Cumberland Avenue
CORRIDOR PROJECT

Image Credit: Bruce Mccamish, www.amazingaerialphotography.com

Project History – The Process

- Public process started Fall of 2006 and included:
  - public meetings
  - stakeholder meetings
  - a design charette/project studio

- Established an Advisory Board
- Created the purpose of the plan:

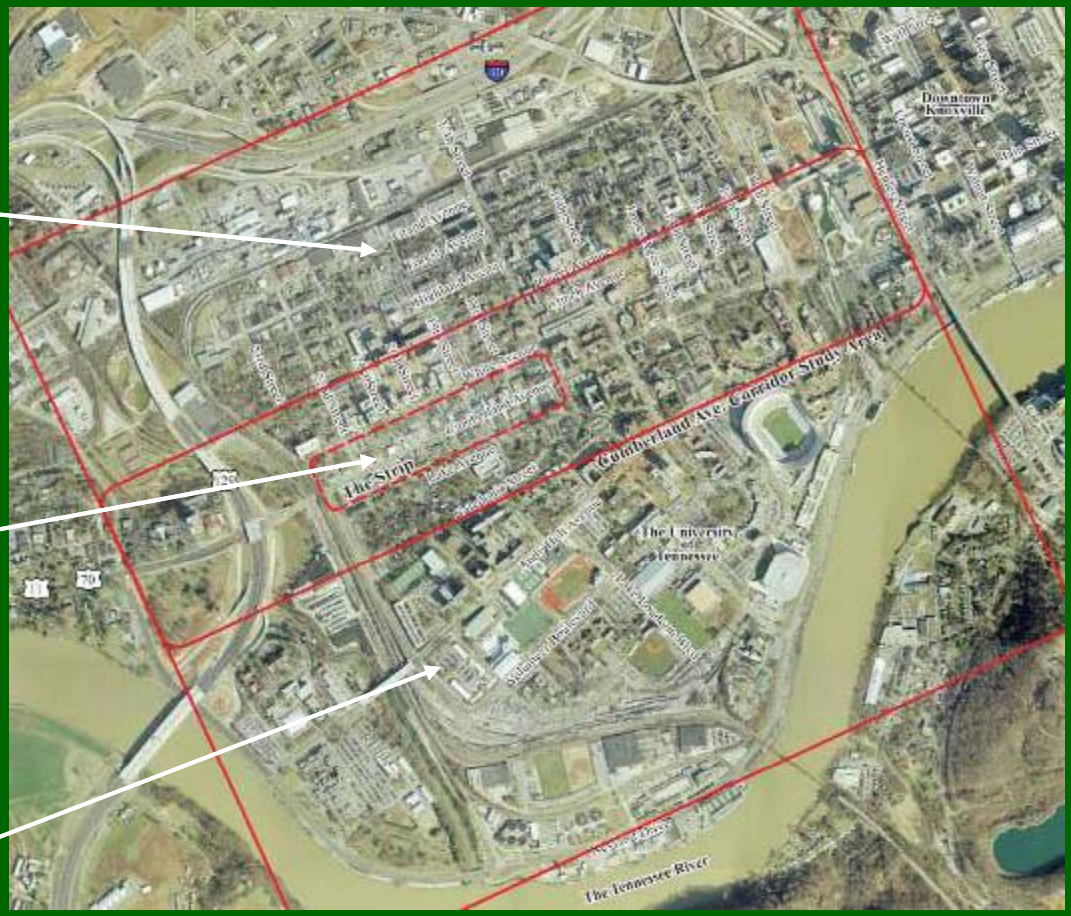
"To chart the course for a more attractive, economically successful, vibrant and safe Cumberland Avenue"

- Plan adopted by MPC and City Council Spring '07

Project History – The Location

Study Area

- Fort Sanders Neighborhood
- The Strip: major focus
- University of TN Campus



Project History – The Vision

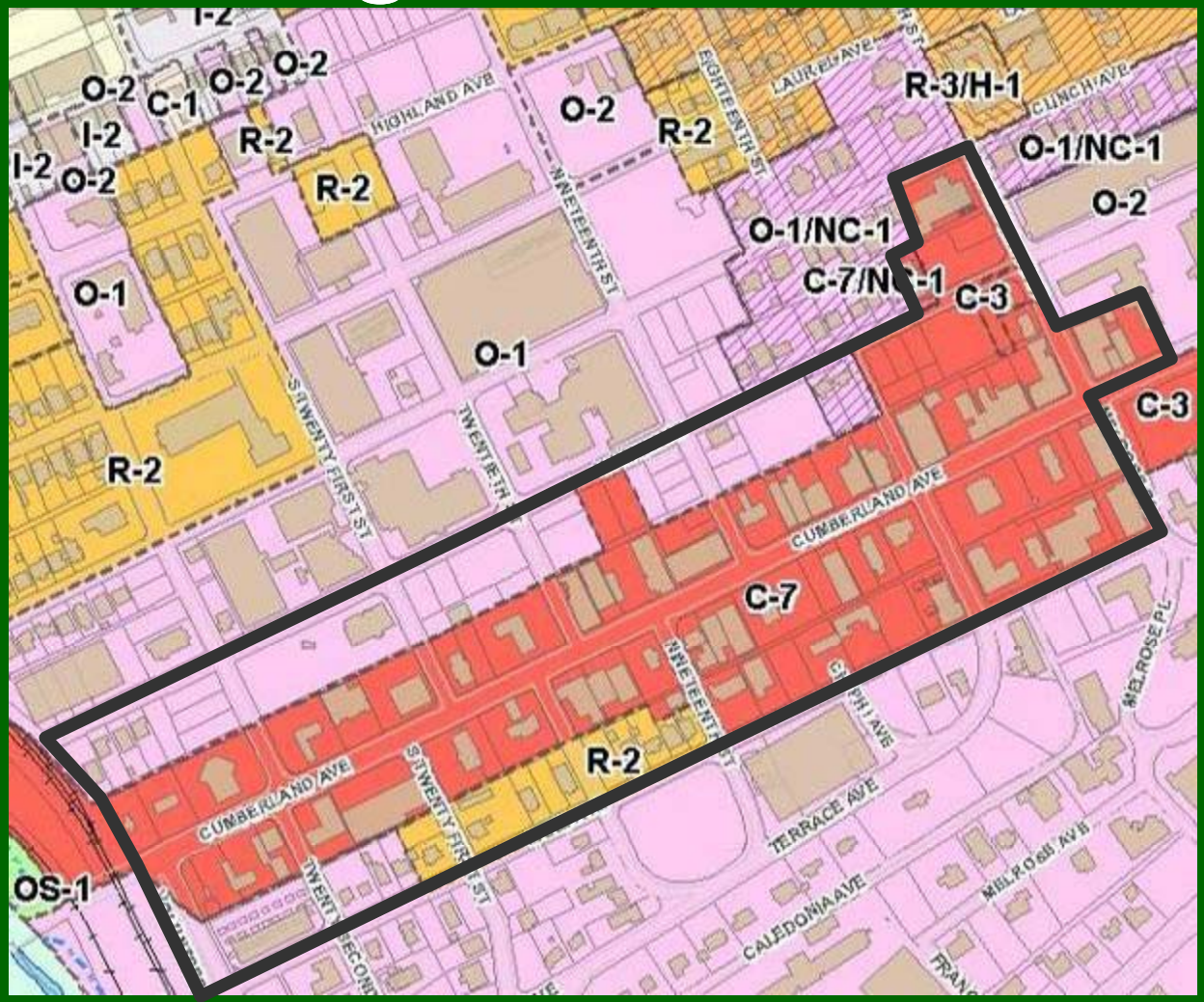
Form Based Code

- Built form to sidewalk
- Increased height
- Pedestrian orientation
- Sign controls

Pedestrian Amenities

- Wider sidewalks
- Designated Crosswalks
- Street trees

Urban Design Plan



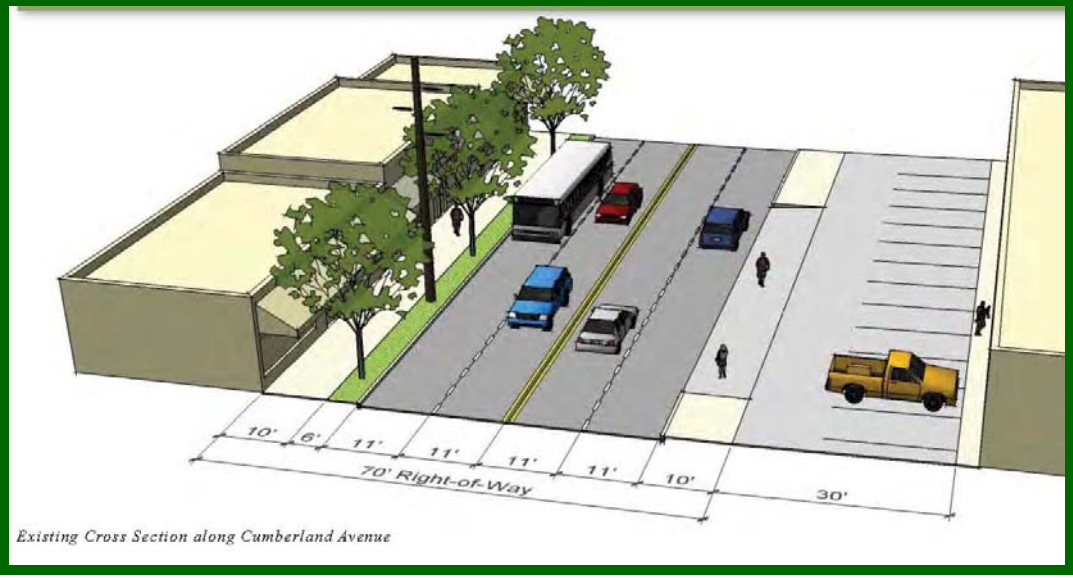
Proposed Form District Boundary & Existing Zoning

Form Code – Building Develop.

- Building Entry Doors & Windows
- Building Facades
- Building Projections
- Building Roofs & Parapets
- Exterior Building Materials
- Existing Buildings & Additions
- Site Lighting
- Mechanical Equipment

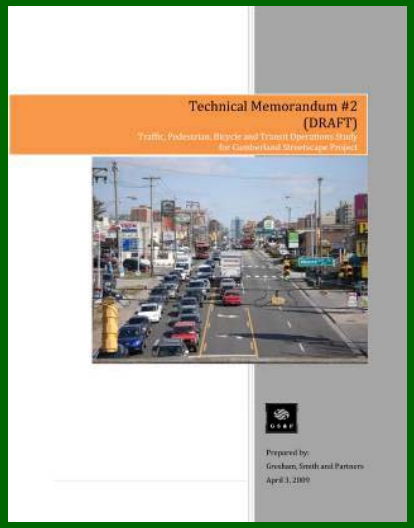
Streetscape Project - Goals

- Implement the “Road Diet”: three-lane road reconfiguration
- Provide wider sidewalks, street trees, and a pedestrian & bicycle friendly environment
- Accommodate transit and delivery trucks
- Relocate utilities off of Cumberland Avenue



Existing Cross Section along Cumberland Avenue

Streetscape Project - Actions



- Obtained TDOT contract for project and funding for design work
- Selected consultants for design work:
  - Vaughn & Melton, CRJA, GS&P, Fulghum MacIndoe and S&ME
- Detailed Right of Way Survey of corridor
- Expanded Traffic Studies for the corridor
- Received Environmental Clearance from TDOT and Notice to Proceed

Streetscape Project – Challenges

Access Management:

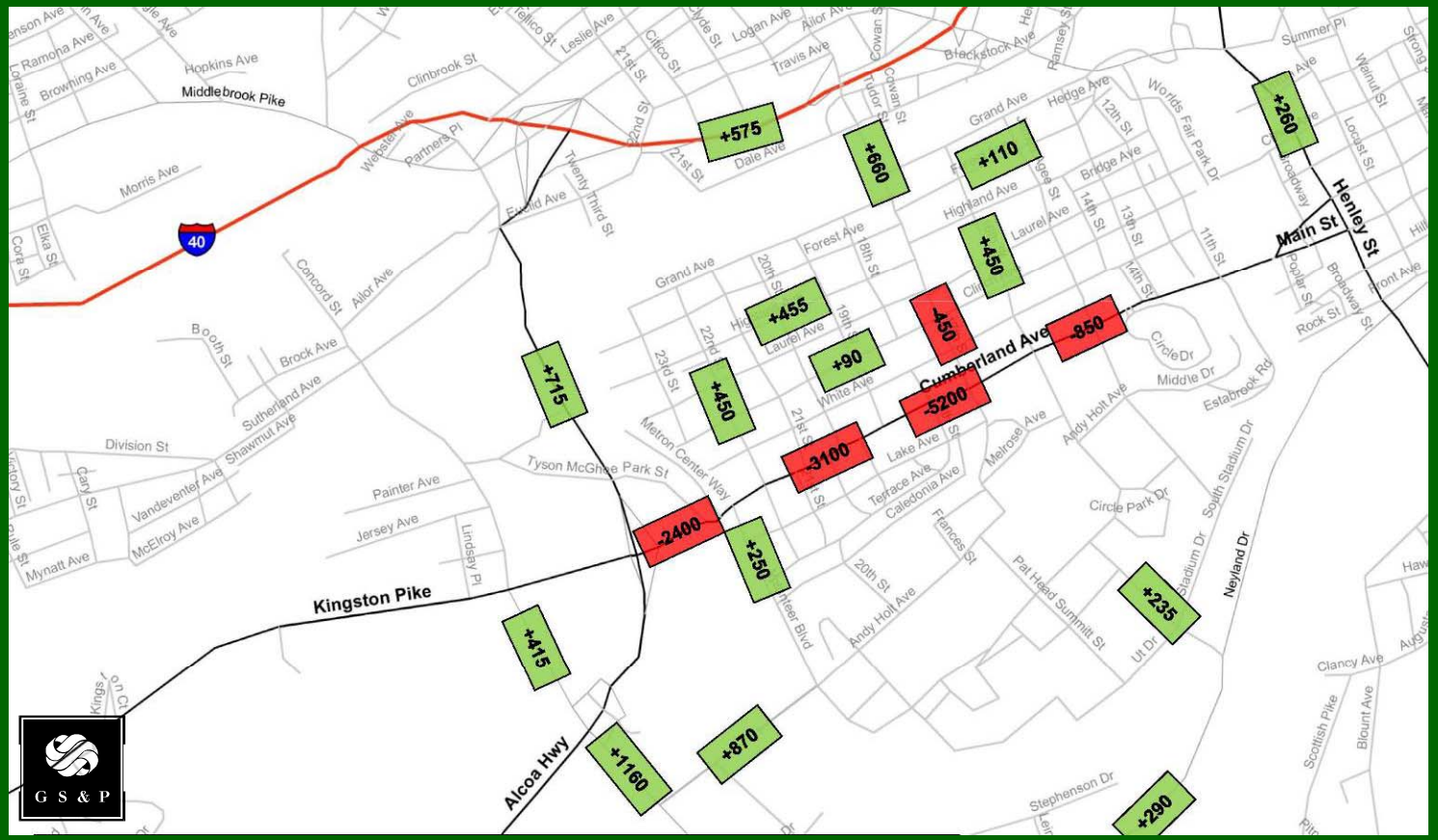
- 36 driveway curb cuts in 12 blocks
- Vision plan assumed closure of all curb cuts

- All driveway curb cuts cannot be closed
- Center turn lane conflicts due to curb cuts
- Commercial loading zones for delivery trucks

Streetscape Project – Challenges

Delay/Diversion:

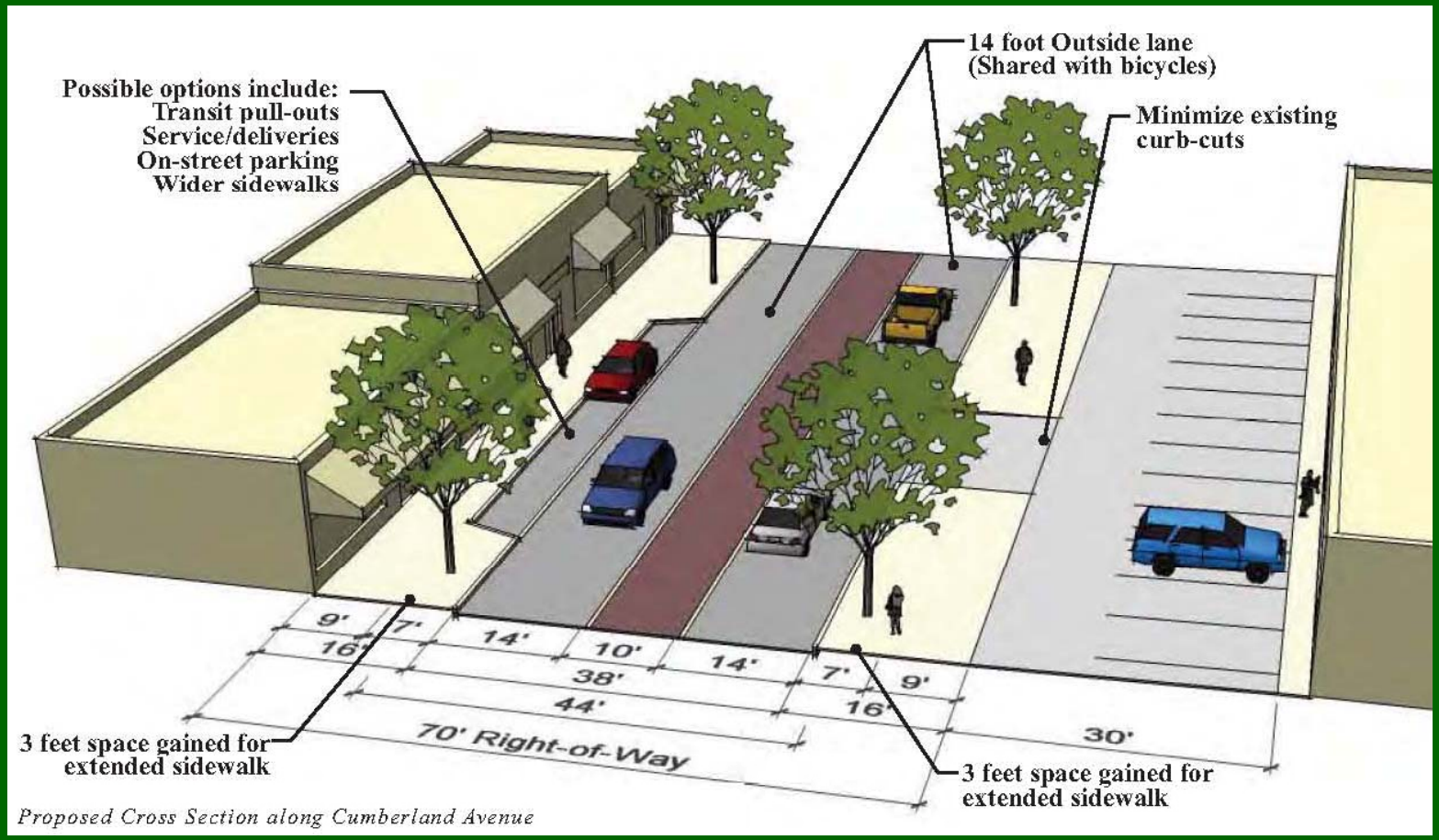
- Delay from 60 seconds to 150 seconds during afternoon rush hour
- Diversion from 5-10% to 15-20%



Streetscape Project – Challenges

Typical Roadway Width

- Estimated at 70 feet wide to reality of 65 feet wide



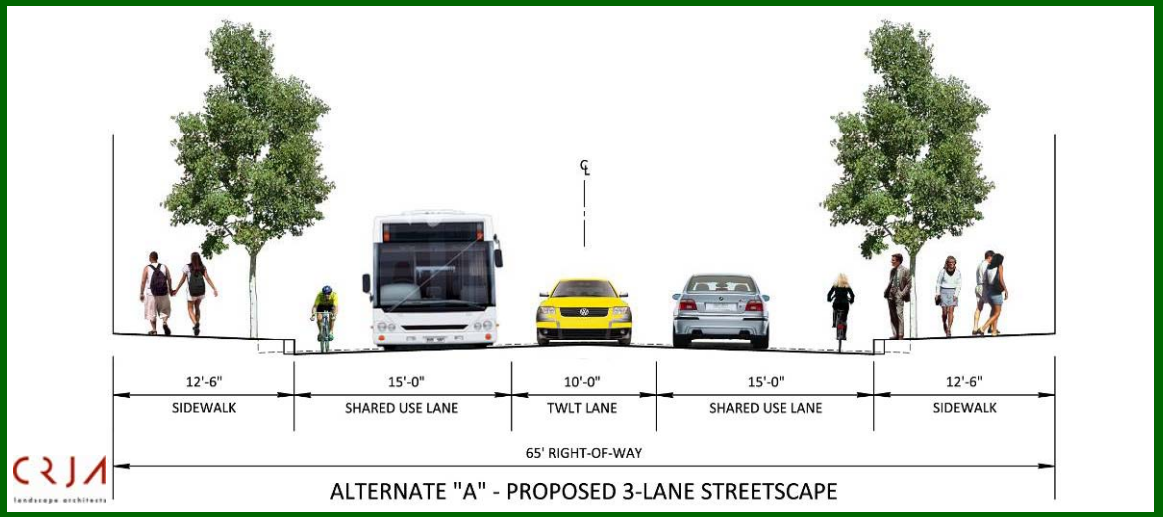
Streetscape Project - Concepts

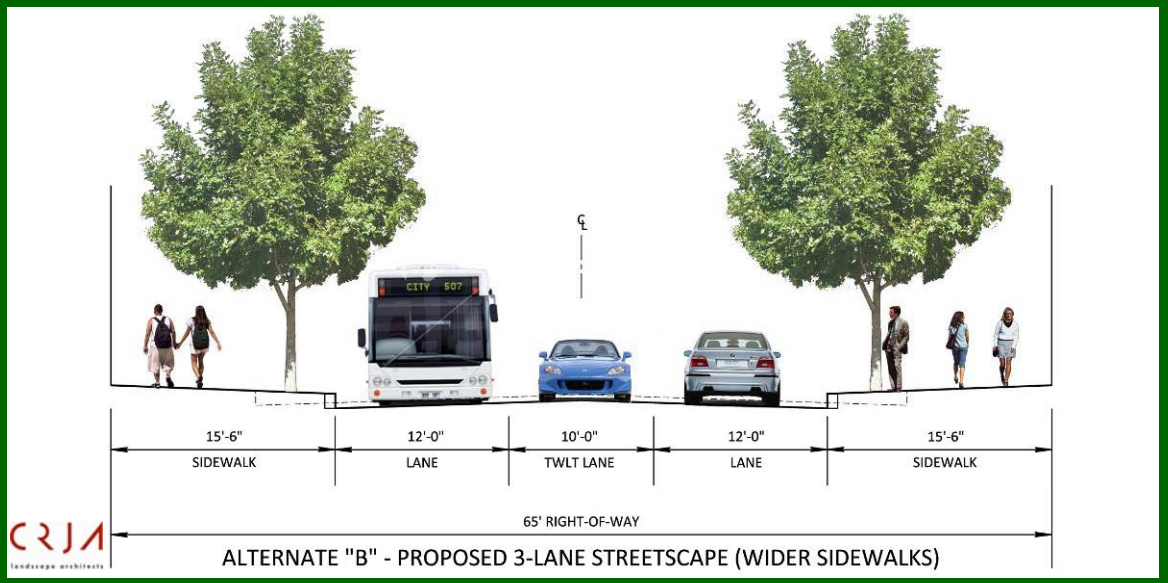
Option 1: 3-Lane Cross Section with Center Turn Lane

- Change street cross section to 3 lanes
- Widen sidewalks and provide street trees
- New crosswalks and bus shelters
- Change side streets to two-way (north/south)
- Removal of utility poles

Streetscape Project - Concepts

Cross Section of Opt. 1: 3-Lane Cross Section with TWLTL





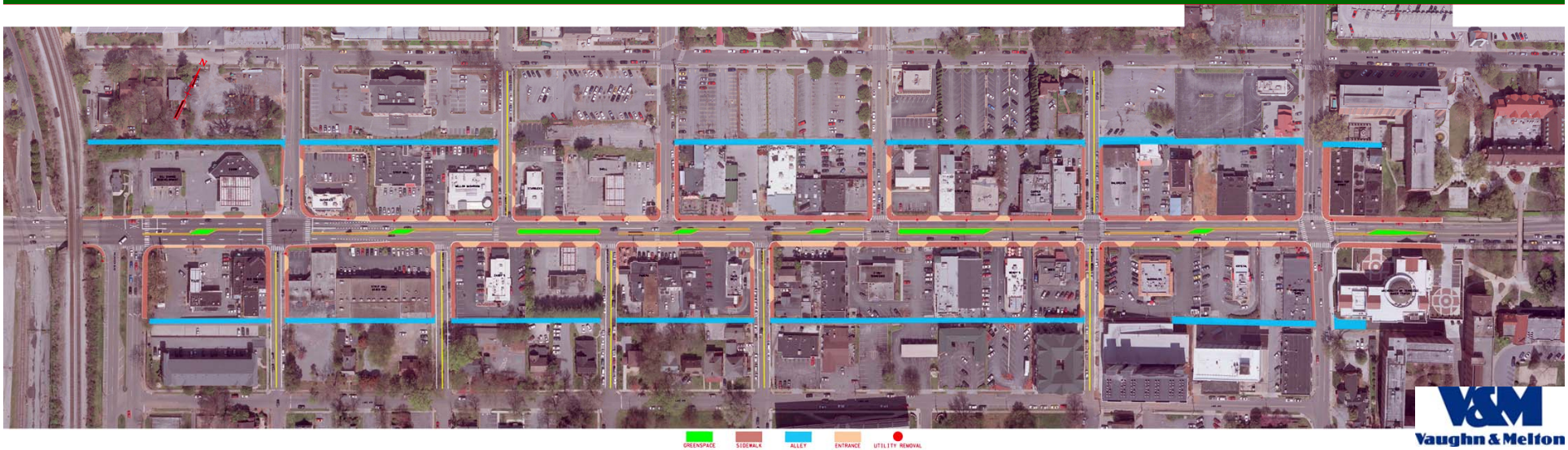
Streetscape Project - Concepts

Option 1: 3-Lane Cross Section with Center Turn Lane

- Transforms look and operation of the street
- Improves user experience
  - Reduces crossing distance
  - Widens sidewalks
  - Removes utility poles
  - Improves street aesthetics
- Increases delay and diversion
- Allows left turn movements through corridor – conflicts within TWLTL
- 2-way side streets:
  - Increases circulation
  - Reduces parking

Streetscape Project - Concepts

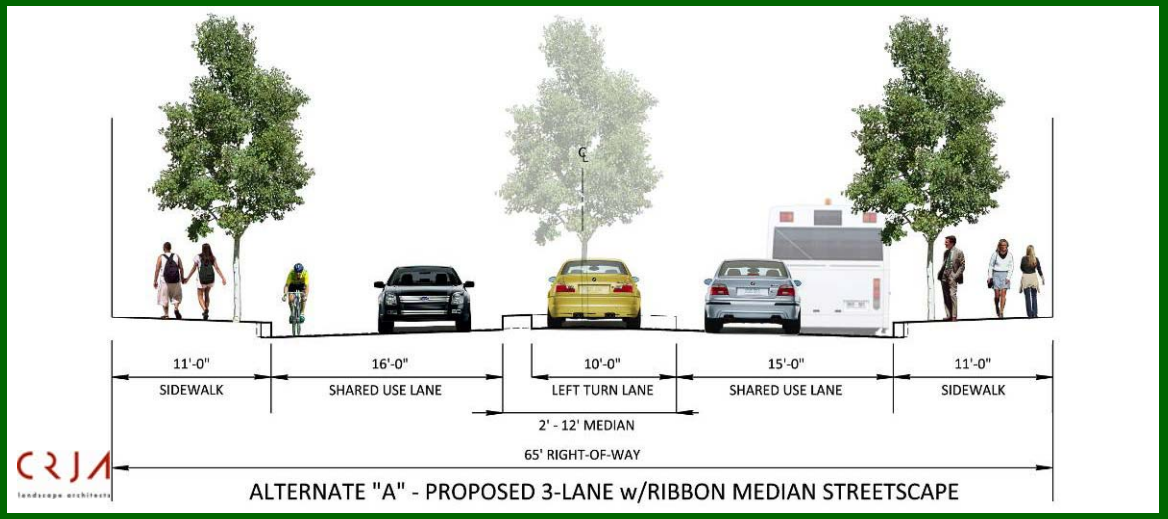
Option 2: 3-Lane Cross Section with Median

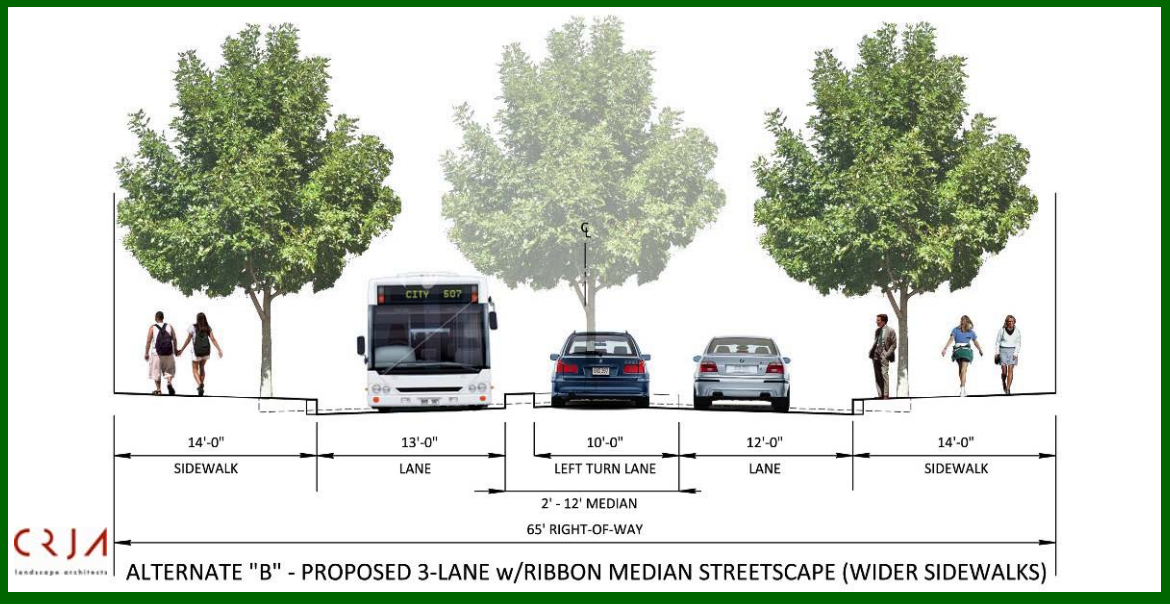


- Change street cross section to 3 lanes and include a median to control turn movements
- Widen sidewalks and provide street trees
- New crosswalks and bus shelters
- Change side streets to two-way (north/south)
- Removal of utility poles

Streetscape Project - Concepts

Cross Section of Opt. 2: 3-Lane Cross Section with Median

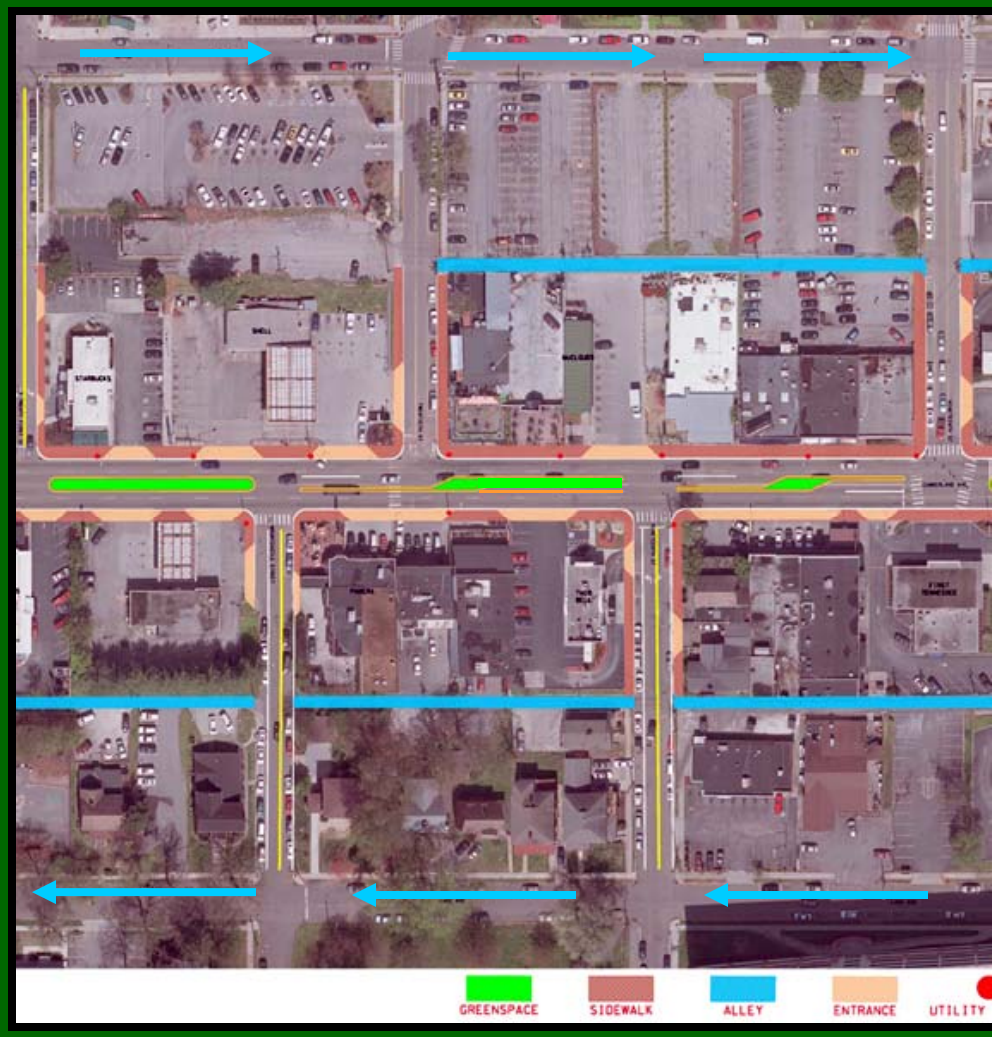




Streetscape Project - Concepts

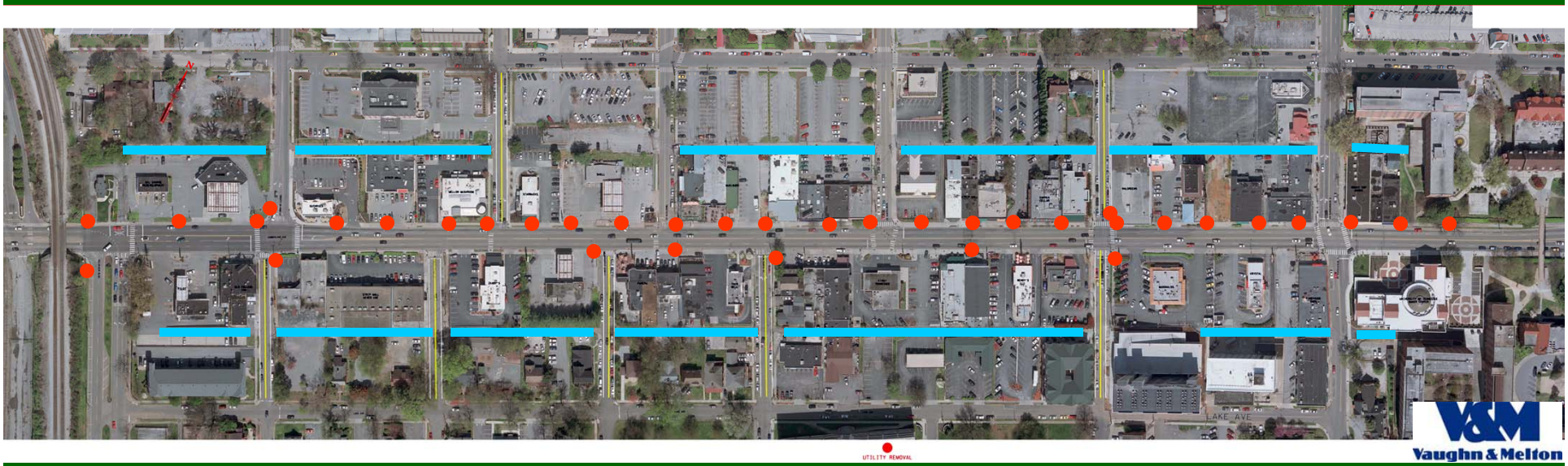
Option 2: 3-Lane Cross Section with Median

- Transforms look and operation of the street
- Improves user experience:
  - Reduces crossing distance
  - Widens sidewalks
  - Removes utility poles
  - Improves street aesthetics
- Increases delay and diversion
- Channels left turn movement to intersections
  - decreasing conflicts
  - increasing safety
  - limits access to businesses
- 2-way side streets:
  - Increases circulation
  - Reduces parking



Streetscape Project - Concepts

Option 3: 4-Lane Cross Section with Utility Removal



- Maintain street cross section, 4 lanes
- Replace existing sidewalks
- Provide trees and landscaping where possible
- New crosswalks and bus shelters
- Change side streets to two-way (north/south)
- Removal of utility poles

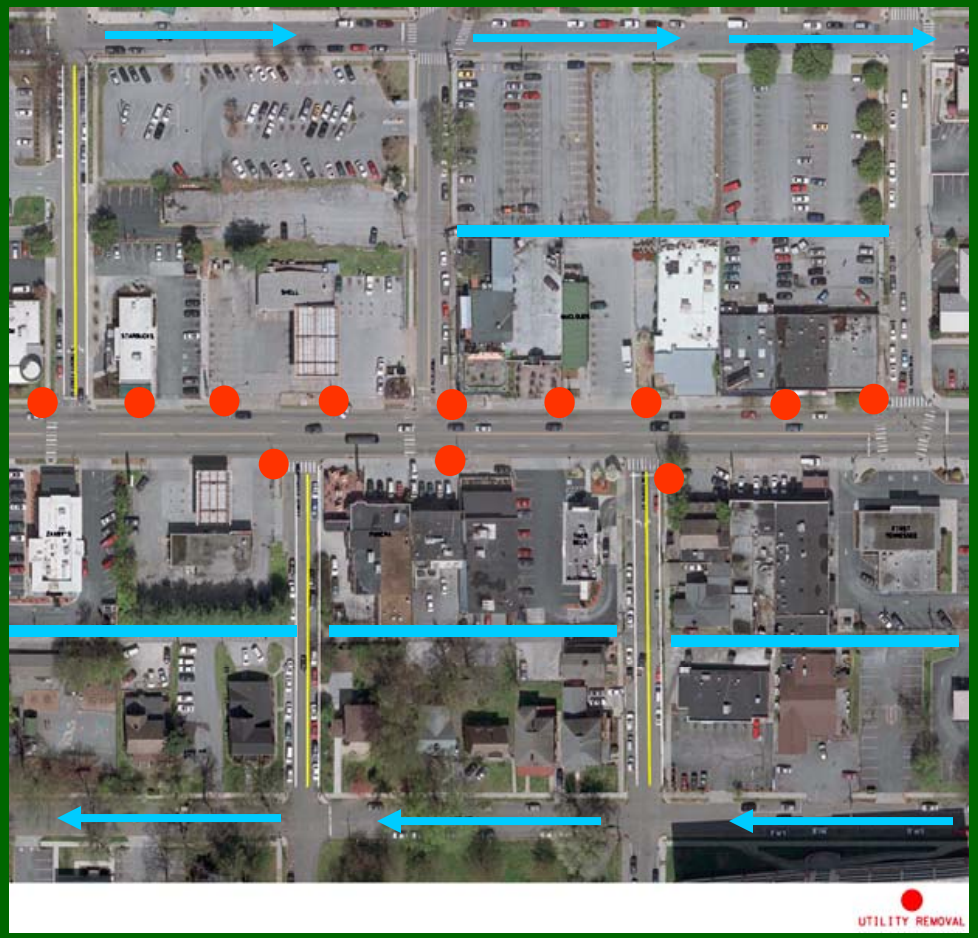
Streetscape Project - Concepts

Cross Section of Opt. 3: 4-Lanes with Utility Removal

Streetscape Project - Concepts

Option 3: 4-Lane Cross Section with Utility Removal

- Maintains the current operation of the street
  - Does not increase vehicular delay and diversion
  - Does not increase turning movement conflicts
  - Maintains current access to businesses
- Improves existing sidewalks
- Removes utility poles
- Some opportunities for landscaping
- 2-way side streets:
  - Increases circulation
  - Reduces parking



Next Steps

- Process for Streetscape Detailed Design
- Form Base Code Consultant Review and Public Comment
- Continue to work with Property Owners, Merchants, Neighborhood Associations, KUB, UT & Hospitals
  - Advisory Board Meetings
  - Public Meetings

Streetscape Project – Summary

Option 1: 3-lane w/ TWLTL	Alternate A:	Lane: 15’ TWLTL: 10’	Sidewalks: 12’-6”
	Alternate B:	Lane: 12’ TWLTL: 10’	Sidewalks: 15’-6”
Option 2: 3-lane w/ Median	Alternate A:	Lanes: 15’ &16’ Turn lane: 10’+2’	Sidewalks: 11’
	Alternate B:	Lanes: 12’ & 13’ Turn Lane: 10’+2’	Sidewalks: 14’
Option 3: 4-lane		Lanes: 11’ – 11’6” Turn Lane: None	Sidewalks: 10’

Cumberland Avenue
CORRIDOR PROJECT

Questions and Comments

For more information please visit our Websites:

www.cityofknoxville.org/cumberland

www.cumberlandconnections.blogspot.com

Anne Wallace
Cumberland Ave. Project Manager
865.215.2029
awallace@cityofknoxville.org