



RENEW MAPLE AVENUE

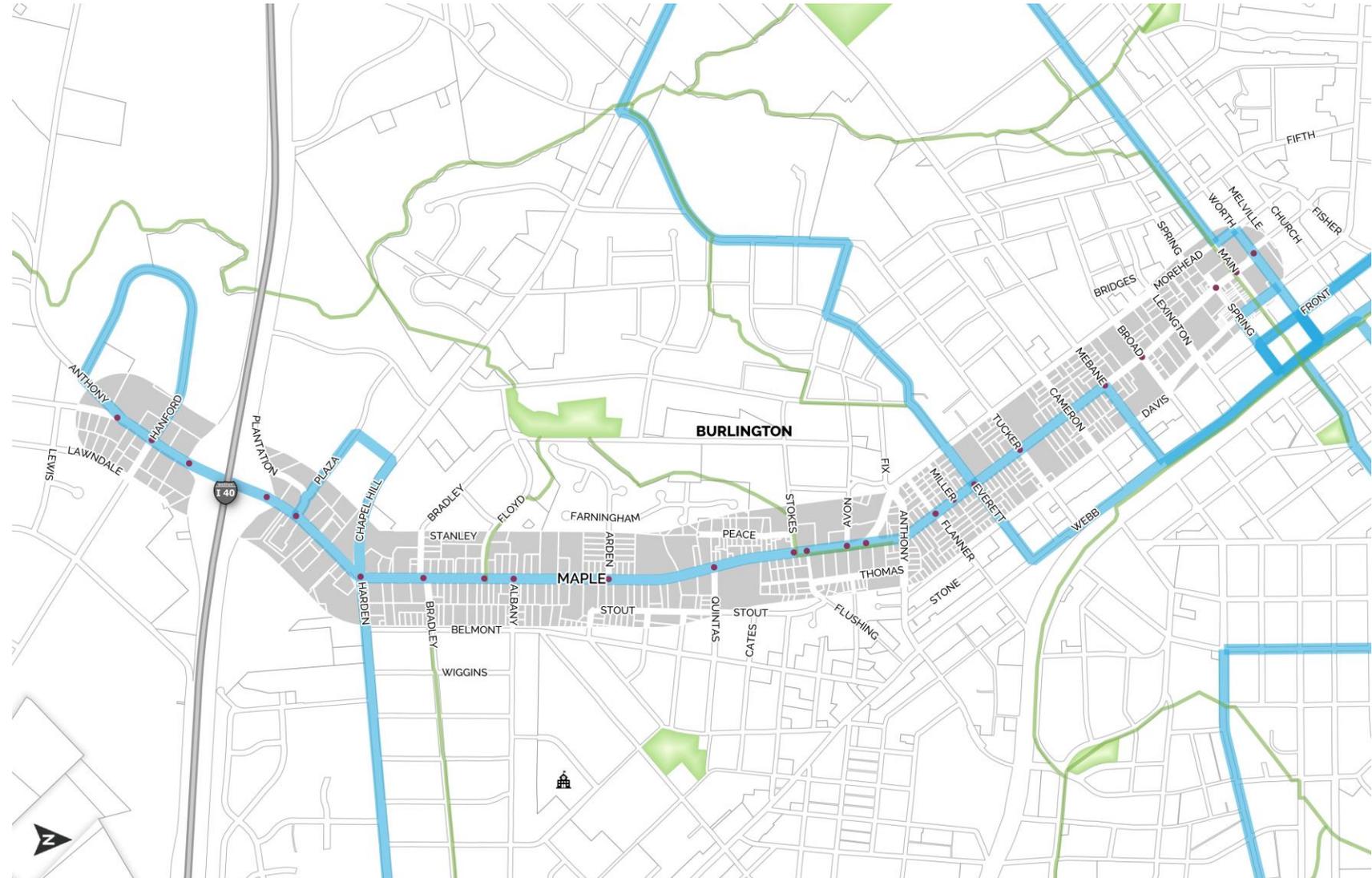


A CITY OF BURLINGTON CORRIDOR INITIATIVE

Steering Committee Meeting | Tuesday, October 17, 2017

Corridor Limits

**Anthony Road to
Church Street**
2.7 miles



Maple Talks

August 23, 2017

Paramount Theater

Over 80 attendees

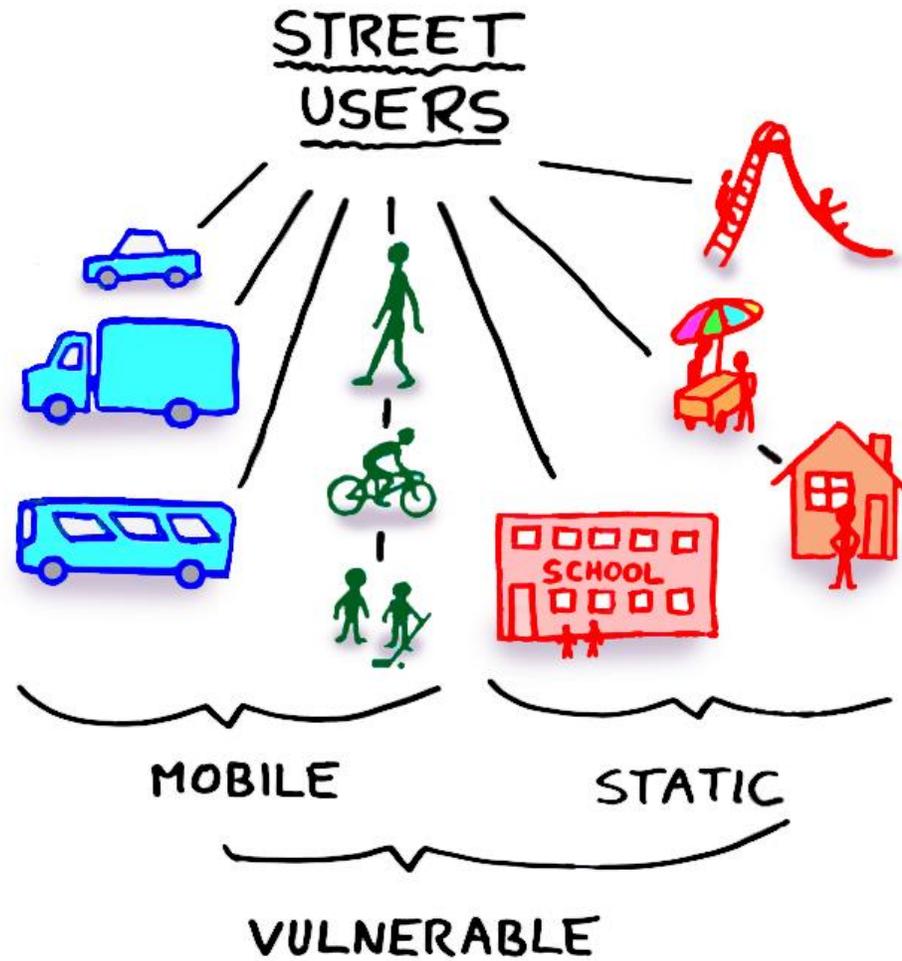
Education

Information

Socialization



Capacity of a Street





"Capacity" of a Street

Lockwood

Great Streets Approach

People as priority

People who drive cars, trucks, walk, bike, ride transit, and live and work along/near the street

Quality of design

Quality of service for transportation

Quality of life for residents and users

*Make the trip as enjoyable
as the destination*



Reaching a Broader User Base



1% Experienced and confident

9% Casual and somewhat confident

60% Interested but concerned

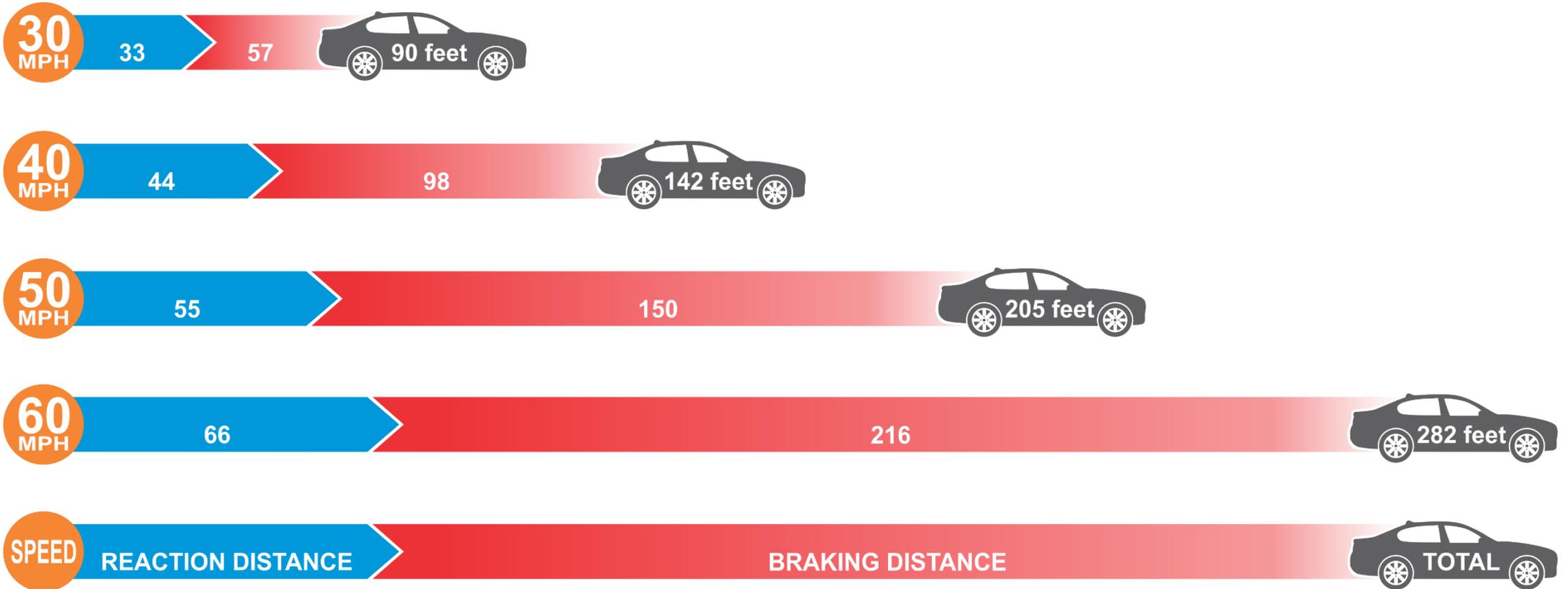


lower stress tolerance

higher stress tolerance

Source: Dill, J., McNeil, N. (2012). *Four Types of Cyclists? Examining a Typology to Better Understand Bicycling Behavior and Potential*.
Graphic: Toole Design Group

Speed and Stopping Distance



— PEDESTRIAN FATALITY & SERIOUS INJURY RISK +

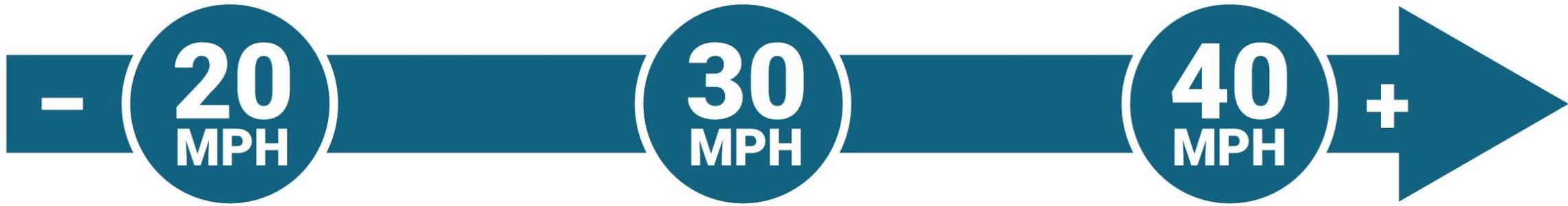
18%



50%



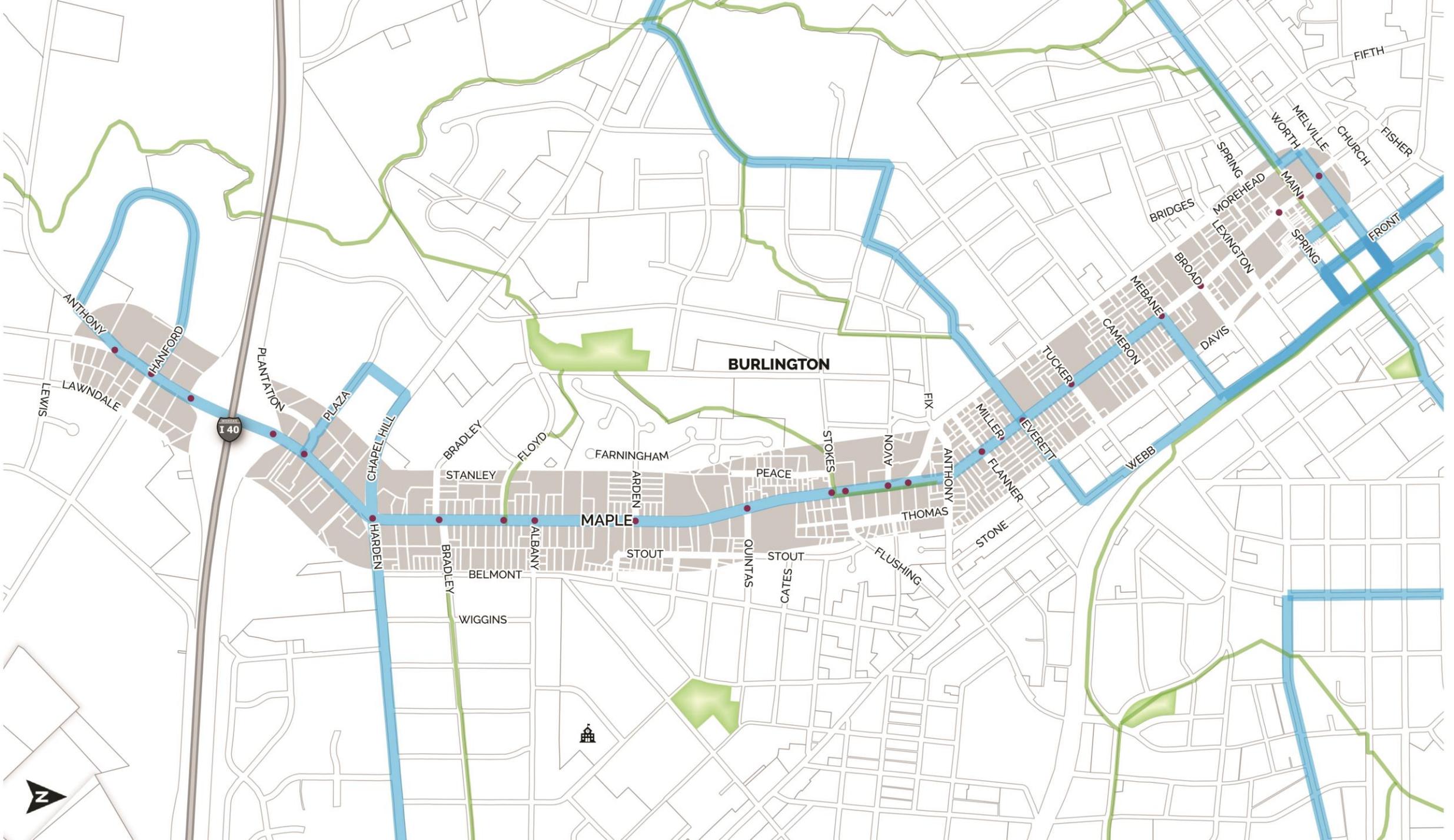
77%



CONE OF VISION

Are you concerned about any of the following issues regarding Maple Avenue? (click all that apply)

1. Vehicular safety/accidents
2. Pedestrian safety/accidents
3. Bicycle safety/accidents
4. Traffic congestion
5. Condition of the street
6. Condition of surrounding properties
7. Other



BURLINGTON

I 40

LEWIS
LAWNDALE
ANTHONY
HANFORD

PLANTATION

PLAZA

CHAPEL HILL

BRADLEY

FLOYD

FARNINGHAM

STANLEY

ARDEN

PEACE

STOKES

AVON

ANTHONY

FLANNER

EVERETT

WEBB

HARDEN

BRADLEY

BELMONT

ALBANY

STOUT

MAPLE

QUINTAS

STOUT

CATES

FLUSHING

STONE

THOMAS

STONE

TUCKER

CAMERON

BROAD

LEXINGTON

SPRING

WORTH

MELVILLE

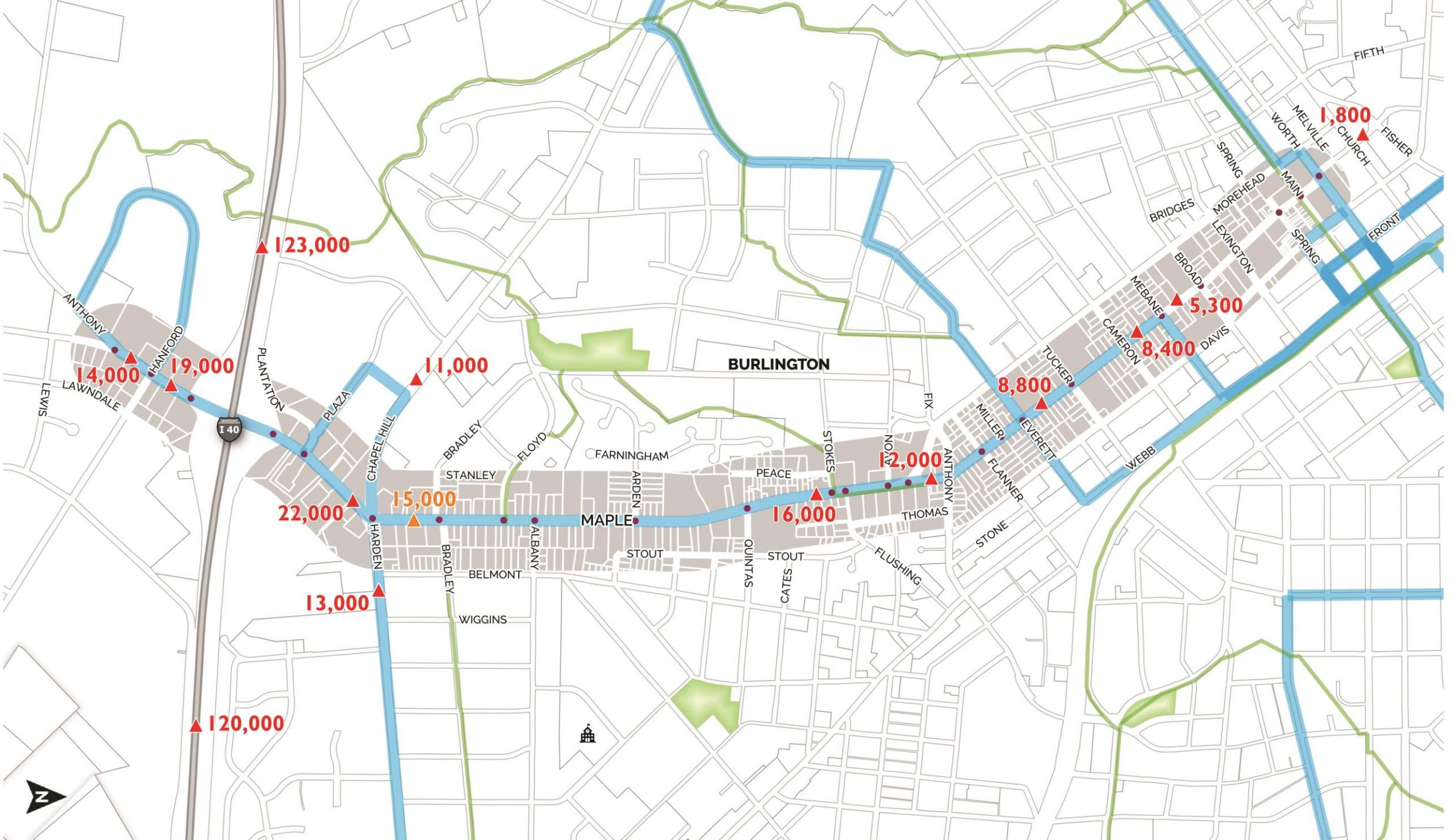
CHURCH

FISHER

FIFTH

FRONT





Average Daily Traffic (ADT)

ADT is the total two-way traffic on a roadway over the course of one day.



Average Daily Traffic (ADT)

What does 16,000 cars per day mean?

~ 8,000 cars in one direction

~ 1,600 cars during rush hour

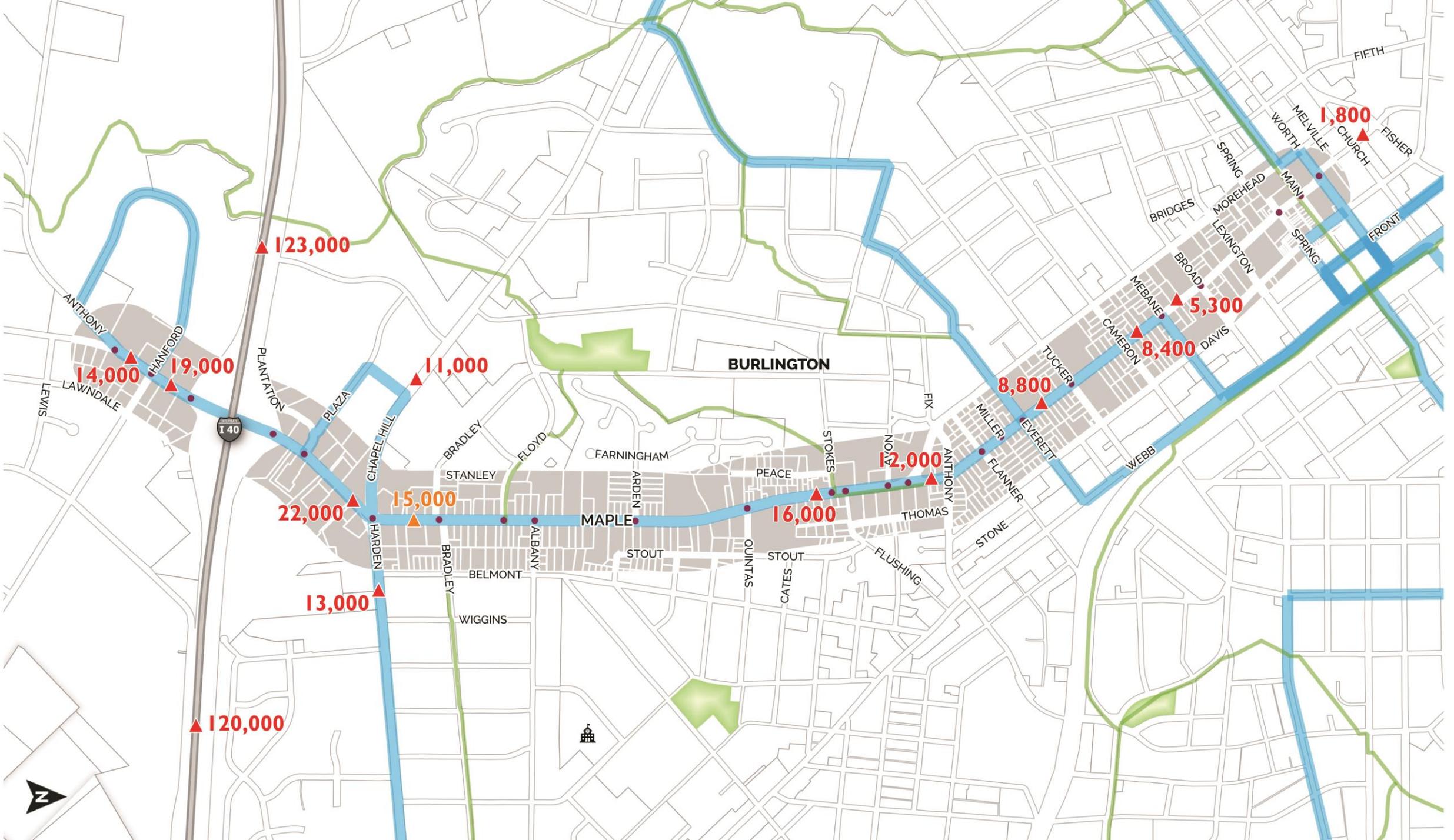
~ 1 car every 6 seconds

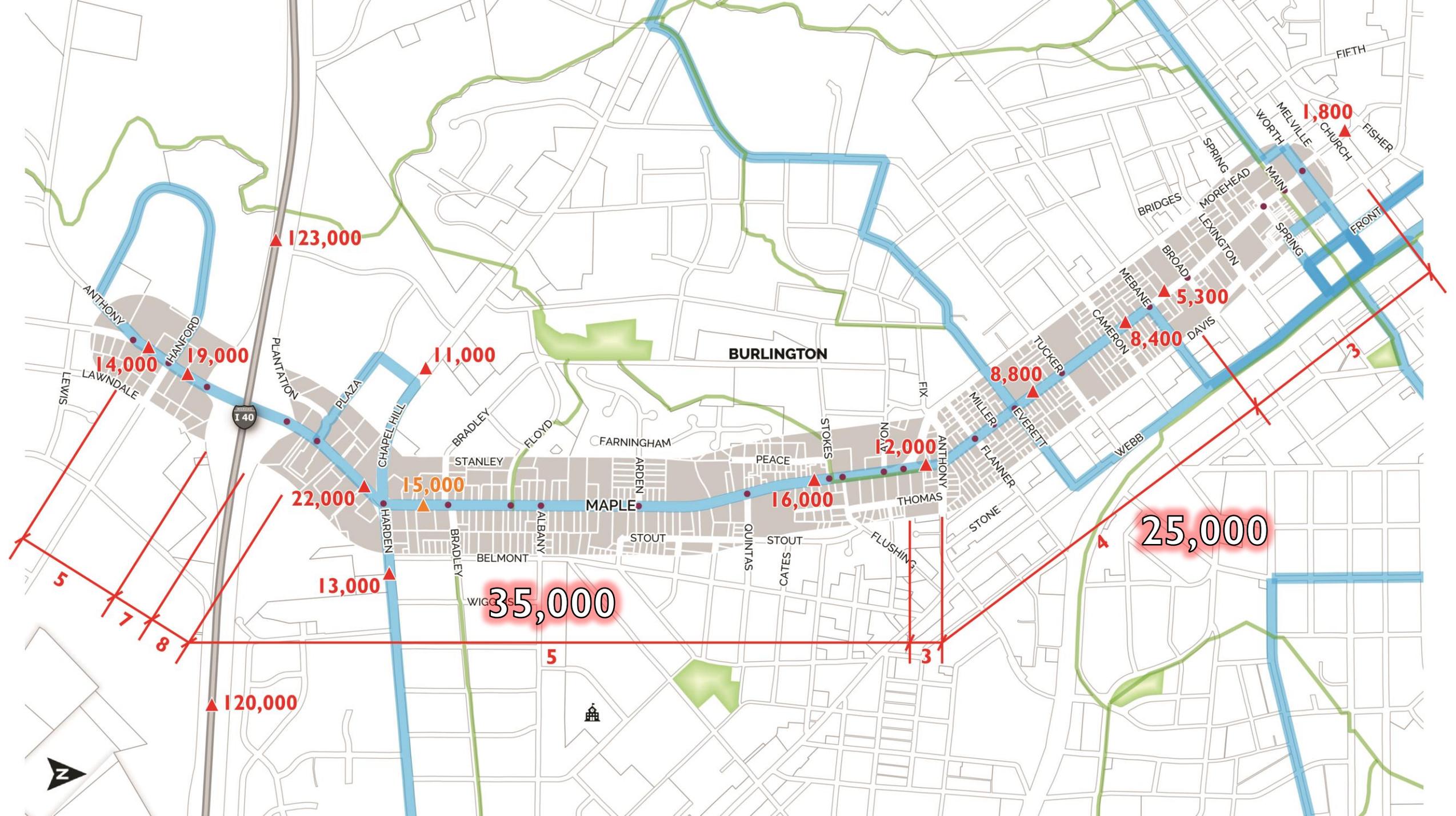


Lane Capacities

Number of Lanes	Capacity (ADT)
2 lanes	~10,000
3 lanes	~20,000
4 lanes	~25,000
5 lanes	~35,000
6 lanes	~40,000

Note: Capacities are for surface streets, not limited access highways





If not needed for vehicular capacity, I would support reallocating portions of the right-of-way for: (click all that apply)

1. Landscaping / beautification
2. Benches and other street furniture
3. Lighting
4. Sidewalks
5. Bicycle facilities
6. Greenway / trail
7. Linear parks / open space
8. I do not support reallocating the right-of-way

Market & Economics

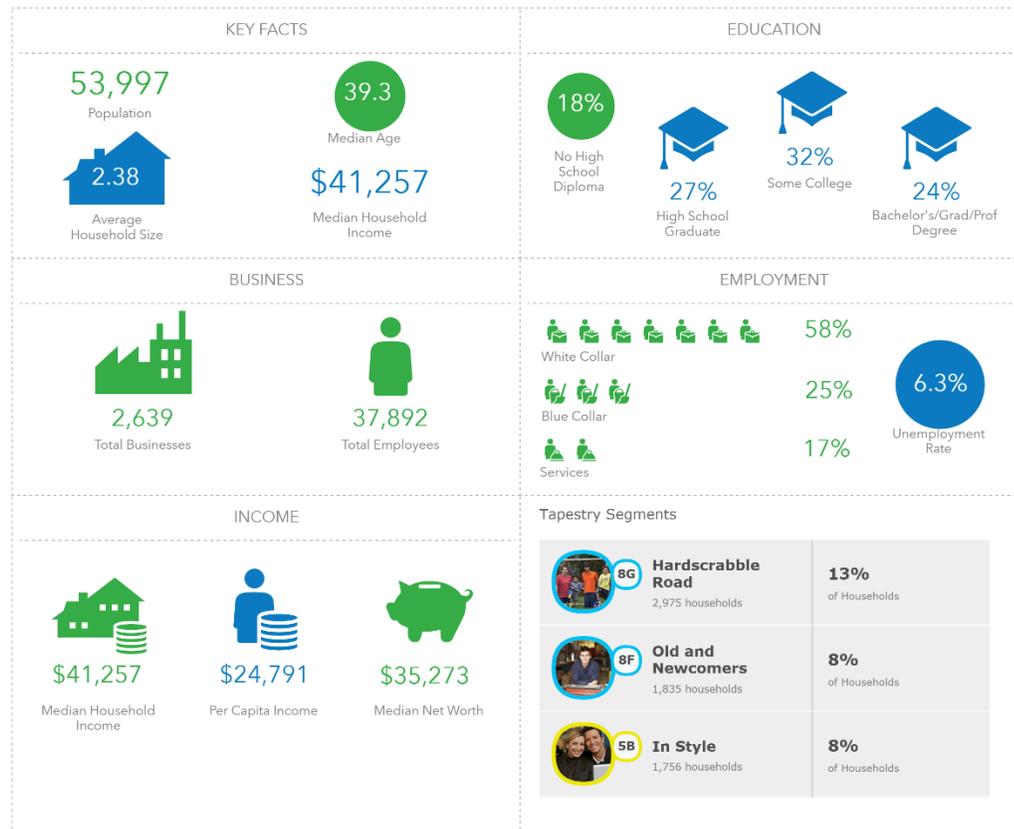
Bringing the Past to the Future

At a Glance – City vs. Study Area

At A Glance

Burlington, NC
Burlington City, NC (3709060)
Geography: Place

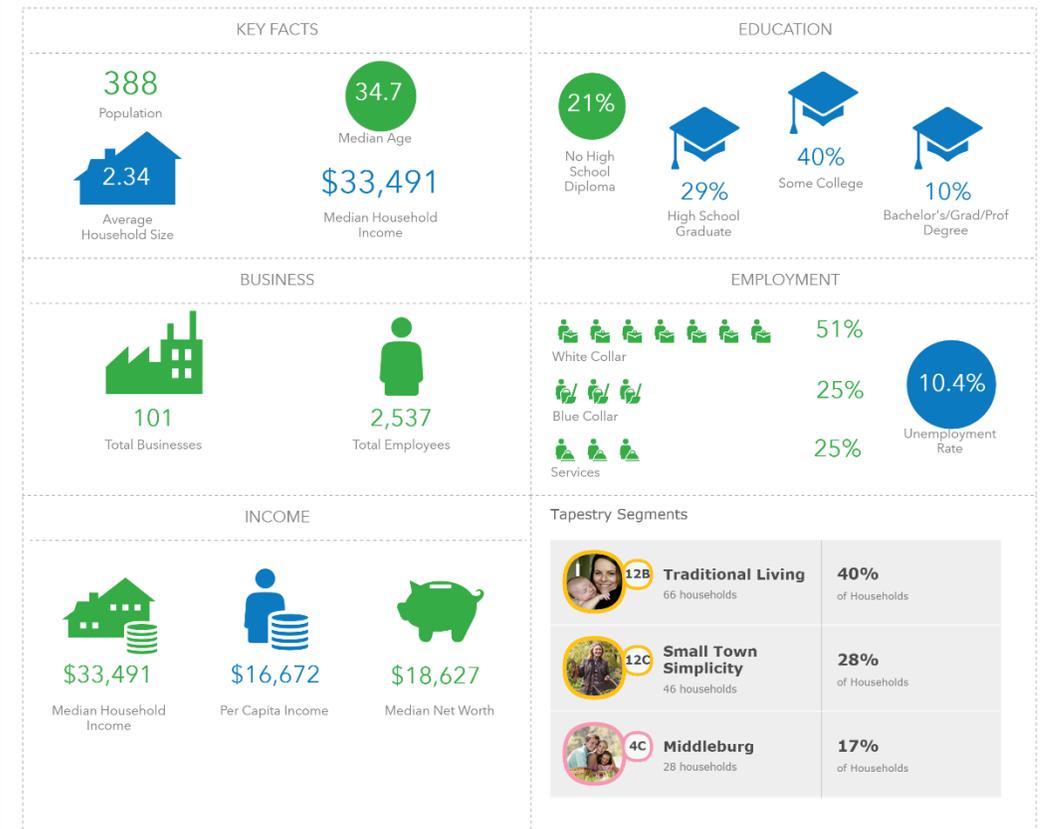
Prepared by Esri



At A Glance

Maple Avenue Study Area
Maple Avenue Study Area
Area: 0.85 square miles

Prepared by Esri



Alamance County Economic Base

Manufacturing

Retail Trade

Healthcare Services

Accommodation & Food Services

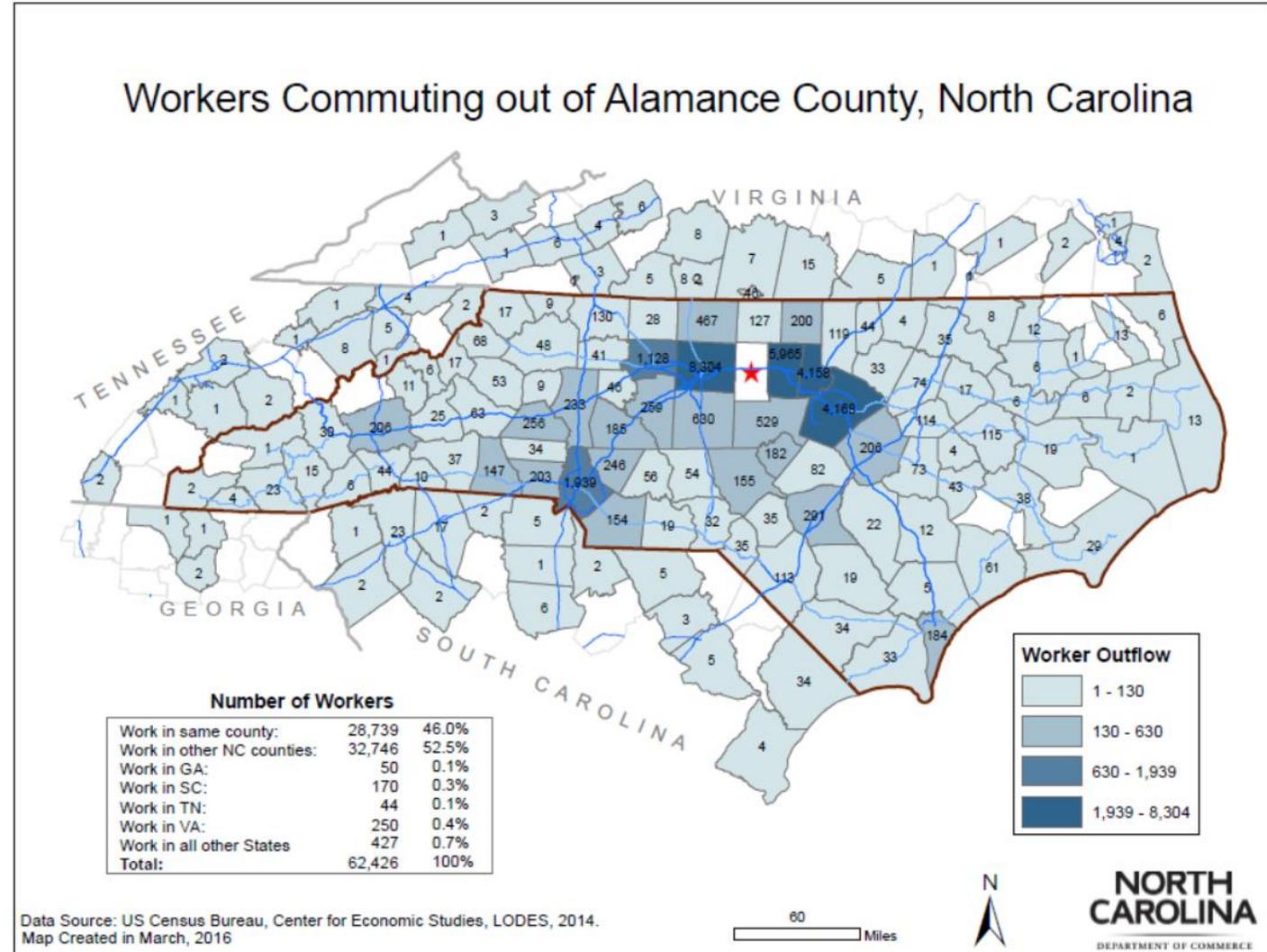
Economic Base Industry Key Sectors (NAICS)			
Alamance County - 2016	LQ	% Employment	Product Type
Total Annual Average Employment: 52,806			
Manufacturing (31-33)	1.79	17.56%	Flex Industrial
Textile Mills (313)	43.04	3.89%	
Textile Product Mills (314)	2.01	0.19%	
Apparel Manufacturing (315)	17.84	1.82%	
Wood Product Manufacturing (321)	2.20	0.68%	
Paper Manufacturing (322)	2.73	0.80%	
Printing & related support activities (323)	1.42	0.51%	
Plastics & Rubber Manufacturing (326)	2.79	1.55%	
Nonmetallic mineral product manufacturing (327)	1.07	0.34%	
Fabricated metal product manufacturing (332)	1.15	1.29%	
Machinery manufacturing (333)	2.18	1.86%	
Miscellaneous manufacturing (339)	1.13	0.53%	
Wholesale Trade (42)	1.06	4.93%	Warehouse/Distr.
Merchant wholesalers, durable goods (423)	1.20	2.79%	
Merchant wholesalers, nondurable goods (424)	1.20	1.94%	
Retail Trade (44-45)	1.32	16.66%	Retail
Motor vehicle & parts dealers (441)	1.30	2.05%	
Furniture & home furnishings stores (442)	1.09	0.41%	
Building material & garden supply stores (444)	1.14	1.16%	
Health & Personal care stores (446)	1.20	0.10%	
Gasoline stations (447)	1.77	1.30%	
Clothing/Clothing Accessories Stores (448)	1.94	2.07%	
Sports, hobby, instrument & book stores (451)	2.24	1.10%	
General Merchandise Stores (452)	1.54	3.93%	
Miscellaneous store retailers (453)	1.27	0.83%	
Transportation & Distribution (48-49)			Warehouse/Distr.
Warehousing & storage (493)	1.19	0.87%	
Administrative and Waste Services (56)	1.02	7.26%	Office/Other
Administrative & support services (561)	1.01	6.87%	
Waste management & remediation services (562)	1.21	0.39%	
Educational Services (61)	1.56	3.44%	Institutional/Office
Health Care & Social Assistance (62)	1.24	18.63%	Institutional/Office
Ambulatory health care services (621)	1.80	10.13%	
Nursing & residential care facilities (623)	1.38	3.64%	
Accommodation & Food Services (72)	1.22	12.91%	Retail/Hotel
Food services & drinking places (722)	1.36	12.27%	
Construction (23)			Other
Specialty trade contractors (238)	1.16	3.93%	

Source: US Bureau of Labor Statistics

Commuting Patterns

10 minutes

23.7 minutes



Current Reality



Strategic location
Exit 145 Interstate interchange
Visibility & Accessibility
Significant Traffic Volumes
Existing Business & Industry
Adequate Utility Capacity
Zoning & Entitlements
Affordability



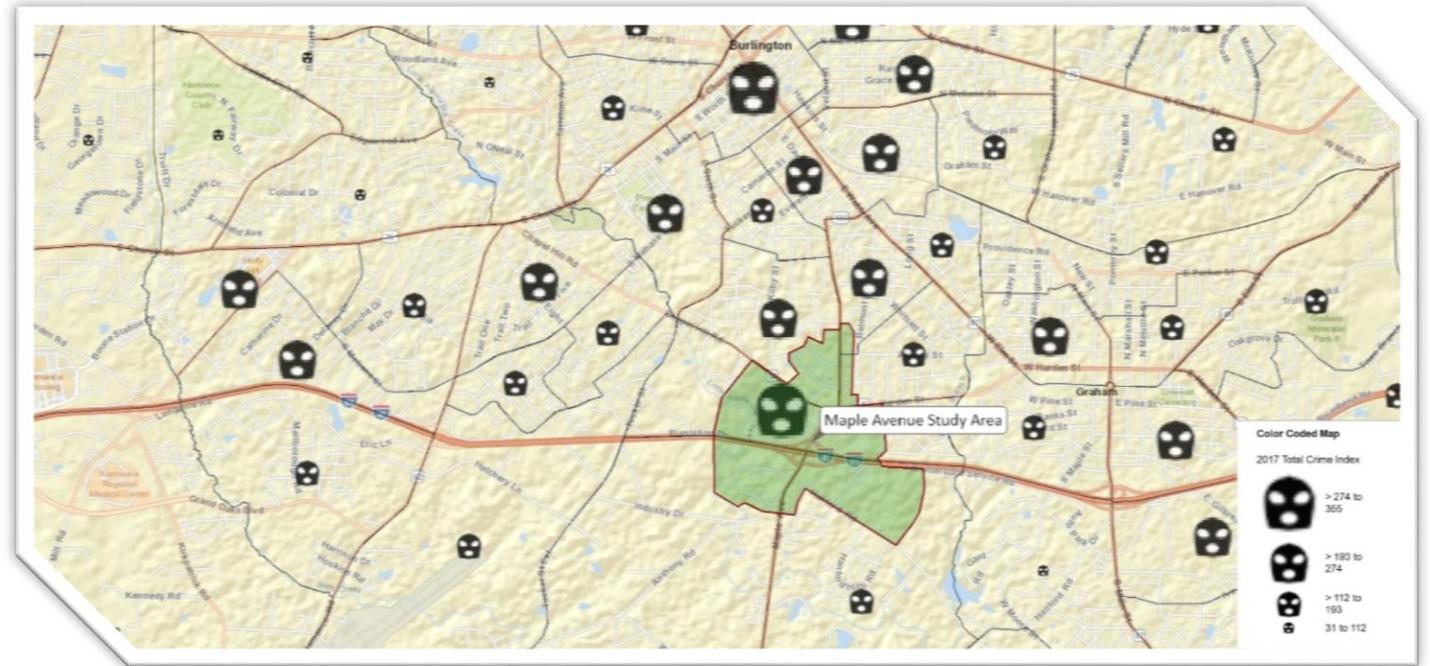
Obsolescence & Vacancy
Crime & Safety issues
Transportation conflicts
Aesthetically unattractive
buildings/structures/signage
Competitive Disadvantages
Market Supply constraints

Critical Issues / Constraints

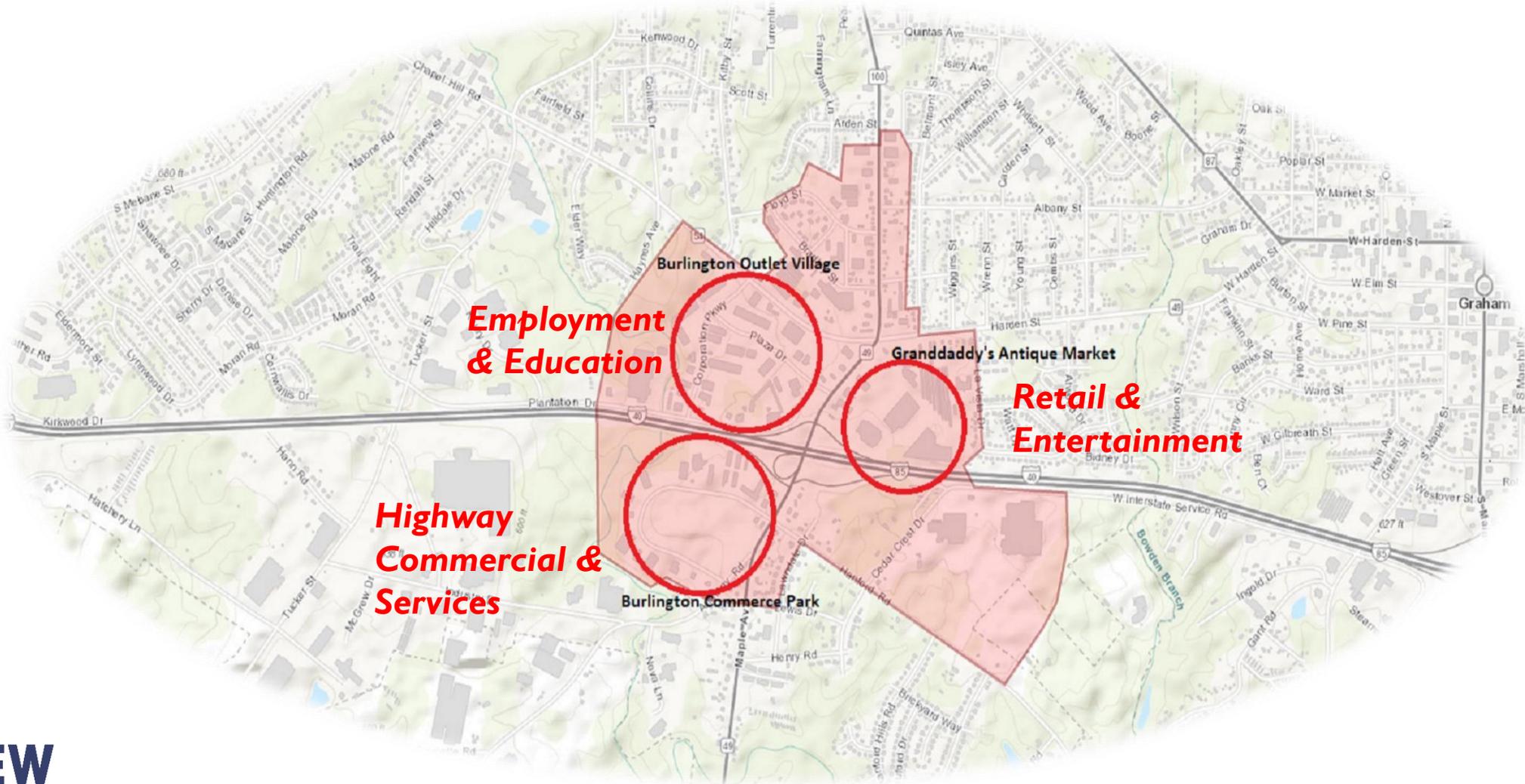
Safety

~Crime Index: 283

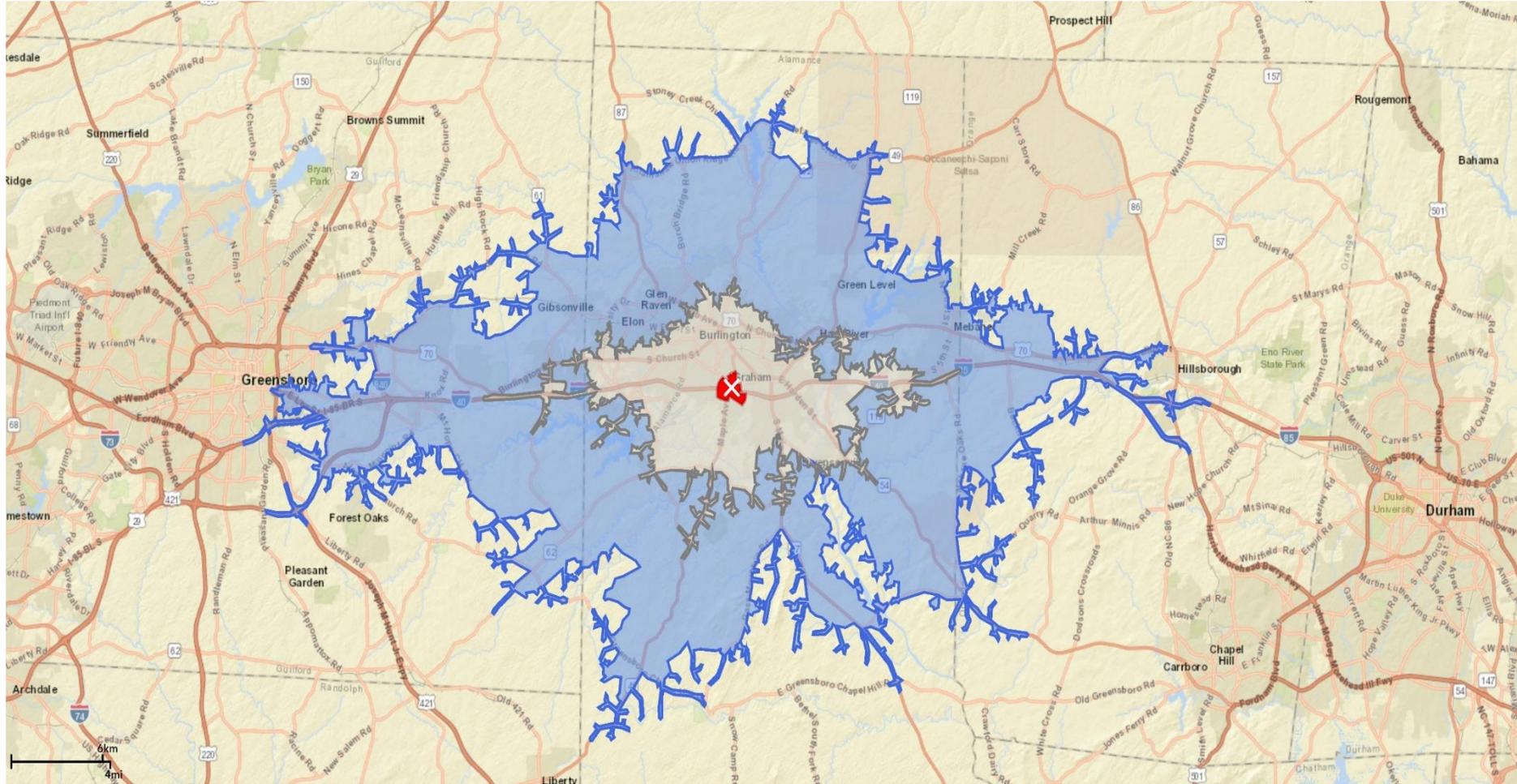
Aesthetics



Targeted Areas – Catalyst Sites



Trade Areas – Primary & Secondary



Key Themes

Maple Avenue as a Destination Gateway

- To area destinations
- To downtown
- To major employment centers
- To recreation/events/attractions

Maple Avenue as an Innovation Hub

- Advanced Manufacturing
- Materials Science
- Life Science
- STEM/STEAM
- Education



Product Types

Industrial

- Flex/”New Generation” Industrial/Office
- Warehouse/Logistics

Retail & Entertainment

Lodging

Housing



Potential Bicycle Facilities

Bike Lane

Exclusive space for bicyclists
Adjacent to motor vehicle lane
Sends message to “expect cyclists”



Buffered Bike Lane

Bike lane with additional striping or hatching (buffer) next to it

Buffer is typically 2'-3' wide



Separated Bike Lane

At street level

Can be one-way or two-way

Various barriers between bike lane and motor vehicle travel lane

High degree of comfort



Side Path

Two-way path, fully separated
Open to bicycles, pedestrians,
and most other non-motorized
users
Typically 10'-12' min. width



Which of the following bicycle facilities would you most like to see on Maple Avenue? (click all that apply)

1. Bike Lane
2. Buffered Bike Lane
3. Separated Bike Lane
4. Side Path
5. None of the above

Potential Pedestrian Facilities

ADA Compliant Crossing

High visibility striping in crossing areas

4' minimum width for ADA accessible curb ramps

Push button with audible status

Pedestrian countdown signal



Median Refuge

Provides in-street refuge along route of crossing

7'+ to fit bicycles

Approach to travel lanes must be ADA compliant



Rapid Flashing Beacon

Increases visibility at
uncontrolled crosswalks
Pedestrian activated



Raised Crosswalk

Area of pavement raised from street level to sidewalk level

Gentle ramps allow vehicles to slowly traverse

Calms traffic

Increases pedestrian priority and visibility



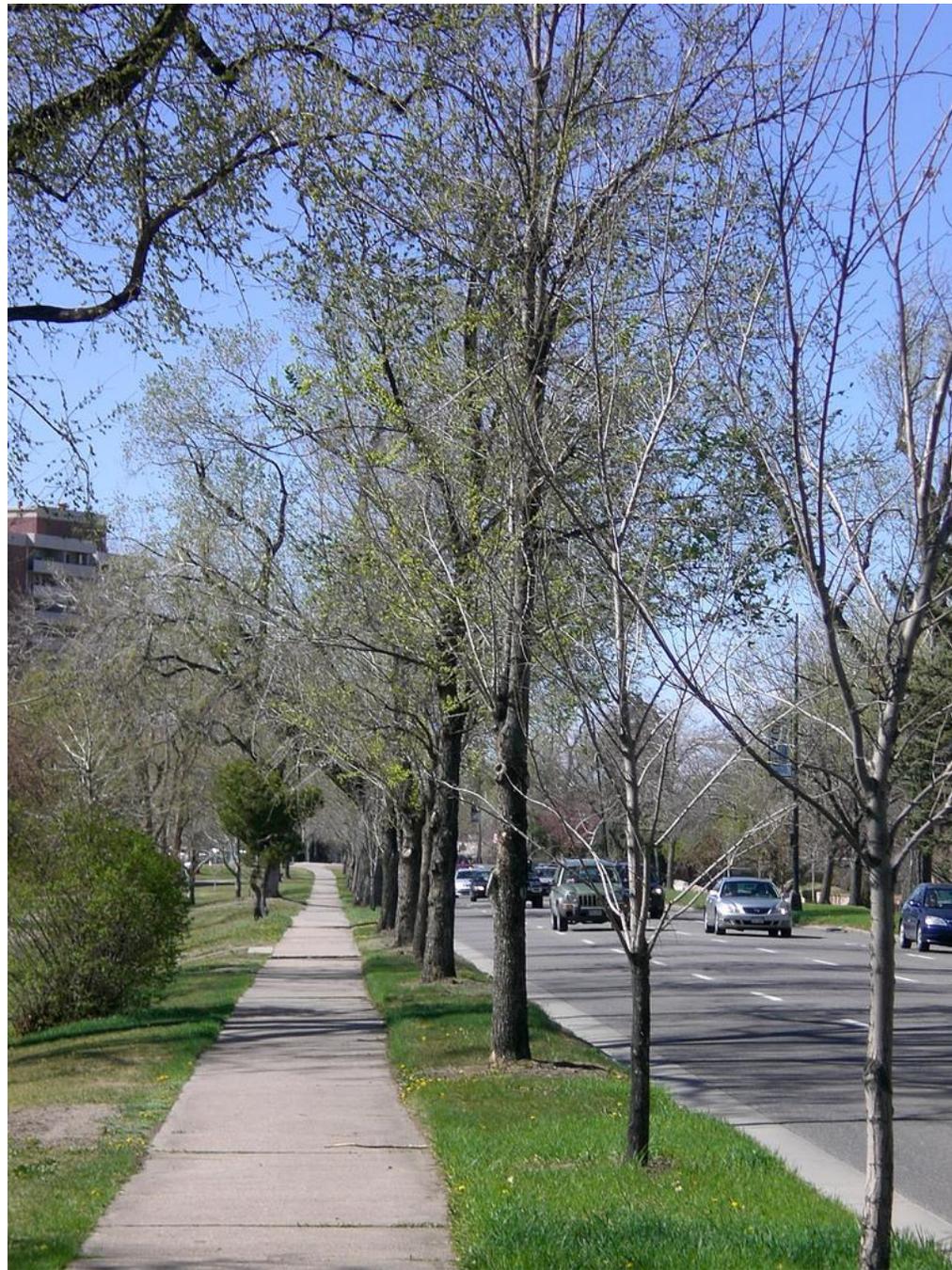
Which of the following pedestrian facilities would you most like to see on Maple Avenue? (click all that apply)

1. ADA Compliant Crossings
2. Median Refuge
3. Rapid Flashing Beacon
4. Raised Crosswalk
5. None of the above

Visual Preference Survey

RENEW
MAPLE AVENUE
A CITY OF BURLINGTON CORRIDOR INITIATIVE

Image 1



Source: Flickr, Complete Streets

RENEW MAPLE AVENUE

A CITY OF BURLINGTON CORRIDOR INITIATIVE



Image 2



Source: Ernie Boughman



Source: www.frederickwilliamhoagarchitect.com



Source: <http://www.cityofgoleta.org>



Source: www.jeffersoncitymo.gov

RENEW
MAPLE AVENUE
A CITY OF BURLINGTON CORRIDOR INITIATIVE



Source: Libby Thomas

Image 7



Source: Ernie Boughman



Source: www.yesmontgomeryva.org



Image 10

RENEW
MAPLE AVENUE
A CITY OF BURLINGTON CORRIDOR INITIATIVE



Image 11



Image 12



Source: www.charmeck.org

RENEW MAPLE AVENUE

A CITY OF BURLINGTON CORRIDOR INITIATIVE



Source: bettercities.net

Image 14



Image 15

Source: Ernie Boughman

RENEW MAPLE AVENUE

A CITY OF BURLINGTON CORRIDOR INITIATIVE



Image 16

Source: Jared Draper



Image 17

Source: Ernie Boughman



Image 18

Source: la.streetsblog.org



Source: Ernie Boughman



Source: Parsons Brinckerhoff



Image 21

Source: Ernie Boughman





Source: walkableprinceton.com

RENEW MAPLE AVENUE

A CITY OF BURLINGTON CORRIDOR INITIATIVE

Image 24

Source: <http://www.urbanophile.com/2010/05/23/next-american-suburb-carmel-indiana/comment-page-1/>



RENEW MAPLE AVENUE

A CITY OF BURLINGTON CORRIDOR INITIATIVE



Source: Ernie Boughman



Source: Ernie Boughman



Image 27

Source: Ernie Boughman

RENEW MAPLE AVENUE

A CITY OF BURLINGTON CORRIDOR INITIATIVE



Image 28

Source: Ernie Boughman



Image 29



Image 30

Priority Spectrums

