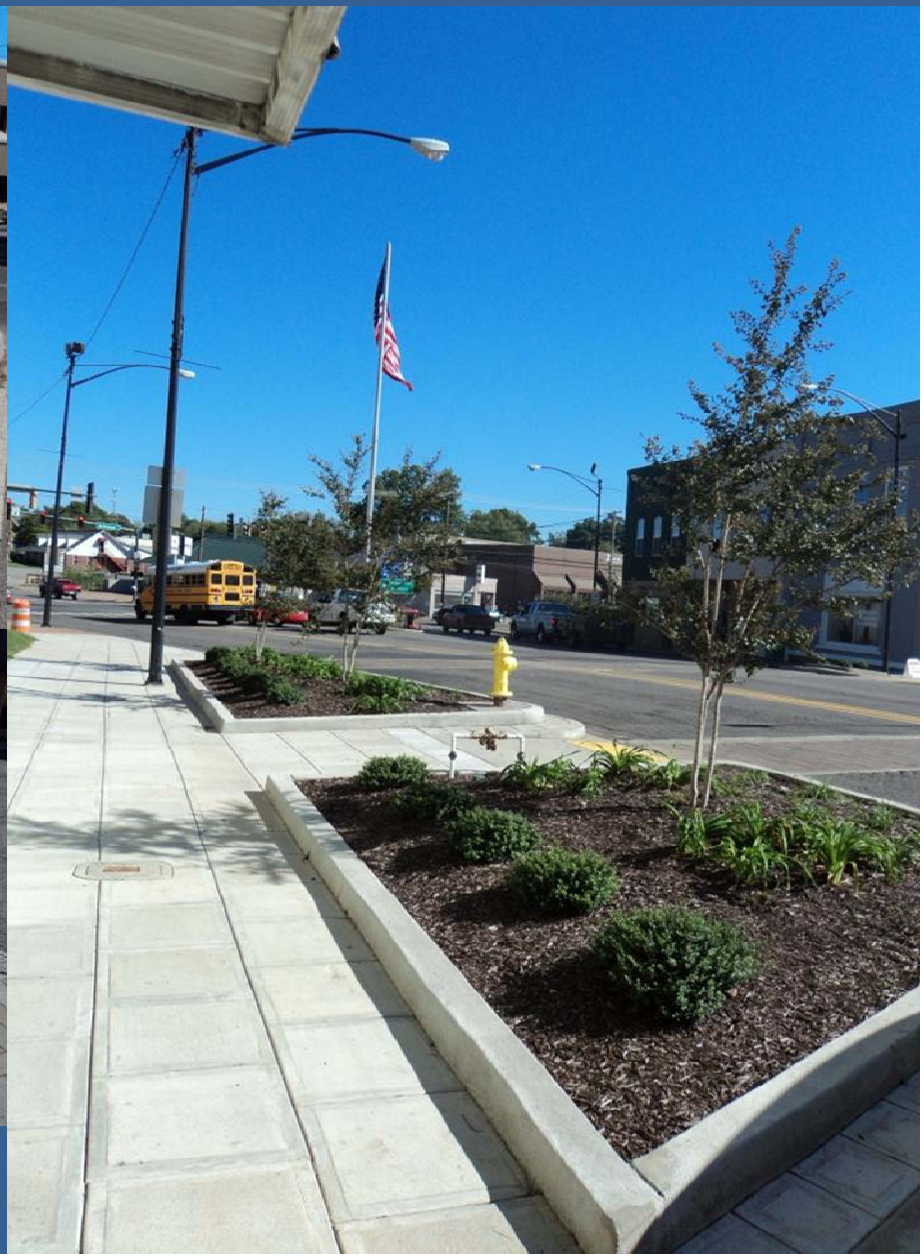
Main Street/US 64 Initiative



Challenges

- Construction issues with soils
  - Solution: retrofit base material for crosswalks post-construction

Main Street Bulbouts



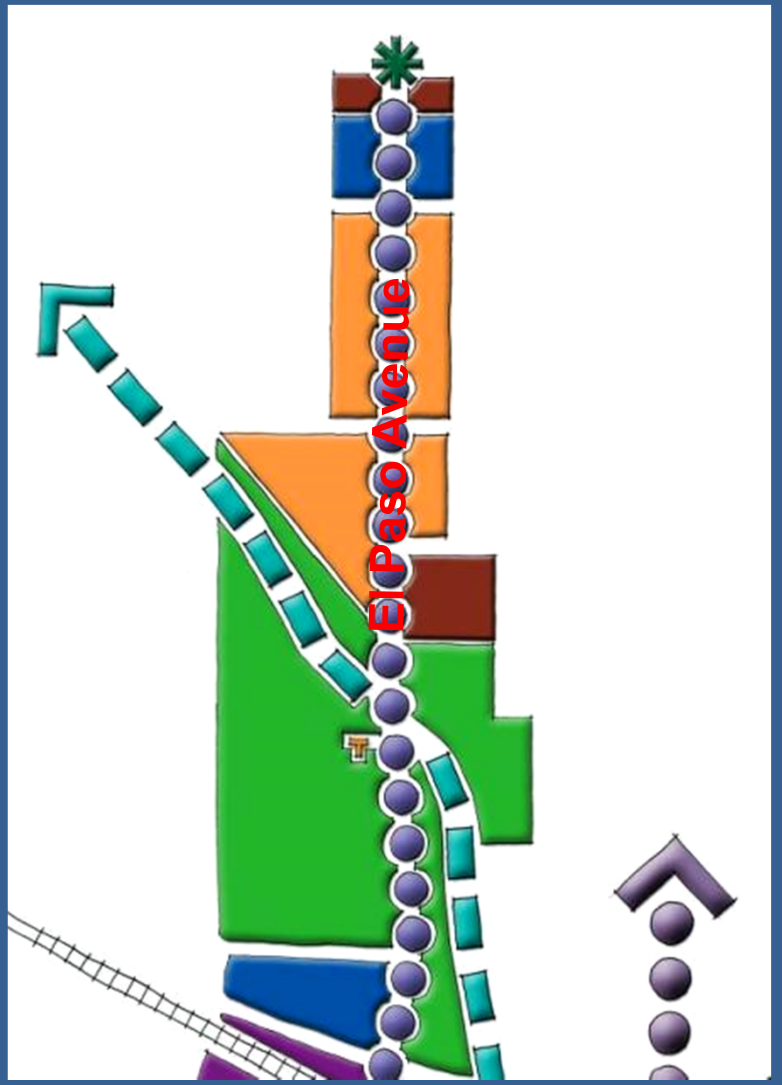
El Paso Corridor – Master Plan

LEGEND

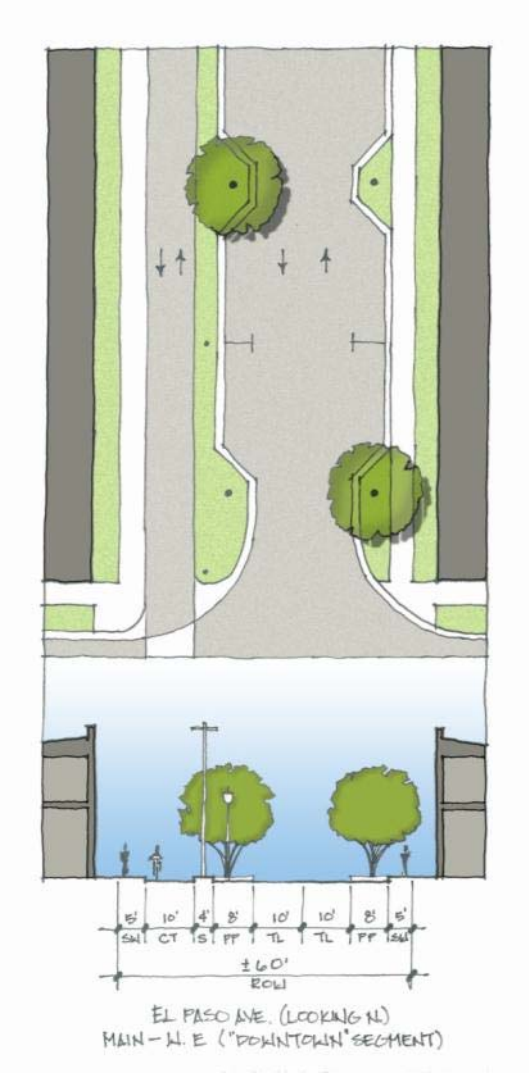
- **Park** (high priority)
- **Park** (low priority)
- **Civic / Institutional**
- **Religious**
- **Mixed Use** (Retail Emphasis)
- **Mixed Use** (Office Emphasis)
- **Mixed Use** (Residential Character)
- **Mixed Use** (Neighborhood Scale)
- **Mixed Housing**

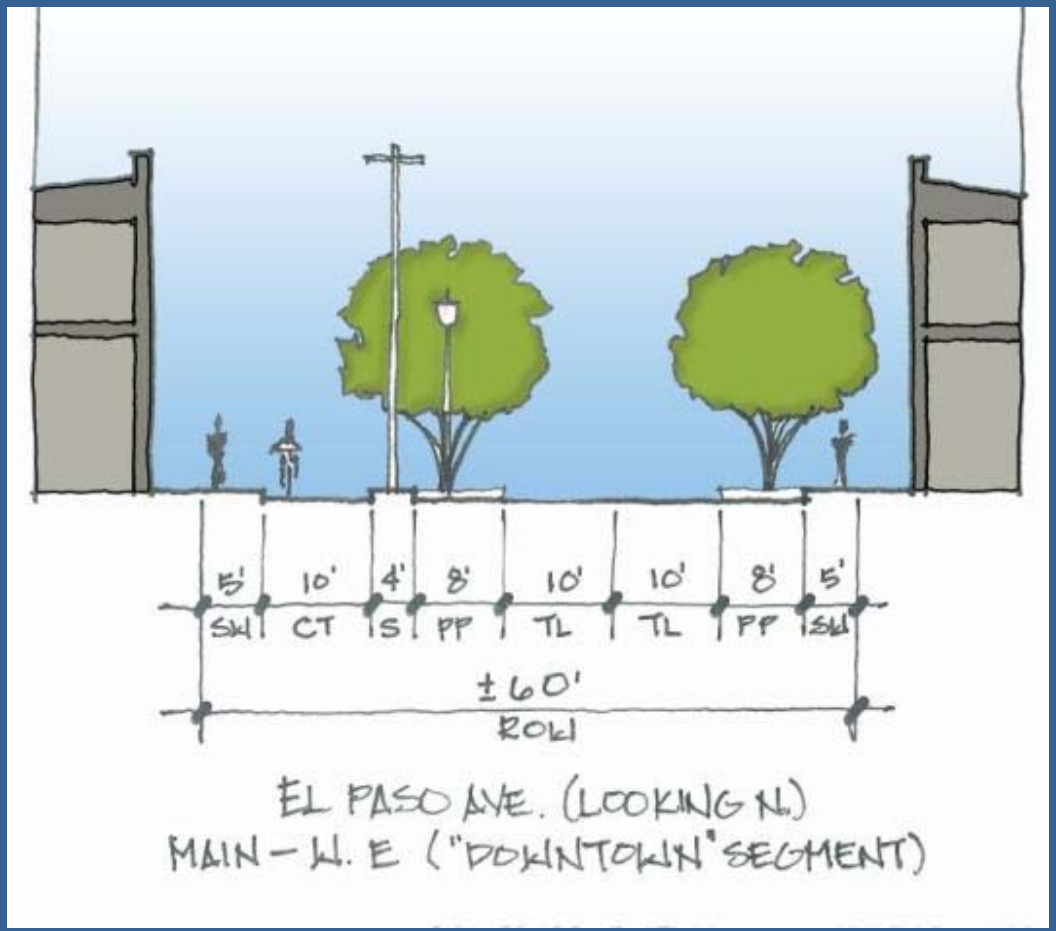
Greenway

Key Street



Charrette Concept





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Challenges

- Construction issues with soils
  - Solution: retrofit base material for paver crosswalks post-construction
- Discovered massive concrete slab under roadway (former state highway)
  - Solution: Modify design concept to keep centerline in place to avoid significant demolition

El Paso Corridor – Refined Concept

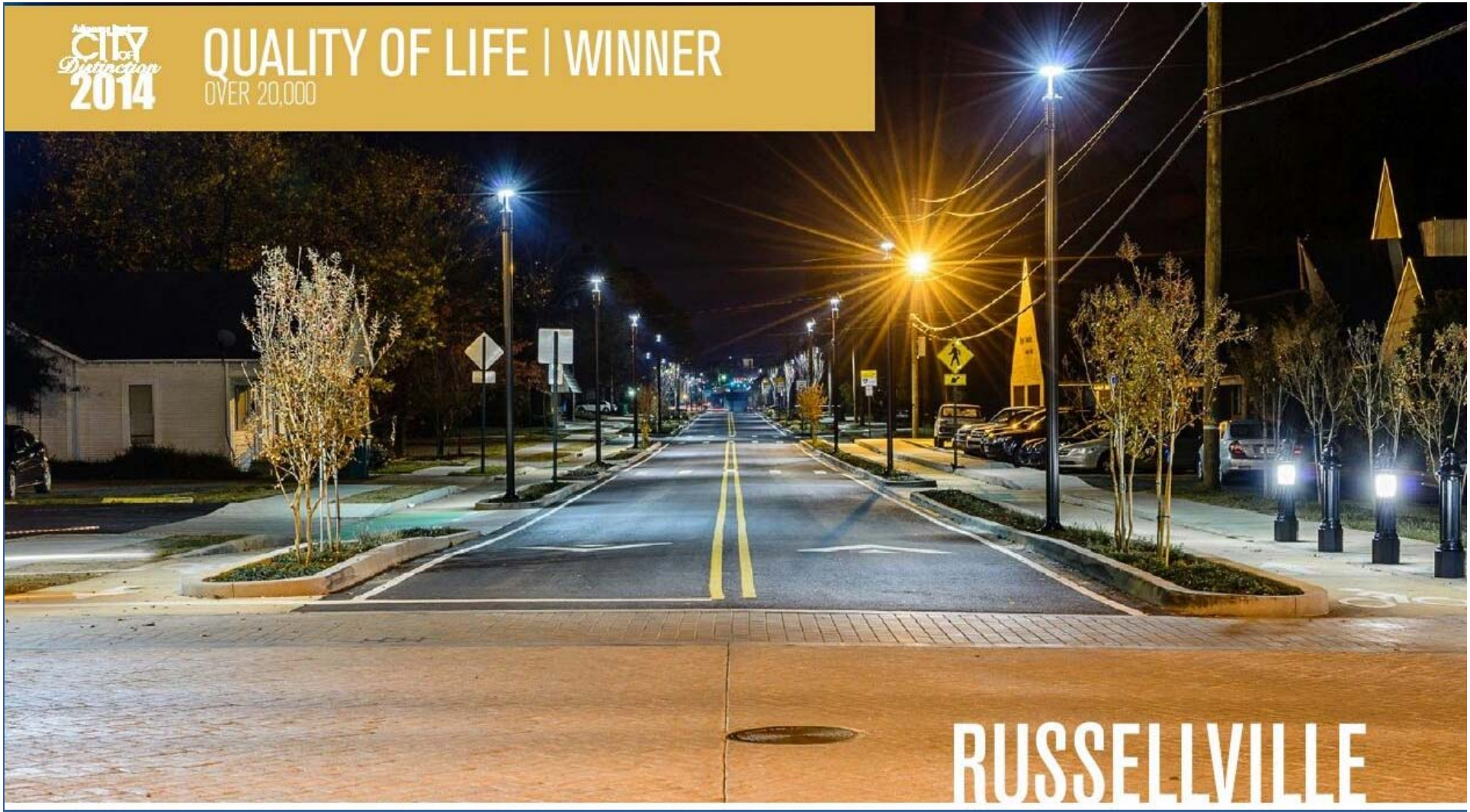
One Way Cycle Track

Design (Fall 2012-Spring 2013)

Construction (2013- 2014)

Key: progressive City traffic engineer and supportive university ($)

“Though El Paso Avenue has its own design, the concept is similar to the H Street and Parker Road project, with vehicle travel lanes, bike lanes, trees, sidewalks and period lighting.
“It’s going to be one cool street,” Oakes said…
He added that capital road projects such as these are paid for with proceeds from the city’s one-cent sales tax.”

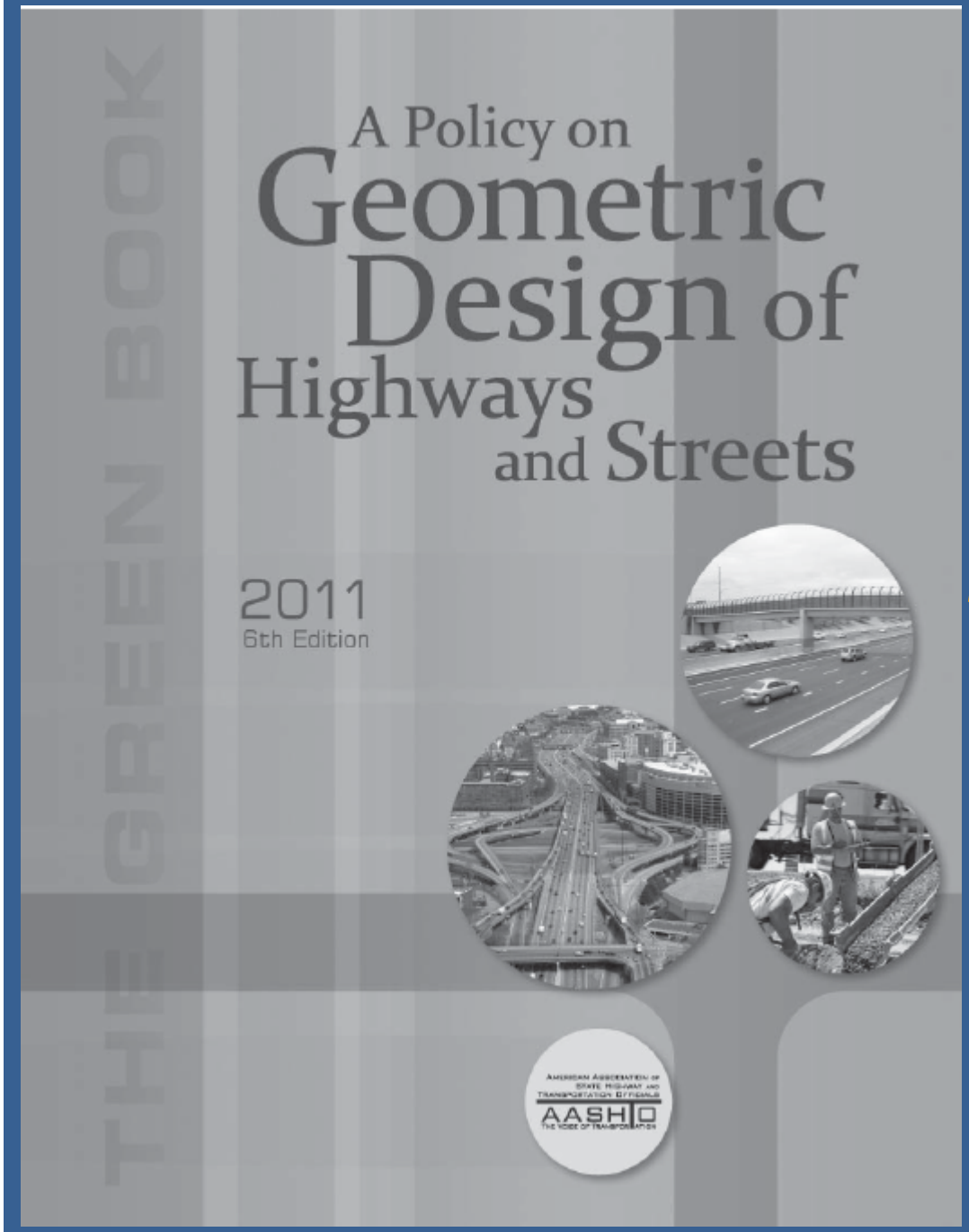


Post-construction:

- New businesses along corridor
- New businesses downtown
- Foot and bike traffic
- University pursuing mixed use with housing corridor

Strategies to Overcome Challenges in Implementation

- Use national guidance; change the rules
- Collaborate with community at all stages
- Quantify impacts; accept congestion
- Tap non-traditional funding; know your contracting community
- Be flexible with design, but respect the vision



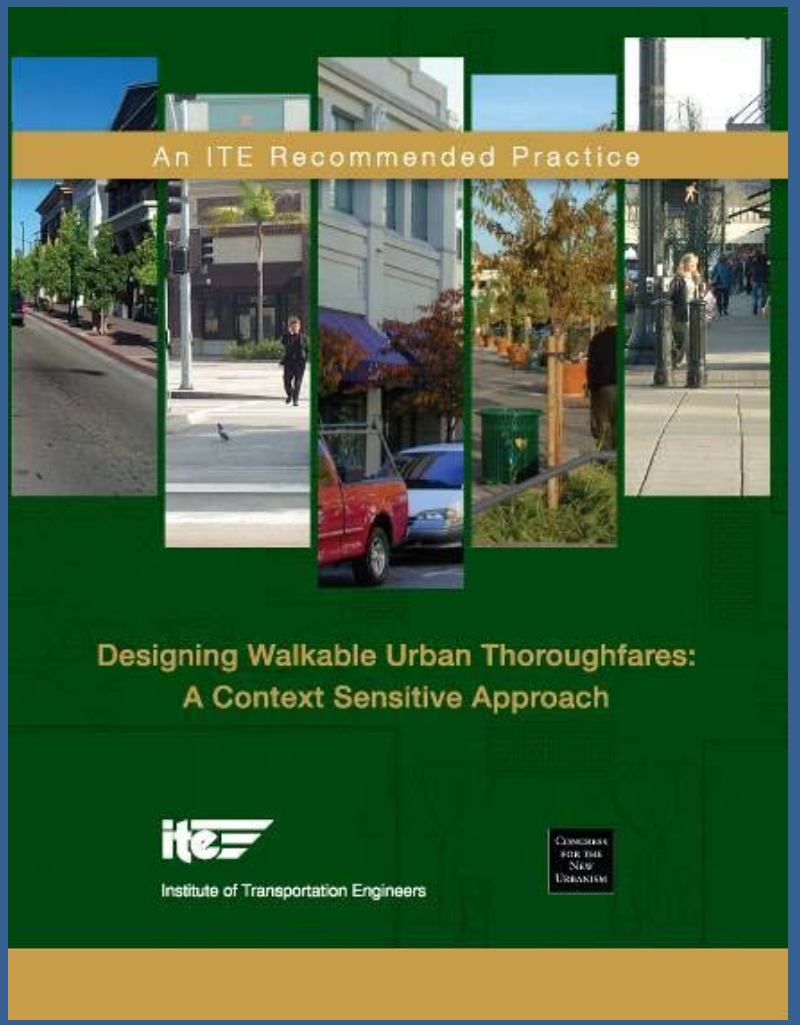
"These geometric design are intended to provide operation efficiency, comfort, safety, and convenience for the motorist. The design concepts presented herein were also developed with consideration for environmental quality. The effects of the various environmental impacts can and should be mitigated by thoughtful design processes. This principle, coupled with that of aesthetic consistency with the surrounding terrain and urban setting, is intended to produce highways that are safe and efficient for users, acceptable to non-users, and in harmony with the environment."

From the Forward to the AASHTO Green Book

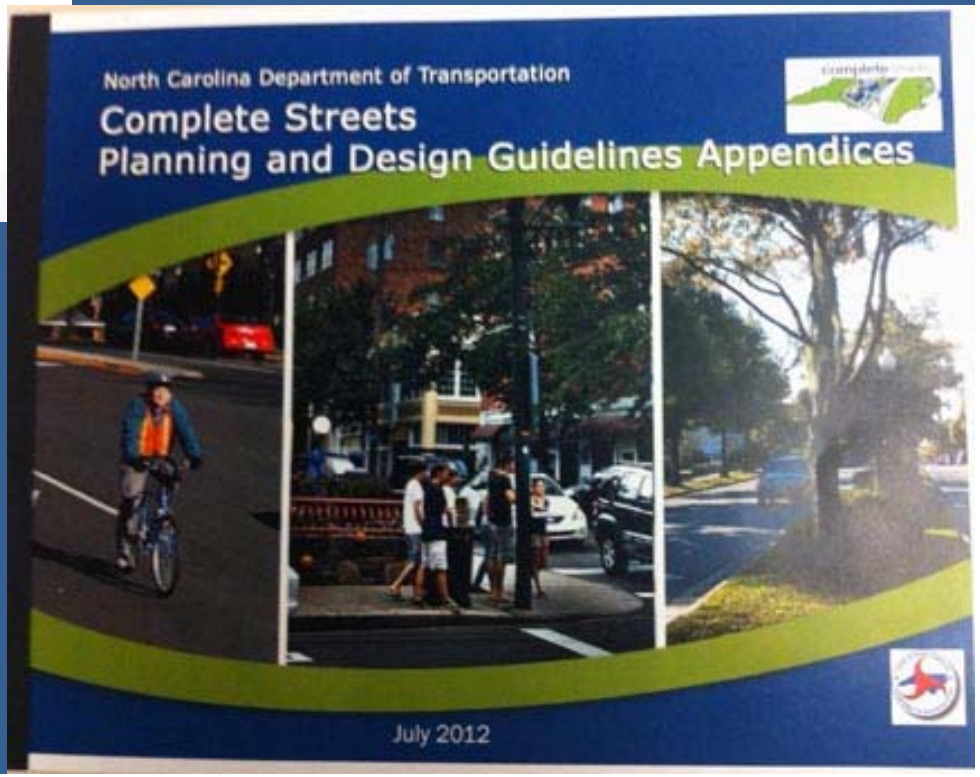
Guidance Today

"This report has been developed in response to widespread interest for improving both mobility choices and community character through a commitment to creating and enhancing walkable communities."

From Chapter 1 of the Recommended Practice, 2010



And More Guidance…



Where Research Can Help

- Reinforce context sensitive solutions
- Highlight flexibility in standards; compile “best of” for Complete Streets guidelines
- Quantify changing travel trends – no longer “business as usual”
- Compile before and after data

Thank You!

"America . . . conceived many odd inventions for getting somewhere, but could think of nothing to do when they got there"

Will Rogers, 1936