

The Cecil Group
Planning and Design

DA DOUCET
& ASSOCIATES

N
NELSON
NYGAARD



South Deerfield Complete Streets & Downtown Livability Plan

Existing Conditions

November 15-17, 2012

AGENDA

- Existing Reports
- Existing Conditions/Site Analysis
- Issues/Opportunities

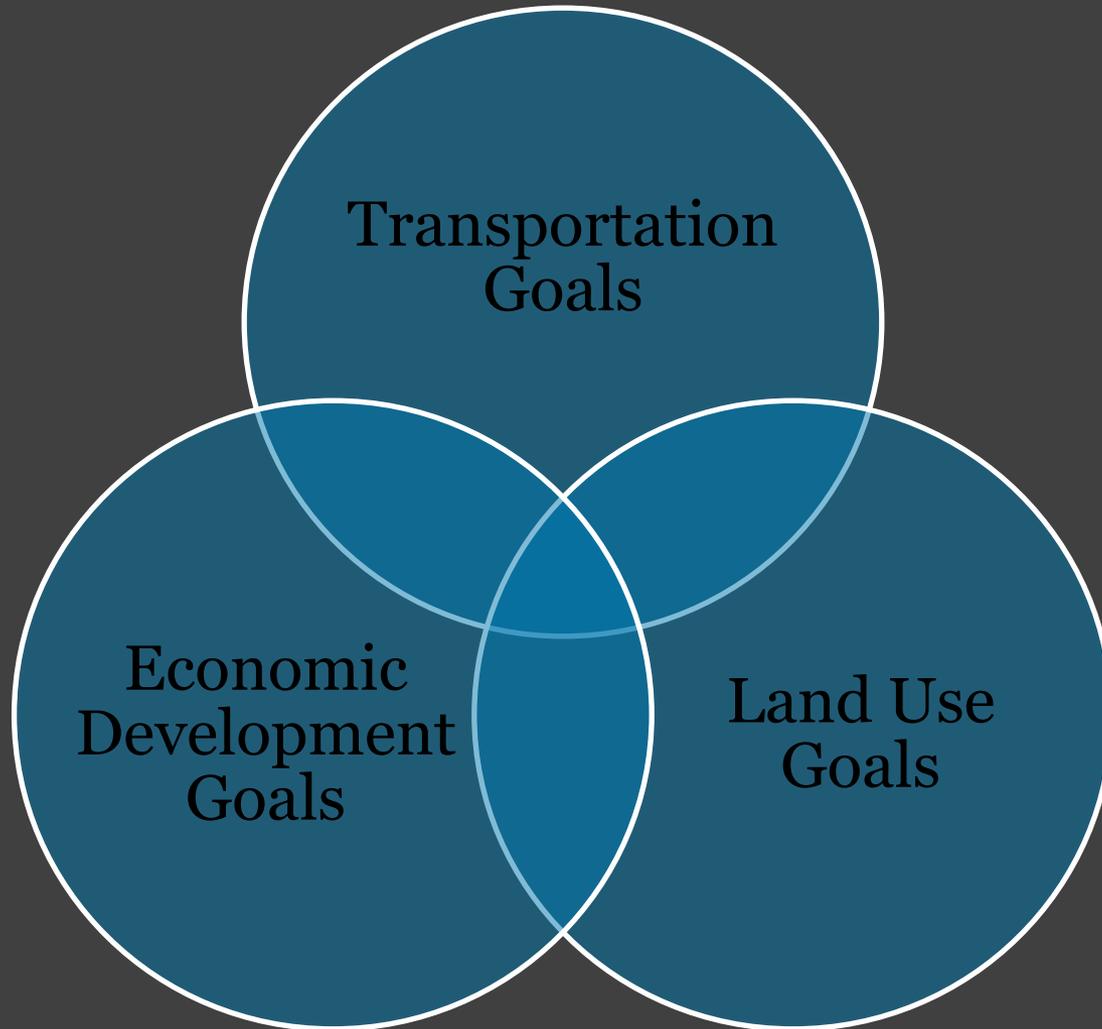
AGENDA

- **Existing Reports**
- Existing Conditions/Site Analysis
- Issues/Opportunities

Project Background

- Franklin County 2035 Regional Plan for Sustainable Development
 - Compilation of goals from county-wide survey
- Application of Traffic Calming in South Deerfield
 - Focus on pedestrian safety and accessibility
 - Better connect two commercial areas

2035 Regional Plan for Sustainable Development



2035 Regional Plan for Sustainable Development

Transportation goals:

- Increase availability and use of public transit
- Restore passenger rail service
- Increase bicycle/pedestrian facilities and promote walking and bicycling

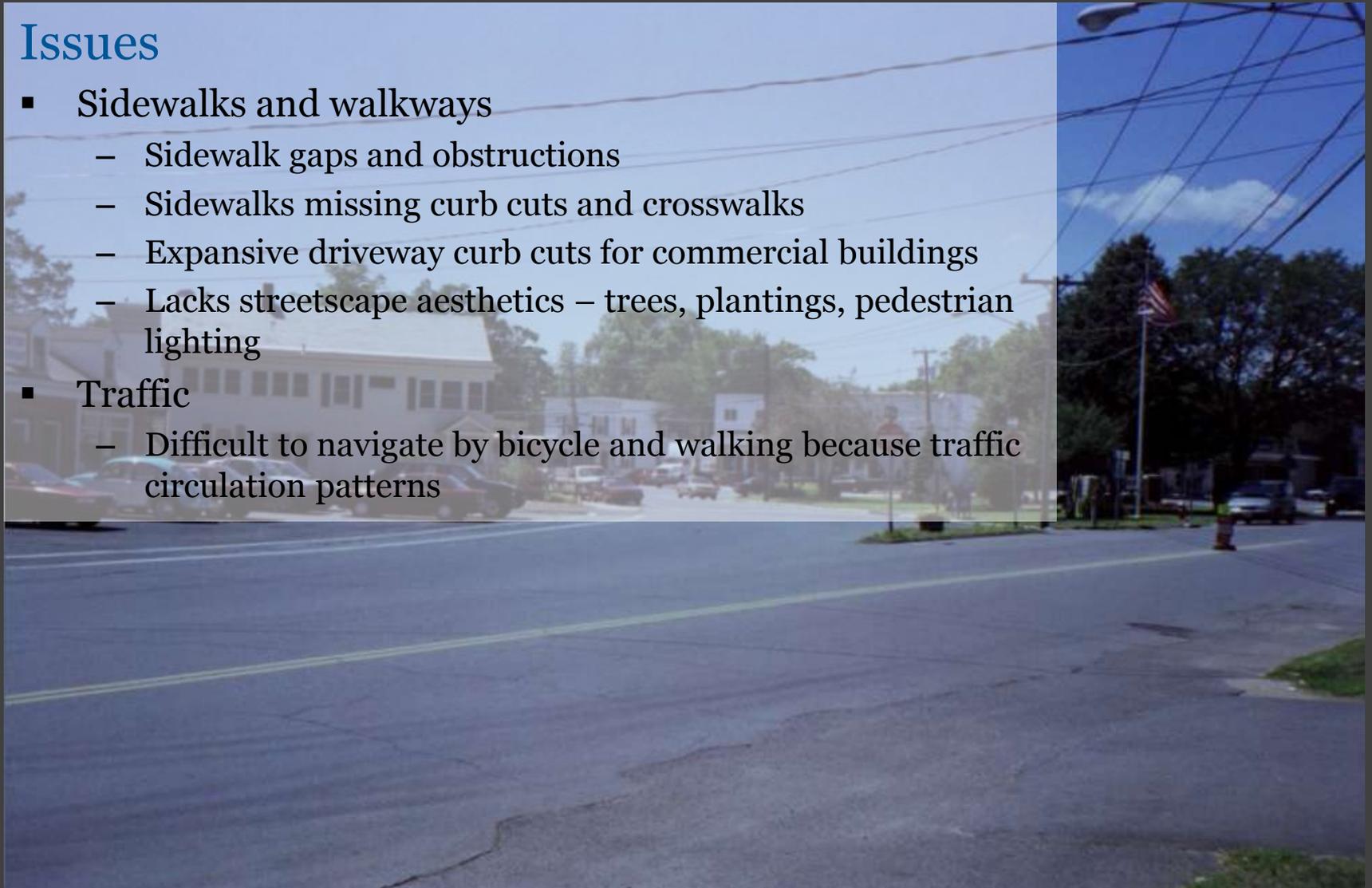
Recommendations relevant to this project:

- Conduct “Complete Streets” analysis for employment/town centers and surrounding residential neighborhoods
- Encourage land use regulations that allow for mixed use and higher density residential development in town centers and other areas served by transit
- Increase options for walking and bicycling
- Expand bus service between town centers and dense residential neighborhoods

Application of Traffic Calming in South Deerfield

Issues

- Sidewalks and walkways
 - Sidewalk gaps and obstructions
 - Sidewalks missing curb cuts and crosswalks
 - Expansive driveway curb cuts for commercial buildings
 - Lacks streetscape aesthetics – trees, plantings, pedestrian lighting
- Traffic
 - Difficult to navigate by bicycle and walking because traffic circulation patterns

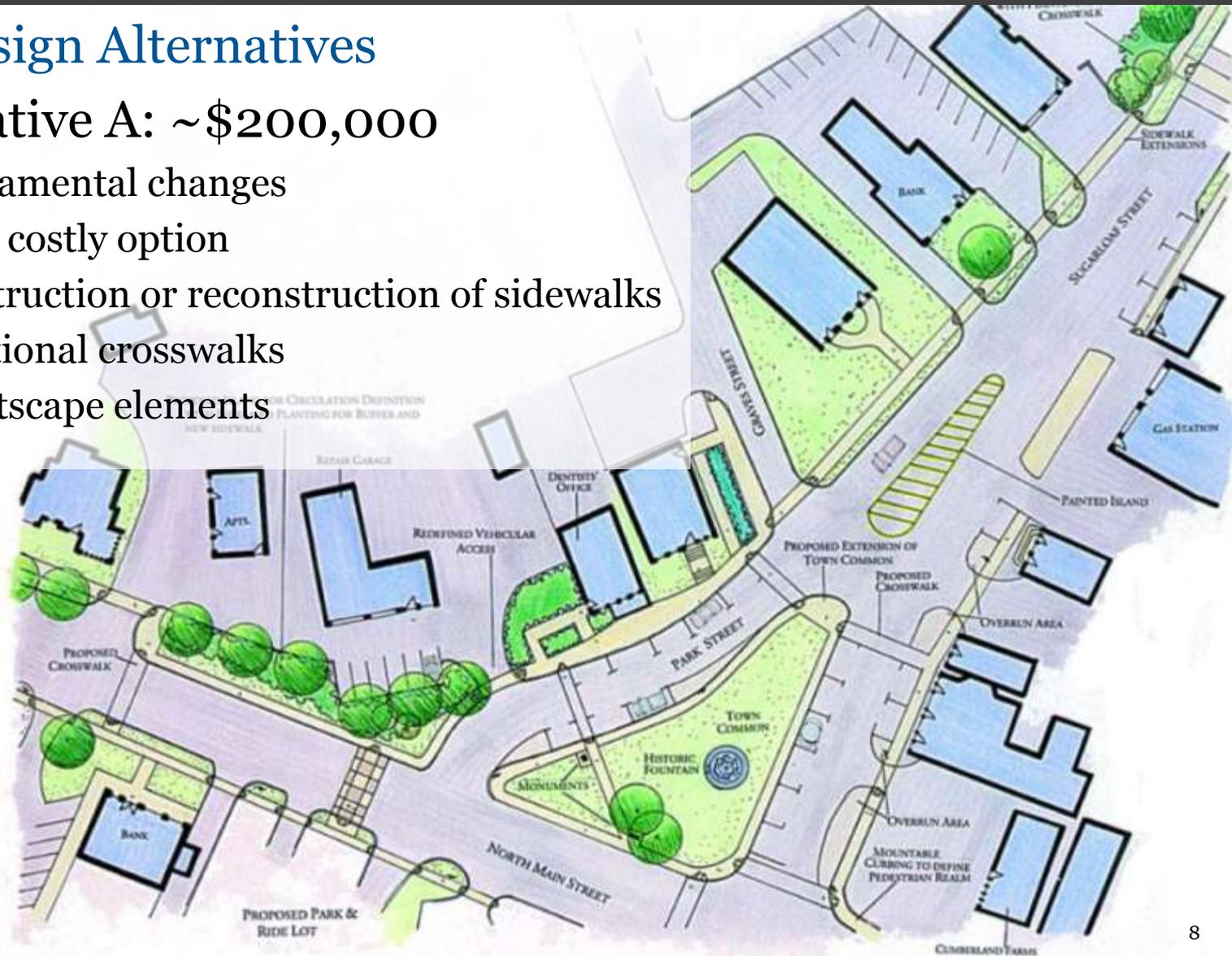


Application of Traffic Calming in South Deerfield

Three Design Alternatives

Alternative A: ~\$200,000

- Fundamental changes
- Least costly option
- Construction or reconstruction of sidewalks
- Additional crosswalks
- Streetscape elements



Application of Traffic Calming in South Deerfield

Three Design Alternatives

Alternative B: ~\$650,000

- More expansive streetscape and roadway improvements
- More costly paving material
- Additional landscaping and brickwork

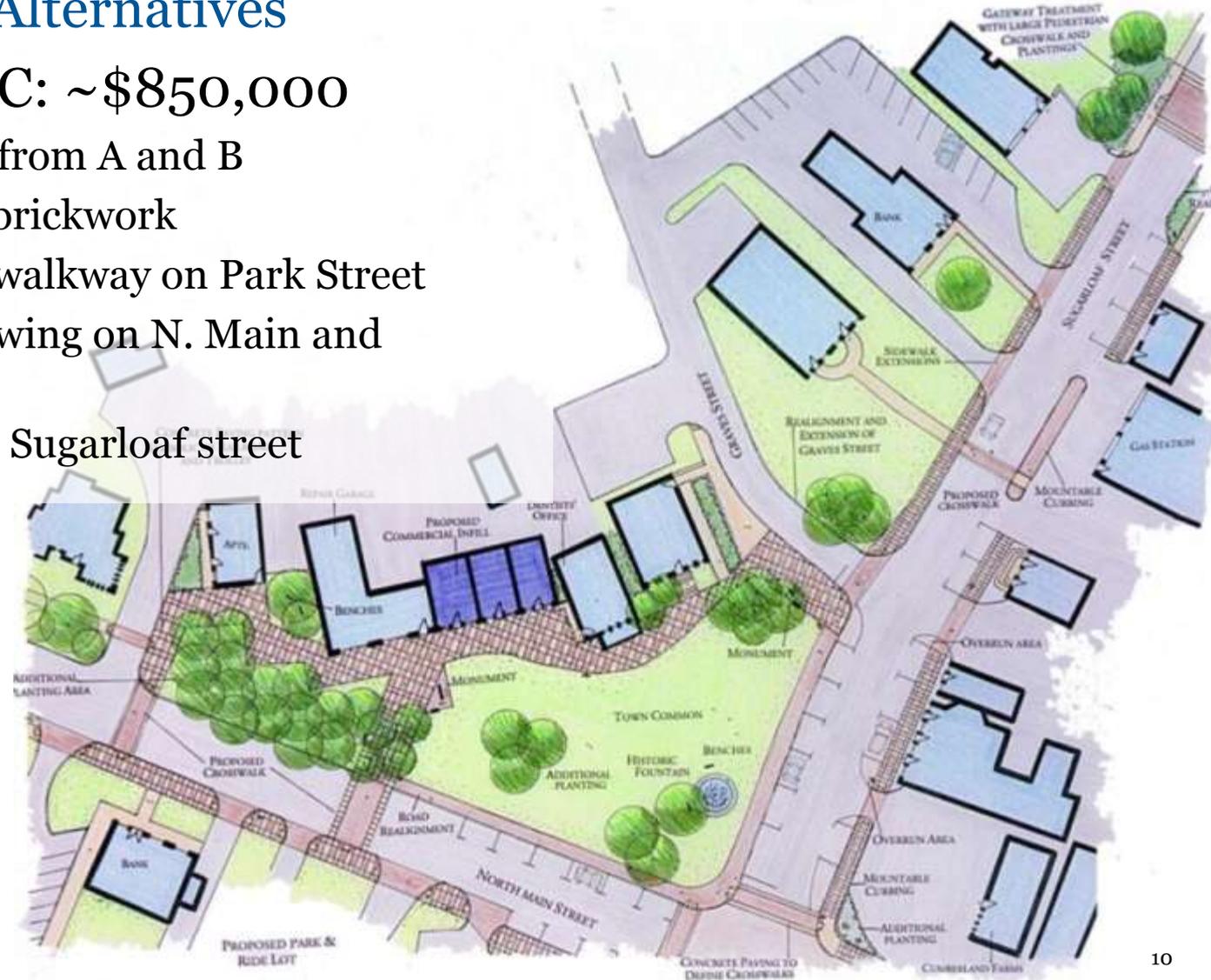


Application of Traffic Calming in South Deerfield

Three Design Alternatives

Alternative C: ~\$850,000

- Everything from A and B
- Additional brickwork
- Pedestrian walkway on Park Street
- Road narrowing on N. Main and Sugarloaf
- Gateway on Sugarloaf street



Oxford Property Analysis – Site Plan Scenario 1

Mixed-Use

Development Plan

- 150,000 total s.f.
- Retail (72,450 s.f.)
- Office (38,000 s.f.)
- Condominiums (30 units)

Amenities

- Walking paths
- Small squares/green space
- Landscaping
- 603 parking spaces



Oxford Property Analysis – Site Plan Scenario 2

Industrial

Development Plan

- Industrial (150,000 s.f.)

Amenities

- Landscaping treatments
- 318 parking spaces

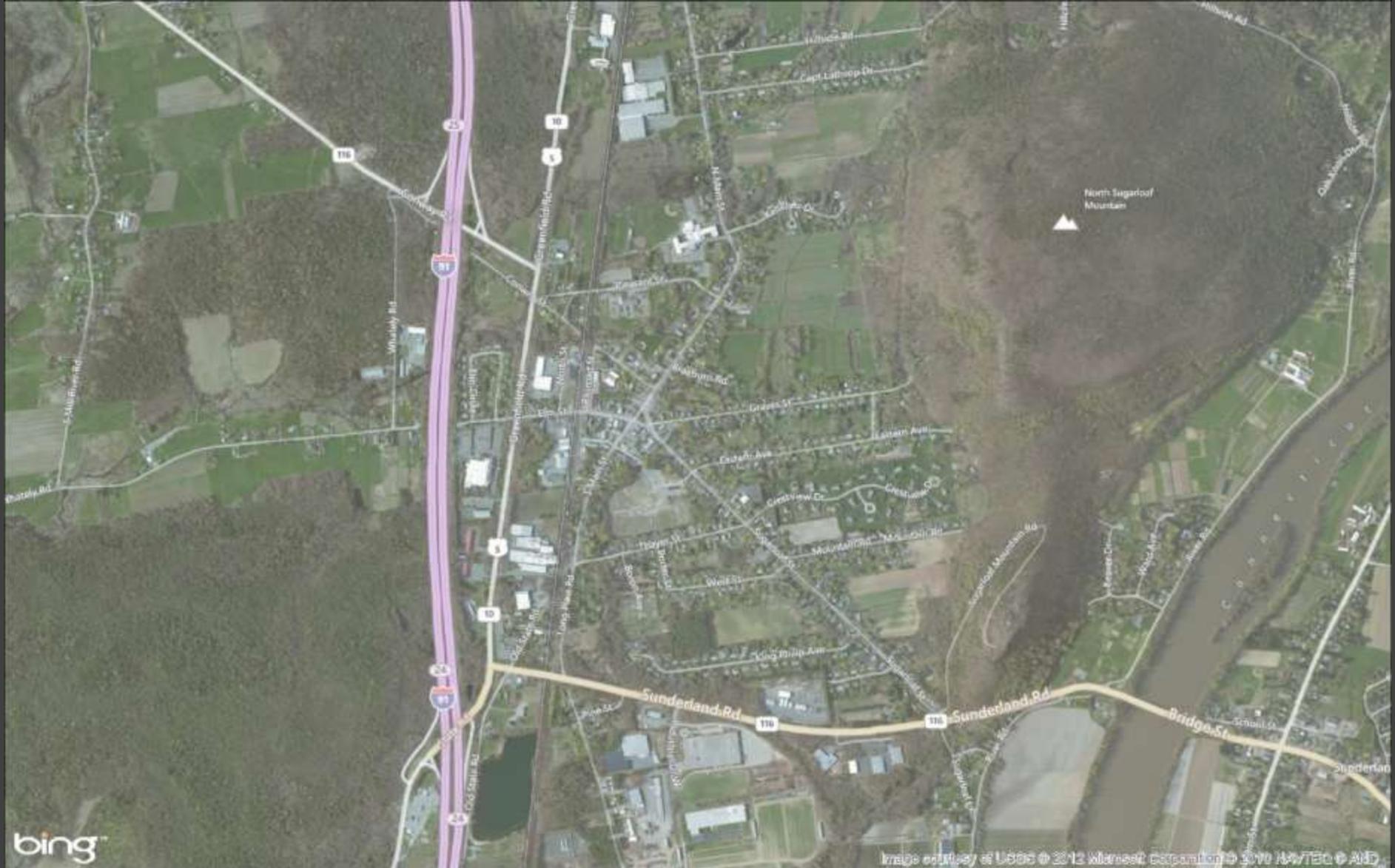


AGENDA

- Existing Reports
- **Existing Conditions/Site Analysis**
- Issues/Opportunities

FRANKLIN COUNTY

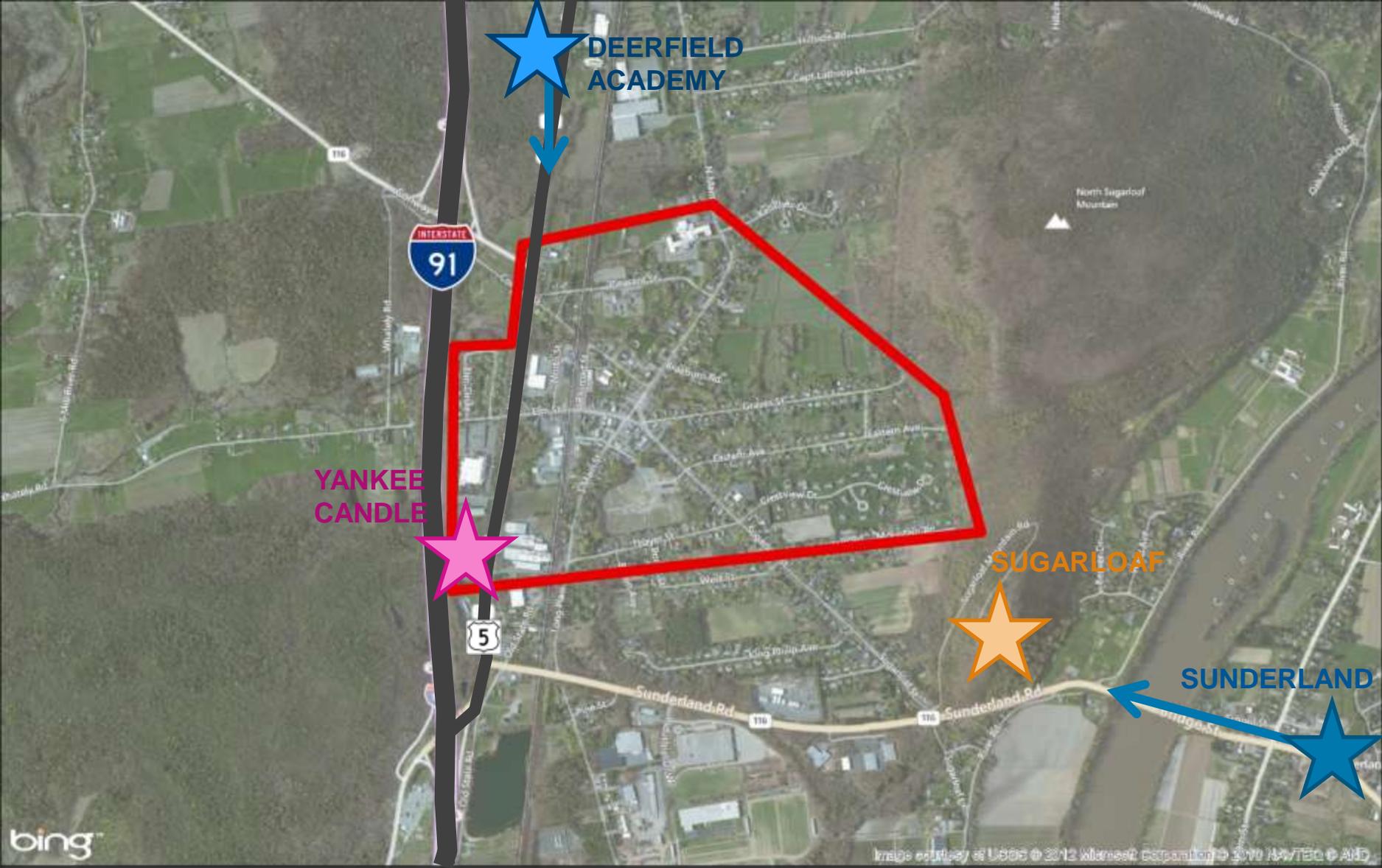




SOUTH DEERFIELD STUDY AREA



SOUTH DEERFIELD STUDY AREA



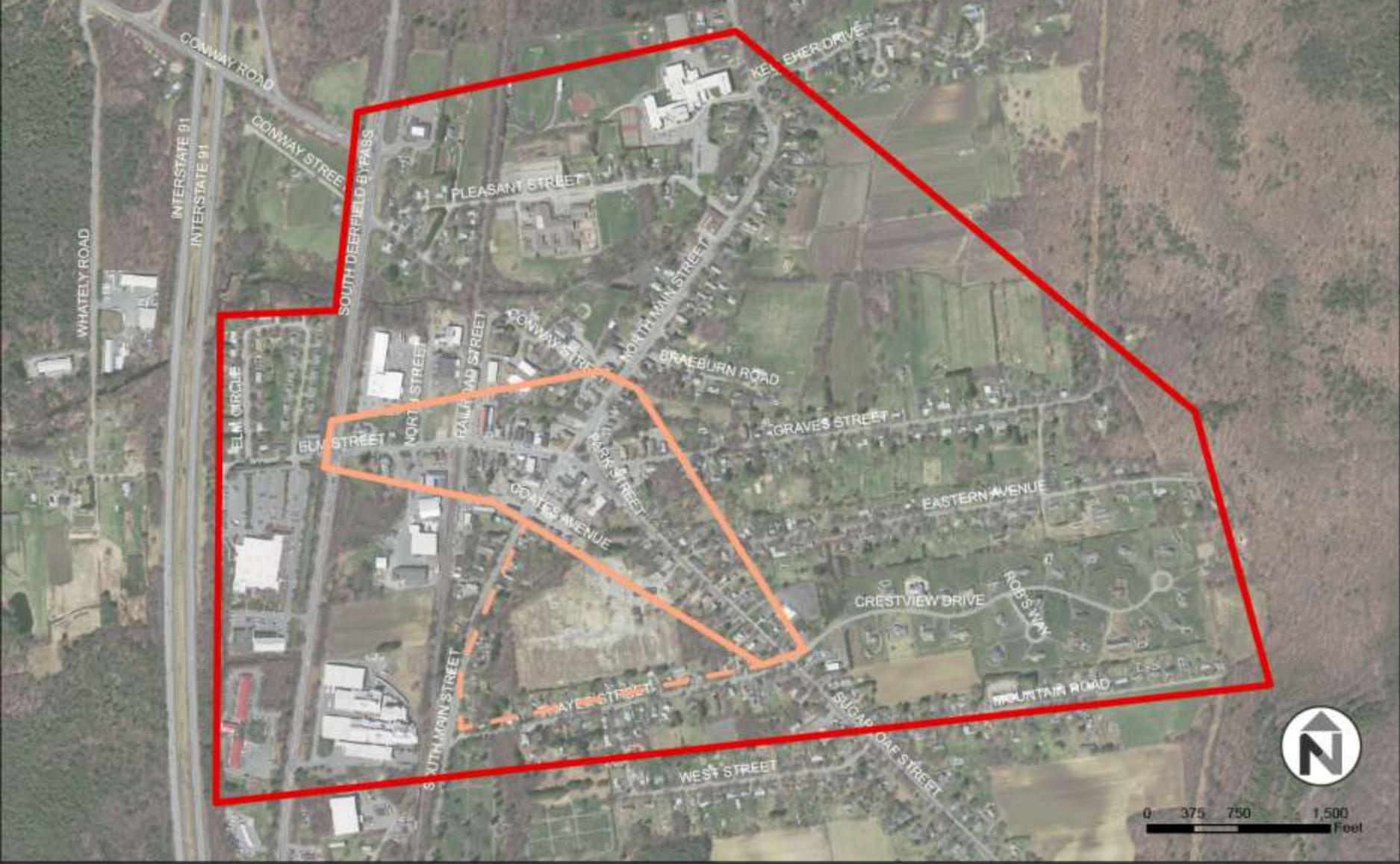
DEERFIELD ACADEMY

YANKEE CANDLE

SUGARLOAF

SUNDERLAND

SOUTH DEERFIELD STUDY AREA

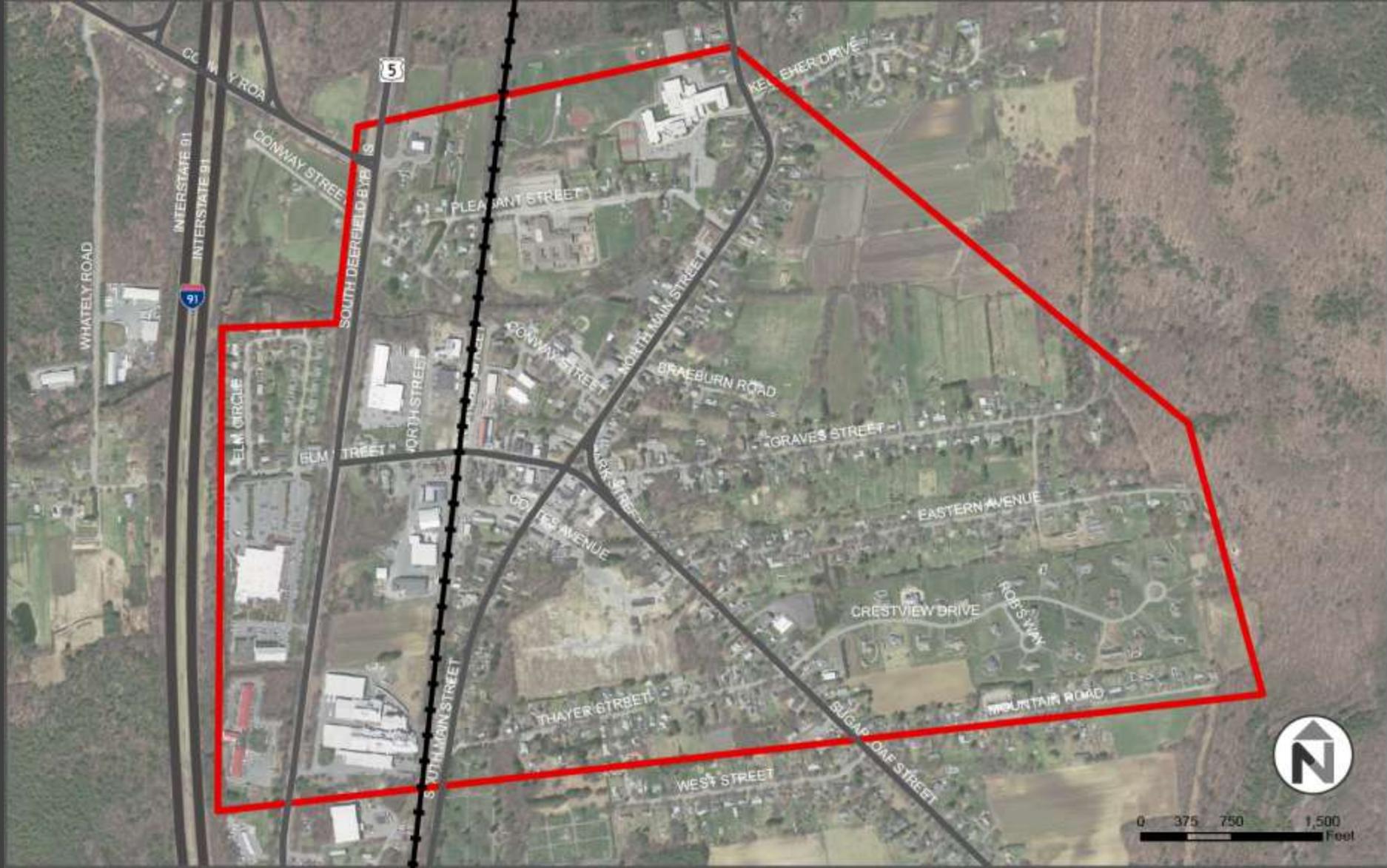




Primary Access

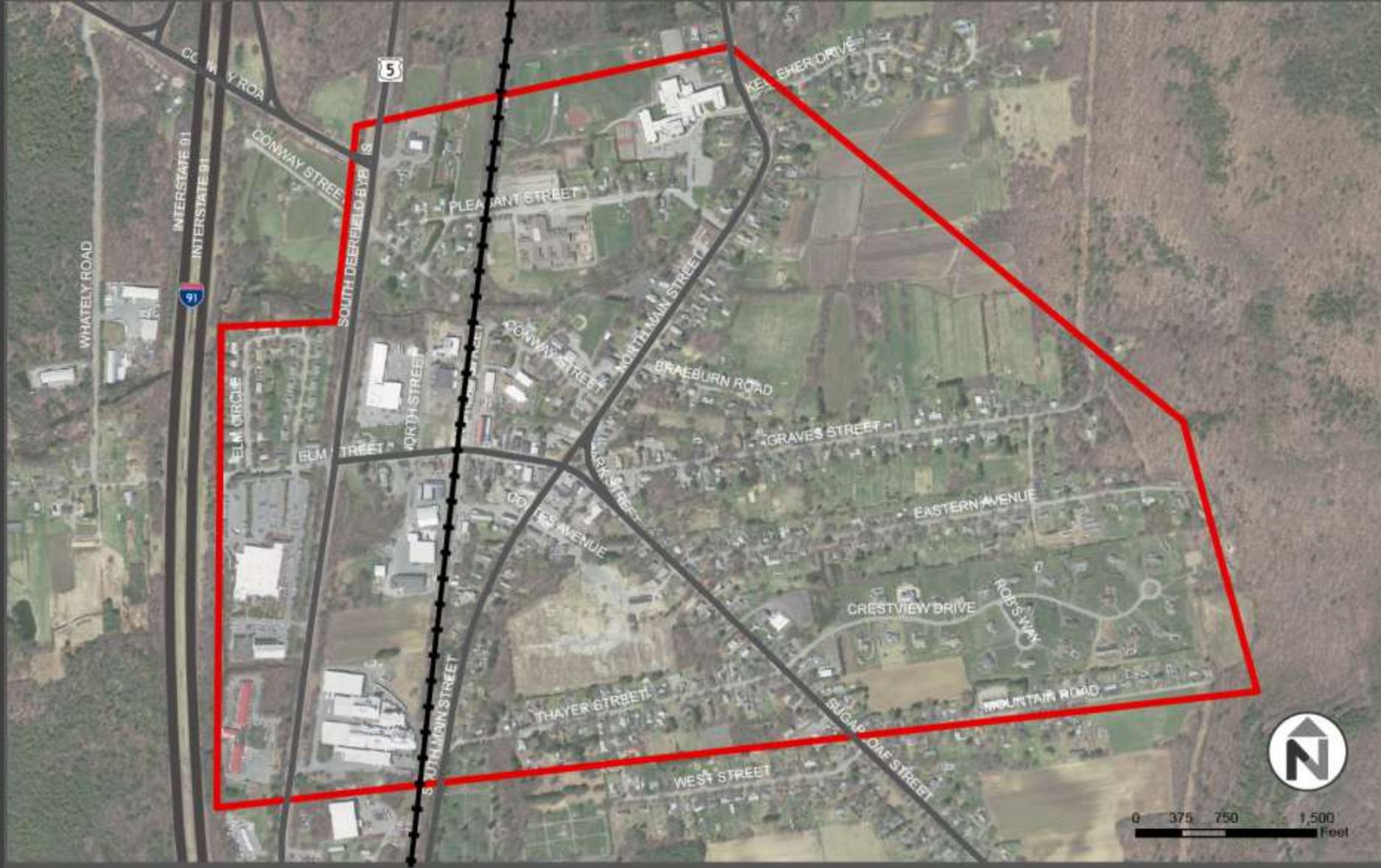


Secondary Access



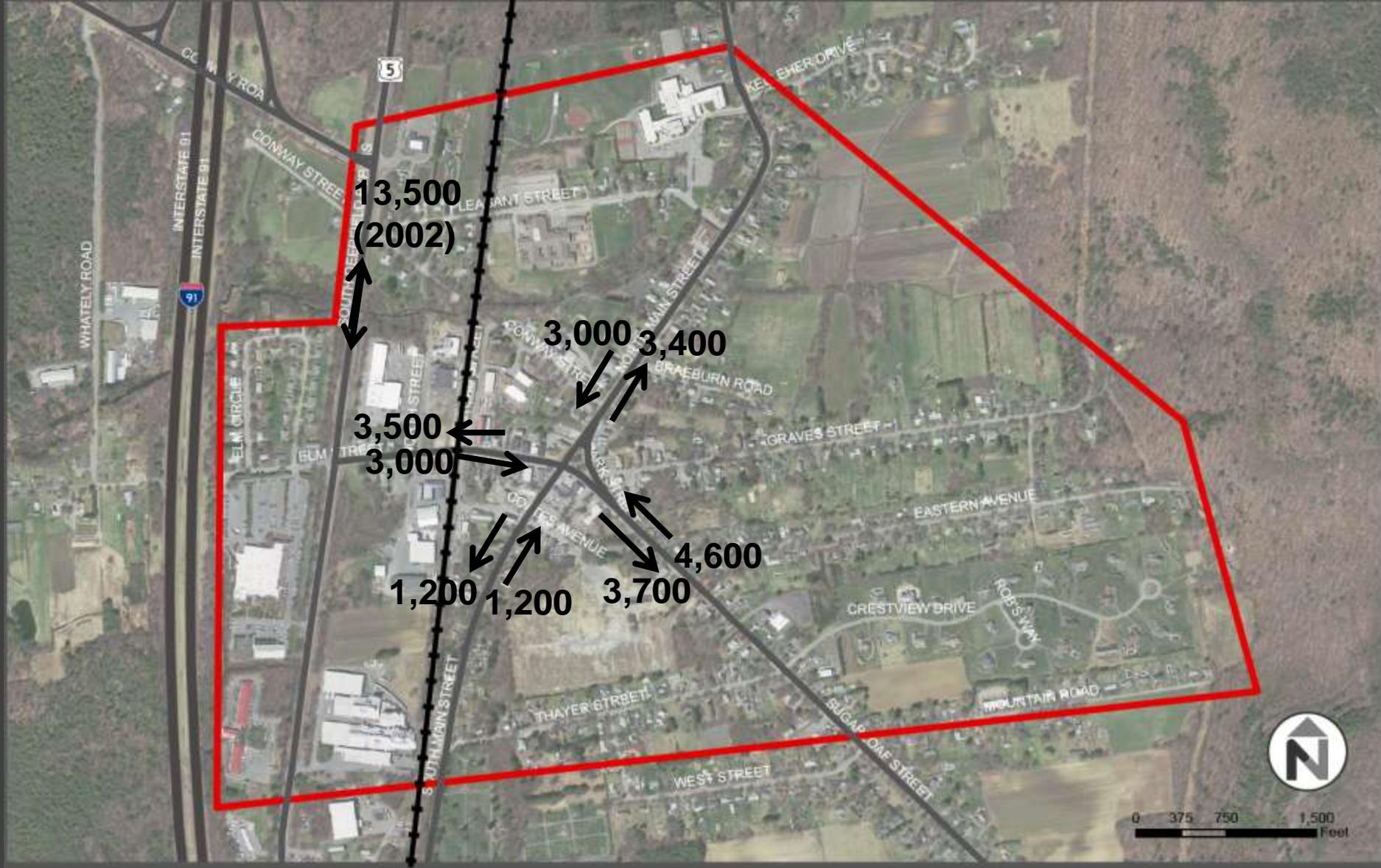
EXISTING TRANSPORTATION NETWORK

Major Roadways and Railroad



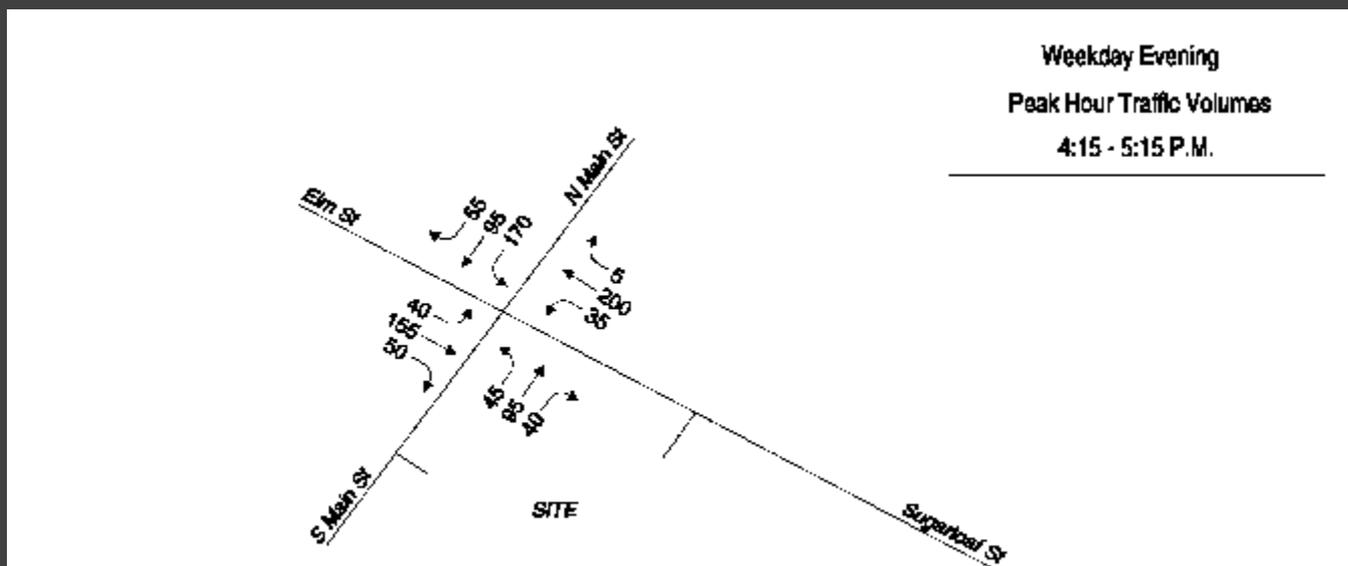
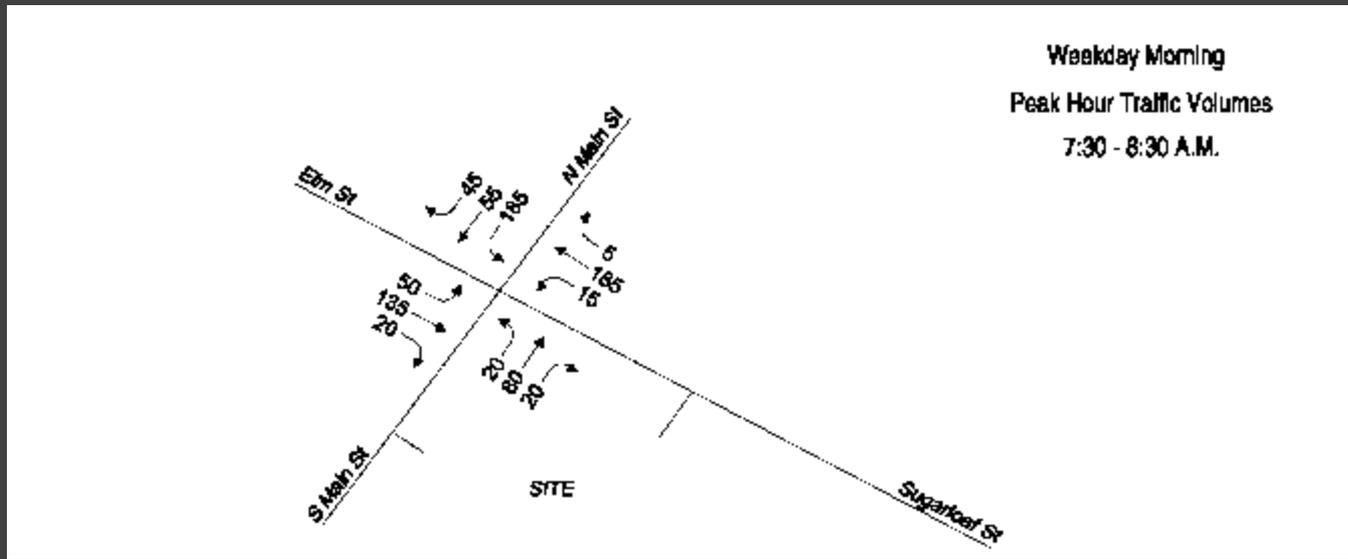
EXISTING TRANSPORTATION NETWORK

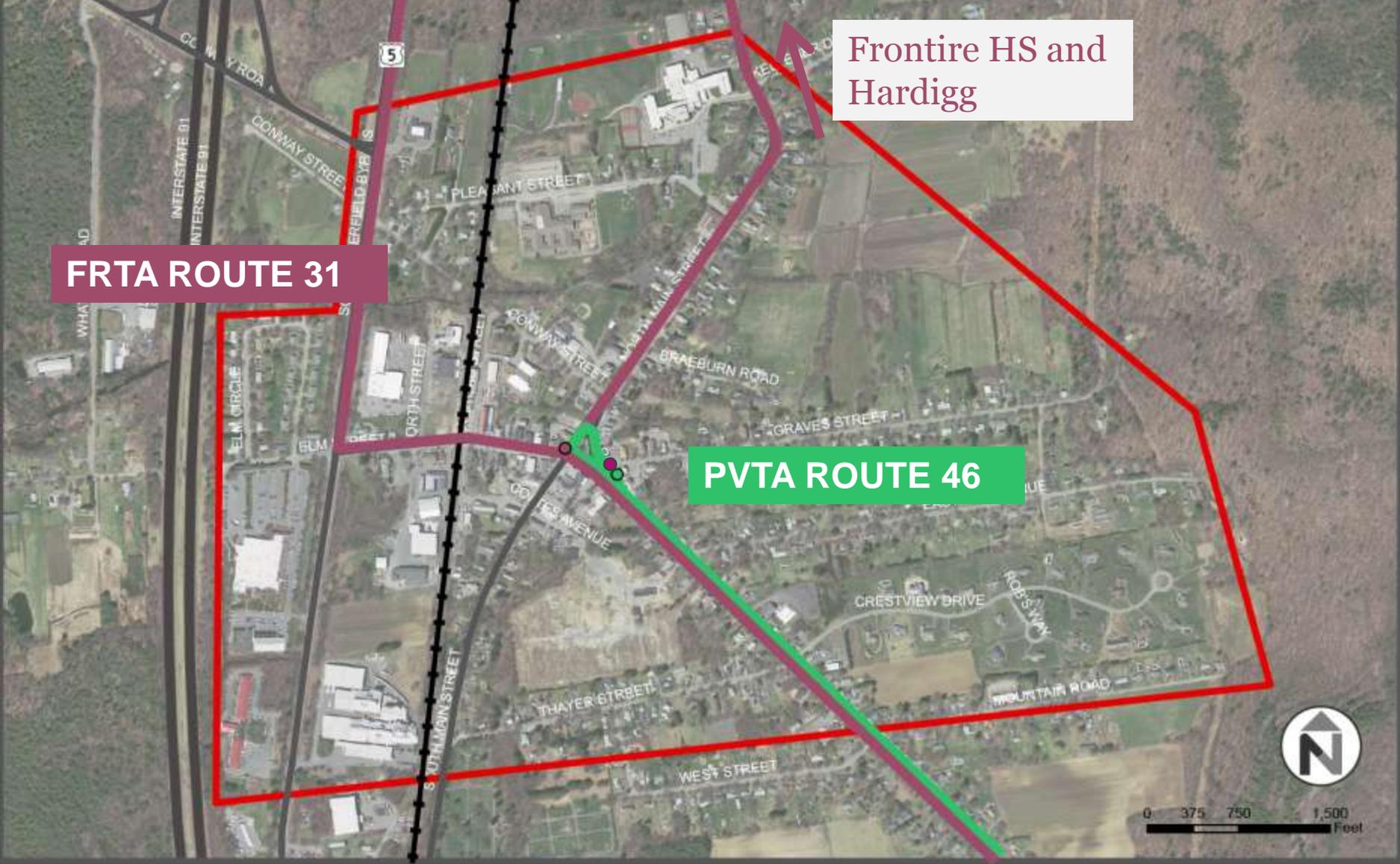
Major Roadways and Railroad



Daily Traffic Volumes (2009 VHB Oxford Property Analysis)

Peak Hour Traffic Volumes (2009 VHB)





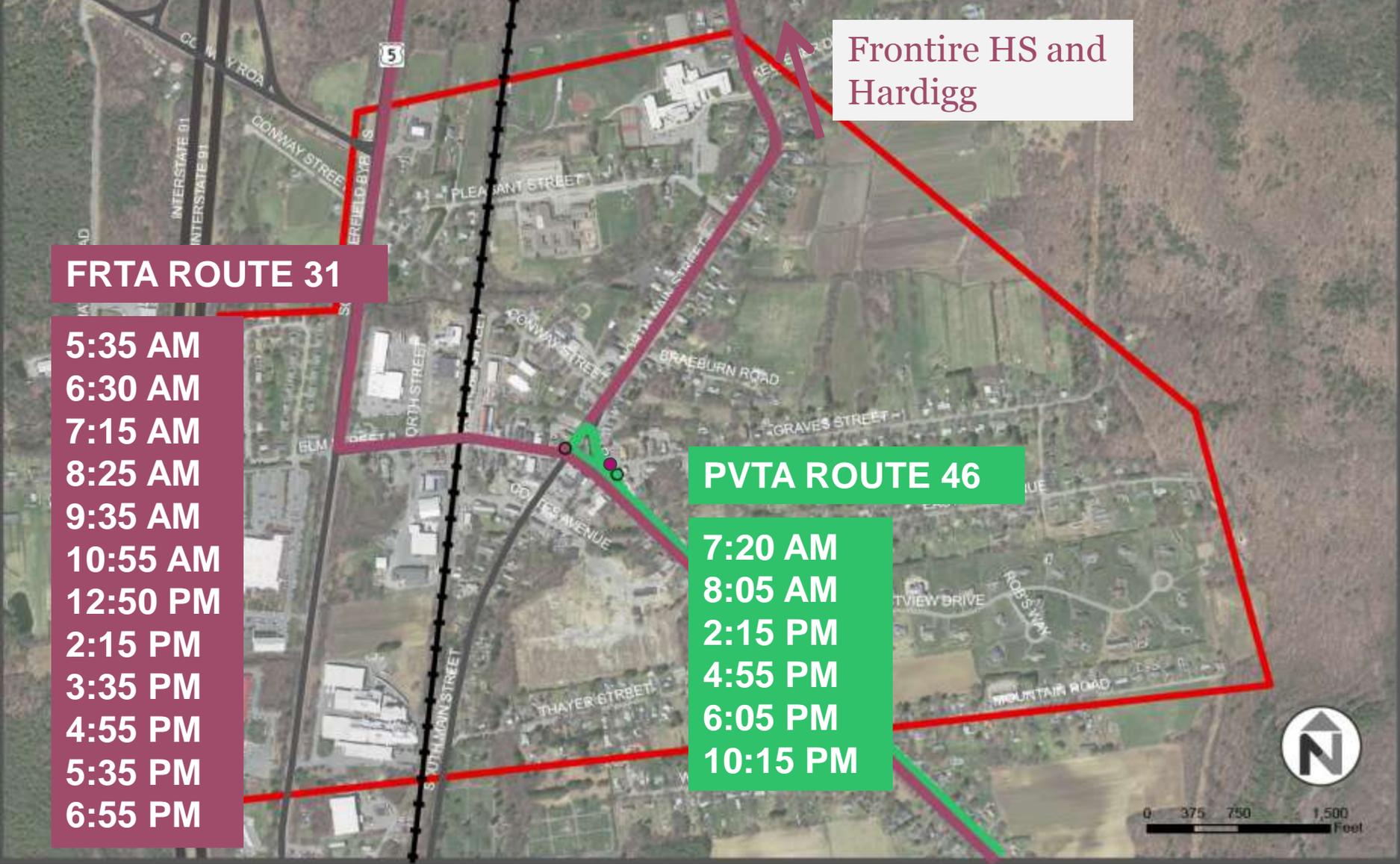
FRTA ROUTE 31

Frontire HS and
Hardigg

PVTA ROUTE 46

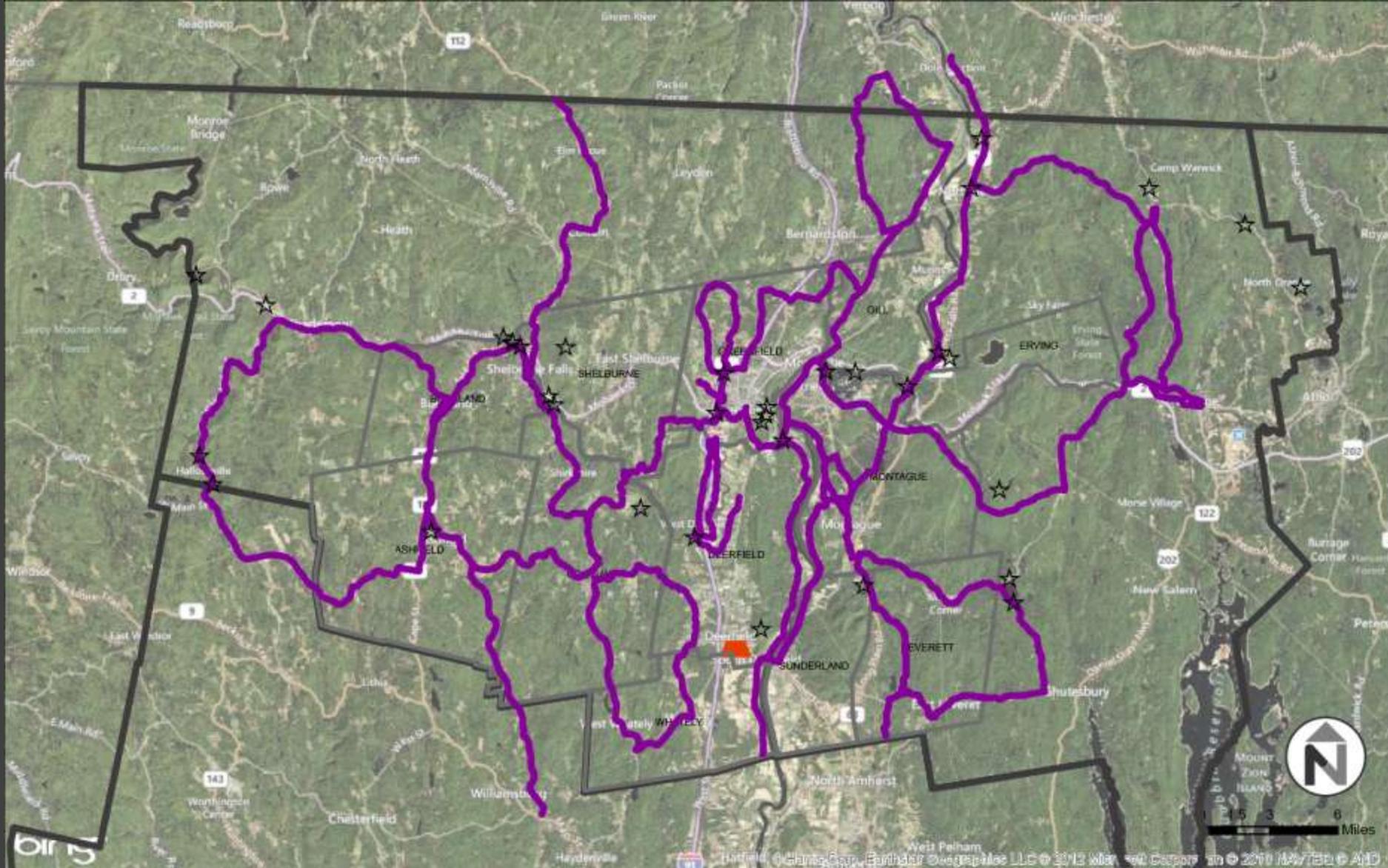
EXISTING TRANSPORTATION NETWORK

Transit



EXISTING TRANSPORTATION NETWORK

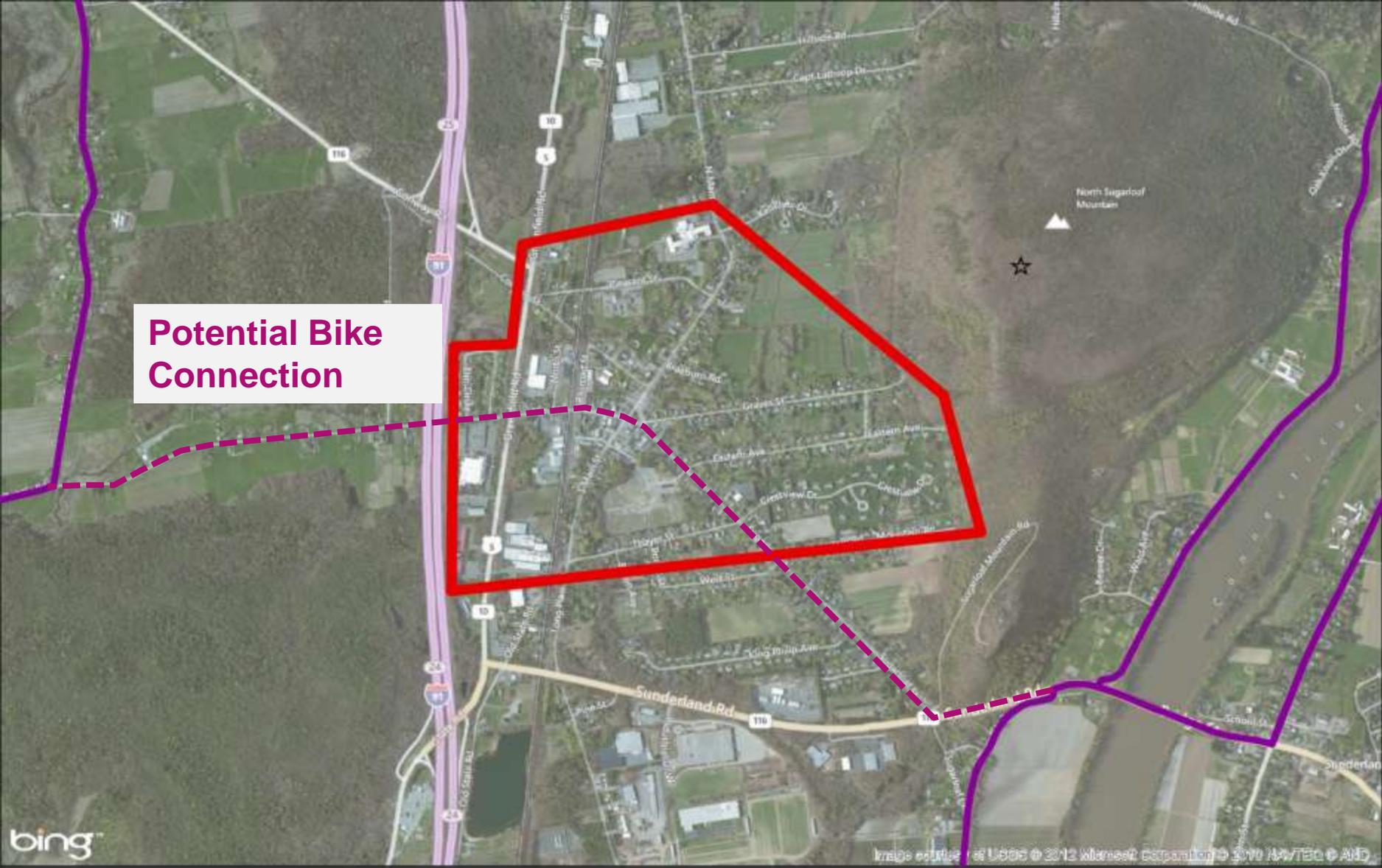
Transit



FRANKLIN COUNTY BIKEWAY ROUTES

☆ Public Parking

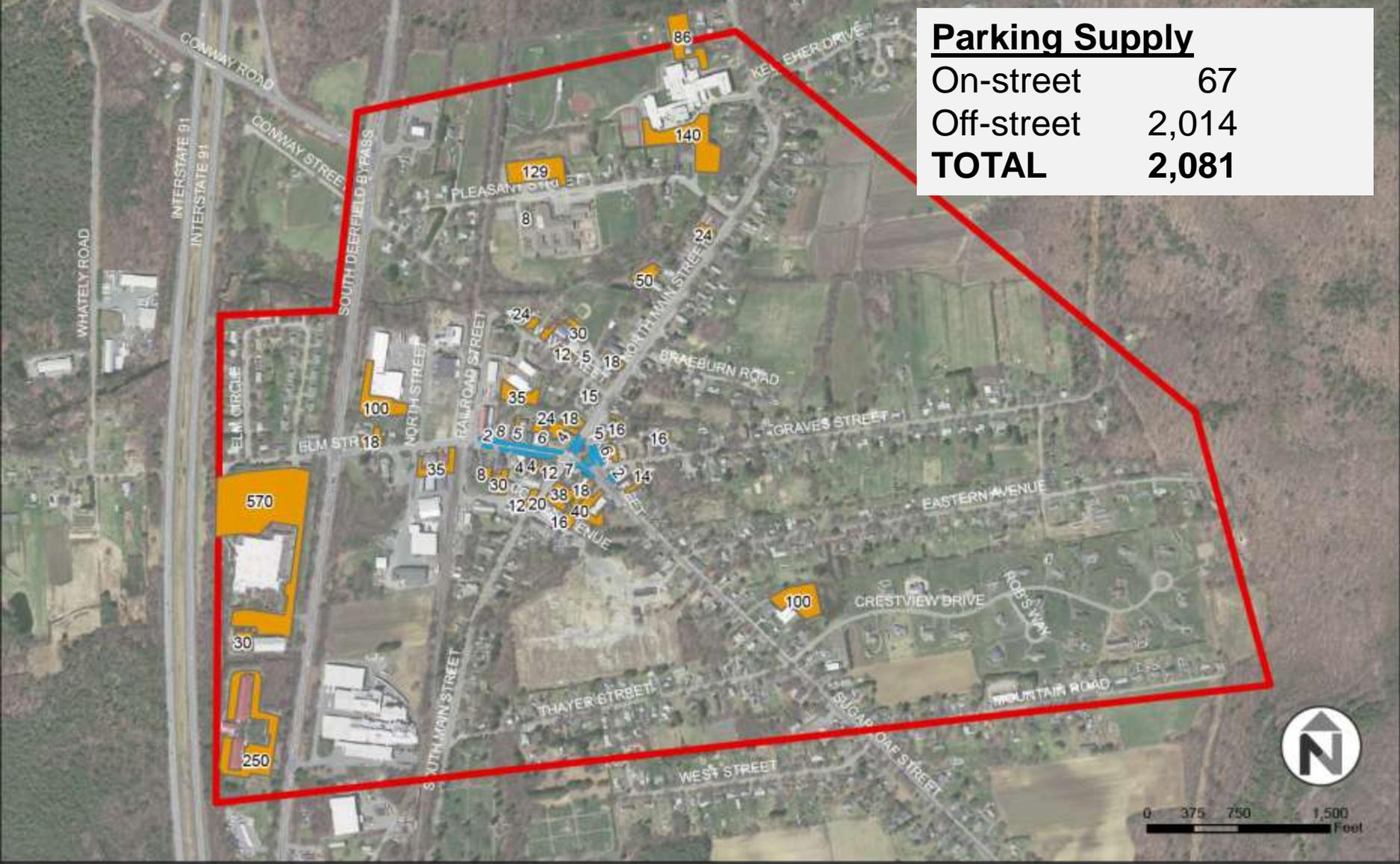
Potential Bike Connection



SOUTH DEERFIELD STUDY AREA

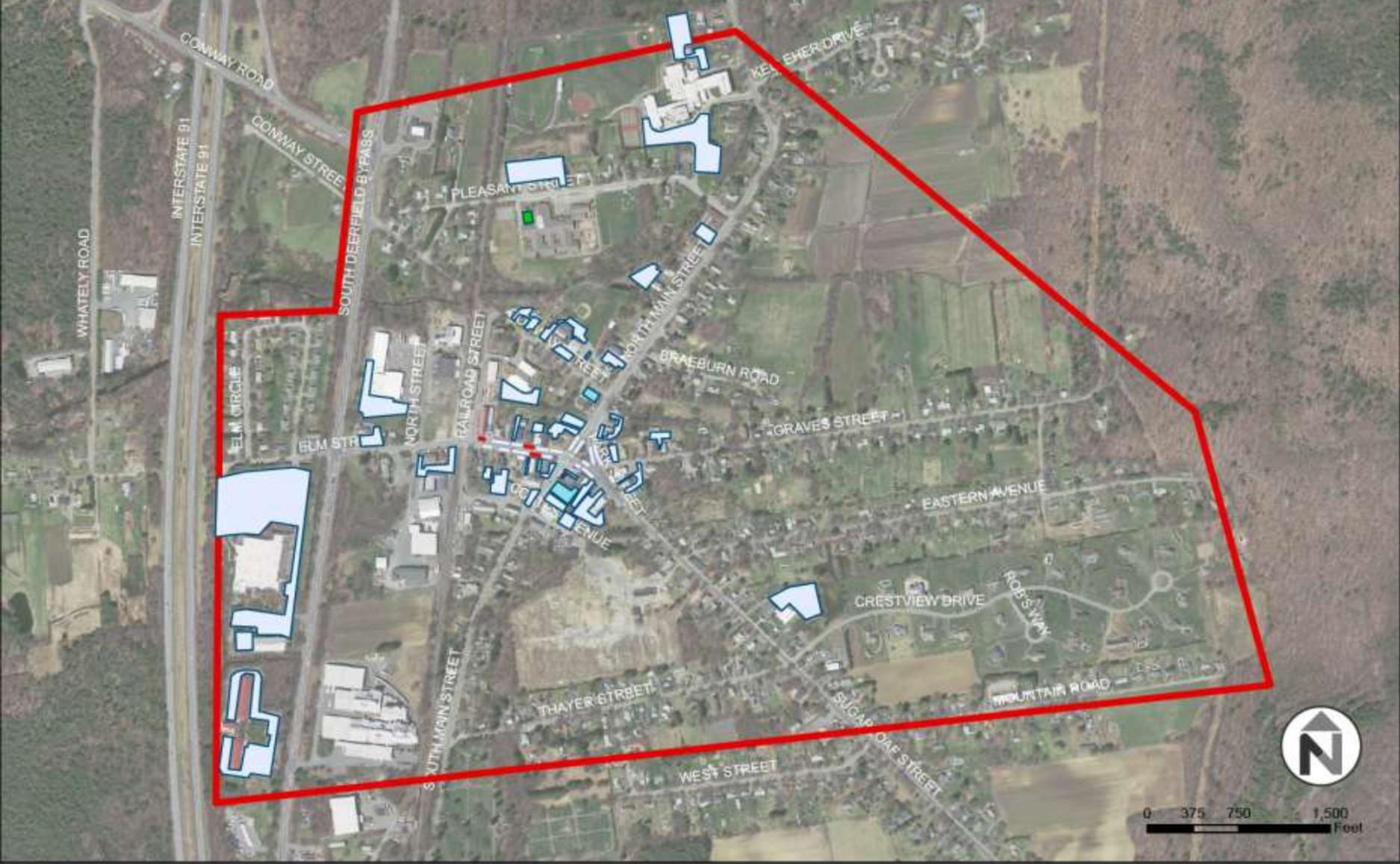
Parking Supply

On-street	67
Off-street	2,014
TOTAL	2,081

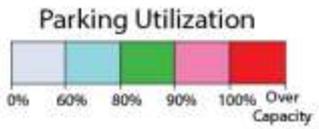


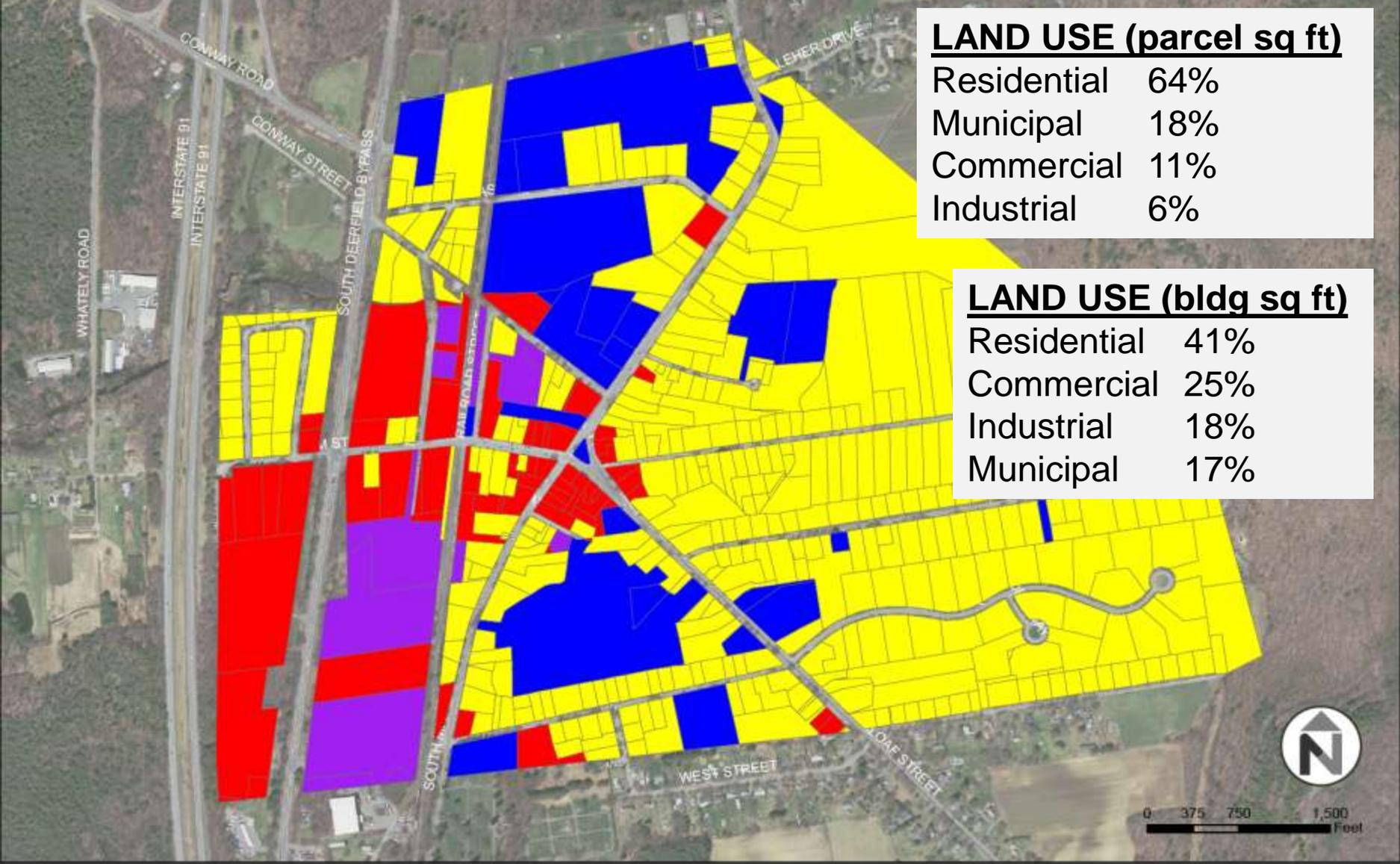
PARKING SUPPLY

- On-street
- Off-street



PARKING UTILIZATION





LAND USE (parcel sq ft)

Residential	64%
Municipal	18%
Commercial	11%
Industrial	6%

LAND USE (bldg sq ft)

Residential	41%
Commercial	25%
Industrial	18%
Municipal	17%

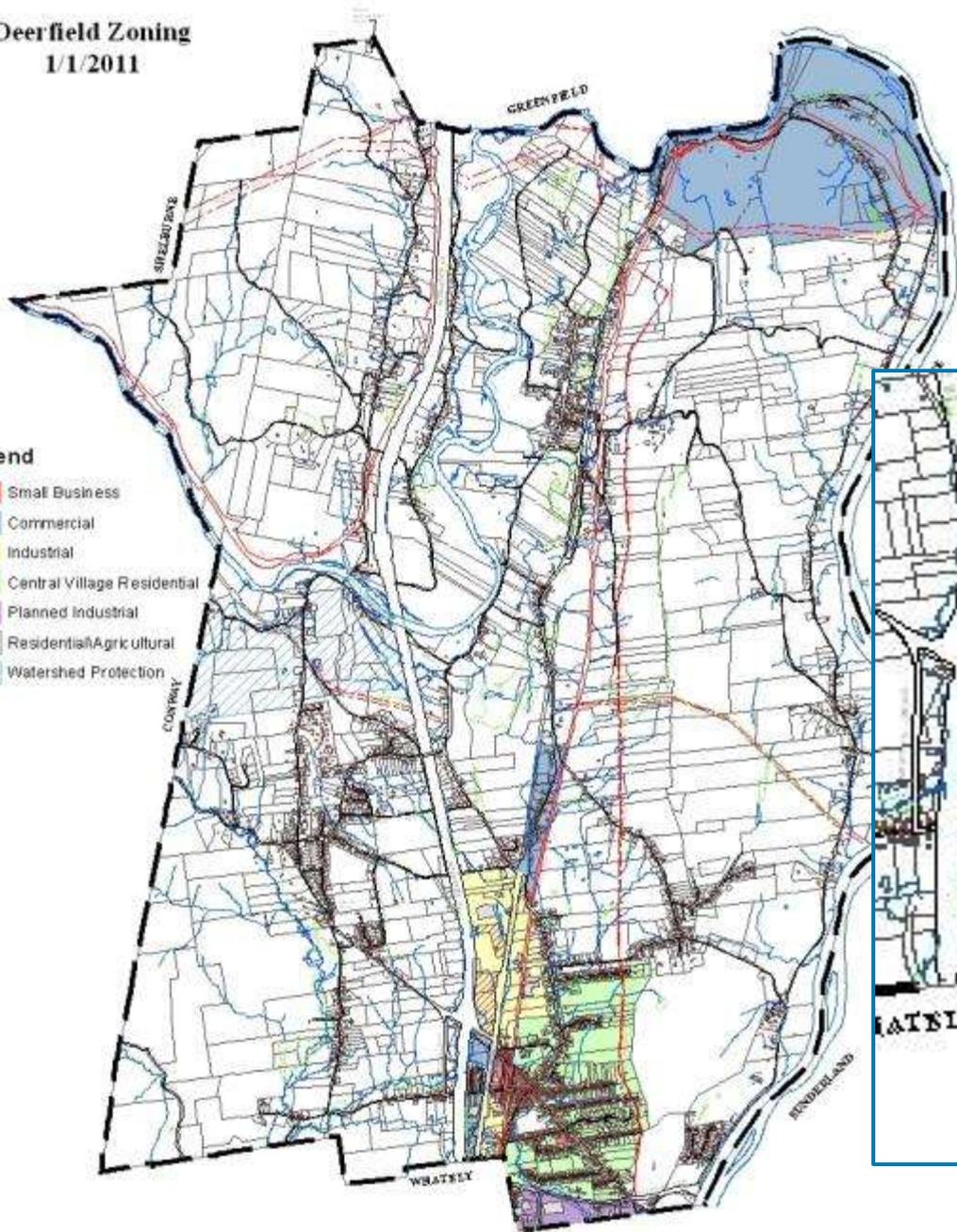
EXISTING LAND USE

- Residential
- Commercial
- Industrial
- Open Space/Farmland
- Municipal

Deerfield Zoning
1/1/2011

Legend

- Small Business
- Commercial
- Industrial
- Central Village Residential
- Planned Industrial
- Residential/Agricultural
- Watershed Protection



South Deerfield



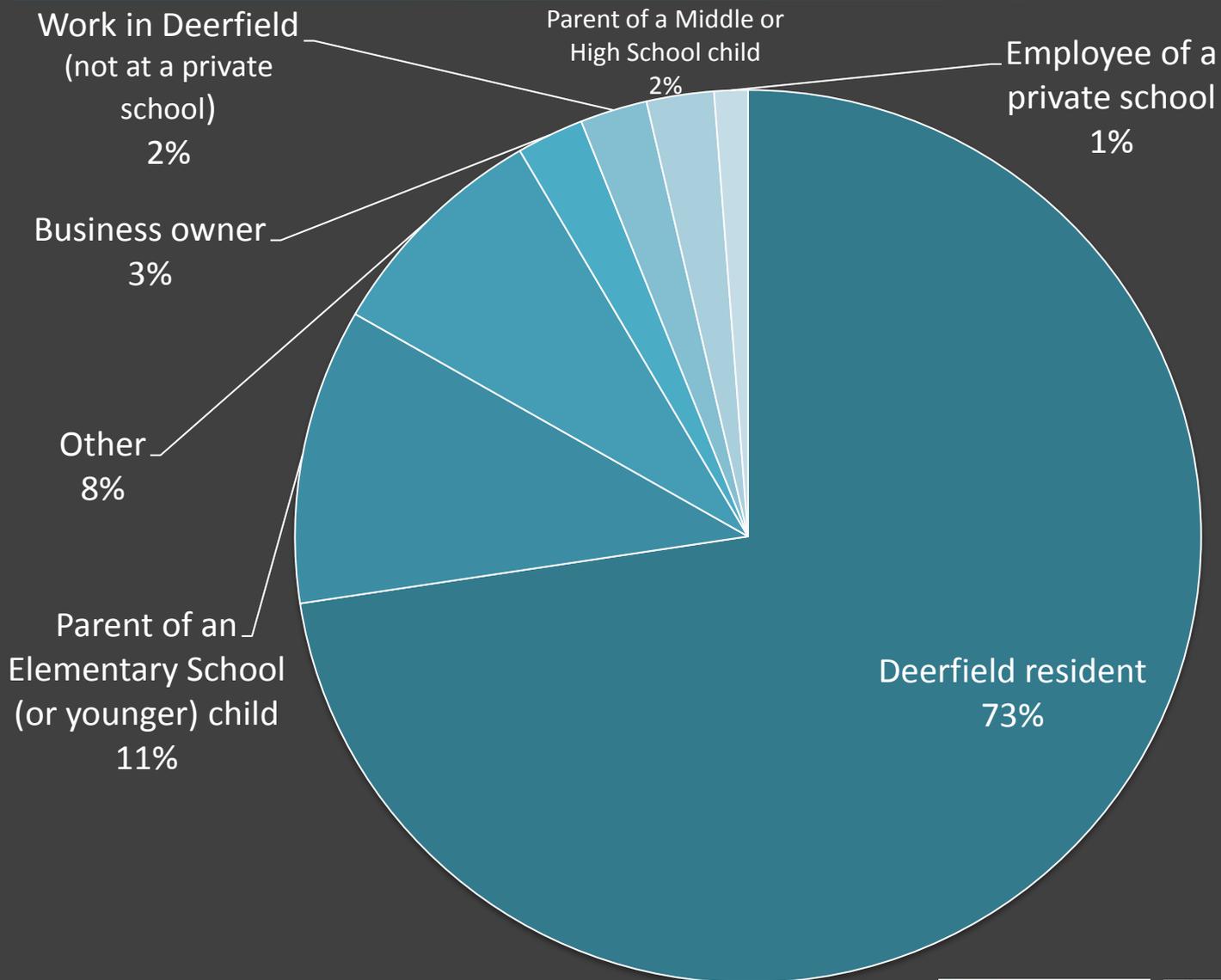




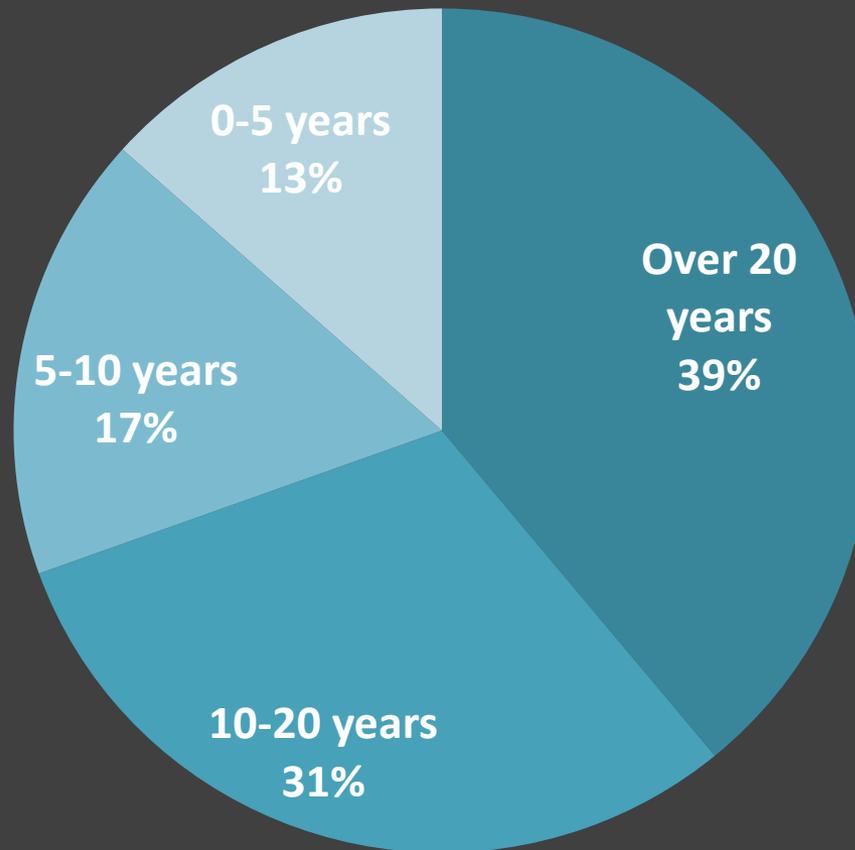
AGENDA

- Existing Reports
- Existing Conditions/Site Analysis
- **Issues/Opportunities**

Demographics - Survey Respondent Affiliation(s)



For residents: how long have you lived in Deerfield?



What are some words or phrases that help you to define your community?

Beautiful Cafe Caring Close Knit Community
Deerfield Family **Friendly** Historic History Interesting
Little Location Practical Progressive Quiet Rural **Safe** Strong
Town

What words or phrases help to define what you would like to see in your community in the FUTURE?

Activities Atkins Businesses Center
Community Deerfield Family Oriented Foods
Friendly Growth Historic Hotel Inviting Meeting New England
Prosperous Public Quality Safer Shopping Social Spaces
Town Vibrant Welcoming

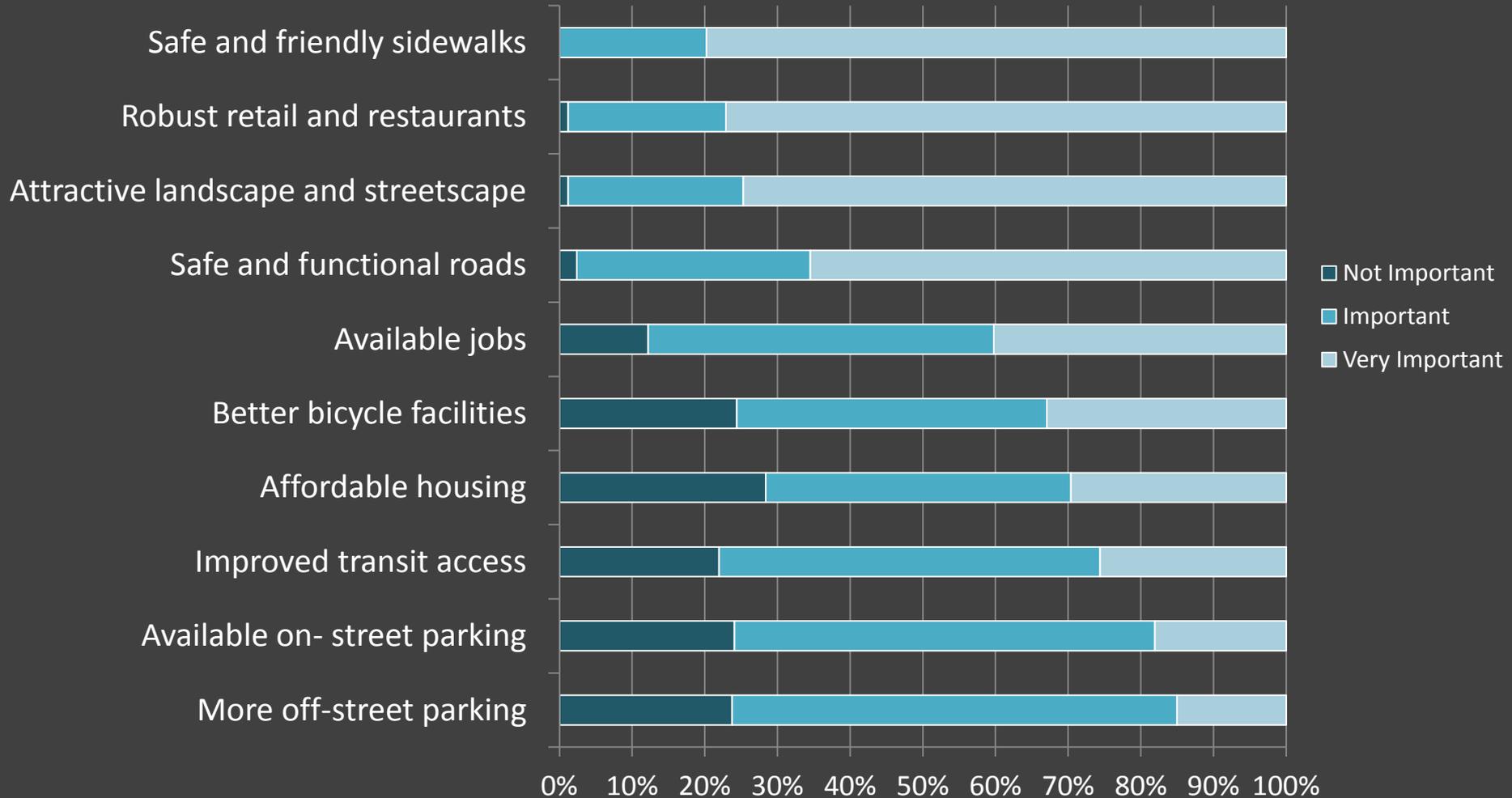
What are the major assets in South Deerfield's Village Center?

Architecture **Basic Businesses Common** Community
Cute Little Fountain **Day Lily Gas Station Library**
New Ice Cream **Parking** Restuarants Retail Safe Sidewalks
Town Traffic **Village Walk** Yankee Candle

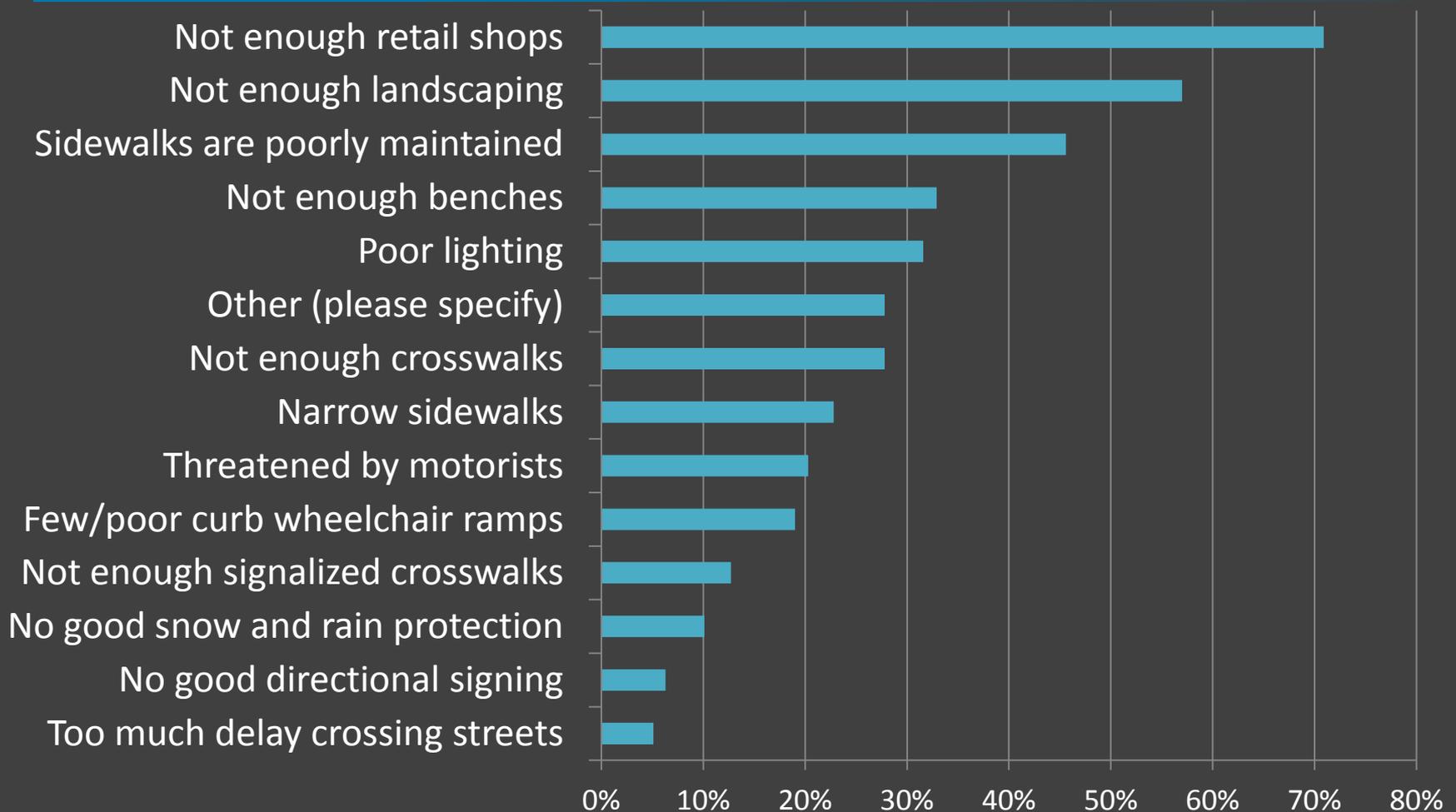
What would you like to change about the Village Center?

Attract Better Restaurants Businesses Cafe
Downtown Elm Street Events Facade Four Way Stop
Hotel Warren Palces Park Place Retail Senior
Shops Sidewalks Station Support Town Wish

Importance in Deerfield



What don't you like about walking in South Deerfield?



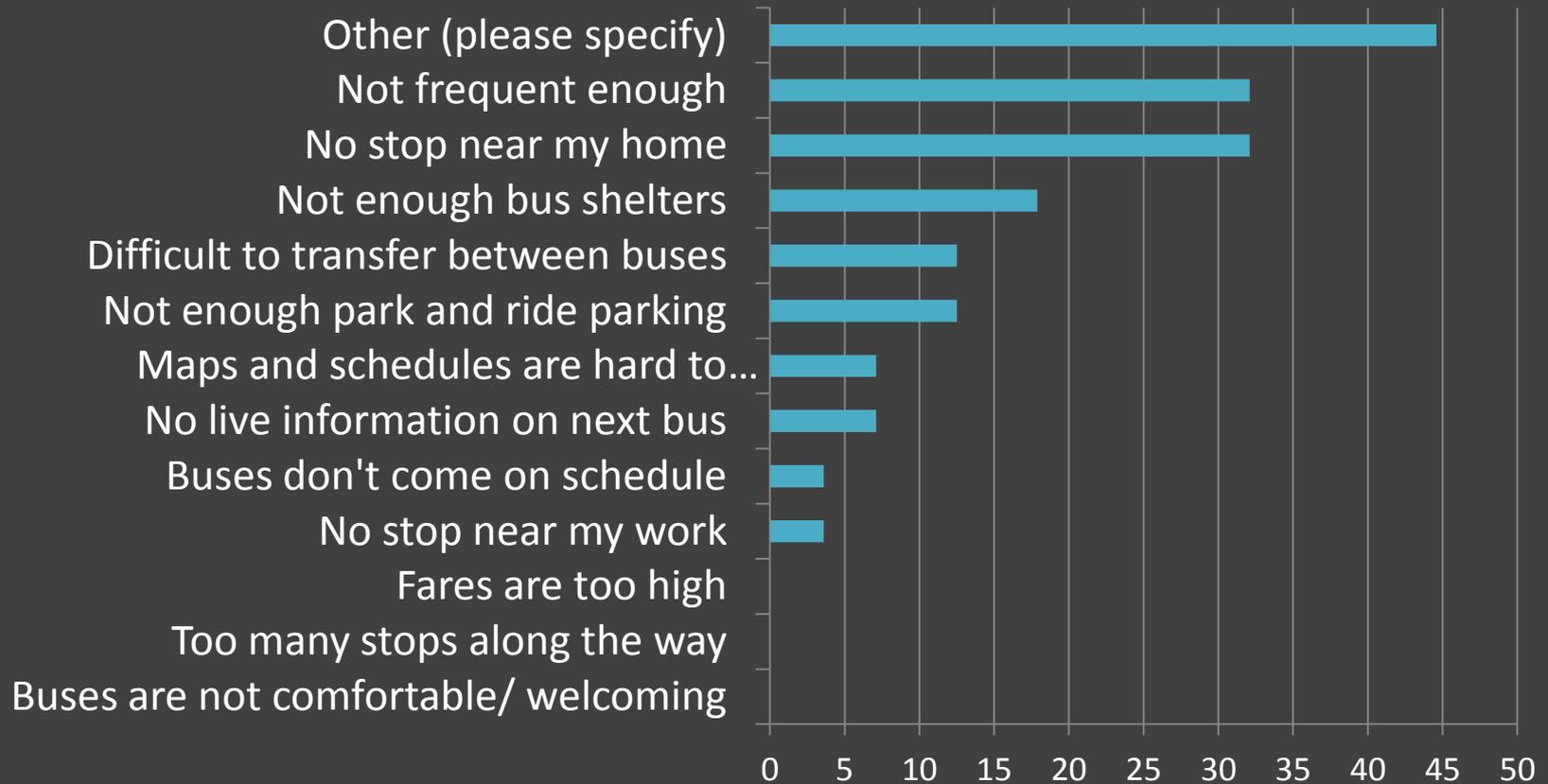
Other (Please Specify)-

36% Need to improve and/or clearly define sidewalks

32% There are no good retail or restaurants to walk to in the downtown

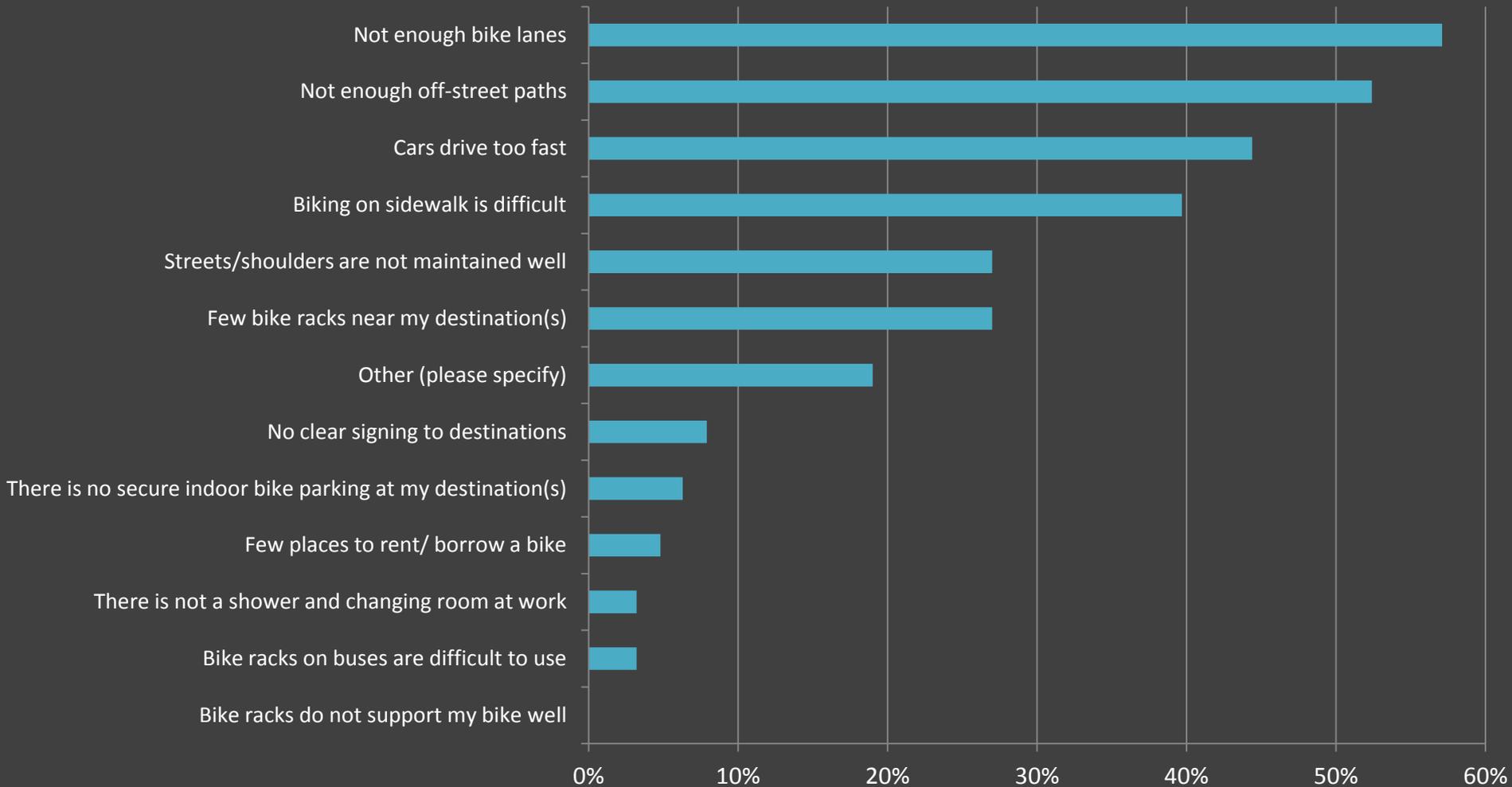
18% Deerfield is pedestrian friendly

What don't you like about public transit in South Deerfield?



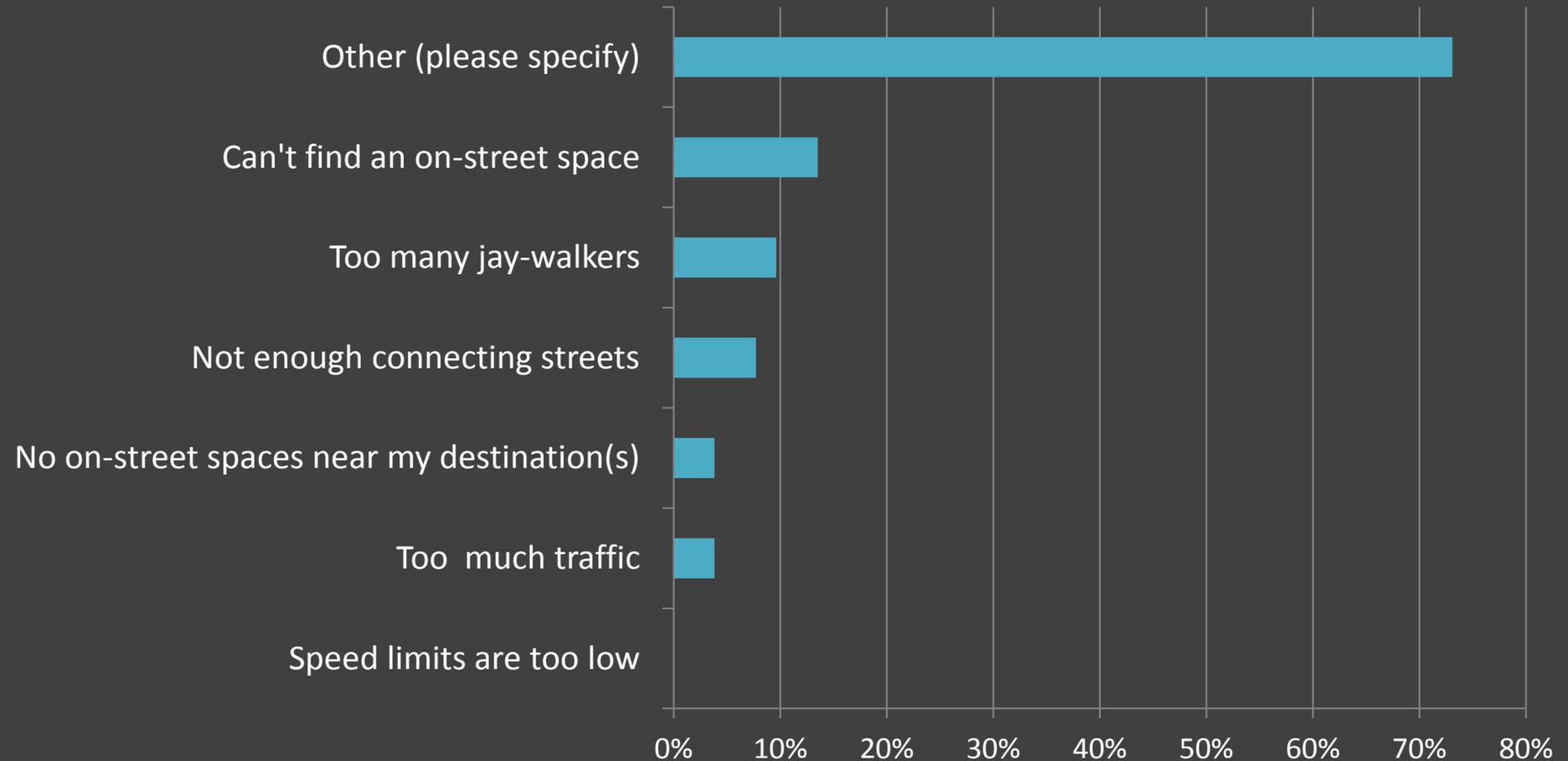
Other (Please Specify)- 68% Do not use public transit in Deerfield

What don't you like about biking in South Deerfield?



Other (Please Specify)- 50% Do not bike in Deerfield

What makes driving in South Deerfield difficult?

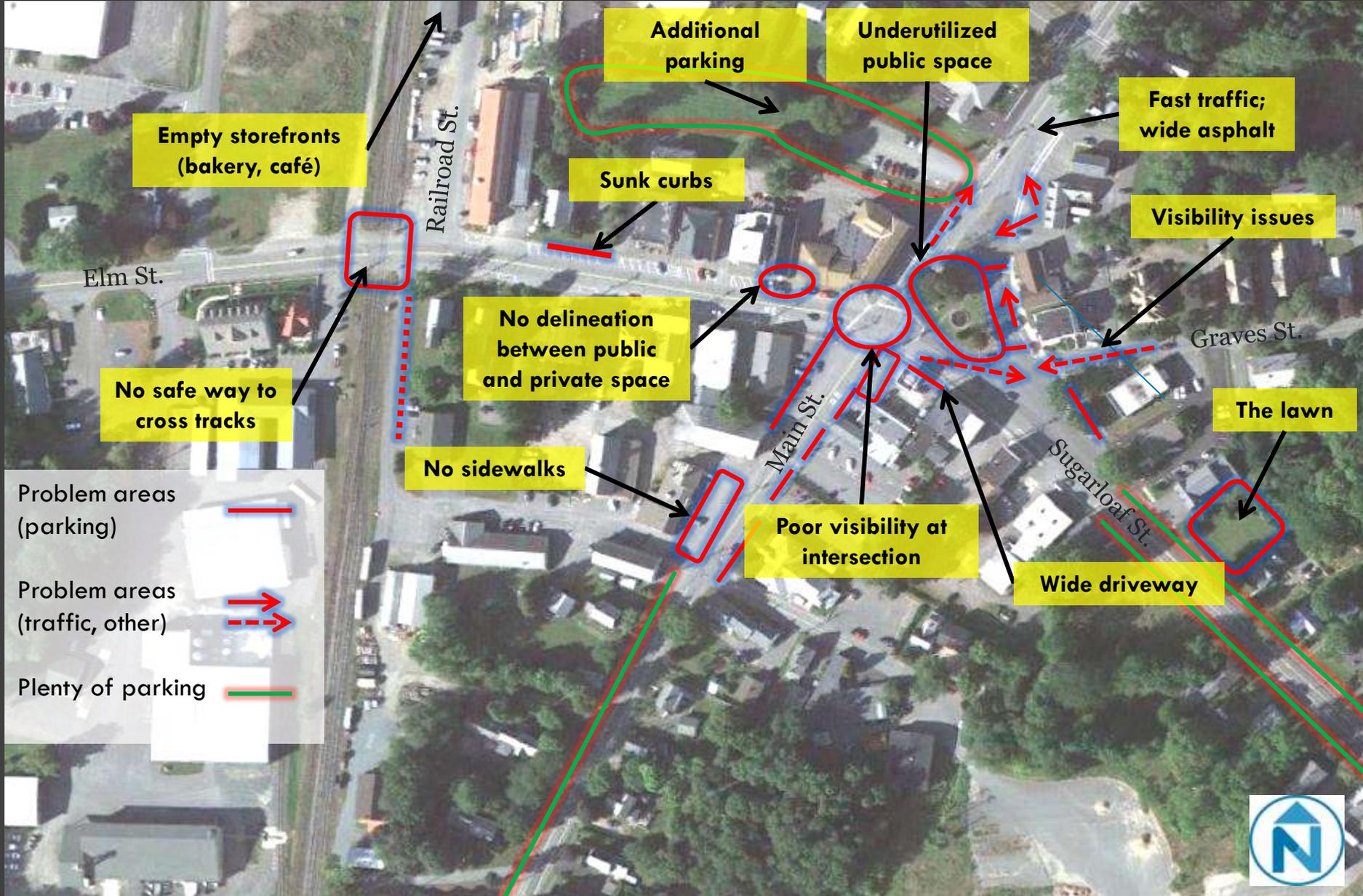


Other (Please Specify)-

37% No issues with driving in Deerfield

15% Issues with four way stop in Downtown Deerfield

Public Comments

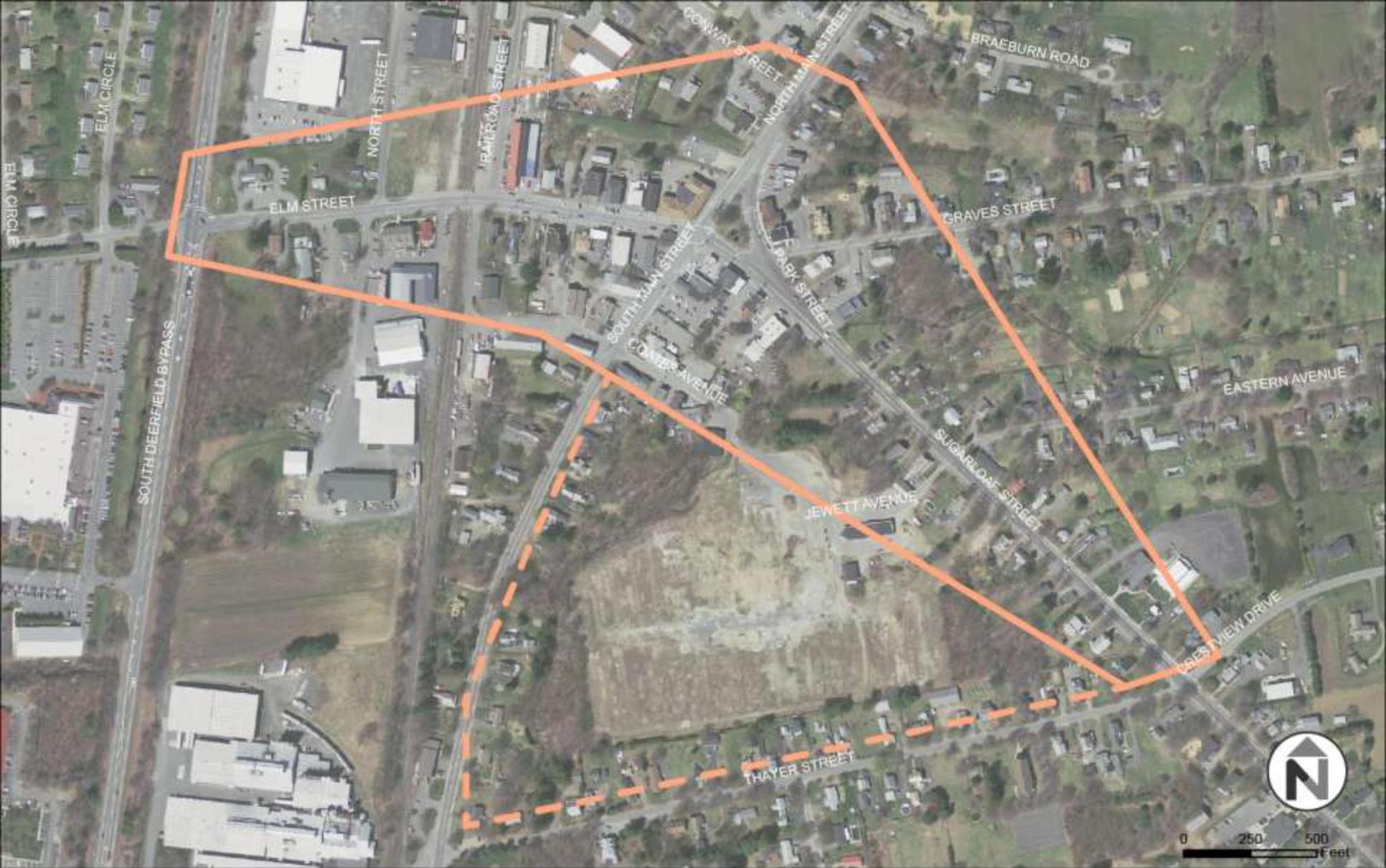




ROUTE 5 GATEWAY



DOWNTOWN ZOOM



DOWNTOWN

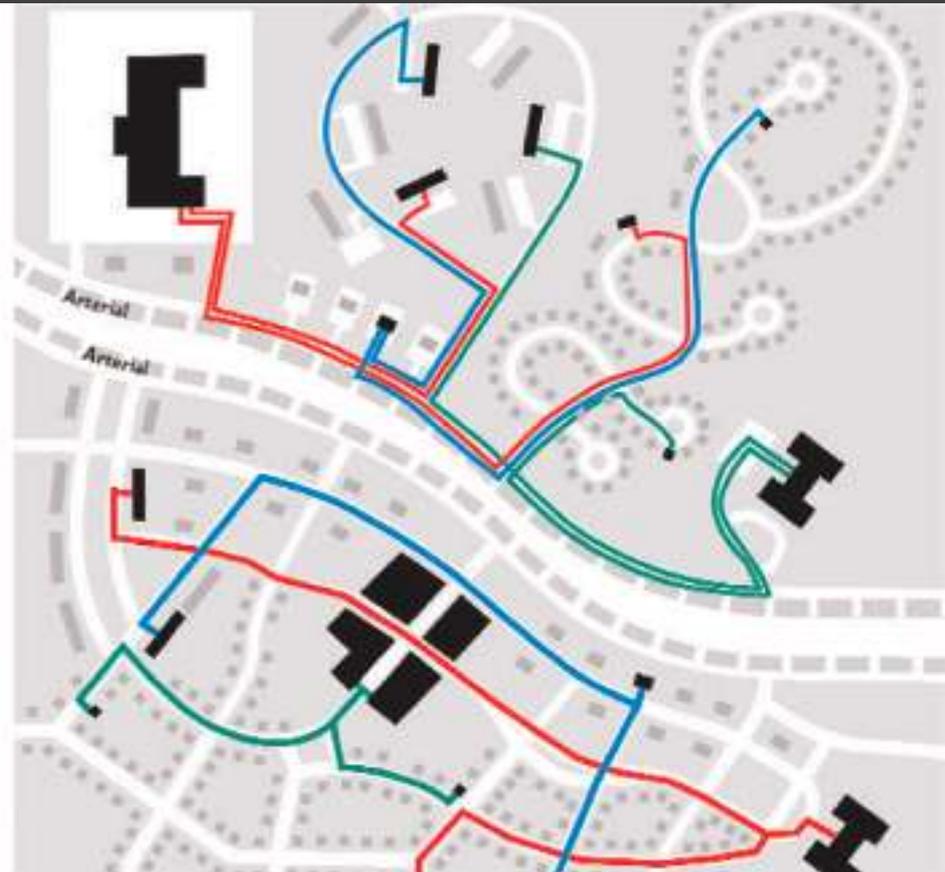
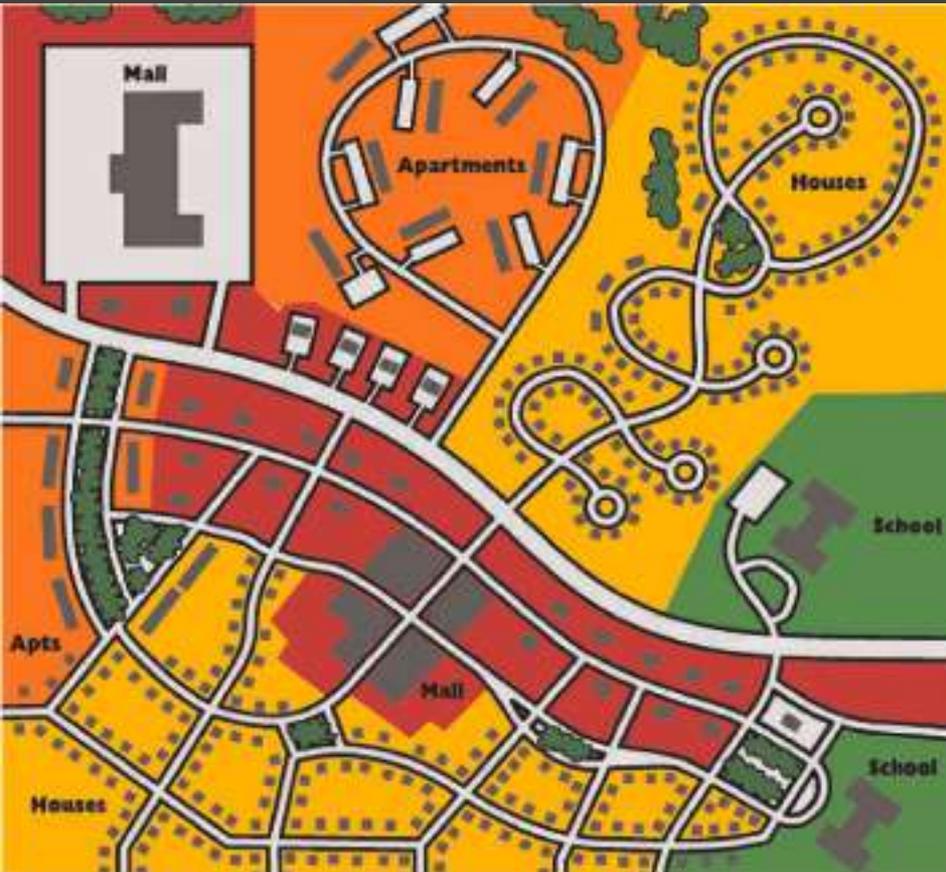
CHARRETTE

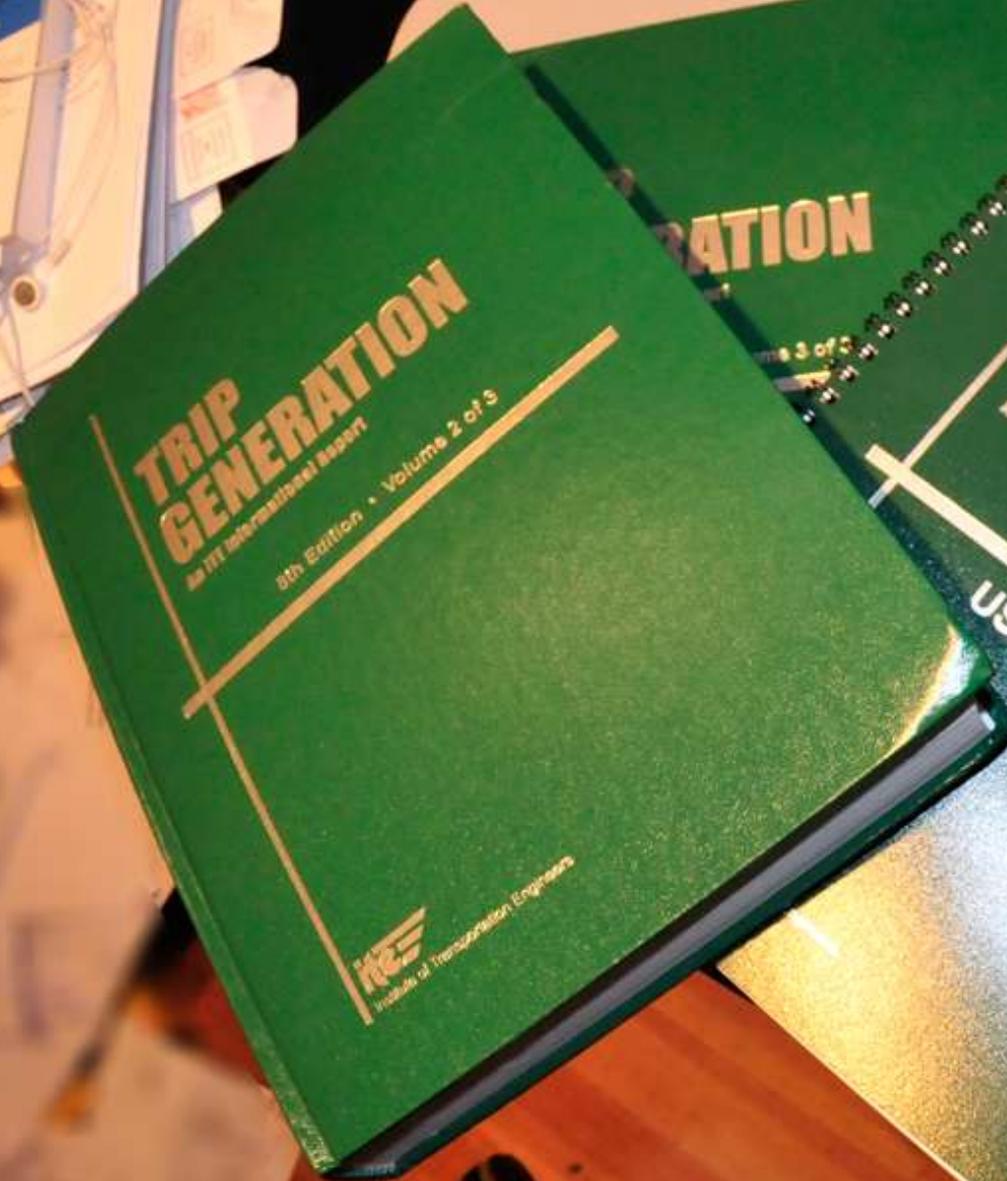
South Deerfield Complete Streets & Downtown Livability Plan CHARRETTE





Same Land Uses, Very Different Travel Behavior

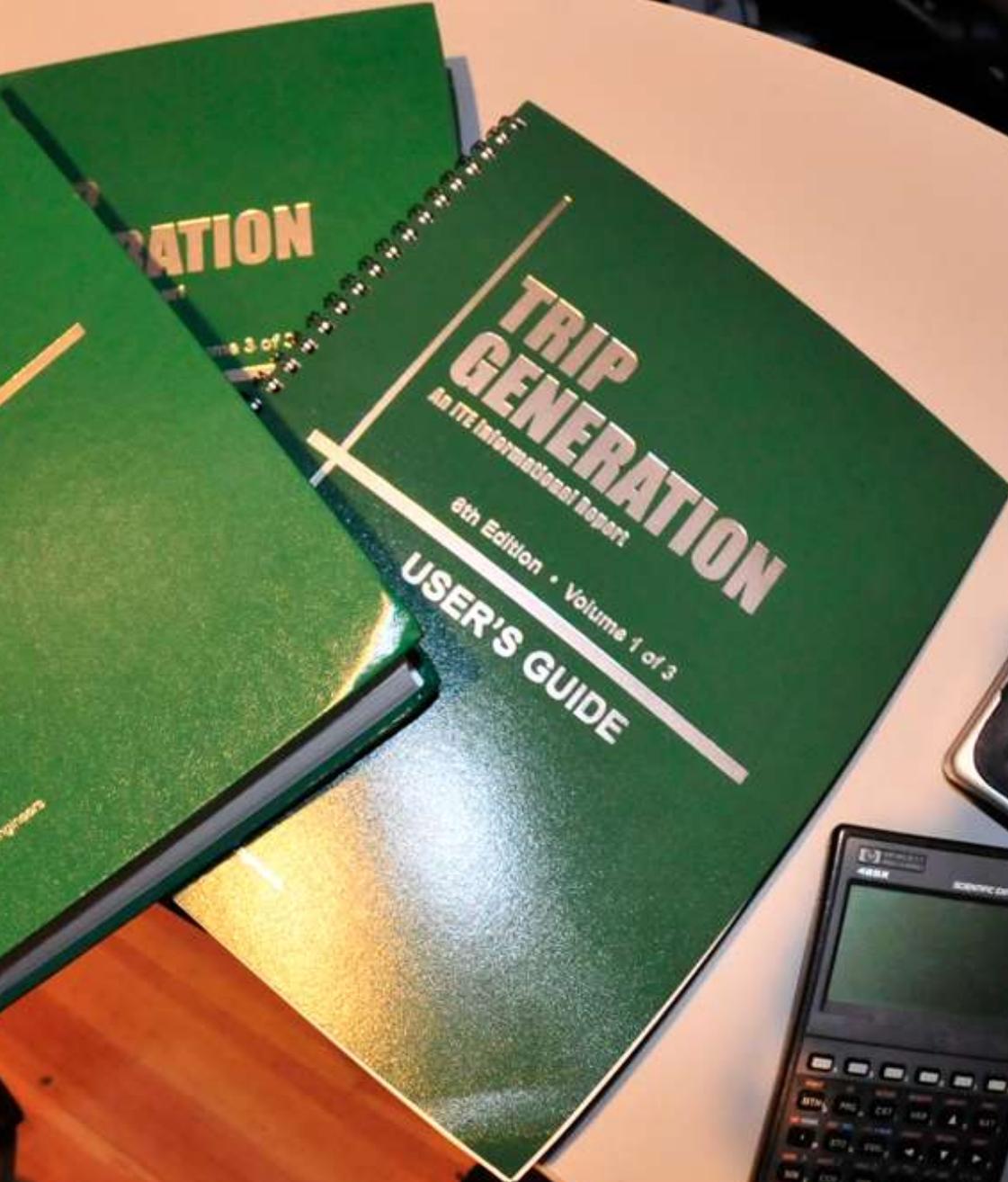




TRIP GENERATION

An IETE International Report

5th Edition • Volume 2 of 3



TRIP GENERATION

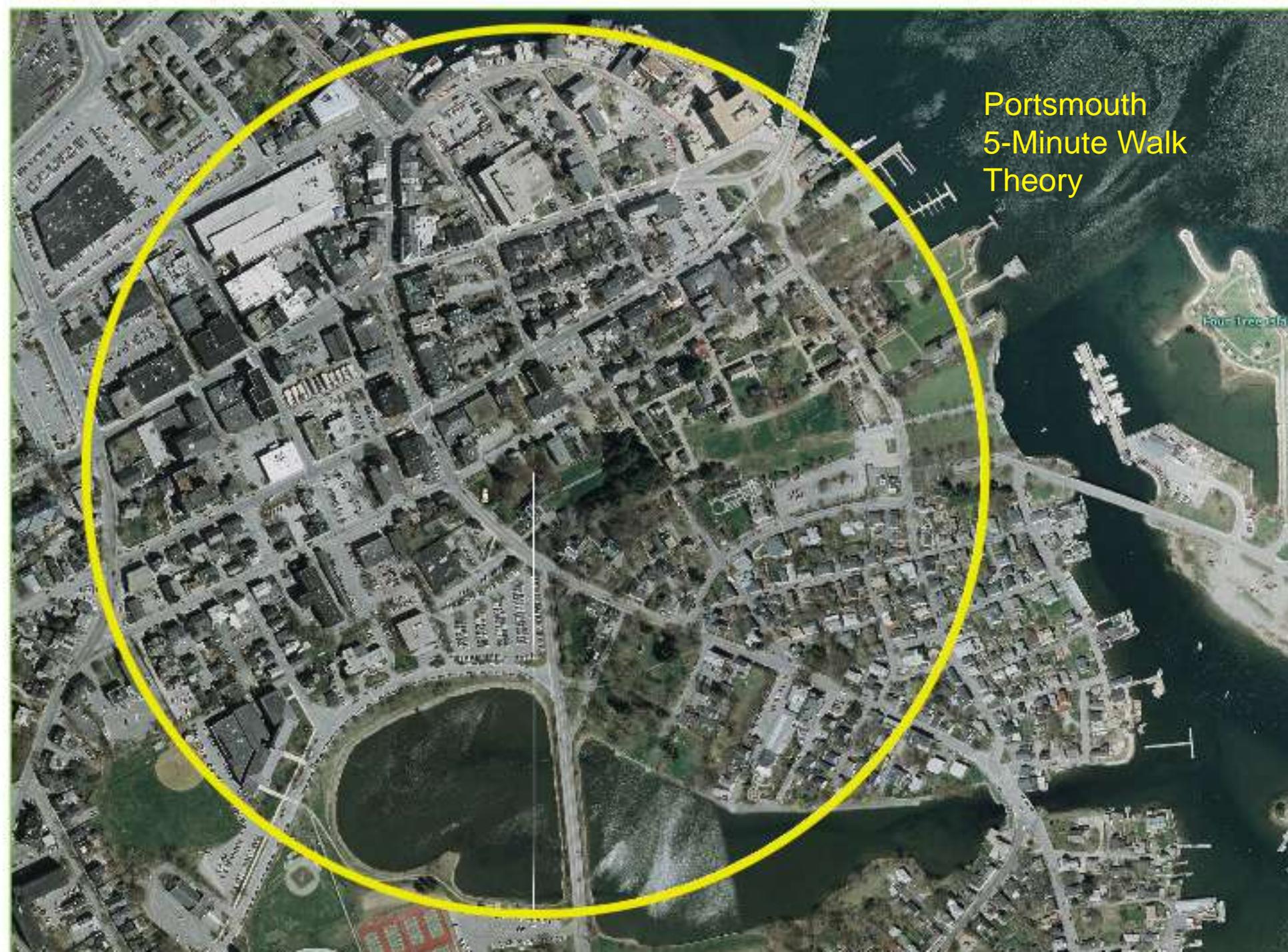
An IETE International Report

5th Edition • Volume 1 of 3

USER'S GUIDE



Portsmouth
5-Minute Walk
Theory













KEITH W. EVELAND
DMD
PERDUE DENTISTRY
11500 E.C.

WRONG
WAY







POPOVERS

PAKISTANI CAFE

PAKISTANI CAFE



17.5'



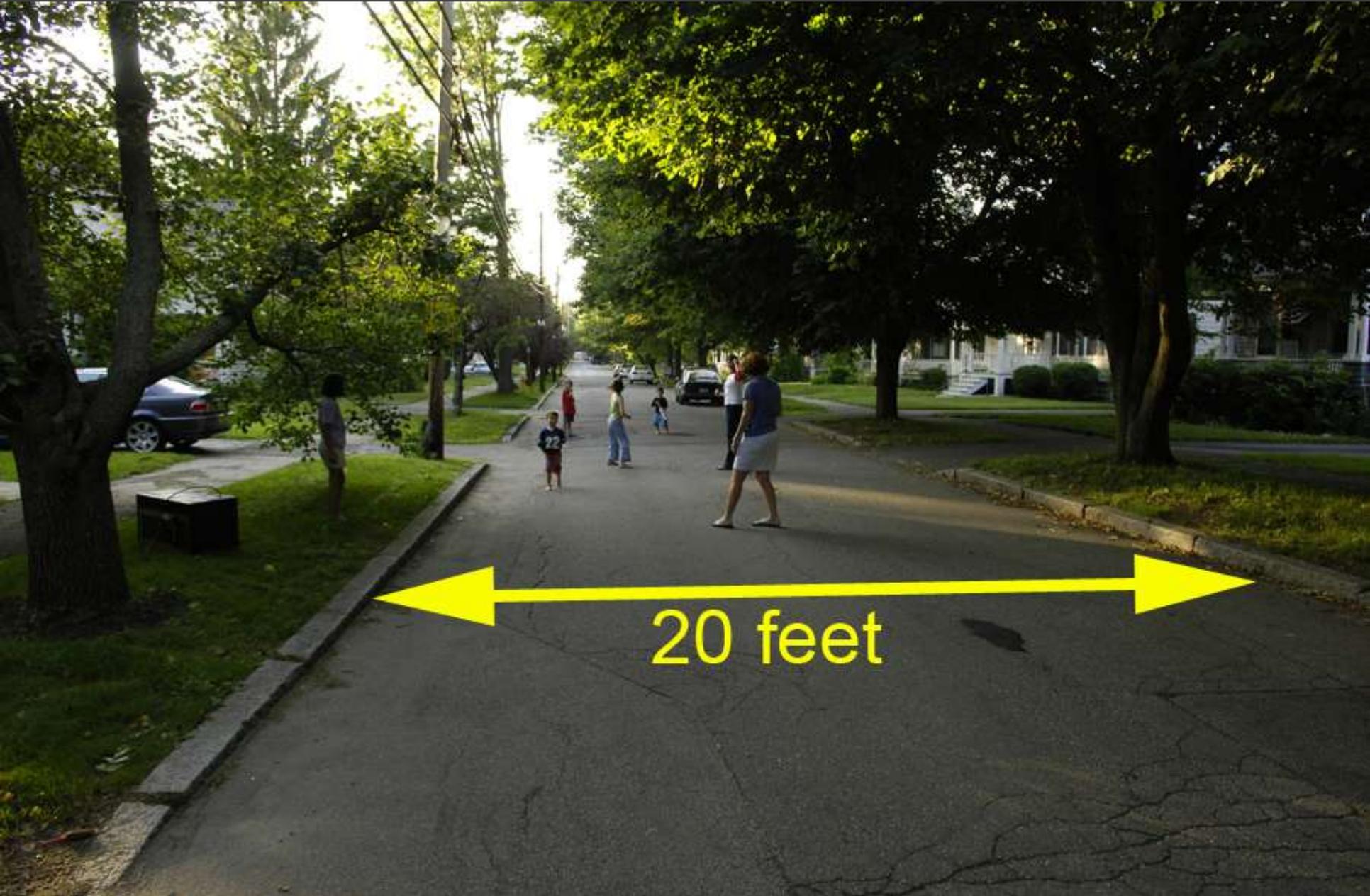
NO PARKING HERE TO DRIVEWAY

15'



25 yds





20 feet



9 feet





SLOW
CHILDREN

www.usps.com

1B2-3834



21' to 22'
State Highway



603-427-8385

CAFE

Bar

201-415-159

Hotel



portsmouth nh

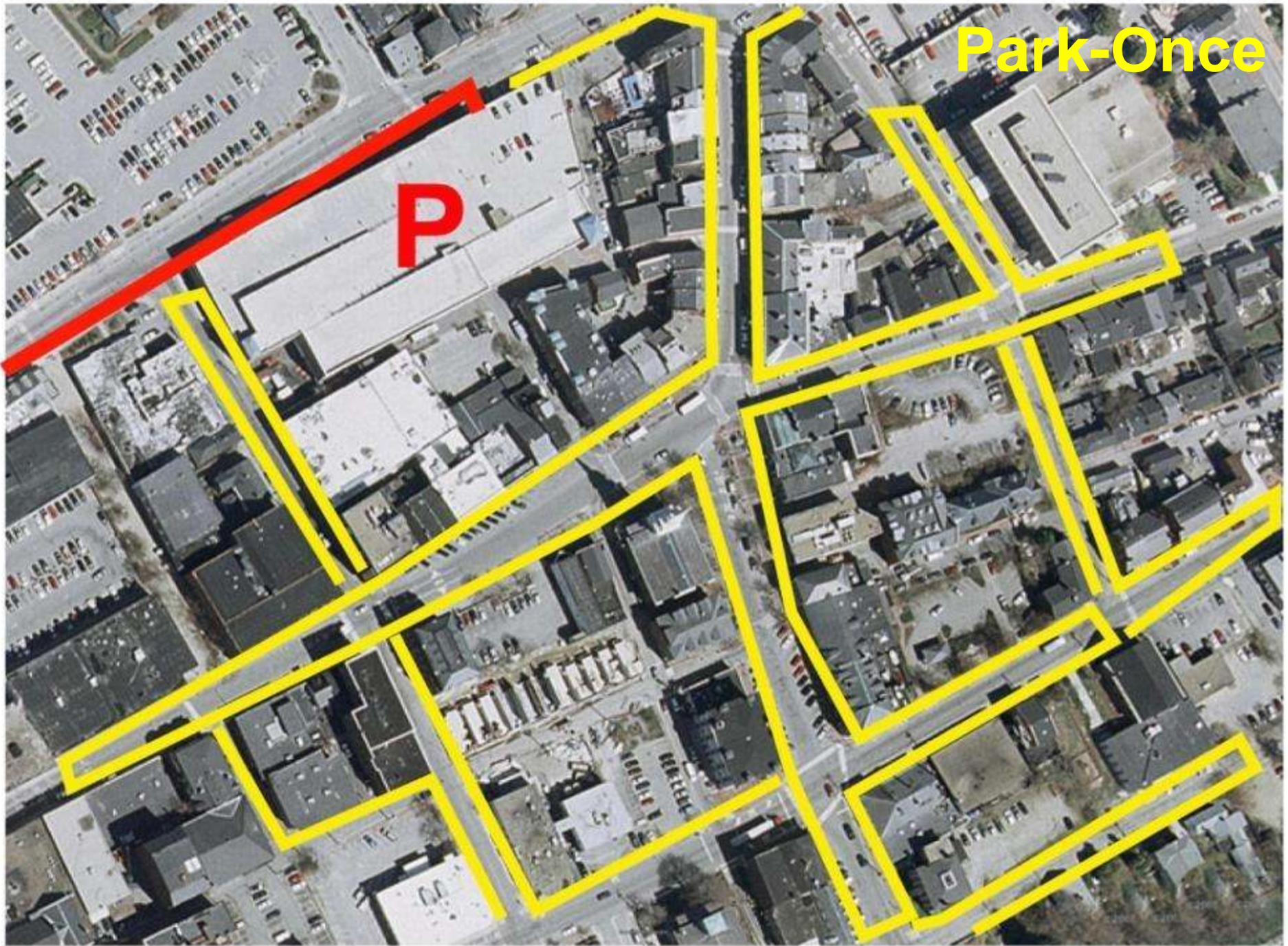
Four Tree Island

Little Island

Lady Island

Park-Once

P





Portsmouth's 10-Minute Walk Reality



portsmouth nh

Four Tree Island

Little Island

Lady Isle

Same Town Very Different Pedestrian Environment



5-Minute Walk
Theory

portsmou



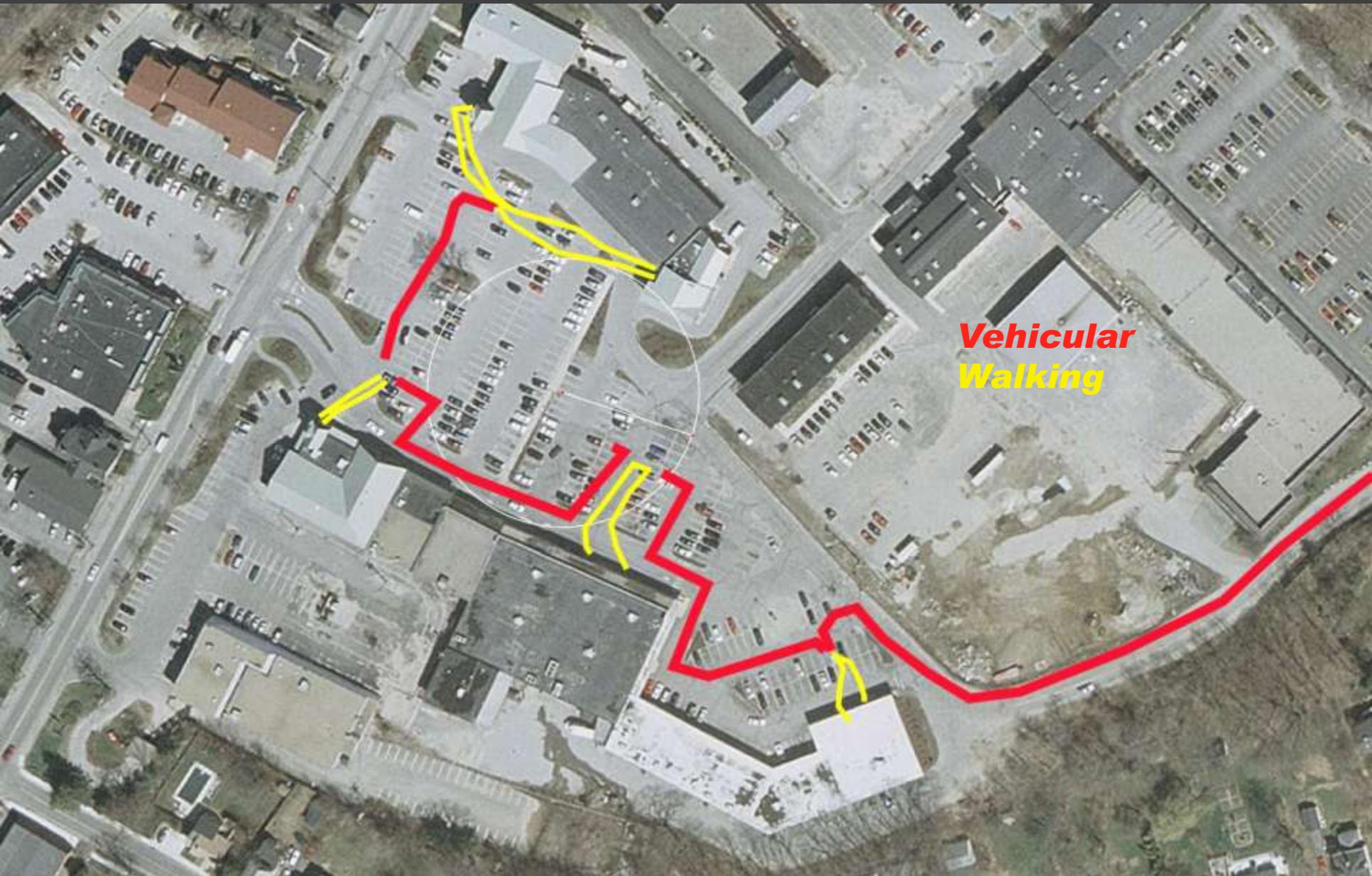
Hannaford

HANDICAPPED
PARKING

HANDICAPPED
PARKING

165-118





**Vehicular
Walking**

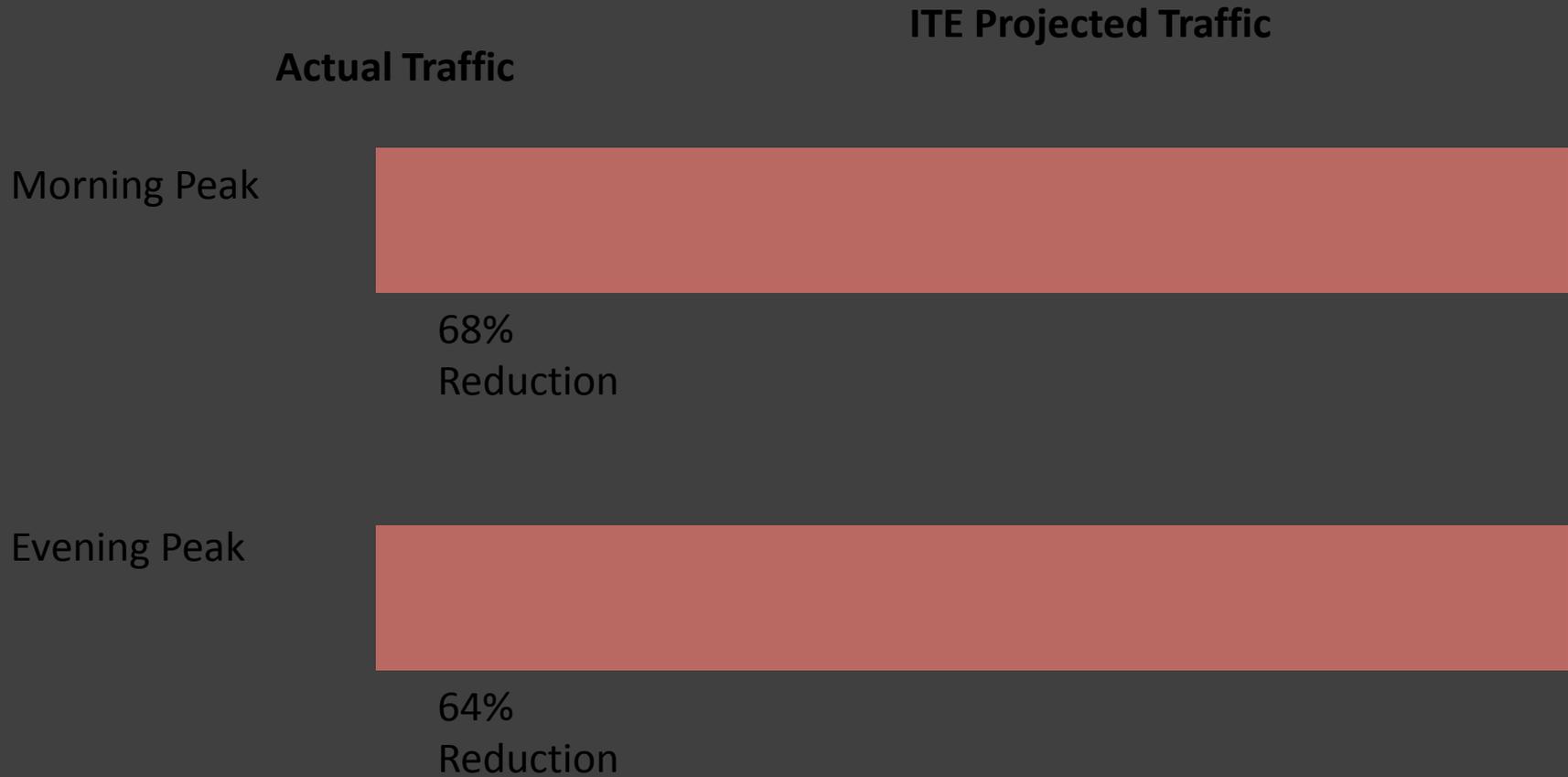


**30 Second Walk
Reality**



**30 Second Walk
at Market Square**

Huge Potential for Change



Portsmouth NH Capture Study (7th Edition Update)

What is transportation for?

- Transportation is not an end in itself
- It is merely a means by which we support individual and collective goals and objectives



What Are Streets For?



Nelson\Nygaard

Movement

- Moving vehicles
- Moving people
- People Meeting
- People Watching

Streets are our primary public open spaces



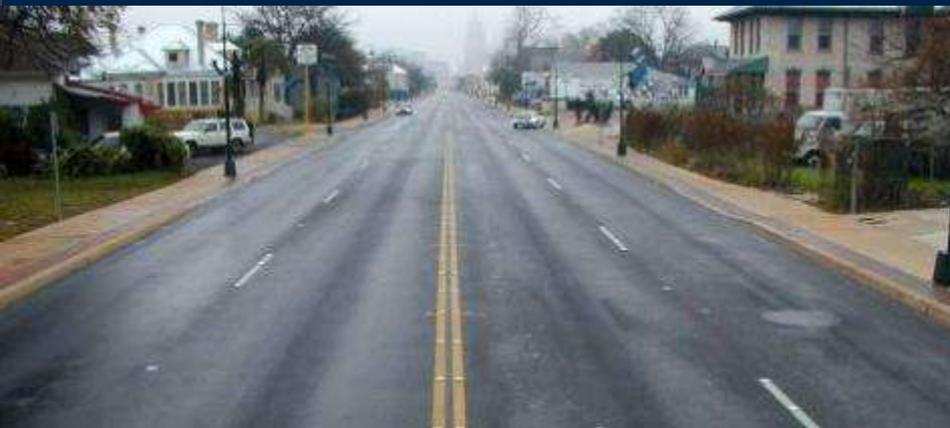
Streets connect us to transit, parking



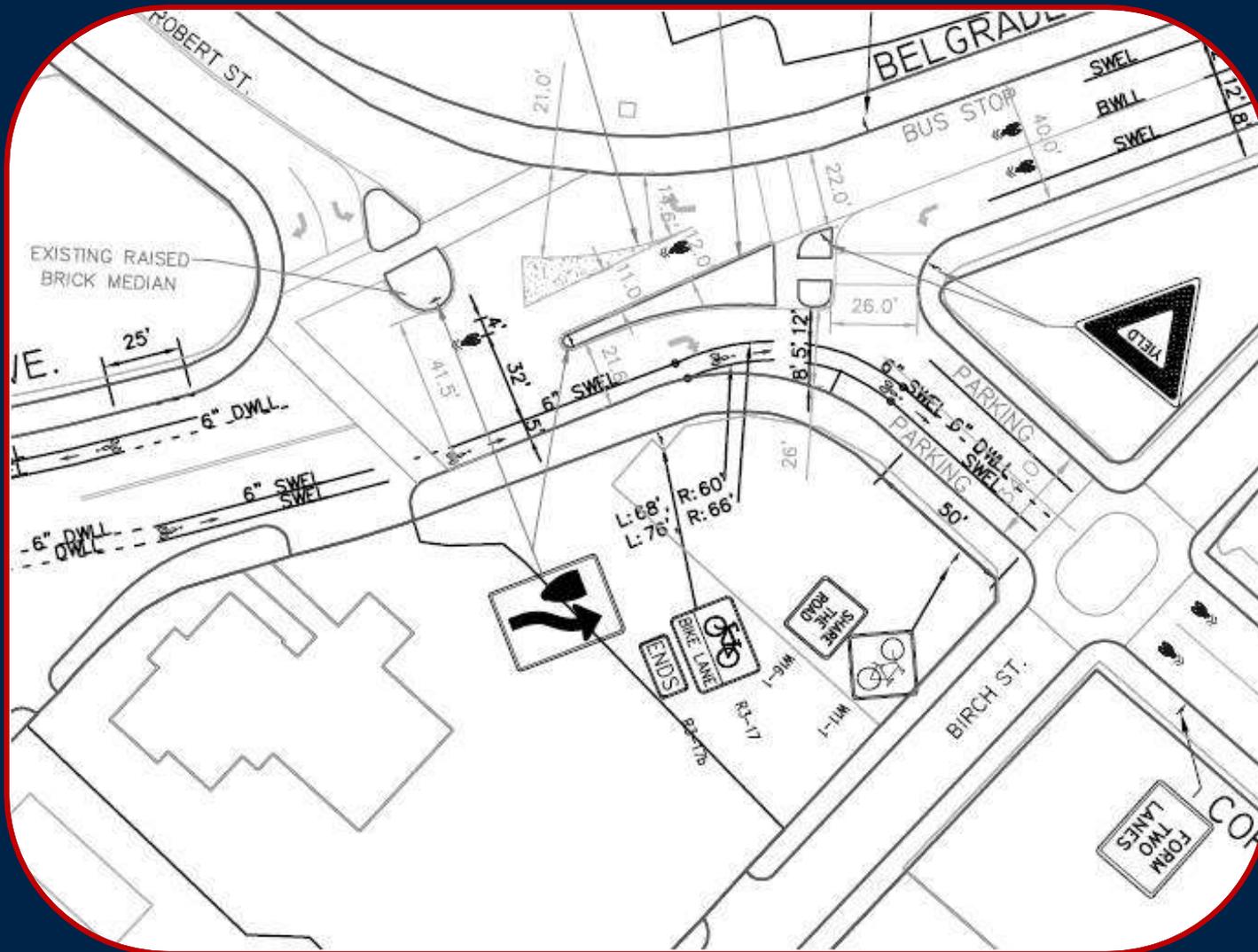
Question 4: Proactive Engineers for Complete Streets

■ Strategy #3: Balance the needs of all users:

- Design from the outside in
- Identify win-win strategies



Plans for Street Redesign in Boston



Built Projects: Boston Bike Lanes



Question 5: Proactive Planners for Complete Streets

■ Strategy #1: Pedestrian Analysis tools

- Pedestrian travel demand analysis
- Pedestrian data collection techniques / phasing plans
- Safe Routes to School Travel Plans



Question 5: Proactive Planners for Complete Streets

■ Strategy #2: Detailed Analysis of Bicycle

h St



Policies Are Important



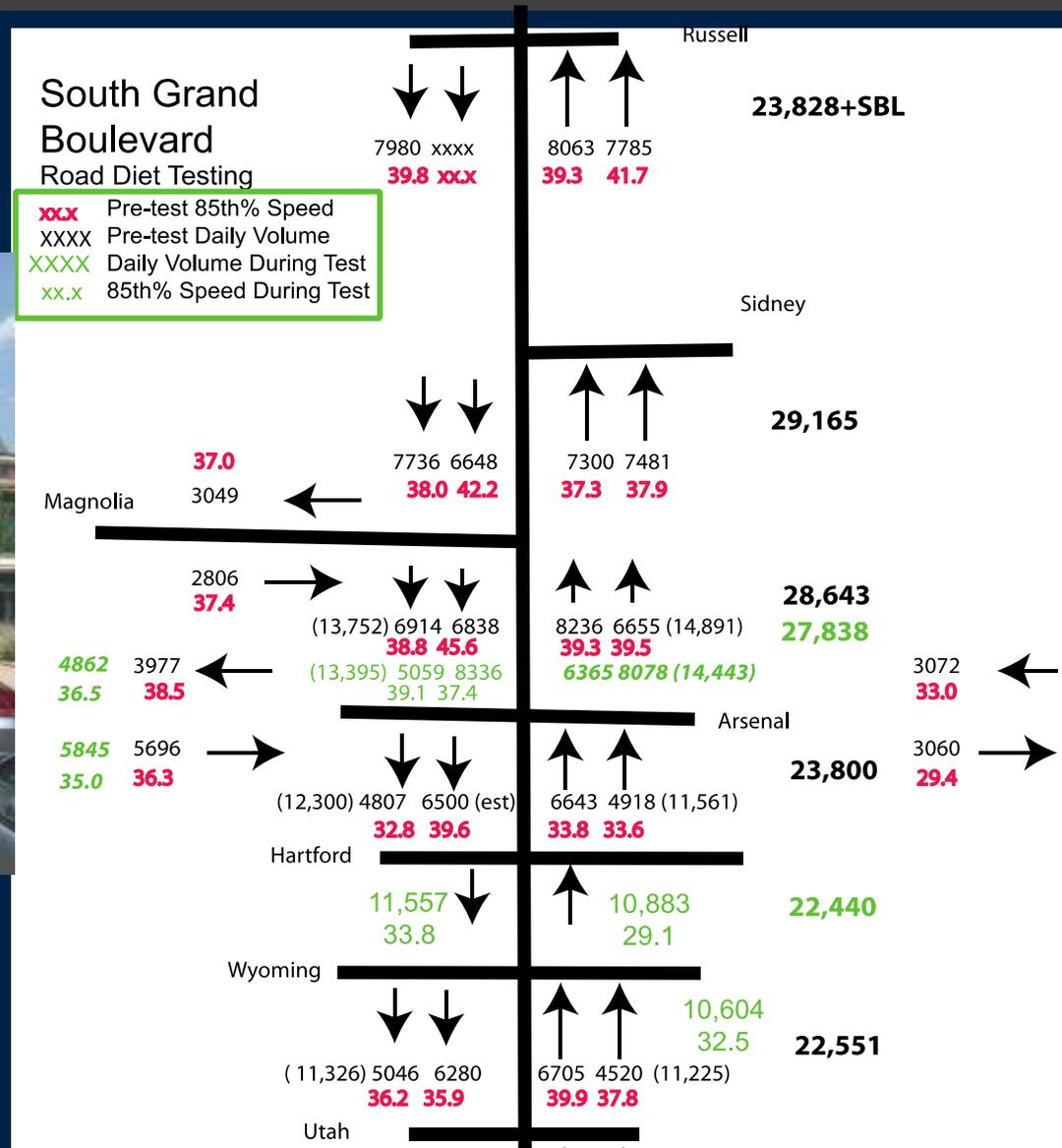
Policies Are Important



Policies Are Important



Complete Systems: South Grand Boulevard







Pilot test at South Grand Boulevard and Utah St.



GRAND

check cross section

General Note
 remove all signal hardware,
 poles, push buttons, signals,
 etc. that are not to be reused

fix radii

ANCHOR

ANCHOR

install new traffic signal
 on 25' long arm, typ.

existing signal pole
 replace/install 2 pedestals
 replace/install 1 pedestrian
 replace/install 2 signals

install new wiring in new
 install new 6' signal post
 publication & sign, typ.
 1 5' - 6' from curb (shown)

remove exist. traffic signal
 pole

install new wiring in exist.

install new 6' signal post
 publication & sign, typ.
 1 5' - 6' from curb (shown)

install new wiring in new

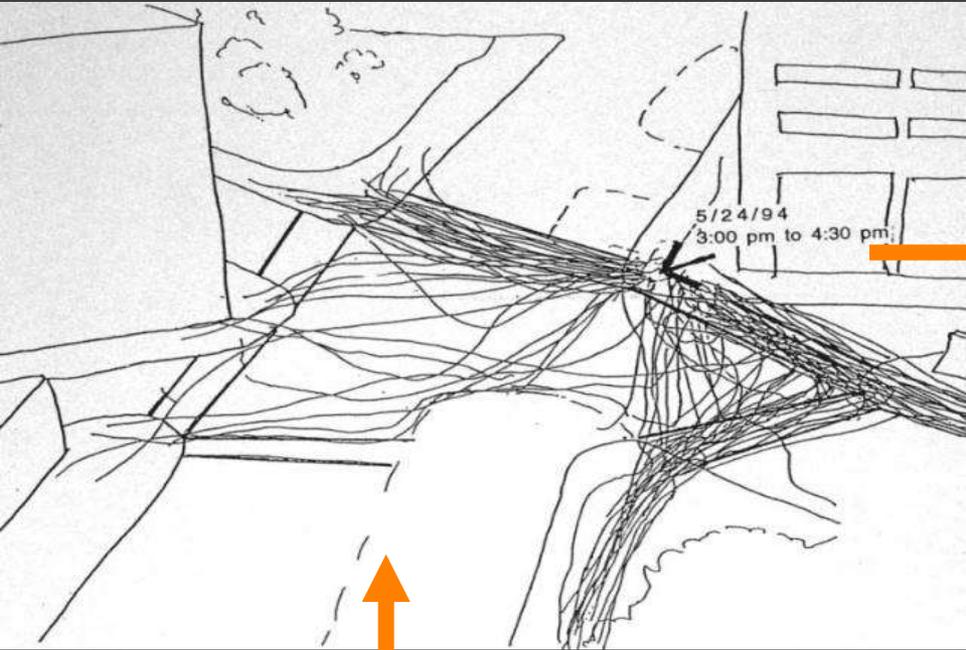
existing signal pole
 replace/install 2 pedestals
 replace/install 1 pedestrian
 replace/install 2 signals

remove exist. pole. New



Follow desire lines

Project for Public Space, Inc.



High Street



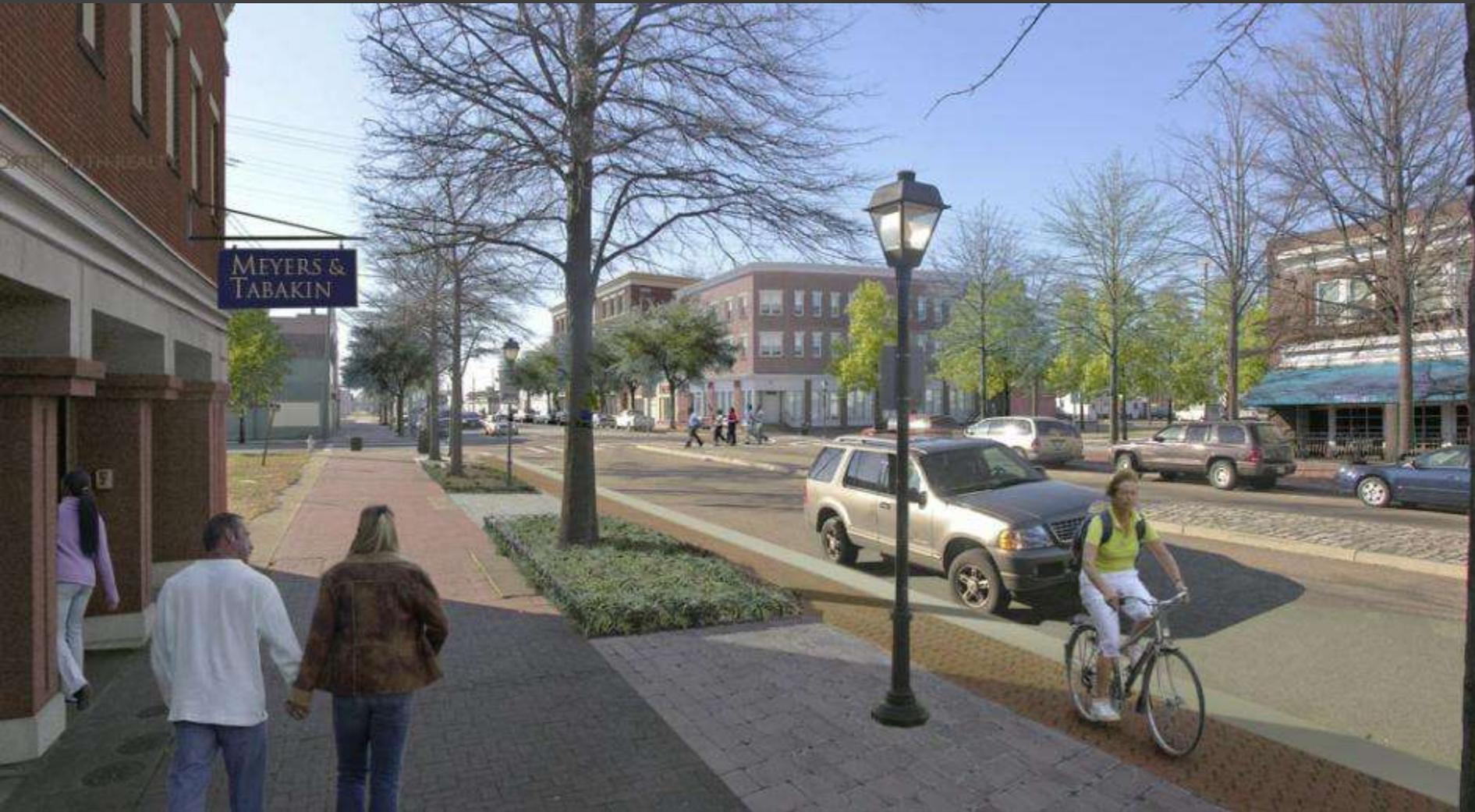
High Street



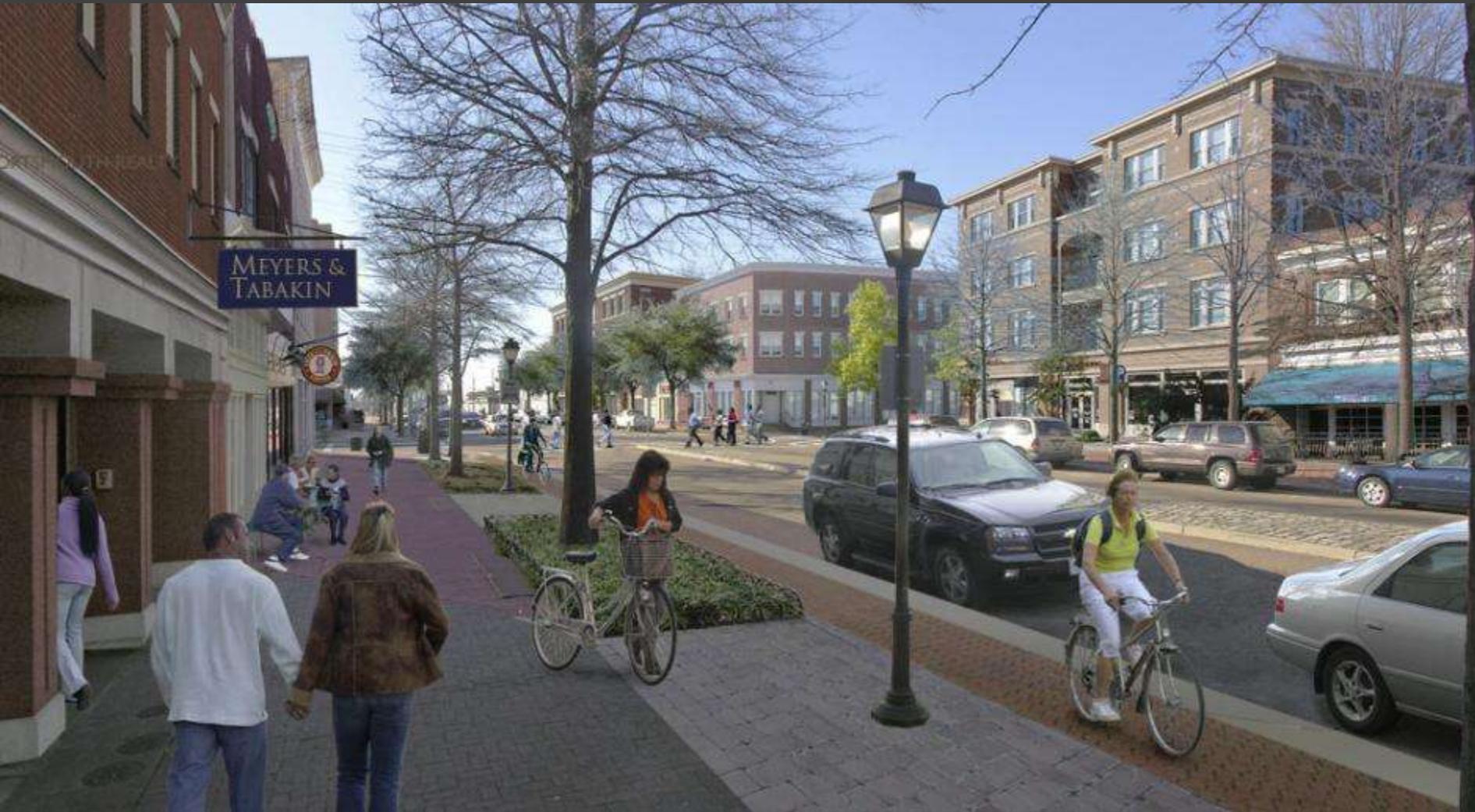
High Street



High Street



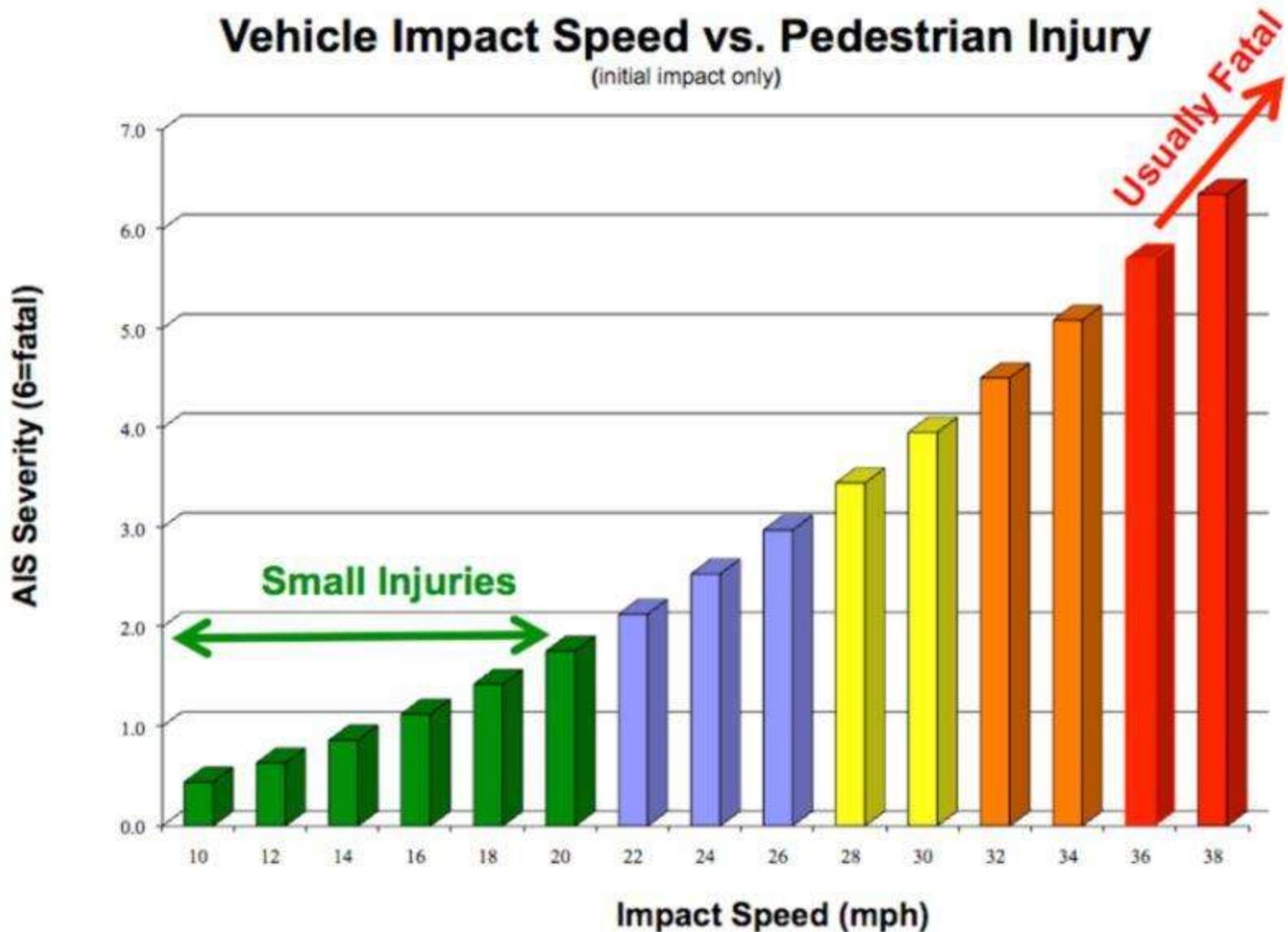
High Street





Vehicle Impact Speed vs. Pedestrian Injury

(initial impact only)







14560AE
Atlas
Van Lines

SITTERLY MOVERS
www.sitterlymovers.com
Springfield, Dean Hill • Worcester, MA

SITTERLY MOVERS
Springfield, Dean Hill • Worcester, MA
www.sitterlymovers.com

Atlas Van Lines

35





- Continuity and connectivity
- Complement to the context
- Sociable environment
- Interest and variety
- Quality and care
- Accessibility
- Safety and security
- Seasonality
- Diurnality



Streetscape Principles

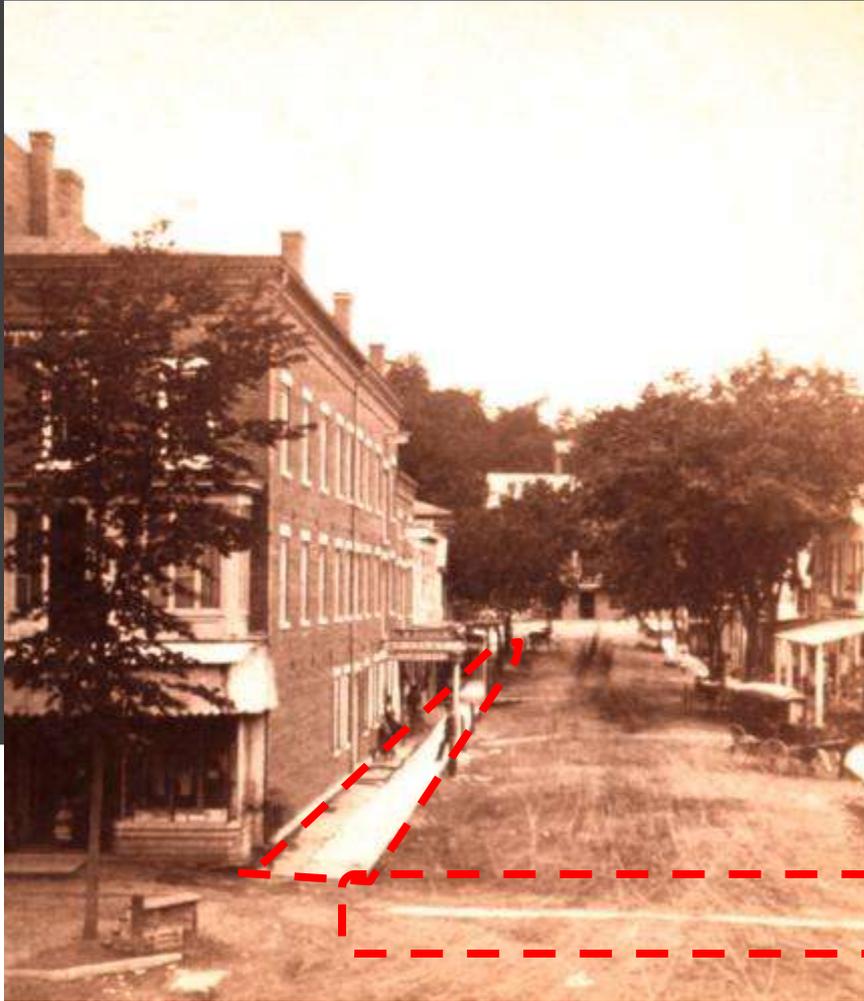
A Brief Retrospective

Beware of nostalgia;
the past was not always pedestrian-friendly



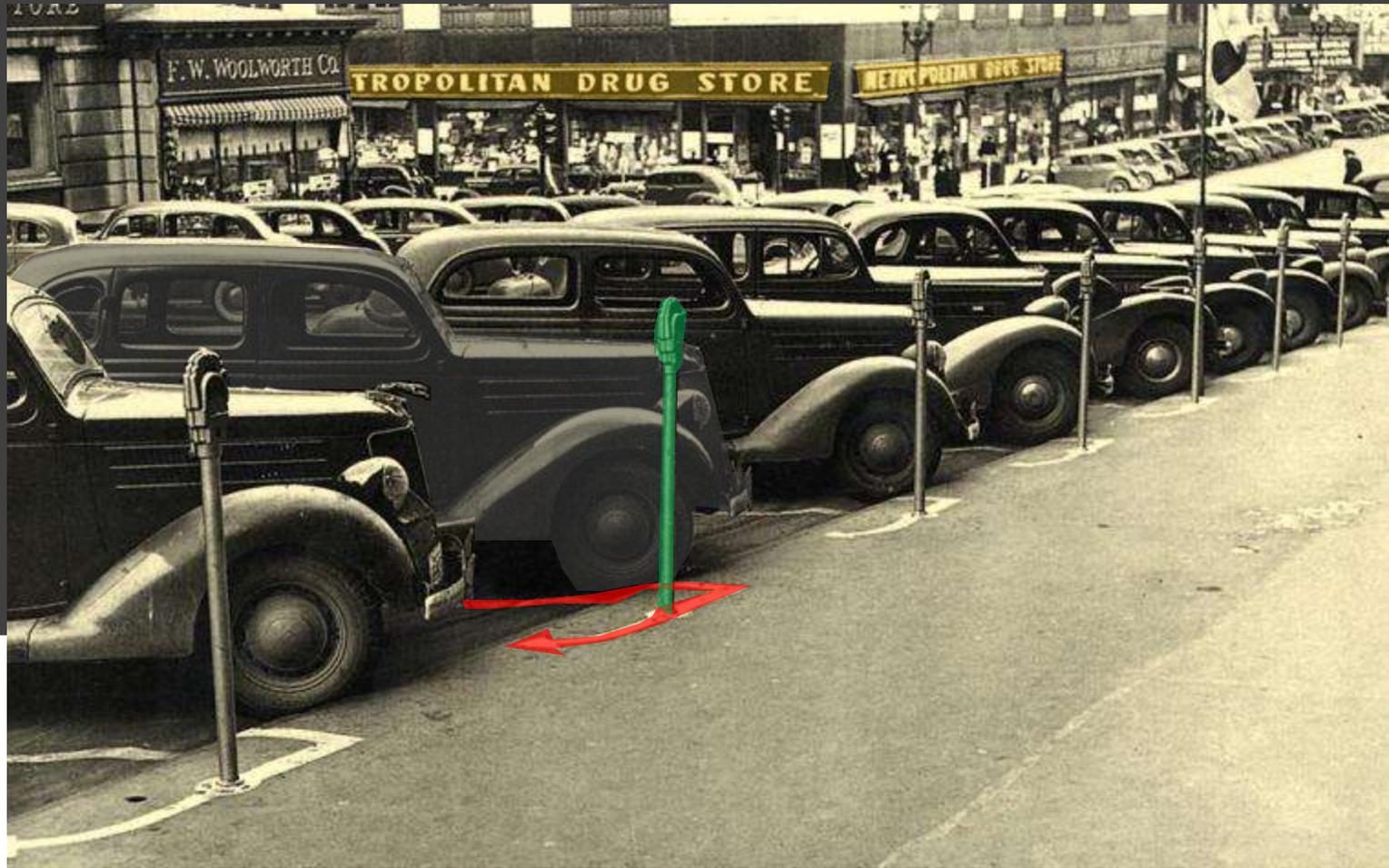
A Brief Retrospective

The street was the main place, the heart of the community



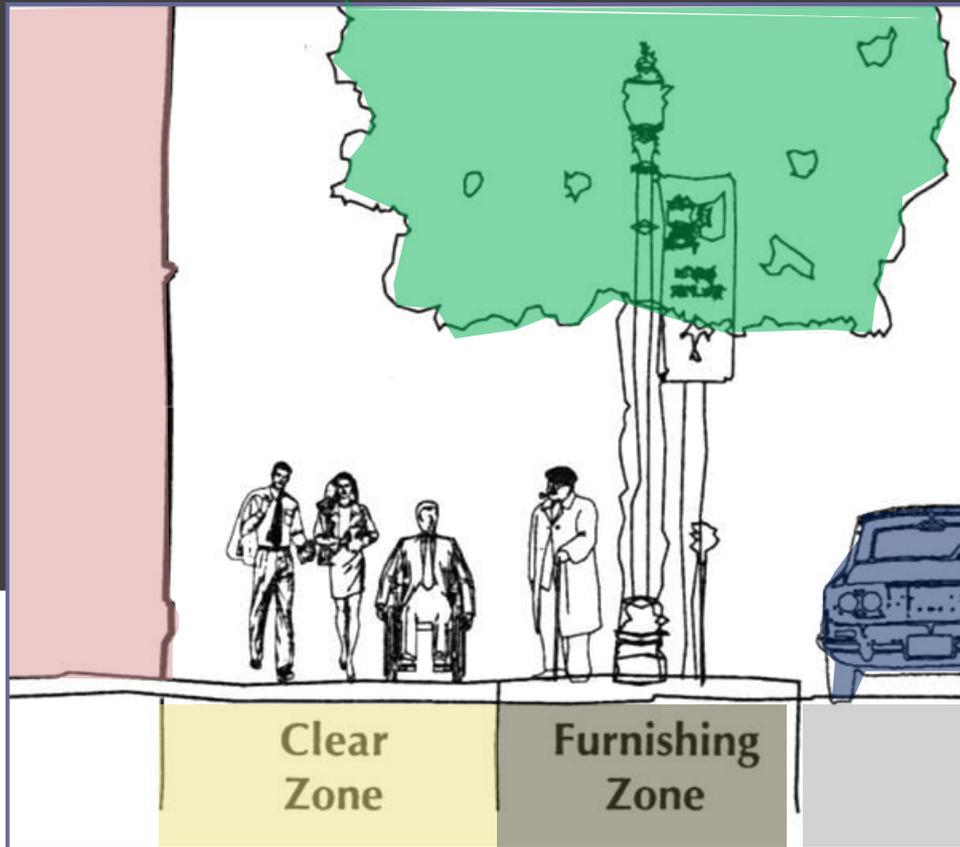
A Brief Retrospective

The automobile filled that available space(s)



Understanding the Pedestrian Environment

“Zoning”





Streetscape Principles

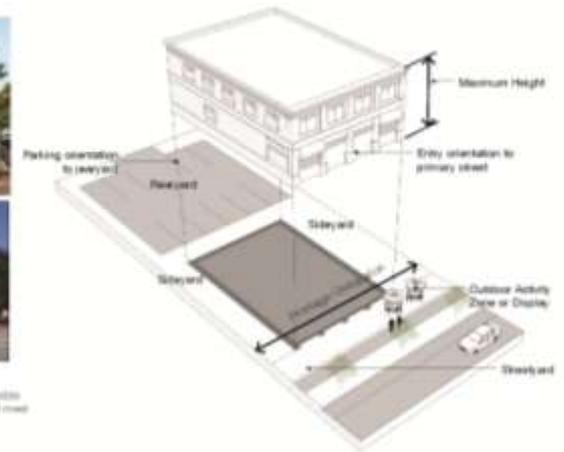


Streetscape Principles

FIGURE 16.3.1 - BUILDING AND SITE TYPES

Mixed Use Building and Site Type

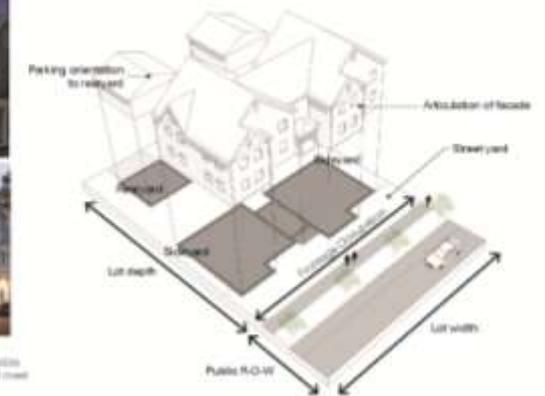
Character Examples:



The illustrations of Figure 16.3.1 represent one possible solution; exact conditions may vary depending on what meets the intent shown.

Multi-Family Residential Building and Site Type

Character Examples:



The illustrations of Figure 16.3.1 represent one possible solution; exact conditions may vary depending on what meets the intent shown.



Building Design Principles

Charrette Process



public review



Draw concepts

Draw alternatives

refinement

plan

public review

public review



Public Comments

