

Appendix C - Public Involvement

APPENDIX C

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Public Participation Plan

DRAFT Public Participation Plan

Delaware Avenue Complete Streets Feasibility Study

What is the Delaware Avenue Complete Streets Feasibility Study?

The Delaware Avenue Complete Streets Feasibility Study is sponsored by the Town of Bethlehem to identify and analyze the feasibility of a full range of appropriate [complete streets elements](#) for Delaware Avenue between Elsmere Avenue and the Normanskill Bridge.

The potentially feasible future street designs and complete streets features to be identified through this study will balance the needs of all roadway users (drivers, pedestrians, bicyclists, and transit users). This balance will be achieved in a manner that enhances community quality of life, the local economy, and safety for all roadway users along this multi-modal and increasingly mixed use corridor and its adjacent neighborhoods.

This study will include corridor specific traffic operations and crash analyses, development of feasible alternatives based on a complete streets framework, and strong stakeholder and community based outreach, education and input.

The outcome of this study will be Delaware Avenue corridor improvement concept plans.

What is the Goal of the Public Participation Plan?

This Public Participation Plan (PPP) documents specific methods to engage, inform and educate the public about the Delaware Avenue Complete Streets Feasibility Study. The goals of the Public Participation Plan are to ensure clear information is provided to the stakeholders groups regarding the Project, and to facilitate “public” involvement throughout the study process and especially during development of alternatives and the study recommendations. In order to achieve these goals the PPP will create various opportunities to inform and engage the Technical Advisory Committee (TAC), the Study Advisory Committee (SAC), stakeholders groups, business owners and residents in and adjacent to the Delaware Avenue study area and the general public.

Involvement of the public in this planning effort is critical to its success. The consultant will participate in two (2) public workshops and create project webpages to receive input as well as to inform citizens, staff, stakeholders, and other agencies about the study. It will be critical to provide ample and easily understood information regarding what complete streets are and are not, and the potential array of benefits as well as impacts.

Who makes up the Technical Committee, the Advisory Committee and Stakeholders groups? What are their roles?

The following “Committees” were established to work on various study tasks and to help guide the study process, striving to have diverse interests and agencies represented. There is some overlap of members on the TAC and the SAC which will enable good communication between the committees.

Technical Advisory Committee (TAC): The TAC will guide the overall project, undertake project tasks as

assigned, and will meet frequently to review progress. This committee includes the following individuals with a good cross section of agencies represented:

- Rob Leslie – Town Director of Planning
- Ken Kovalchik – Town Sr Planner
- Anne Benware - CDTC Project Manager
- Dave Jukins – CDTC Sr Planner/Engineer
- Rob Cherry – NYSDOT
- Consultant team

Study Advisory Committee (SAC): The role of the Study Advisory Committee is to guide the study and to review and give feedback on interim and final study products. Study Advisory Committee members include individuals from the following entities representing involved and interested agencies, residents and businesses.

- Study Area businesses
 - Debbie Battaglia, Delaware Plaza
 - Mark Joseph Kelly, Main Square
 - Ed Kleinke, Kleinke Associates
 - John Phillips, Phillips Hardware
 - Jim Giacone, My Place and Co.
 - Tim McCann, Best Cleaners
 - Chris Frese, Frese’s Landscaping
 - Gregg Biche, Quality PM, Inc.
- Study Area Residents and Civic Organizations
 - Ellie Prakken, Bethlehem Garden Club
 - Virginia Acquario, Bethlehem Garden Club
 - Wilma DeLucco, Delmar Progress Club
 - Scott Lewendon, Bethlehem Planning Board, Friends of the Rail Trail
 - Jeremy Martelle, American Legion-N.A. Blanchard Post No. 1040
 - Jennifer Kilcoyne, Bethlehem Chamber of Commerce
 - Maude Easter, Resident
- Town
 - John Clarkson, Supervisor
 - Rob Leslie, Director of Planning
 - Brent Meredith, Highway Superintendent
 - Elizabeth Staubach, Economic Development Coordinator
 - Julie Sasso, Town Board
 - Paul Penman, Deputy Commissioner of Public Works/Town Engineer
 - Monika King, Senior Engineer
 - Kenneth Kovalchik, Senior Planner
- Agencies
 - Anne Benware, Capital District Transportation Committee
 - Dave Jukins, Capital District Transportation Committee
 - Sam Wells, Capital District Transportation Authority

- Ross Farrell, Capital District Transportation Authority
- Martin Daley, Capital District Regional Planning Commission
- Rob Cherry, NYSDOT Region 1
- Audrey Burneson, NYSDOT Region 1

The goal of these committees is to share technical information, provide input on public outreach materials, enable informed decision-making, help shape the draft and final study recommendations, and provide overall guidance on the study as it progresses. The SAC members and interested stakeholders may be asked to assist in notifying citizens and community groups living and/or working in the study area about the public meetings and the study in general. This is important to get the broader community engaged with the study. By helping to distribute flyers/announcements and speaking to members of the community about the study, the SAC and interested stakeholders will help further promote public involvement to individuals that were not reached through other means.

What communication methods will be used to involve stakeholders and how will they be implemented?

Meetings

Technical Committee Meetings: Frequent Technical Committee meetings will be held as needed to review progress.

Advisory Committee Meetings: Five (5) SAC meetings are planned – 1) Kick-off, 2) Operational and Safety Analysis, 3) Review Public Input/Draft Alternatives, 4) Evaluation of Alternatives, and 5) Public Comment/Recommendations.

Stakeholder Meetings: Stakeholder meetings will be by invitation and will be focused on key stakeholders needed for direction or from whom “approvals” are needed. If it is determined by the TAC that specific stakeholders require unique outreach, then a separate meeting and/or opportunity for engagement will be facilitated. For example, this could include contact with the Albany Water Board and Albany County regarding access to the rail trail.

Public Meetings: There will be two public meetings to obtain input from the public at large. These will be widely publicized to maximize attendance. The consultant will facilitate these meetings. Members of the TAC will be asked to participate. SAC members will be encouraged to attend. It is expected that the public meetings will be held at the Town Hall, which will be confirmed.

- **Public Meeting 1:** Public Meeting 1 will be used to introduce the project to the general public, and solicit input on issues and ideas. Specific techniques used at the first public meeting will be confirmed with the TAC and will likely include:
 - Publicity: Flyer, Project Website, Town Website, email, Town notices/outlets, Press Release
 - Welcome Station: Sign-in / Fact Sheet pick-up / Comment Sheet
 - PowerPoint: Study overview, purpose and existing conditions, “What are Complete Streets?”
 - Presentation Boards: Study goals and objectives, Existing Conditions, “What are

Complete Streets?", Road Diets: Definition and Potential Benefits

- Activity: Break-out groups (Issues and Ideas)
 - Close: Summary / Report back / Next Steps
- **Public Meeting 2:** Public Meeting 2 will be used to present the results of the alternatives analysis and the status of the draft study recommendations and will use similar Publicity, Welcome Station and PowerPoint presentation formats to Public Meeting 1. Feedback on the alternatives will be the focus of this second public meeting. The consultant will prepare poster size visuals of the corridor study area, graphics illustrating the alternatives and their various complete streets elements, maps and associated pertinent data/material related to the evaluation and multi-modal performance results, highlighting any needed trade-offs. Specific techniques used at the second public meeting will be confirmed with the TAC and the SAC. A ranking exercise is expected.

Additional Techniques

Project Website: The Project web material and a web site will be created by the Consultant.

Social Media: CDTC and the Town will use Facebook and Twitter to advertise public meetings and other input opportunities.

Newspaper Articles: Press Release to Spotlight Newspaper

Public Notices: Town / CDTC normal public notice channels will be used. The consultant will provide materials.

Email: After the stakeholder list is confirmed, communication will be primarily by email.

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Public Involvement Meeting #1

Delaware Avenue Complete Streets Feasibility Study

Meeting Summary
Public Meeting February 16, 2017

Town of Bethlehem, New York

CM Project No. 116-149

Prepared For:



Capital District
Transportation
Committee



Prepared By:



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Appendix D Written Comments

**Meeting Summary – Public Information Meeting #1
Delaware Avenue Complete Streets Feasibility Study
February 16, 2017**



The first public information meeting for the Delaware Avenue Complete Streets Feasibility Study was held on Thursday, February 16, 2017, at the Town of Bethlehem Town Hall. The meeting was well attended with over 110 residents, stakeholders, and study advisory committee members present. The meeting began with an introduction by Rob Leslie, Town of Bethlehem Planning Director, and Michael Franchini, Capital District Transportation Committee (CDTC) Executive Director. Following the introductions, a Complete Streets overview and Technical presentation was provided by Mark Sargent and Kristi DiCocco, from Creighton Manning. See Appendix A for the PowerPoint presentation.

The purpose of the meeting was to inform the public about this transportation planning study, let them know the different methods by which they can provide comments, provide the public with an initial understanding of the existing conditions and needs, and obtain input from the public on Complete Streets issues and ideas (problems and solutions), that should be considered as the study progresses.

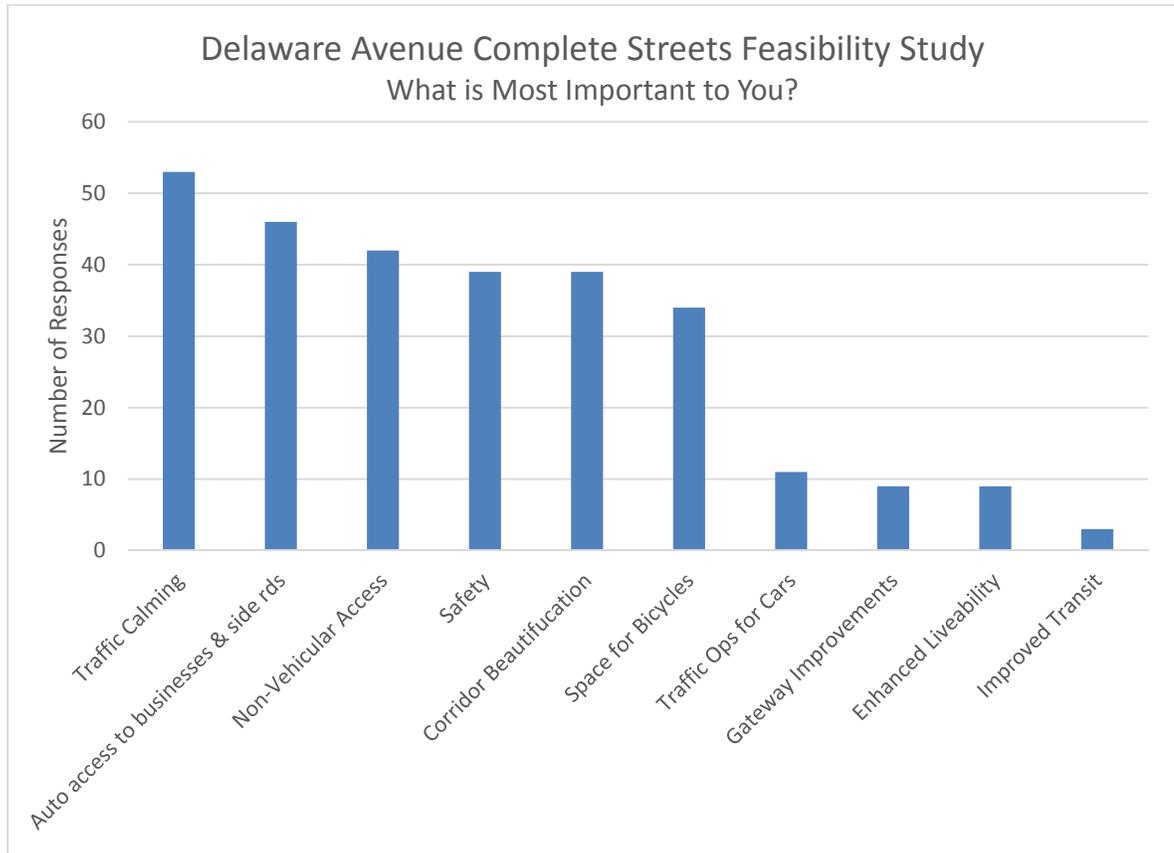


Meeting attendees had several opportunities to provide input, ask questions, and offer comments. This included three poster stations where attendees were asked to rate their top three project priorities; an open forum question/comment session; written comment forms and a comment drop-box; and a station oriented mapping session where facilitators interacted with the public to solicit specific issues, concerns, and ideas for the project corridor. Post-it notes, aerial map mark-ups, and station facilitator notes were used to record the public input received. There were four map stations (all alike) to provide good access to the stations considering the number of attendees. Attendees were also given the project website address www.delawareavecompletestreets.com and encouraged to review the material on the website and provide comments via the website email.

1. Poster Station Project Priorities/Issues

What are your top three project priorities/issues?

Each attendee was given three dots to place on this ranking exercise. There were a total of 285 dots placed with most people selecting traffic calming, auto access to businesses and side streets, and non-vehicular access representing the top three choices. Safety, corridor beautification and space for bicycles also ranked high. Less popular, were traffic operations for cars, gateway improvements, enhanced livability, and improved transit. Taken together, attendees are looking for an attractive and safer corridor with reduced speeds that provides good access for all modes. Having optimal operations for cars alone is not a priority, but providing reasonable access for cars to and from side streets and businesses is a priority.



2. Open Forum Question/Comment Session

The following was discussed during the open forum question/comment session:

Question: Will the rough estimate of the amount of time added to the rush hour commute due to a road diet be provided?

Response: The next phase of the study will include an analysis that will provide that estimate.

Question: When will improvements happen?

Response: The study is currently in the planning phase and has not been identified as a construction project at this time. During the meeting, five years \pm was mentioned as a possible time frame.

Question: Do Complete Streets have an economic benefit?

Response: Yes. An economic study cited during the presentation showed that Complete Streets projects have an economic benefit.

Question: Is the Town and study coordinating the impact of ongoing development projects? Will future development occurring in the town considered in the study?

Response: Yes, trips from future development are being incorporated into the study analyses and corridor model.

Question: Better trail access was mentioned as a goal. That means more cars in my neighborhood, correct? I am concerned about traffic and parking area impacts in my neighborhood.

Response: Ideas for better trail access are being explored. Please make sure to provide comments regarding your concerns.

Question: Does the study include areas beyond Delaware Avenue for trail access?

Response: Yes, the study will explore connections for adjacent trail connections.

Question: This is a good study. Are areas/streets beyond Delaware Ave included in the study, for example Elsmere Ave down to Kenwood Ave?

Response: No, the study area is only focused on Delaware Avenue. We have gotten comments regarding the Elsmere Ave/Kenwood Ave intersection because DOT started a project there to improve the pedestrian crossing and it has been stalled due to a National Grid issue. The Town has contacted NYSDOT about this.

Question: Have you come up with options of differing costs? Would you combine phases of two different projects into one? How much does cost come in to the selection of a preferred alternative?

Response: Design alternatives will be explored during the next phase and order of magnitude costs will be prepared. Project cost is part of the evaluation and selection of the preferred alternative. One purpose of this study is to develop concepts reflecting the community's vision that could be incorporated into a simple, low cost repaving project at a time when NYSDOT comes in to repave the roadway.

Question: Are new traffic signals along Delaware Ave being considered? People want to cross at protected pedestrian crossings and that has to be done with full traffic signals.

Responses: Protected pedestrian crossings will be evaluated during the next phase.

Question: Is CDTA involved in the study? Will bus stops and new investments be considered?

Response: Yes, CDTA is involved and transit needs and improvements will be included in the study.

General Comment: Trees and landscaping are a benefit overall and can calm traffic due to visual perception.

Comment: Behind Delaware Plaza there is a large parking lot that could be used for car parking if an access was created from that location to the rail trail.

Comment: Rail trail access at the medical office building parking lot and the Booth Road area should be formalized.

Comment: There is a need for snow and ice removal along the sidewalks and bicycle space on the roadway. Currently, it is difficult to use the sidewalks and access the bus stops due to snow and ice.

3. Station-Mapping Input Session

Specific input from the station-mapping input session can be found in Appendix C Tables 1 and 2. The public's comments are summarized for each of the four break-out groups (Table 1), and then by category (Table 2). In addition to the comments recorded on the maps and on post-it notes, the following comments were provided by station facilitators:

- Vehicular traffic congestion and parking concerns at new trail access locations and impacts to the residential neighborhoods
- Look for opportunities to formalize agreements with property and business owners to allow for shared parking agreements (i.e. rear parking area at Hannaford and the Albany Water Line corridor)
- The Elsmere Ave signal should have a delay with more consideration given to pedestrians
- Provide additional pedestrian crossings and signalization for improved pedestrian circulation
- Encourage slower travel speeds
- Provide transit support infrastructure (i.e. safe crossing at the park-ride lot, bike racks, and covered shelters)
- Improve snow and ice removal at transit stops
- Review transit stop locations and consider consolidation and/or shifting stops that are too close together
- Expand shoulders and provide bike lanes
- Provide street trees for aesthetics and traffic calming

4. Written comments

As of this writing (May 1, 2017), two months after the public meeting, 22 written comments have been received. Written comments are included in Appendix D. A synopsis of the comments shows that a majority of people are in support of the complete streets concepts being considered for this study. There are also a number of specific comments and questions about the need to maintain good access to businesses, trail access ideas, bike accommodations, possible right-of-way impacts, and NYSDOT involvement in the study, among others.

The public meeting concluded with an invitation for meeting attendees to stay involved in the study through the study website and public comment form. Meeting attendees were also encouraged to contact the Study Advisory Committee members with any additional questions or concerns.

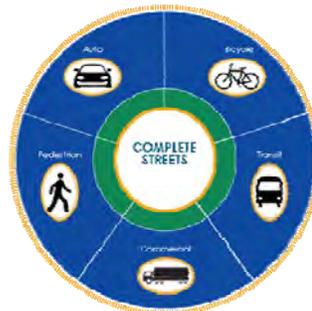
Appendix A

PowerPoint



Transportation Planning Study

- Advisory Committee
 - Delaware Improvement Group
 - Residents and Businesses
 - Town, CDTC, CDRPC, NYSDOT, CDTA





Draft Study Goals

“Create a Plan for a more balanced transportation system along Delaware Avenue to enable safe and comfortable ADA compliant access for users of all ages and abilities, including pedestrians, bicyclists, transit users and motor vehicle drivers, otherwise known as Complete Streets.”



Safety



Access



Economy



Place

Scope / Meeting Purpose

- ✓ Initiation and Data Gathering
- ✓ Existing Conditions
- ✓ Public Workshop #1
- Draft Conceptual Complete Streets Alternatives
- Evaluation of Alternatives
- Public Meeting #2
- Report and Implementation Strategy
- Final Presentation

What are Complete Streets?



Complete Streets are streets for everyone, no matter who they are or how they travel.



National Complete Streets Coalition

6

What are Complete Streets?

Safe, comfortable and convenient



National Complete Streets Coalition

7

What are Complete Streets ?



What are Complete Streets ?

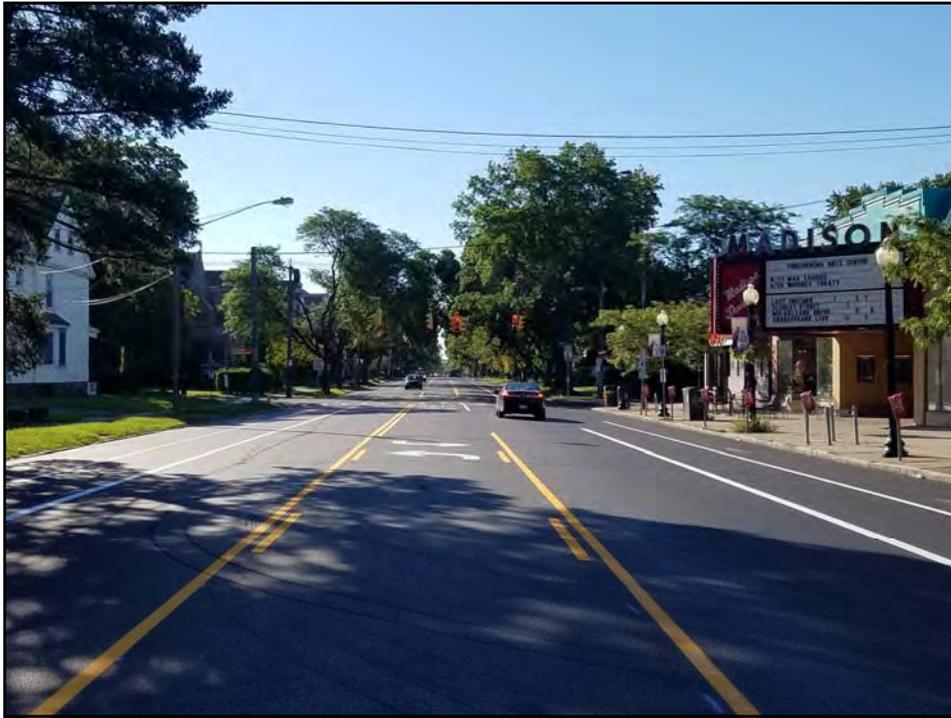
“There is no one design prescription for complete streets. Ingredients that may be found on a complete street include: sidewalks, bike lanes (or wide paved shoulders), special bus lanes, comfortable and accessible public transportation stops, frequent crossing opportunities, median islands, accessible pedestrian signals, curb extensions, and more. A complete street in a rural area will look quite different from a complete street in a highly urban area. But both are designed to balance safety and convenience for everyone using the road.”

- National Complete Streets Coalition



National Complete Streets Coalition





Why?

- National and local efforts support Complete Streets
 - 2005 Comprehensive Plan
 - 2009 Climate Smart Community Pledge
 - 2011 Sustainable Bethlehem Initiative
 - 2014 Comprehensive Plan Assessment Committee Report to Town Board
- NYS Law “...shall consider the safe travel on the road network by all users of all ages, including motorists, pedestrians, bicyclists, and public transportation users...”
- Bethlehem Resolution “...shall consider the safe and efficient accommodation of bicyclists and pedestrians in all new street construction and reconstruction...”

Why Complete Streets - Health

- Promotes Physical Activity and Healthy Lifestyle.
- 31% of Americans are obese. 65 % are overweight or obese.
- Obesity results in \$117 billion of direct health related costs each year.
- People who live in neighborhoods with sidewalks on most streets are 47% more likely to be active at least 30 minutes per day.



Source: www.ActiveLivingResearch.org



Why Complete Streets - Economy

- Promotes Community Interaction
- Less \$ on transportation = more spending money
- Increased private investment in community
- Increased home values: 15 real estate markets; one-point increase in the walkability scores; \$700 to \$3,000 increase



Why Complete Streets - Mobility

- Equity
- By 2045 the number of Americans over age 65 will increase by 77 percent
- About one-third of people over 65 have a disability
- Millennials are driving less and looking for other transportation options



Older Americans — Redefining Longevity

By 2045, the number of Americans over age 65 will increase by

77%

About **one-third** of people over 65 have a disability that limits mobility. Their access to critical services will be more important than ever.

Millennials — Shaped by Technology

There are **73 million Millennials** aged 18 to 34. They are the first to have access to the internet during their formative years and will be an important engine of our future economy.

Millennials are driving less. By the end of the 2020s, they drive over **20% fewer** miles than of the start of the decade.

Income Inequality

10% of the population takes home **one-third** of our national income.

Transportation is the **second-largest** expense for U.S. households.

Why Complete Streets - Safety

- Safer streets = less costly streets
- Recent Madison Avenue Road Diet in the City of Albany showed a 4:1 cost benefit ratio
- Road diets are one of FHWA's proven safety counter measures
- Reduce crashes by 19 to 47percent
- Speeds likely to be reduced by 3 to 5 mph

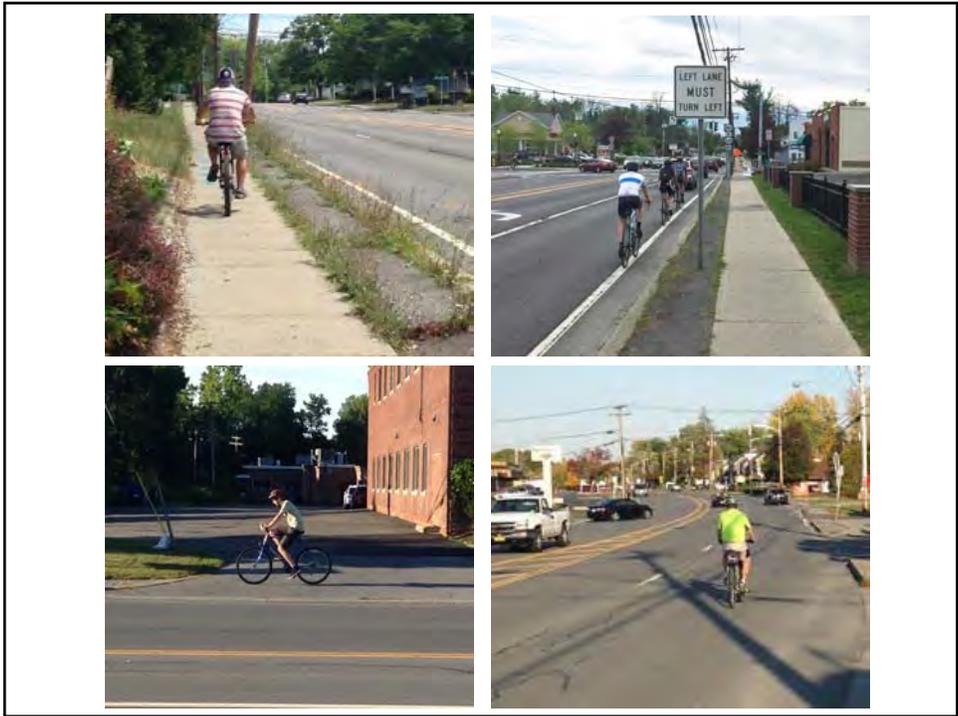


Road Diet Guidance vs Area Roads

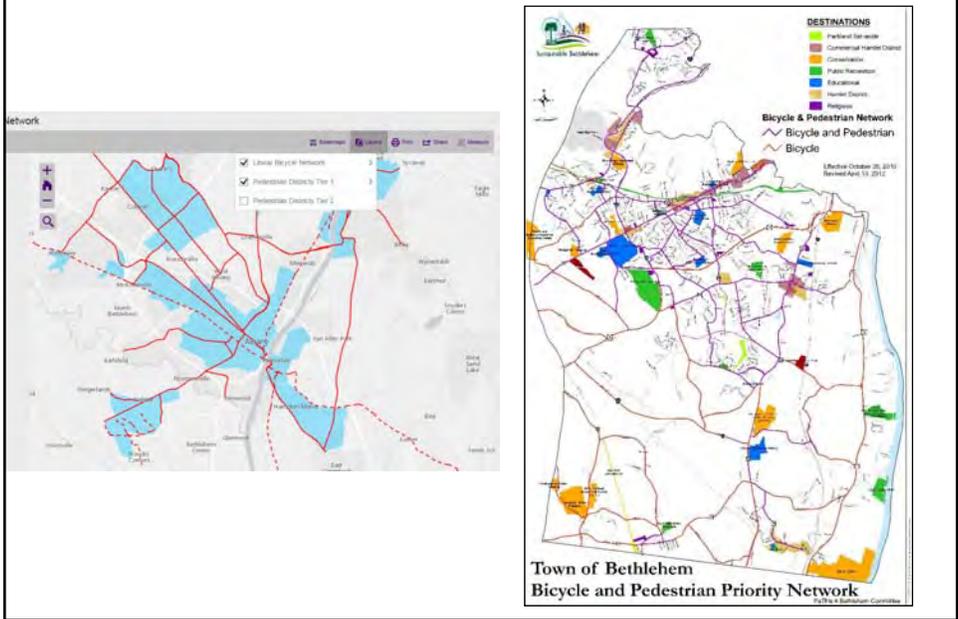
Up to 25,000 Vehicles Per Day – Seattle DOT		
21,100	Route 32 (Broadway)	Menands
≤ 20,000 Vehicles Per Day “ May be a good candidate” - FHWA		
18,900	Route 5	Schenectady
18,300	Delaware Ave (Elsmere Ave to Plaza)	Bethlehem
16,600	Fuller Road (RR Ave to Central)	Albany
15,500	Madison Avenue	Albany
15,500	Delaware Ave (Plaza to City Line)	Bethlehem

Existing Conditions





Town and CDTC Priority Networks



Facilities



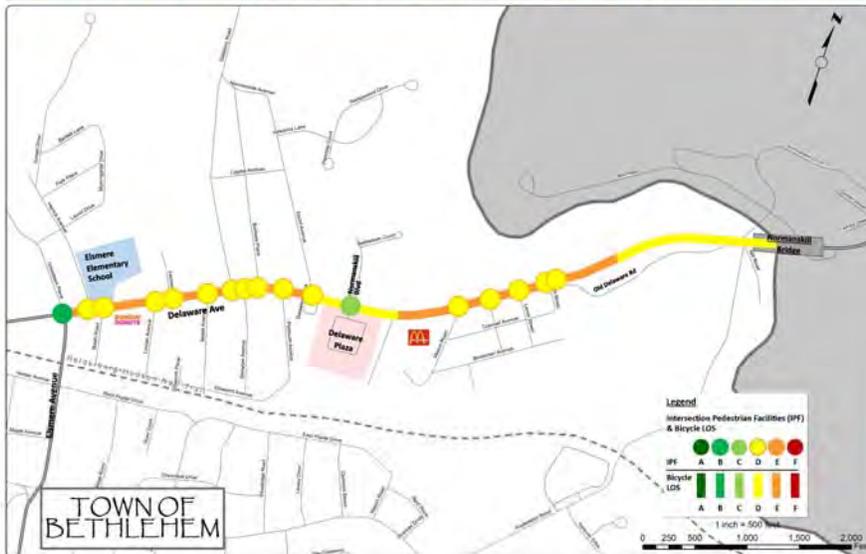
Overall Operations

LOS	Automobile	Bicycle	Pedestrian
A/B			
C/D			
E/F			
Delaware Avenue	LOS B/C	LOS E	LOS B to E

Image Courtesy of State of Florida Department of Transportation 2013 Quality/Level of Service Handbook

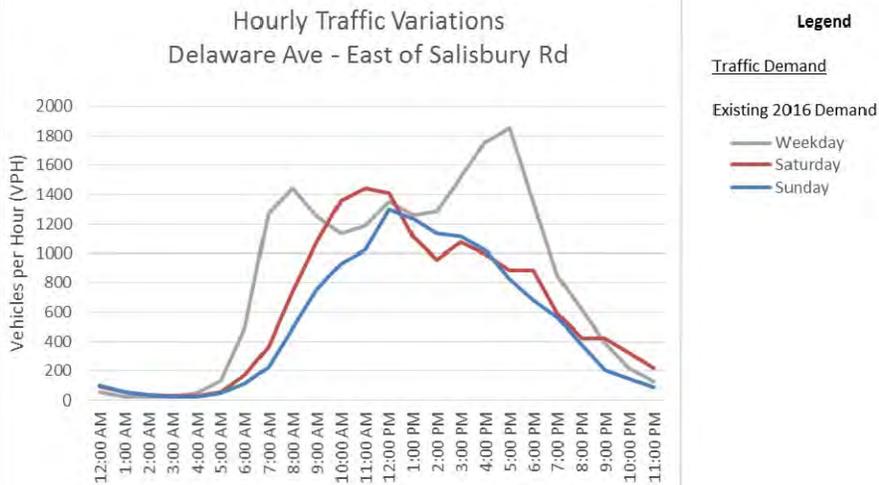
Bike / Ped Operations

Existing Conditions : Intersection Pedestrian Facilities and Bicycle Level of Service

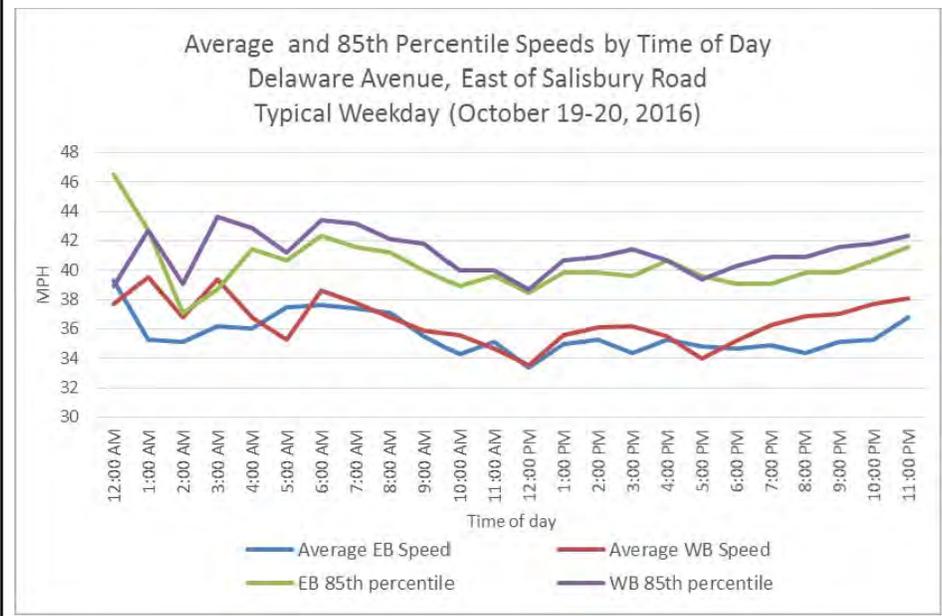


Volumes

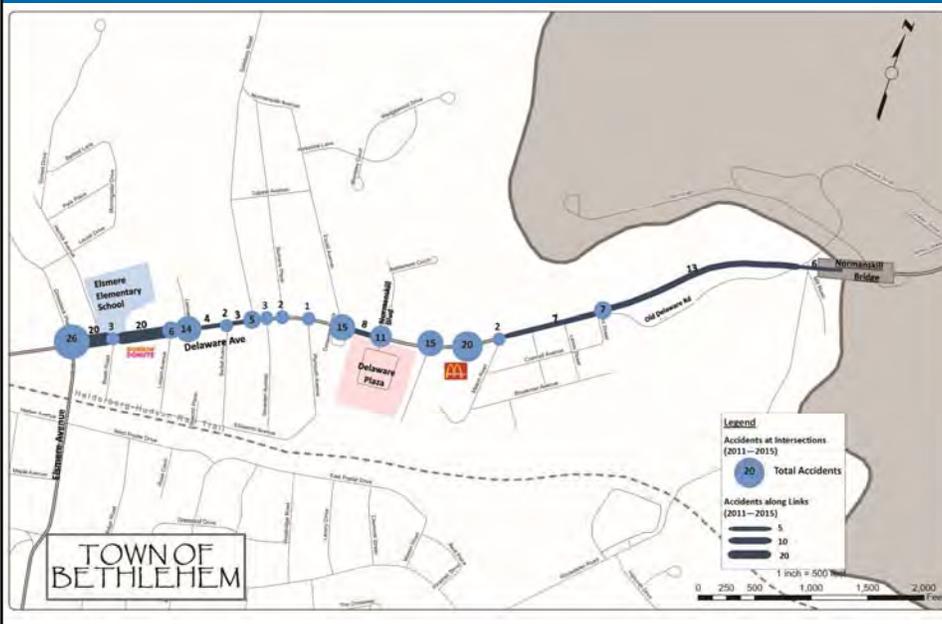
Hourly Traffic Variations
Delaware Ave - East of Salisbury Rd



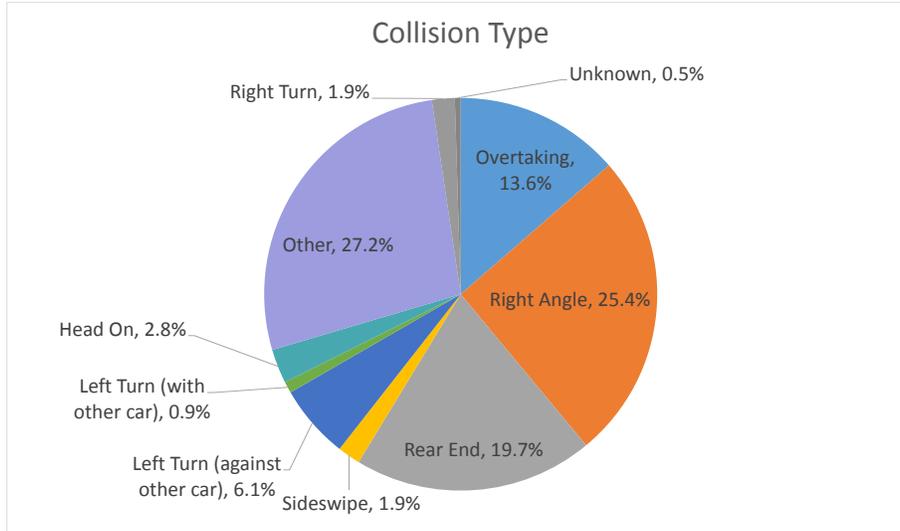
Speeds



Crashes



Crashes



Road Diet Crash Reduction Factors

Countermeasure	Crash Type	Crash Reduction Factor
Narrow roadway cross section (4 to 3 lanes) with two way left-turn lane	All	26%
	Left-turn	24%
	Rear-end	31%
	Right-angle	37%

Trail Access



Issues and Ideas

Comments

- Q & A
- Break-out areas
- Comment form
- Website

www.DelawareAveCompleteStreets.com

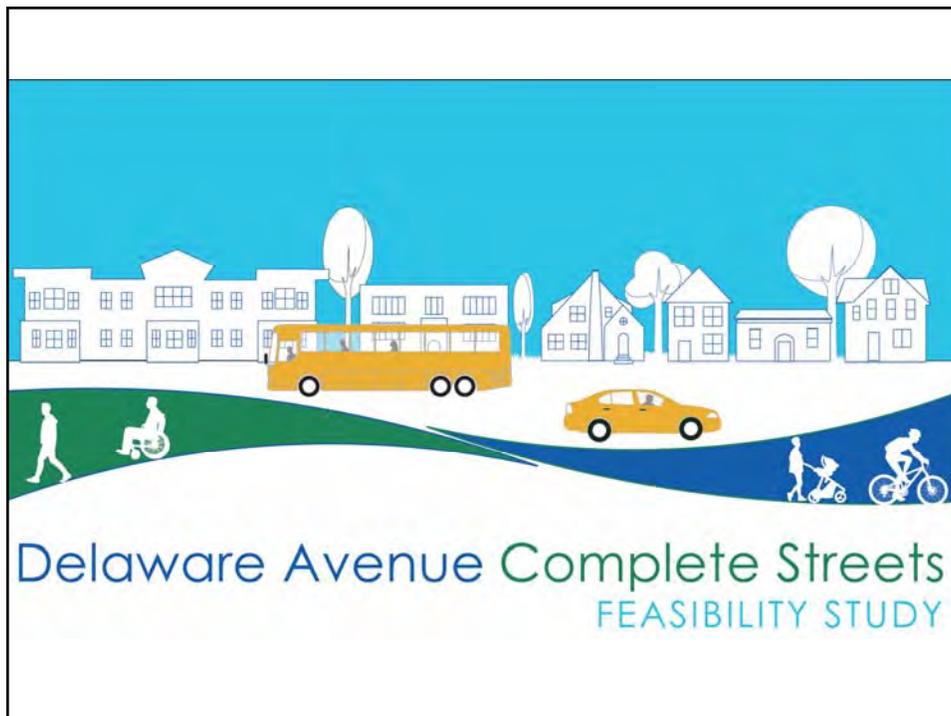
Break-out Instructions

- 4 areas
- 1 Facilitator per group
- Record your comments and concerns
- Goals
 - Identify Issues
 - Brainstorm Ideas



Examples

- Is travel time a concern? Where and when?
- Are you concerned about safety? If so, what and where?
- Are multi-modal (bus, bike, walk) improvements needed?
- Can you reach shops and services if you don't own a car?
- What other corridor enhancements would you like to see?
- Are large scale changes needed to the roadway?
- Do you have an idea for a gateway?
- Do you have ideas for improved trail access?



Thank you!



www.DelawareAveCompleteStreets.com



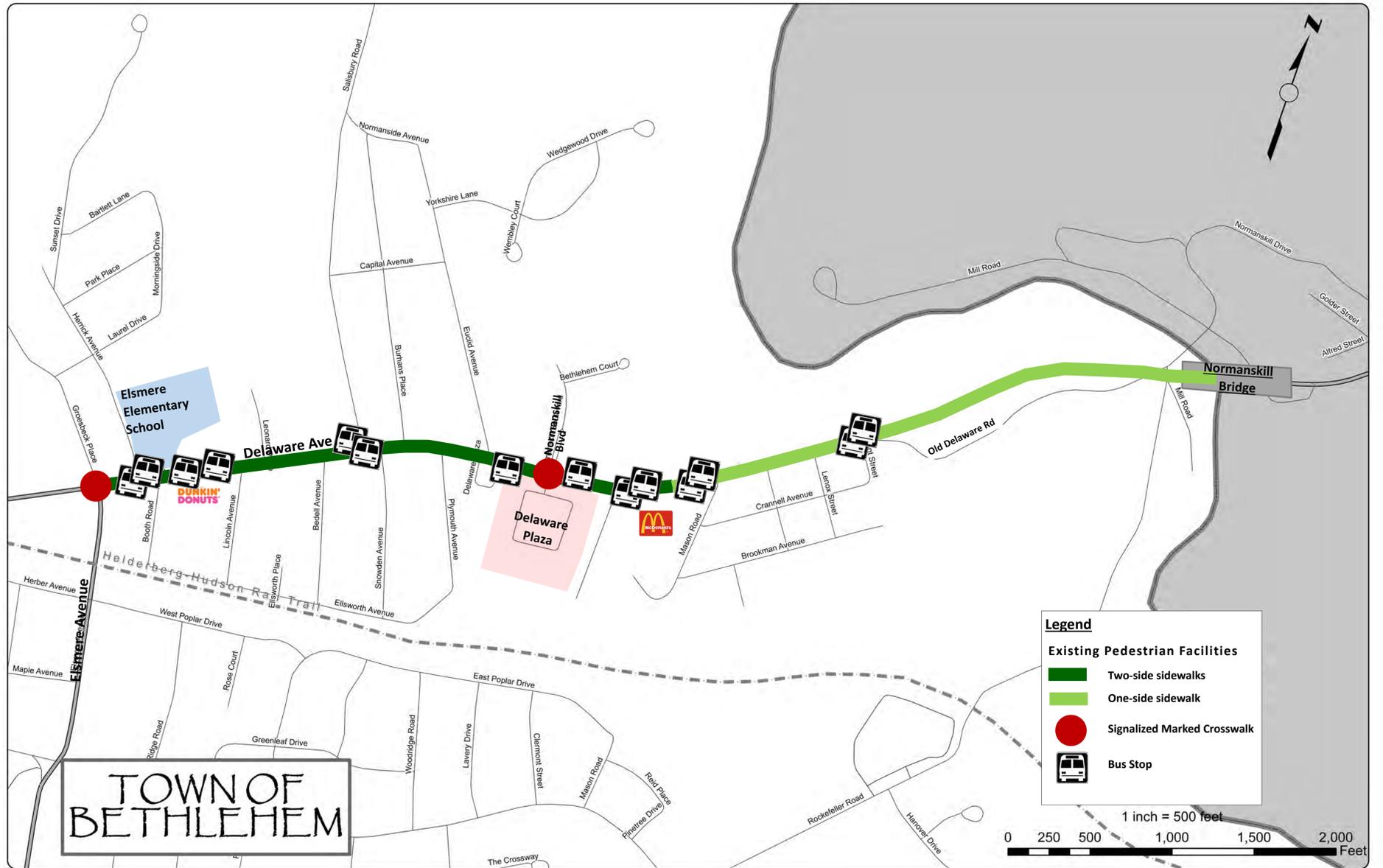
Appendix B

Meeting Posters



Delaware Avenue Complete Streets Feasibility Study

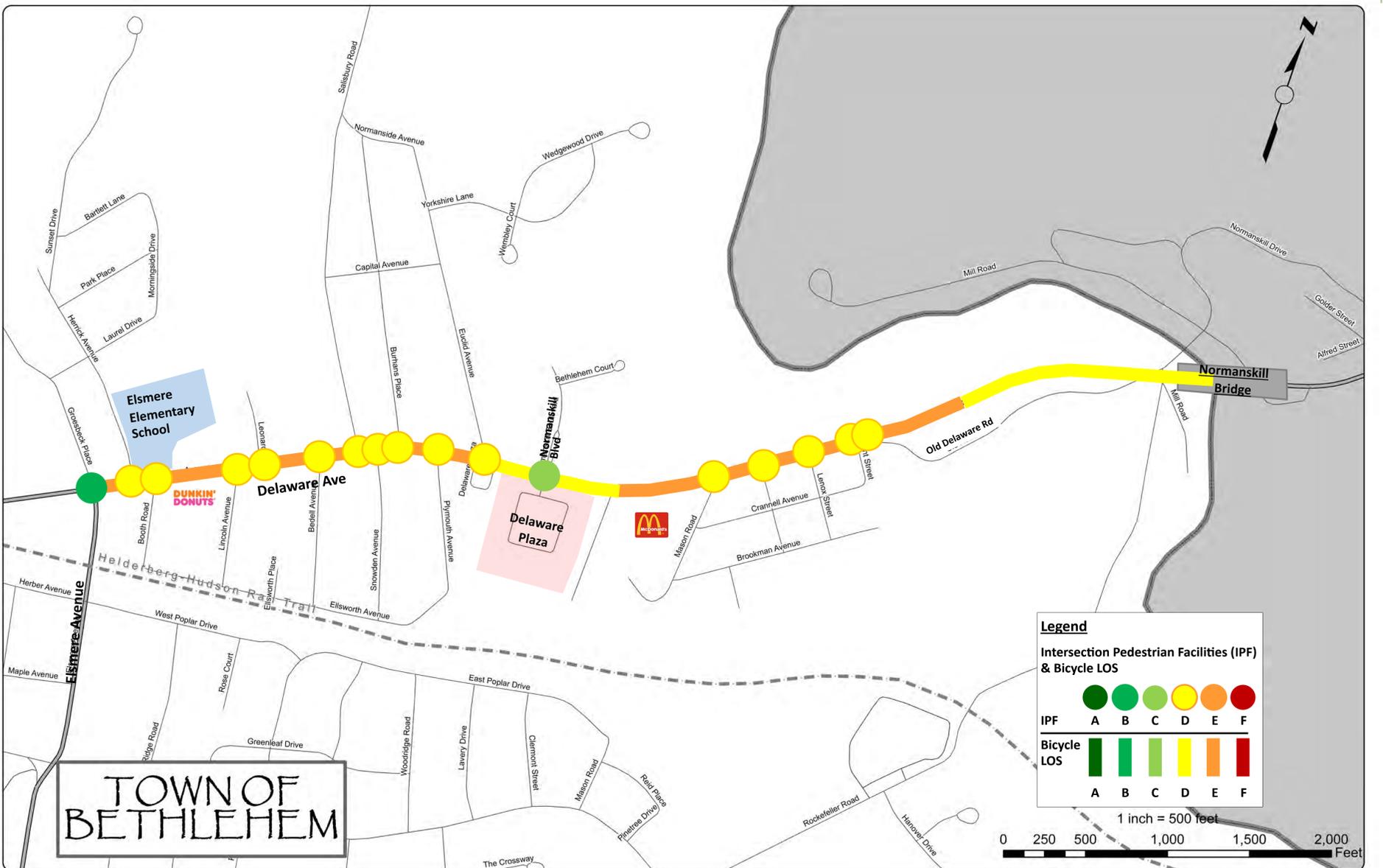
Existing Conditions : Bus Stops & Existing Sidewalk Facility



• 7 Bus Stops in each direction

• 2 Intersections with Crosswalks

Existing Conditions : Intersection Pedestrian Facilities and Bicycle Level of Service



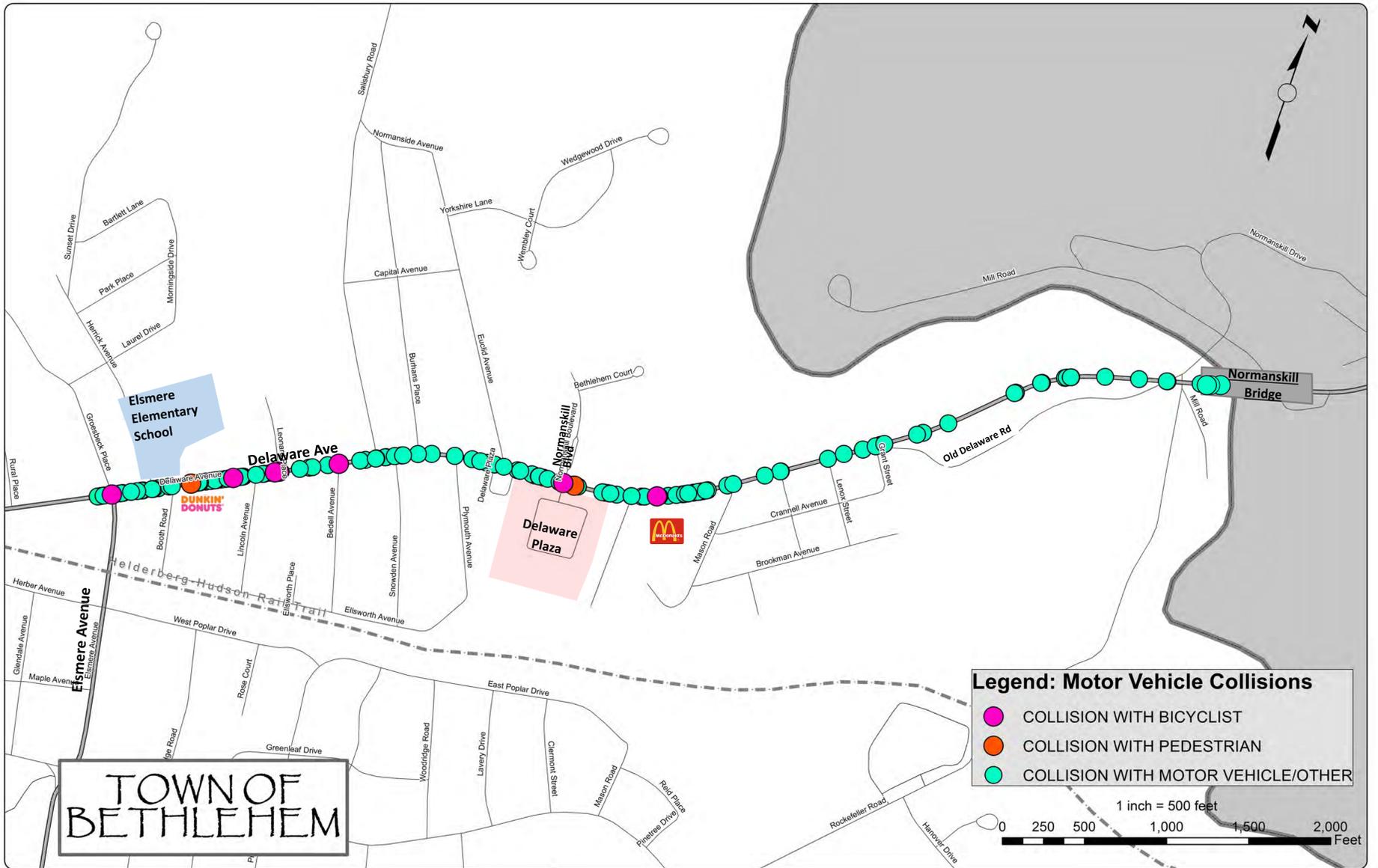
• 2 Signalized Intersections IPF at B or C

• Bicycle LOS for segment between D & E



Delaware Avenue Complete Streets Feasibility Study

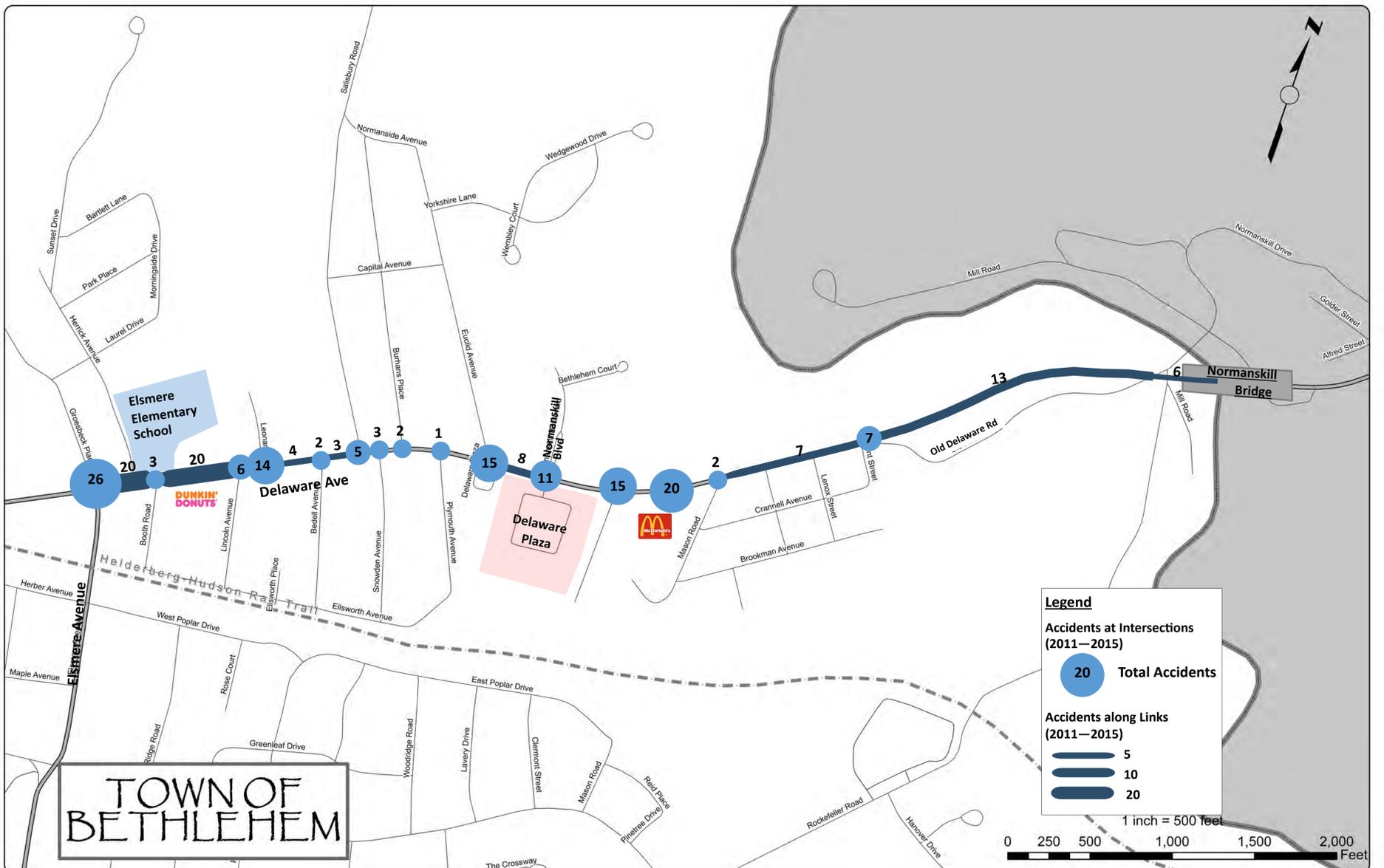
Existing Conditions : Crashes on Delaware Avenue (2011-2015)



• **Crash Type: 204 Vehicle, 2 Pedestrian, 7 Bicycle**

• **37 crashes at two signalized intersections**

Existing Conditions : Crash Proximity Map



• **26 Crashes at Elsmere Ave, 11 at Delaware Plaza**

• **102 Crashes between Elsmere Ave-Delaware Plaza**



Delaware Avenue Complete Streets Feasibility Study

What are the Study GOALS ?

Create a plan for a more **balanced transportation** system along Delaware Avenue to enable **safe and comfortable** ADA* compliant access for users of all ages and abilities, including pedestrians, bicyclists, transit users and motor vehicle drivers, otherwise known as a Complete Street.

Ensure an **effective public involvement** process to engage the community in learning about the benefits and potential tradeoffs of complete streets designs along Delaware Avenue and to seek and obtain public input on conceptual designs that **balance the needs of all roadway users**.

Explore the feasibility a full range of context-sensitive complete streets elements in a manner that **enhances community quality of life, the local economy, and safety** for all users along this multi-modal and increasingly mixed use corridor and its adjacent residential neighborhoods.

Continue to implement the Town's stated goals of fostering a **walkable, bikeable and transit friendly** community serving the needs of all ages and abilities.

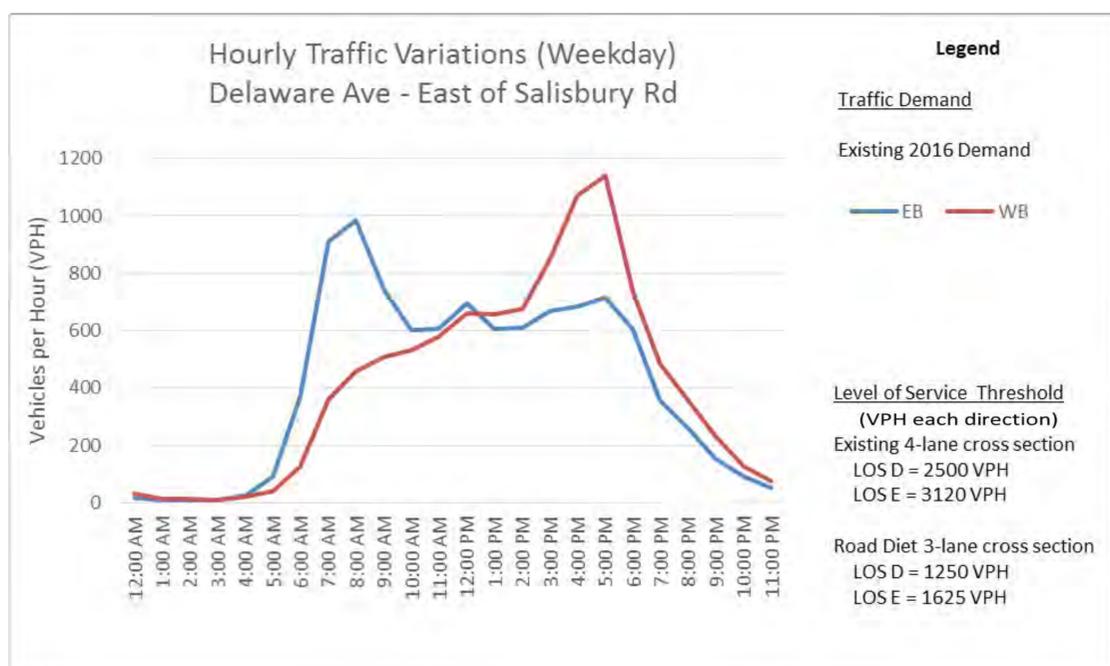
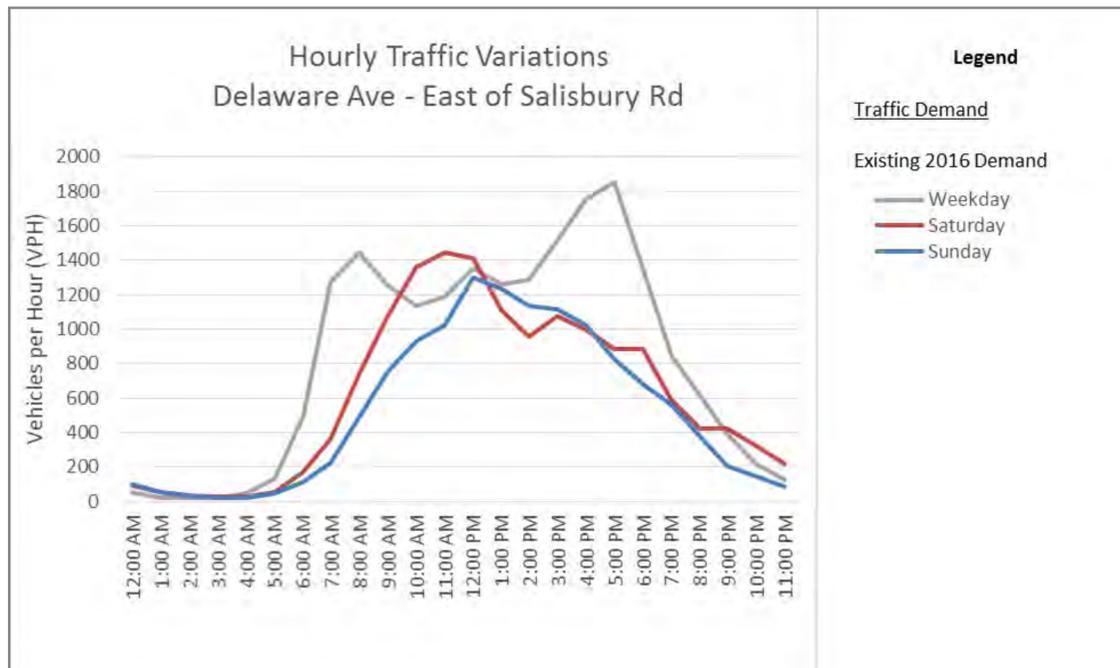
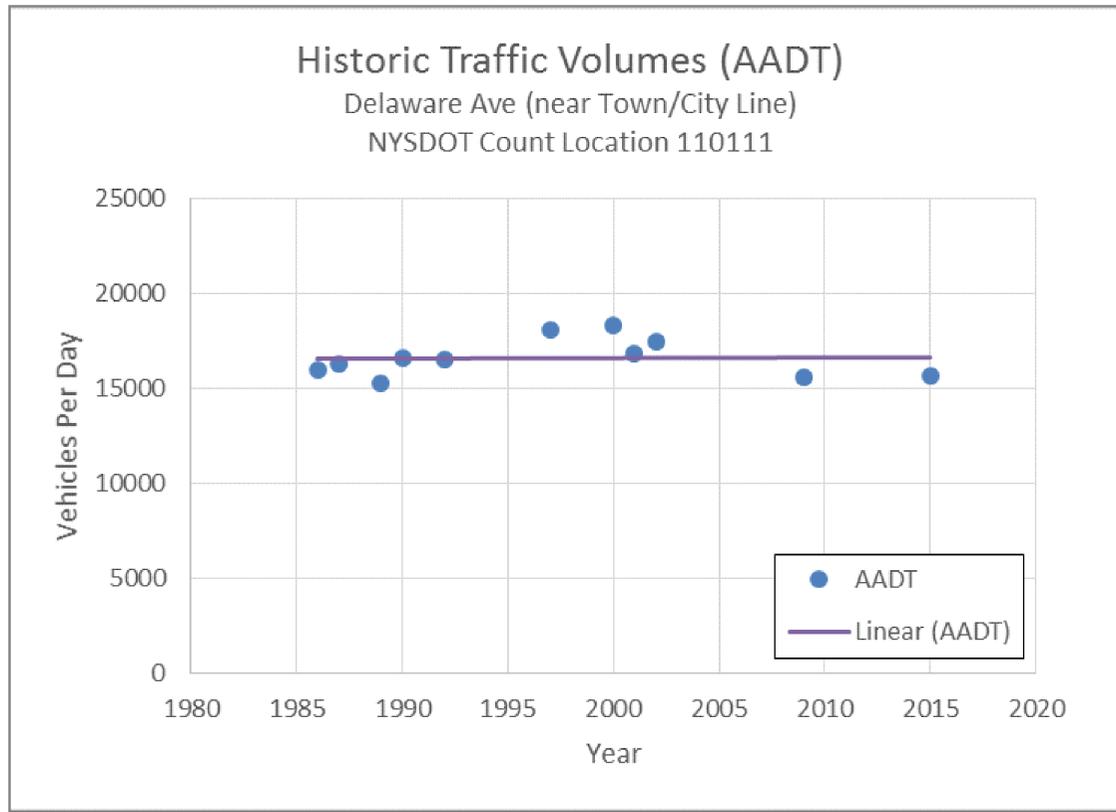
Develop **conceptual future roadway designs** that are acceptable to the town, its residents and businesses and NYSDOT as the road owner.

* ADA - Americans with Disabilities Act



Delaware Avenue Complete Streets Feasibility Study

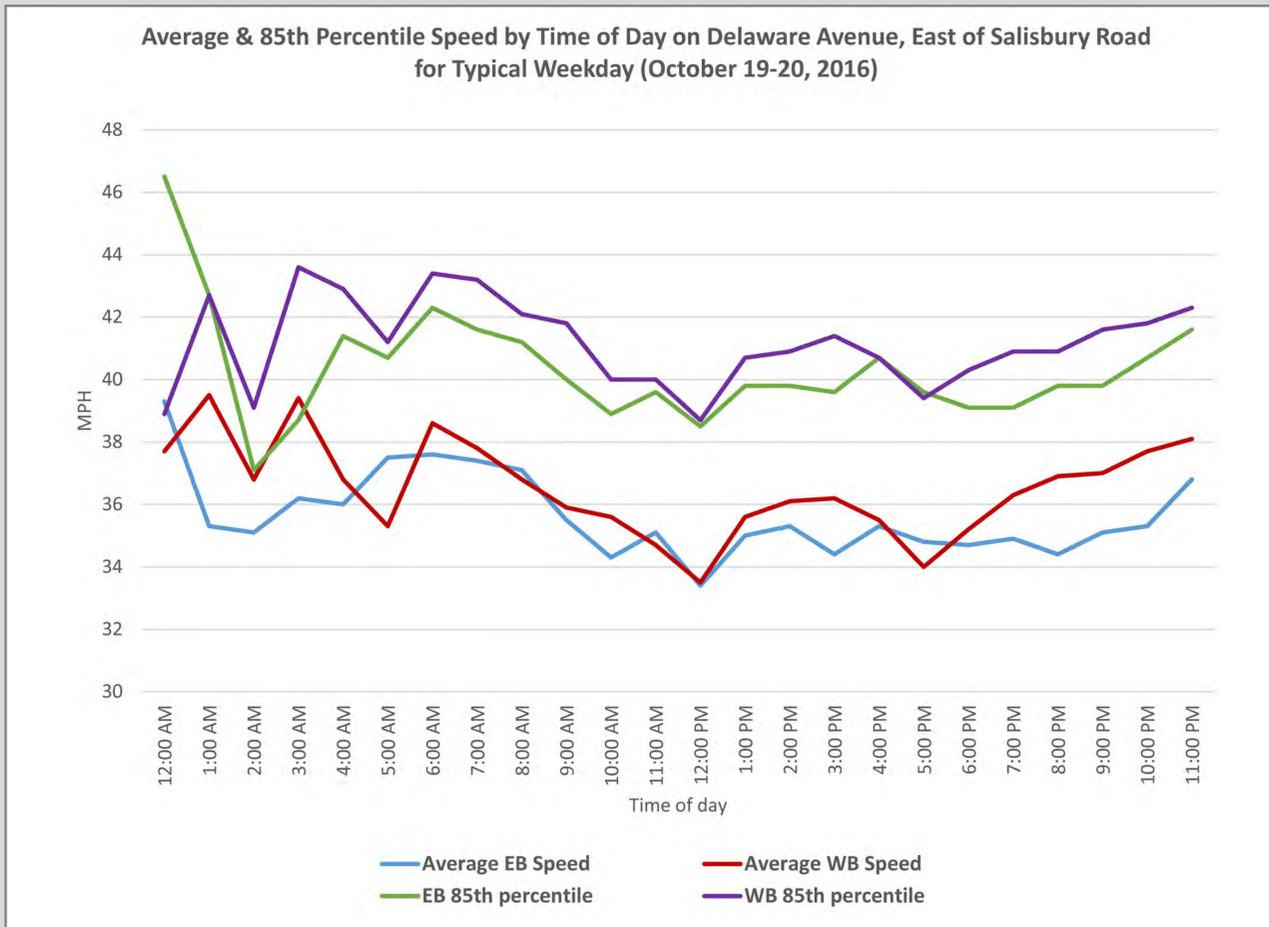
Existing Conditions : Traffic Volume Characteristics





Delaware Avenue Complete Streets Feasibility Study

Existing Conditions : Corridor Speed Characteristics



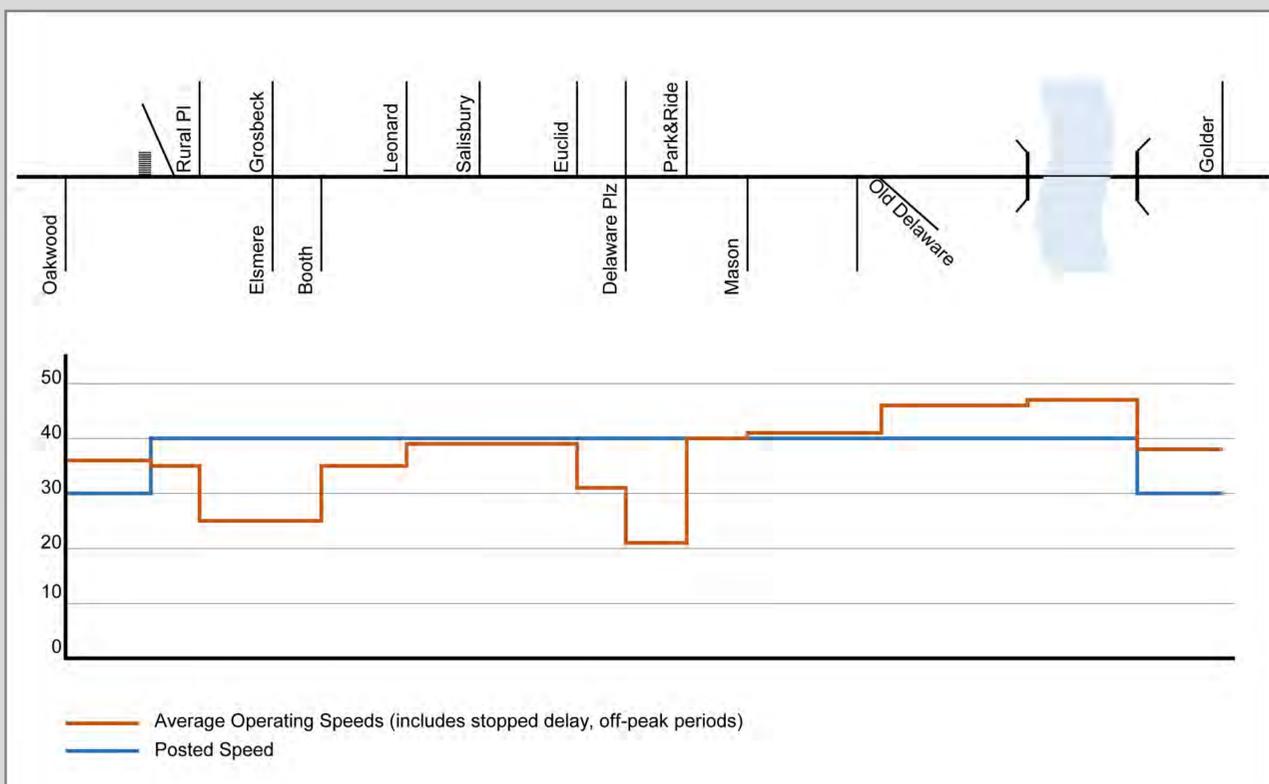
20-25 MPH

Driver's peripheral vision
Stopping distance
Crash risk

40+ MPH

Driver's peripheral vision
Stopping distance
Crash risk

As a driver's speed increases, his peripheral vision narrows severely.²





Delaware Avenue Complete Streets Feasibility Study

What are Complete Streets?



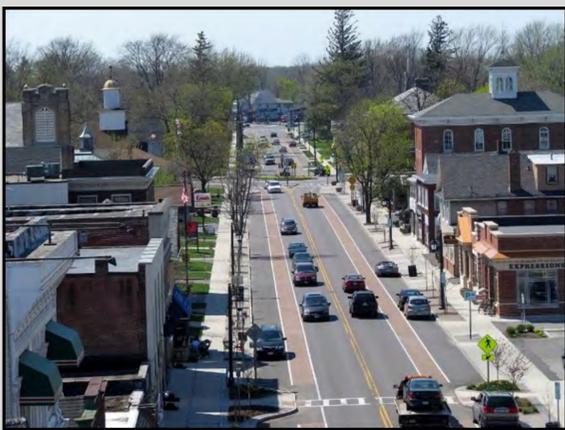
Complete Streets are streets for everyone, no matter who they are or how they travel.



National Complete Streets Coalition



Safe, comfortable and convenient



- Not just bike lanes and sidewalks
- Network based
- Context Sensitive

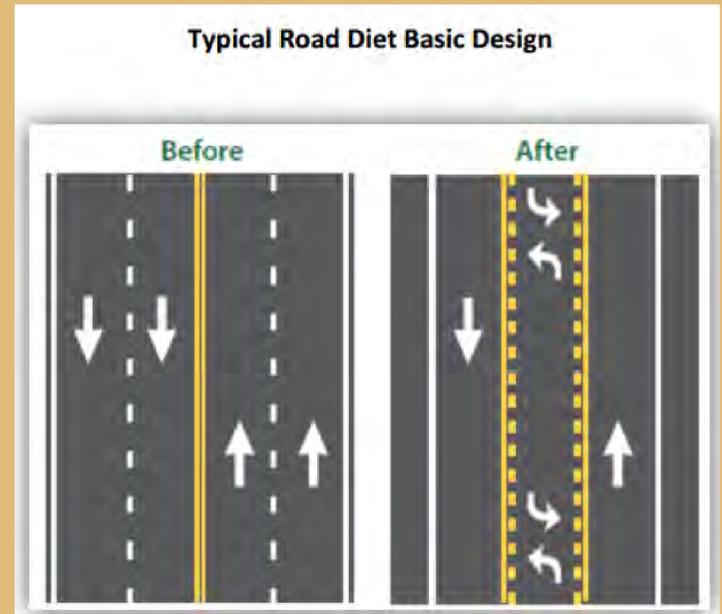




Delaware Avenue Complete Streets Feasibility Study

What are some Specific Complete Streets features considered?

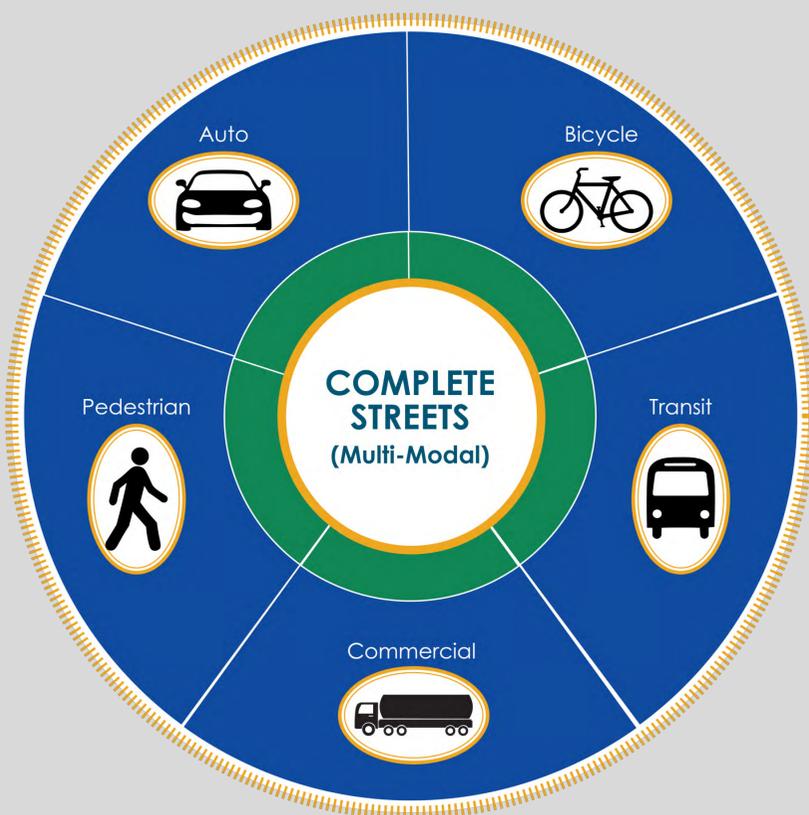
A fundamental goal of this study is to determine if a road diet is feasible on Delaware Avenue from Elsmere Avenue to the Normanskill Bridge. Road diets reduce the number or width of travel lanes on a facility making more room for bicycles, improving buffer space to pedestrians, reducing travel speeds and improving safety.



A Road Diet is generally described as "removing travel lanes from a roadway and utilizing the space for other uses and travel modes."

Why is a Road Diet being considered for Delaware Avenue?

Delaware Avenue is a four-lane undivided roadway (for most of its length within the study area) and experiences higher than state-wide average crash rates. According to FHWA's Road Diet Information Guide "For roads with appropriate traffic volumes, there is strong research support for achieving safety benefits through converting four-lane undivided roads to three-lane cross sections with TWLTLs (two-way center left turn lanes). The FHWA advises that roadways with ADT (average daily traffic) of 20,000 vpd (vehicles per day) or less may be good candidates for a Road Diet and should be evaluated for feasibility.





What are some Specific Complete Streets features considered?

Complete Street roadway design features include sidewalks, lane striping, bicycle lanes, paved shoulders suitable for use by bicyclists, signage, crosswalks, pedestrian control signals, bus pull-outs, curb cuts, raised crosswalks, ramps and traffic calming measures.



Refuge Islands and Medians

A pedestrian refuge island is located in or near a pedestrian crossing to aid and protect pedestrians crossing a roadway. A median refuge can provide a safe location for pedestrians to cross half of the street at a time.

Rectangular Rapid Flashing Beacons (RRFB)

RRFBs are user-activated amber Flashing Beacons that supplement warning signs at unsignalized intersections or midblock crosswalks and have been shown to dramatically increase driver yielding rates to pedestrians.



HAWK Signalized Crosswalks

This pedestrian hybrid beacon is more commonly referred to as a “HAWK” which derives from the phrase “High-Intensity Activated Crosswalk”

Traffic Calming and Gateways

Traffic calming involves physical changes to roadways that reduce speeds, and/or measures that give greater priority to pedestrians, bicyclists, and residents. Measures can include aesthetic treatments: landscaping, benches, light poles, bicycle lane markings, and improved signage and distinctive entrances (gateways) as demarcation for the traffic-calmed area.





Delaware Avenue Complete Streets Feasibility Study

What is Most Important to You ?

Traffic calming

(Speed reduction)

Safety

(Reduced crashes)

More space for bicycles

Ease of auto movements in & out of businesses & side streets

Non-vehicular access

(Trail connections, sidewalk improvements, street crossings)

Traffic operations for cars

(Maintaining travel times)

Improved Transit

Gateway Improvements

Corridor Beautification

(Street trees, landscaping, streetscaping)

Enhanced Livability

(Quality, location, and transportation services available)

Appendix C

Identified Issues and Ideas

Table 1a

Identified Transportation Issues & Ideas

from 2/16/17 Public Meeting

(Listed by Break-out Group)

Group / #											A-Break-out #1	
	General	Location Specific	Business and Side St Access	Traffic	Bicycle / Pedestrian / Transit	Geometry / Condition	Road diet / yes no	Beautification / Streetscape/Place	Safety & Speeds	Trails		B-Break-out #2
												C-Break-out #3
												D-Break-out #4
ID#	Description											
A1		X									X	Continue or repair yellow brick road over bridge and other side to connect parks on both sides of bridge
A2					X	X						Widen the road to add bike lane. Improve sidewalks.
A3	X											Too Much Retail on Delaware Ave.
A4					X						X	Working Bicycle commuters need accomodations especially at night
A5					X	X					X	Widen bike lanes. Maybe protect the lanes to keep bikes off sidewalks
A6		X	X	X							X	Concern that lane reductions on Delaware will cause increase in traffic along Plymouth Ave as drivers attempt to take short cut to Elsmere. Concerned about increased traffic on Plymouth if access to Rail Trail more formalized.
A7		X			X						X	Bikes/Peds at night their safety a concern. From Bridge, Delaware plaza to Elsmere. Lack of Lights
A8					X						X	Bus stop lighting needed
A9					X						X	Speeding during off-peak hours and bike/peds out at night. Safety concern
A10	X											Design guidelines. Keep the character. Small town keep it alive.
A11					X	X						Road Diet! Two lanes, turning lane, and bike lanes
A12					X					X	X	Access across Delaware Ave to Rail Trail from north side of Delaware Ave. Difficult, car speeds
A13		X	X				X					The Ellsworth Ave area is my haven from the commercialism on Delaware. It is narrow and we like the privacy. Leave it as is. We already have too much retail look
A14		X			X							Need Crosswalk. (Leonard PL.)
A15		X	X								X	Lincoln, Leonard PL. Making Left tuns, Dentist office shrubbery
A16	X	X										Build Apartments. (Between Lincoln Ave and Bedell Ave)
A17	X	X										Do not build proposed apartments here. (Between Lincoln Ave and Bedell Ave)
A18		X	X		X						X	Dunkin Donuts drive-thru project, bus stop, and 4 lanes on Delaware make it very difficult and dangerous to make a left hand turn off Lincoln Ave
A19	X	X	X									Dunkin Donuts Drive-thru onto Lincoln Ave
A20					X	X	X			X		A Road Diet seems like it would reduce accidents and slow traffic. It seems it would also improve pedestrian traffic. Add a bike lane.
A21		X			X					X		Groesbeck and Elsmere. The pedestrian crossing light often takes an excessive amount of time to allow people to cross within the crosswalk light.
A22		X			X					X	X	Rail Trail parking issue. Cars Parking on Ellsworth Ave. Its dangerous for pedestrians and cyclists.
A23		X	X								X	There is a huge parking lot by the Booth Rd access as it is now. Arrange use with existing medical building . It is totally empty on the weekends.
A24		X	X								X	Booth Rd. Formalize parking lot use for Rail Trail/ medical office building.
A25		X			X						X	Elsmere Ave safety concerns. Road pedestrian crossings especially school children.
A26		X			X						X	There needs to be a red light camera at the corner of Groesbeck and Elsmere. People often run the red lights, turn right on red and are not aware of pedestrians.
A27					X	X						Dedicated bicycle lane and change bus stops.
A28				X	X							At traffic signals, turn lanes with arrows are helpful to seniors.
A29											X	Likes the idea of lowering speed limit. Will help businesses.
A30		X			X						X	Pedestrian Safety issues. (Kenwood Ave and Elsmere Ave.
A31					X							Pedestrian Facilities need improvement
A32		X			X						X	Pedestrian Safety issues. (Kenwood Ave and Elsmere Ave)
A33		X									X	Safety Issues. (Poplar Ave and Elsmere Ave)

Table 1a

Identified Transportation Issues & Ideas

from 2/16/17 Public Meeting

(Listed by Break-out Group)

Group / #											A-Break-out #1	B-Break-out #2	C-Break-out #3	D-Break-out #4	
	General	Location Specific	Business and Side St Access	Traffic	Bicycle / Pedestrian / Transit	Geometry / Condition	Road diet / yes no	Beautification / Streetscape/Place	Safety & Speeds	Trails					
ID#	Description														
B1		X			X				X						Need for safe cycling access to alley. (Mill Rd)
B2									X						More Street lighting
B3					X	X			X						Needs bus pull offs/ bus bays. Bike conflict concern
B4		X							X	X					Hard to turn left to trail head parking (near Mill Rd)
B5						X	X								Make it 2 lanes in each direction with turning lane
B6						X			X						Move EB Merge up the hill
B7						X			X						Commuters high speed merge concern
B8						X									Need better bus stations
B9						X			X						Need more space/shoulder between pedestrians and cars
B10						X			X						Need safe places to cross the street
B11									X						Park near landslide
B12						X			X						Place a clear pedestrian crossing so people aren't crossing to access bus stop by waiting in the roadway
B13															Internal signing and circulation needed (bowling alley area)
B14		X							X						Left turns are a concern in front of CDTA parking lot and Mercato's restaurant
B15		X				X									Clean up some driveways. Eliminate/combine/one-way?
B16		X				X									Pedestrian Bridge (at Delaware Plaza)
B17		X				X									Move Delaware CDTA stops to inside the plaza parking lot
B18									X						Trees would be great along the whole corridor. I live in "old" Delmar because of the old tree lined streets
B19			X						X						Encourage Businesses to create access points to the trail from their "backyards"
B20		X	X	X					X						Need traffic light near Euclid or Burhans so cars can turn left onto Delaware Ave and pedestrians can cross
B21						X			X						Crosswalks with lights and fewer bus stops
B22		X							X						Lower Speed limit on Delaware Ave and enforce Snowden Ave
B23		X				X			X						Too hard to cross Delaware at Salisbury to get #18 bus into city
B24		X	X												Need Stoplight (Delaware Ave and Salisbury)
B25		X	X			X									It will be impossible to turn left out of Salisbury
B26		X				X			X						Sidewalk needed down Salisbury Rd
B27						X	X		X						Make it 2 lanes with a turn lane in the middle. Wider shoulder for bikers and pedestrian safety. More places to cross the street
B28						X			X						Sidewalk too close to high speed traffic
B29							X								Pavement Conditions. Potholes ETC...
B30							X								Road Diet! Lower speed limit
B31							X								Road Diet "good idea"
B32	X	X	X												Concern moving cars into a neighborhood. Ellsworth has always been a pedestrian friendly street. Long before the bike path came. Also Town does not own property residents do.
B33		X				X			X						Restore Elsmere Ave stairs for trail access
B34		X							X						Lincoln Ave access to Rail Trail?
B35		X				X			X						Make room for on-street parking for access to path along Ellsworth
B36	X	X													Do not build proposed apartments here. (Between Lincoln Ave and Bedell Ave)
B37	X	X													Please no apartments here
B38	X	X													I agree! Me too! :(
B39	X	X													This will hurt us and our property value! :(
B40		X							X						Rail Trail access formalize entrance. (From Poplar to rear of plaza)
B41		X				X			X						Need a light at Salisbury and crosswalk
B42		X							X						Crash Area (between Mason Rd and Normanskill Blvd)

Table 1a

Identified Transportation Issues & Ideas

from 2/16/17 Public Meeting

(Listed by Break-out Group)

Group / #											A-Break-out #1	B-Break-out #2	C-Break-out #3	D-Break-out #4	
	General	Location Specific	Business and Side St Access	Traffic	Bicycle / Pedestrian / Transit	Geometry / Condition	Road diet / yes no	Beautification / Streetscape/Place	Safety & Speeds	Trails					
ID#	Description														
C1		X				X				X					Make the merge sooner. Too many people speed up to pass at the current merge
C2	X		X				X	X							Snow piles off of Delaware ave. More trees. Road diet. One more light in middle
C3				X											Need bike lane
C4	X														Need to study land use too
C5				X											Need crosswalks
C6		X			X							X			Westbound from bridge where 4 lanes begin, extremely hazardous for bikes. Less than 1 foot of shoulder. Bike lanes would make a huge improvement and attract new riders
C7	X			X											Plowing and bus stops. Improve
C8		X		X								X			This is a terrible bus stop. Hard to cross. (near Grant St)
C9									X	X					Street trees to calm Traffic
C10		X			X							X			Dangerous to cross Delaware for the Grant bus stop due to visibility, traffic (speed), and lack of place to stand at bus stop. Bus stop is important here because it serves 2 neighborhoods, both behind Tastee Freez and down the hill.
C11		X		X									X		Trail to Delaware Ave. Bike lane near plaza area.
C12	X														Snow and ice removal timelier, integrated, coordinated all along road
C13		X		X	X										Proposed roundabout (and far side bus stops at plaza and Normanskill Blvd)
C14	X														Too many noisy, loud vehicles. Get police to cite offenders
C15		X	X	X									X		Connect Rail Trail to Hannaford back parking area
C16	X	X		X									X		At Delaware: 1) Signs pointing to Rail Trail. 2) Paved bike path access points Plymouth and Ellsworth
C17		X	X												Need Stoplight at Salisbury
C18	X	X	X												Stoplight somewhere between Delaware plaza and Elsmere
C19		X		X									X		Entrance to Rail Trail (Ellsworth Ave)
C20	X	X													Build Apartments. (Between Lincoln Ave and Bedell Ave)
C21	X	X													Do not build proposed apartments here. (Between Lincoln Ave and Bedell Ave)
C22		X										X			Look at accident data since turning lane was created at Delaware, Elsmere, and Groesbeck
C23	X			X								X			Driveways and sidewalks aren't properly marked. Its tough to walk on sidewalks because people are pulling out of driveways
C24												X			Speed limit lowered
C25	X							X							Maybe trees and bushes along sidewalks and curb cuts
C26				X								X			Crosswalks with lights an fewer bus stops
C27				X		X	X								Safe sidewalks with tree lawns for all the children walking to/from school
C28		X	X	X								X			Issue from plaza to Elsmere, Elsmere to Plaza. Need turn lane like Euclid
C29			X			X									No Road Diet. Negative impact on Businesses
C30					X	X									Make a turning lane throughout from Elsmere to Plaza
C31			X											X	Use backyards of businesses to access rail trail and provide a place for rail users
C32														X	Bike Shop large riders on Sunday weekends
C33		X		X											Bike access (on Delaware from Booth to Elsmere)
C34														X	Replace stairs at the access
C35				X								X			Driveway/sidewalks not well marked (Beverage ctr area)
C36		X		X								X			Access Management (Dunkin Donuts Area)
C37		X		X											All paved need seperation wide open (Hardware Store / My Place Area)
C38		X		X								X			Crossing from Park and ride to bus stop is difficult
C39		X		X										X	Convert to pedestrian bridge (over Normanskill)

Table 1a

Identified Transportation Issues & Ideas

from 2/16/17 Public Meeting

(Listed by Break-out Group)

Group / #											A-Break-out #1	B-Break-out #2	C-Break-out #3	D-Break-out #4
	General	Location Specific	Business and Side St Access	Traffic	Bicycle / Pedestrian / Transit	Geometry / Condition	Road diet / yes no	Beautification / Streetscape/Place	Safety & Speeds	Trails				
ID#	Description													
D1		X			X							X		Keep old bridge open for pedestrians unlike Rockefeller which was a bridge. Poor Choice
D2		X				X					X			Turning lane into Novus. Multiple Accidents here
D3		X										X		Provide access to the nature preserve east
D4	X	X												Replace Bridge (Rockefeller Rd)
D5					X									Bike lane along one or both sides of Delaware Ave
D6	X													Green infrastructure along corridor
D7	X													Taste freeze/ Laundromat access improvement (Grant St)
D8		X			X									Bus stop lane (Near Speedway)
D9		X			X									Bus stop lane (Normanskill Blvd)
D10		X			X									Bus stop lane (Plaza)
D11	X	X												Electric car charging station (plaza)
D12		X			X							X		Access to Nature preserve West (Normanskill Blvd)
D13	X		X											Traffic counts: which side has the most vehicular traffic
D14		X			X									Pedestrian cross with pedestrian light only for access from neighborhood to trail (Burhans Pl and Delaware Ave)
D15		X	X	X										Left turn access is very difficult (Delaware Ave near Snowden ave)
D16		X			X							X		Access between rail trail and shopping plaza
D17				X	X							X		Concerns on people driving into neighborhoods to park. Already plenty of access
D18	X											X		Trail Parking?
D19		X	X	X								X		Connect to Trail (Rear of plaza)
D20		X	X									X		Get city of Albany on board & get access or ownership to surplus city land (rear of plaza)
D21		X			X							X		Trail entrance (Ellsworth)
D22		X	X											Traffic calming (reduce) cut through traffic (Ellsworth Ave)
D23	X							X						Consolidate telecommunications and electric utilities on one set of poles on one side
D24	X	X												Build Apartments. (Between Lincoln Ave and Bedell Ave)
D25	X	X												Do not build proposed apartments here. (Between Lincoln Ave and Bedell Ave)
D26					X	X	X							Turn Delaware Ave into 2 lanes, EB/WB, 1 lane for turning throughout and 1 lane space for traffic island?/ bike lane (dedicated. Said this 4 times over the years. already!
D27					X	X		X	X					Center turn lane needed, additional pedestrian crossing. Trees! And bike lane too
D28		X	X									X		Earlier awareness provided that left hand lane only coming up (intersection of Delaware and Booth)
D29		X										X		Weekend parking for rail trail (medical office building at Elsmere and Delaware)
D30		X										X		Halt illegal cut thru of medical lot. Illegal unsafe driving through Ellsworth
D31		X			X									Rotary? (Elsmere and Delaware)
D32					X							X		School crossing. Should have speed reduction
D33		X			X							X		Repair the stairs at Elsmere and the Rail trail for additional access to the trail
D34		X			X							X		Reduce speed on Elsmere Ave from Bender Ln to Delaware Ave due to : 1) Middle school and Elsmere school crossing 2) dangerous intersections 3) Elsmere fire department
D35					X							X		School crossing. Should have speed reduction
D36		X			X							X		Lengthen merge/ provide left turn pocket
D37		X	X									X		Access Management (W of Novus on S side)
D38		X										X		Sight Distance issue looking right (Old Delaware Ave)
D39		X			X							X		Trail access/Trail connector (Landslide Area)
D40		X			X							X		Trail Access (Rockefeller bridge)
D41														Access/Driveway improvements (Old Delaware Ave)
D42							X							I love 3 lanes
D43		X										X		Trail Access (Mason Rd)

Table 2a

Identified Transportation Issues & Ideas from 2/16/17 Public Meeting (Listed by Category - General)

Group / #									A-Break-out #1	B-Break-out #2	C-Break-out #3	D-Break-out #4	
	General	Location Specific	Business and Side St Access	Traffic	Bicycle / Pedestrian / Transit	Geometry / Condition	Road diet / yes no	Beautification / Streetscape/Place	Safety & Speeds	Trails			
ID#	Description												
A3	X												Too Much Retail on Delaware Ave.
A10	X												Design guidelines. Keep the character. Small town keep it alive.
A16	X	X											Build Apartments. (Between Lincoln Ave and Bedell Ave)
A17	X	X											Do not build proposed apartments here. (Between Lincoln Ave and Bedell Ave)
A19	X	X	X										Dunkin Donuts Drive-thru onto Lincoln Ave
B15	X					X							Clean up some driveways. Eliminate/combine/one-way?
B32	X	X	X										Concern moving cars into a neighborhood. Ellsworth has always been a pedestrian friendly street. Long before the bike path came. Also Town does not own property residents do.
B36	X	X											Do not build proposed apartments here. (Between Lincoln Ave and Bedell Ave)
B37	X	X											Please no apartments here
B38	X	X											I agree! Me too! :(
B39	X	X											This will hurt us and our property value! :(
C2	X		X			X	X						Snow piles off of Delaware ave. More trees. Road diet. One more light in middle
C4	X												Need to study land use too
C7	X			X									Plowing and bus stops. Improve
C12	X												Snow and ice removal timelier, integrated, coordinated all along road
C14	X												Too many noisy, loud vehicles. Get police to cite offenders
C16	X	X		X					X				At Delaware: 1) Signs pointing to Rail Trail. 2) Paved bike path access points Plymouth and Ellsworth
C18	X	X	X										Stoplight somewhere between Delaware plaza and Elsmere
C20	X	X											Build Apartments. (Between Lincoln Ave and Bedell Ave)
C21	X	X											Do not build proposed apartments here. (Between Lincoln Ave and Bedell Ave)
C23	X			X					X				Driveways and sidewalks aren't properly marked. Its tough to walk on sidewalks because people are pulling out of driveways
C25	X						X						Maybe trees and bushes along sidewalks and curb cuts
D4	X	X											Replace Bridge (Rockefeller Rd)
D6	X												Green infrastructure along cooridor
D7	X												Tastee freeze/ Laundromat access improvement (Grant St)
D11	X	X											Electric car charging station (plaza)
D13	X		X										Traffic counts: which side has the most vehicular traffic
D18	X											X	Trail Parking?
D23	X						X						Consolidate telecommunications and electric utilities on one set of poles on one side
D24	X	X											Build Apartments. (Between Lincoln Ave and Bedell Ave)
D25	X	X											Do not build proposed apartments here. (Between Lincoln Ave and Bedell Ave)

Table 2b

Identified Transportation Issues & Ideas from 2/16/17 Public Meeting (Listed by Category - Location Specific)

Group / #	General	Location Specific	Business and Side St Access	Traffic	Bicycle / Pedestrian / Transit	Geometry / Condition	Road diet / yes no	Beautification / Streetscape/Place	Safety & Speeds	Trails	A-Break-out #1 B-Break-out #2 C-Break-out #3 D-Break-out #4
A16	X	X									Build Apartments. (Between Lincoln Ave and Bedell Ave)
A17	X	X									Do not build proposed apartments here. (Between Lincoln Ave and Bedell Ave)
A19	X	X	X								Dunkin Donuts Drive-thru onto Lincoln Ave
B32	X	X		X							Concern moving cars into a neighborhood. Ellsworth has always been a pedestrian friendly street. Long before the bike path came. Also Town does not own property residents do.
B36	X	X									Do not build proposed apartments here. (Between Lincoln Ave and Bedell Ave)
B37	X	X									Please no apartments here
B38	X	X									I agree! Me too! :(
B39	X	X									This will hurt us and our property value! :(
C16	X	X			X					X	At Delaware: 1) Signs pointing to Rail Trail. 2) Paved bike path access points Plymouth and Ellsworth
C18	X	X	X								Stoplight somewhere between Delaware plaza and Elsmere
C20	X	X									Build Apartments. (Between Lincoln Ave and Bedell Ave)
C21	X	X									Do not build proposed apartments here. (Between Lincoln Ave and Bedell Ave)
D4	X	X									Replace Bridge (Rockefeller Rd)
D11	X	X									Electric car charging station (plaza)
D24	X	X									Build Apartments. (Between Lincoln Ave and Bedell Ave)
D25	X	X									Do not build proposed apartments here. (Between Lincoln Ave and Bedell Ave)
A1		X								X	Continue or repair yellow brick road over bridge and other side to connect parks on both sides of bridge
A6		X	X	X						X	Concern that lane reductions on Delaware will cause increase in traffic along Plymouth Ave as drivers attempt to take short cut to Elsmere. Concerned about increased traffic on Plymouth if access to Rail Trail more formalized.
A7		X		X						X	Bikes/Peds at night their safety a concern. From Bridge, Delaware plaza to Elsmere. Lack of Lights
A13		X	X			X					The Ellsworth Ave area is my haven from the commercialism on Delaware. It is narrow and we like the privacy. Leave it as is. We already have too much retail look
A14		X		X							Need Crosswalk. (Leonard PL.)
A15		X	X							X	Lincoln, Leonard PL. Making Left turns, Dentist office shrubbery
A18		X	X	X						X	Dunkin Donuts drive-thru project, bus stop, and 4 lanes on Delaware make it very difficult and dangerous to make a left hand turn off Lincoln Ave
A21		X		X						X	Groesbeck and Elsmere. The pedestrian crossing light often takes an excessive amount of time to allow people to cross within the crosswalk light.
A22		X		X						X X	Rail Trail parking issue. Cars Parking on Ellsworth Ave. Its dangerous for pedestrians and cyclists.
A23		X	X							X	There is a huge parking lot by the Booth Rd access as it is now. Arrange use with existing medical building . It is totally empty on the weekends.
A24		X	X							X	Booth Rd. Formalize parking lot use for Rail Trail/ medical office building.
A25		X		X						X	Elsmere Ave safety concerns. Road pedestrian crossings especially school children.
A26		X		X						X	There needs to be a red light camera at the corner of Groesbeck and Elsmere. People often run the red lights, turn right on red and are not aware of pedestrians.
A30		X		X						X	Pedestrian Safety issues. (Kenwood Ave and Elsmere Ave).
A32		X		X						X	Pedestrian Safety issues. (Kenwood Ave and Elsmere Ave)
A33		X								X	Safety Issues. (Poplar Ave and Elsmere Ave)
B1		X		X						X	Need for safe cycling access to alley. (Mill Rd)
B4		X								X X	Hard to turn left to trail head parking (near Mill Rd)

Table 2b

Identified Transportation Issues & Ideas from 2/16/17 Public Meeting (Listed by Category - Location Specific)

Group / #											A-Break-out #1 B-Break-out #2 C-Break-out #3 D-Break-out #4
	General	Location Specific	Business and Side St Access	Traffic	Bicycle / Pedestrian / Transit	Geometry / Condition	Road diet / yes no	Beautification / Streetscape/Place	Safety & Speeds	Trails	
ID#	Description										
B14	X								X		Left turns are a concern in front of CDTA parking lot and Mercato's restaurant
B16	X			X							Pedestrian Bridge (at Delaware Plaza)
B17	X			X							Move Delaware CDTA stops to inside the plaza parking lot
B20	X		X	X					X		Need traffic light near Euclid or Burhans so cars can turn left onto Delaware Ave and pedestrians can cross
B22	X								X		Lower Speed limit on Delaware Ave and enforce Snowden Ave
B23	X			X					X		Too hard to cross Delaware at Salisbury to get #18 bus into city
B24	X	X									Need Stoplight (Delaware Ave and Salisbury)
B25	X	X				X					It will be impossible to turn left out of Salisbury
B26	X		X						X		Sidewalk needed down Salisbury Rd
B33	X			X					X		Restore Elsmere Ave stairs for trail access
B34	X								X		Lincoln Ave access to Rail Trail?
B35	X			X					X		Make room for on-street parking for access to path along Ellsworth
B40	X								X		Rail Trail access formalize entrance. (From Poplar to rear of plaza)
B41	X			X					X		Need a light at Salisbury and crosswalk
B42	X								X		Crash Area (between Mason Rd and Normanskill Blvd)
C1	X				X				X		Make the merge sooner. Too many people speed up to pass at the current merge
C6	X			X					X		Westbound from bridge where 4 lanes begin, extremely hazardous for bikes. Less than 1 foot of shoulder. Bike lanes would make a huge improvement and attract new riders
C8	X			X					X		This is a terrible bus stop. Hard to cross. (near Grant St)
C10	X			X					X		Dangerous to cross Delaware for the Grant bus stop due to visibility, traffic (speed), and lack of place to stand at bus stop. Bus stop is important here because it serves 2 neighborhoods, both behind Taste Freez and down the hill.
C11	X			X					X		Trail to Delaware Ave. Bike lane near plaza area.
C13	X			X	X						Proposed roundabout (and far side bus stops at plaza and Normanskill Blvd)
C15	X	X		X					X		Connect Rail Trail to Hannaford back parking area
C17	X	X									Need Stoplight at Salisbury
C19	X			X					X		Entrance to Rail Trail (Ellsworth Ave)
C22	X								X		Look at accident data since turning lane was created at Delaware, Elsmere, and Groesbeck
C28	X	X		X					X		Issue from plaza to Elsmere, Elsmere to Plaza. Need turn lane like Euclid
C33	X			X							Bike access (on Delaware from Booth to Elsmere)
C36	X			X					X		Access Management (Dunkin Donuts Area)
C37	X			X							All paved need separation wide open (Hardware Store / My Place Area)
C38	X			X					X		Crossing from Park and ride to bus stop is difficult
C39	X			X					X		Convert to pedestrian bridge (over Normanskill)
D1	X			X					X		Keep old bridge open for pedestrians unlike Rockefeller which was a bridge. Poor Choice
D2	X				X				X		Turning lane into Nouns. Multiple Accidents here
D3	X								X		Provide access to the nature preserve east
D8	X			X							Bus stop lane (Near Speedway)
D9	X			X							Bus stop lane (Normanskill Blvd)
D10	X			X							Bus stop lane (Plaza)
D12	X			X					X		Access to Nature preserve West (Normanskill Blvd)
D14	X			X							Pedestrian cross with pedestrian light only for access from neighborhood to trail (Burhans Pl and Delaware Ave)
D15	X	X	X								Left turn access is very difficult (Delaware Ave near Snowden ave)
D16	X			X					X		Access between rail trail and shopping plaza
D19	X	X		X					X		Connect to Trail (Rear of plaza)

Table 2b

Identified Transportation Issues & Ideas from 2/16/17 Public Meeting (Listed by Category - Location Specific)

Group / #											A-Break-out #1	B-Break-out #2	C-Break-out #3	D-Break-out #4	
	General	Location Specific	Business and Side St Access	Traffic	Bicycle / Pedestrian / Transit	Geometry / Condition	Road diet / yes no	Beautification / Streetscape/Place	Safety & Speeds	Trails					
ID#	Description														
D20		X	X									X			Get city of Albany on board & get access or ownership to surplus city land (rear of plaza)
D21		X			X								X		Trail entrance (Ellsworth)
D22		X	X												Traffic calming (reduce) cut through traffic (Ellsworth Ave)
D28		X	X									X			Earlier awareness provided that left hand lane only coming up (intersection of Delaware and Booth)
D29		X											X		Weekend parking for rail trail (medical office building at Elsmere and Delaware)
D30		X										X			Halt illegal cut thru of medical lot. Illegal unsafe driving through Ellsworth
D31		X			X										Rotary? (Elsmere and Delaware)
D33		X			X								X		Repair the stairs at Elsmere and the Rail trail for additional access to the trail
D34		X			X							X			Reduce speed on Elsmere Ave from Bender Ln to Delaware Ave due to : 1) Middle school and Elsmere school crossing 2) dangerous intersections 3) Elsmere fire department
D36		X			X							X			Lengthen merge/ provide left turn pocket
D37		X	X									X			Access Management (W of Novus on S side)
D38		X										X			Sight Distance issue looking right (Old Delaware Ave)
D39		X		X									X		Trail access/Trail connector (Landslide Area)
D40		X		X									X		Trail Access (Rockefeller bridge)
D43		X											X		Trail Access (Mason Rd)

Table 2c

Identified Transportation Issues & Ideas from 2/16/17 Public Meeting (Listed by Category - Business and Side Street Access)

Group / #	General	Location Specific	Business and Side St Access	Traffic	Bicycle / Pedestrian / Transit	Geometry / Condition	Road diet / yes no	Beautification / Streetscape/Place	Safety & Speeds	Trails	
ID#	Description										
A19	X	X	X								A-Break-out #1 Dunkin Donuts Drive-thru onto Lincoln Ave
A6		X	X	X						X	Concern that lane reductions on Delaware will cause increase in traffic along Plymouth Ave as drivers attempt to take short cut to Elsmere. Concerned about increased traffic on Plymouth if access to Rail Trail more formalized.
A13		X	X				X				The Ellsworth Ave area is my haven from the commercialism on Delaware. It is narrow and we like the privacy. Leave it as is. We already have too much retail look
A15	X	X							X		Lincoln, Leonard PL. Making Left tuns, Dentist office shrubbery
A18	X	X		X					X		Dunkin Donuts drive-thru project, bus stop, and 4 lanes on Delaware make it very difficult and dangerous to make a left hand turn off Lincoln Ave
A23	X	X								X	There is a huge parking lot by the Booth Rd access as it is now. Arrange use with existing medical building . It is totally empty on the weekends.
A24	X	X								X	Booth Rd. Formalize parking lot use for Rail Trail/ medical office building.
C15	X	X		X						X	Connect Rail Trail to Hannaford back parking area
C17	X	X									Need Stoplight at Salisbury
D15	X	X	X								Left turn access is very difficult (Delaware Ave near Snowden ave)
D19	X	X		X						X	Connect to Trail (Rear of plaza)
D20	X	X								X	Get city of Albany on board & get access or ownership to surplus city land (rear of plaza)
D37	X	X							X		Access Management (W of Novus on S side)
B19		X								X	Encourage Businesses to create access points to the trail from their "backyards"
C29		X				X					No Road Diet. Negative impact on Businesses
C31		X								X	Use backyards of businesses to access rail trail and provide a place for rail users

Table 2d

Identified Transportation Issues & Ideas from 2/16/17 Public Meeting (Listed by Category - Traffic)

Group / #	General	Location Specific	Business and Side St Access	Traffic	Bicycle / Pedestrian / Transit	Geometry / Condition	Road diet / yes no	Beautification / Streetscape/Place	Safety & Speeds	Trails	Description
											A-Break-out #1 B-Break-out #2 C-Break-out #3 D-Break-out #4
A6		X	X	X						X	Concern that lane reductions on Delaware will cause increase in traffic along Plymouth Ave as drivers attempt to take short cut to Elsmere. Concerned about increased traffic on Plymouth if access to Rail Trail more formalized.
D15		X	X	X							Left turn access is very difficult (Delaware Ave near Snowden ave)
B32		X	X	X							Concern moving cars into a neighborhood. Ellsworth has always been a pedestrian friendly street. Long before the bike path came. Also Town does not own property residents do.
C18		X	X	X							Stoplight somewhere between Delaware plaza and Elsmere
B20		X	X	X						X	Need traffic light near Euclid or Burhans so cars can turn left onto Delaware Ave and pedestrians can cross
B24		X	X								Need Stoplight (Delaware Ave and Salisbury)
B25		X	X			X					It will be impossible to turn left out of Salisbury
C28		X	X	X	X				X		Issue from plaza to Elsmere, Elsmere to Plaza. Need turn lane like Euclid
D22		X	X								Traffic calming (reduce) cut through traffic (Ellsworth Ave)
D28		X	X							X	Earlier awareness provided that left hand lane only coming up (intersection of Delaware and Booth)
C2		X		X		X	X				Snow piles off of Delaware ave. More trees. Road diet. One more light in middle
D13		X		X							Traffic counts: which side has the most vehicular traffic
A28				X	X						At traffic signals, turn lanes with arrows are helpful to seniors.
D17				X	X					X	Concerns on people driving into neighborhoods to park. Already plenty of access

Table 2e
Identified Transportation Issues & Ideas
from 2/16/17 Public Meeting
(Listed by Category - Bike / Ped / Transit)

Group / #	General	Location Specific	Business and Side St Access	Traffic	Bicycle / Pedestrian / Transit	Geometry / Condition	Road diet / yes no	Beautification / Streetscape/Place	Safety & Speeds	Trails	A-Break-out #1 B-Break-out #2 C-Break-out #3 D-Break-out #4
A2				X	X						Widen the road to add bike lane. Improve sidewalks.
A4				X					X		Working Bicycle commuters need accommodations especially at night
A5				X	X				X		Widen bike lanes. Maybe protect the lanes to keep bikes off sidewalks
A7	X			X					X		Bikes/Peds at night their safety a concern. From Bridge, Delaware plaza to Elsmere. Lack of Lights
A8				X					X		Bus stop lighting needed
A9				X					X		Speeding during off-peak hours and bike/peds out at night. Safety concern
A12				X					X	X	Access across Delaware Ave to Rail Trail from north side of Delaware Ave. Difficult, car speeds
A14	X			X							Need Crosswalk. (Leonard PL.)
A18	X	X		X					X		hand turn off Lincoln Ave
A20				X	X	X			X		bike lane.
A21	X			X					X		within the crosswalk light.
A22	X			X					X	X	Rail Trail parking issue. Cars Parking on Ellsworth Ave. Its dangerous for pedestrians and cyclists.
A25	X			X					X		Elsmere Ave safety concerns. Road pedestrian crossings especially school children.
A26	X			X					X		on red and are not aware of pedestrians.
A27				X		X					Dedicated bicycle lane and change bus stops.
A30	X			X					X		Pedestrian Safety issues. (Kenwood Ave and Elsmere Ave.
A31				X							Pedestrian Facilities need improvement
A32	X			X					X		Pedestrian Safety issues. (Kenwood Ave and Elsmere Ave)
B1	X			X					X		Need for safe cycling access to alley. (Mill Rd)
B3				X	X				X		Needs bus pull offs/ bus bays. Bike conflict concern
B8				X							Need better bus stations
B9				X					X		Need more space/shoulder between pedestrians and cars
B10				X					X		Need safe places to cross the street
B12				X					X		Place a clear pedestrian crossing so people aren't crossing to access bus stop by waiting in the roadway
B16	X			X							Pedestrian Bridge (at Delaware Plaza)
B17	X			X							Move Delaware CDTA stops to inside the plaza parking lot
B20	X	X	X						X		Need traffic light near Euclid or Burhans so cars can turn left onto Delaware Ave and pedestrians can cross
B21				X					X		Crosswalks with lights and fewer bus stops
B23	X			X					X		Too hard to cross Delaware at Salisbury to get #18 bus into city
B26	X			X					X		Sidewalk needed down Salisbury Rd
B27				X	X				X		street
B28				X					X		Sidewalk too close to high speed traffic
B33	X			X					X		Restore Elsmere Ave stairs for trail access

Table 2e

Identified Transportation Issues & Ideas from 2/16/17 Public Meeting (Listed by Category - Bike / Ped / Transit)

Group / #	General	Location Specific	Business and Side St Access	Traffic	Bicycle / Pedestrian / Transit	Geometry / Condition	Road diet / yes no	Beautification / Streetscape/Place	Safety & Speeds	Trails	A-Break-out #1 B-Break-out #2 C-Break-out #3 D-Break-out #4
	X			X						X	
B35		X									Make room for on-street parking for access to path along Ellsworth
B41		X			X				X		Need a light at Salisbury and crosswalk
C3				X							Need bike lane
C5				X							Need crosswalks
C6		X		X						X	would make a huge improvement and attract new riders
C7	X			X							Plowing and bus stops. Improve
C8		X		X					X		This is a terrible bus stop. Hard to cross. (near Grant St)
C10		X		X					X		stop. Bus stop is important here because it serves 2 neighborhoods, both behind Tastee Freez and down the hill.
C11		X		X						X	Trail to Delaware Ave. Bike lane near plaza area.
C13		X		X	X						Proposed roundabout (and far side bus stops at plaza and Normanskill Blvd)
C15		X	X	X						X	Connect Rail Trail to Hannaford back parking area
C16	X	X		X						X	At Delaware: 1) Signs pointing to Rail Trail. 2) Paved bike path access points Plymouth and Ellsworth
C19		X		X						X	Entrance to Rail Trail (Ellsworth Ave)
C23	X			X						X	driveways
C26				X					X		Crosswalks with lights an fewer bus stops
C27				X			X	X			Safe sidewalks with tree lawns for all the children walking to/from school
C33		X		X							Bike access (on Delaware from Booth to Elsmere)
C35				X						X	Driveway/sidewalks not well marked (Beverage ctr area)
C36		X		X					X		Access Management (Dunkin Donuts Area)
C37		X		X							All paved need seperation wide open (Hardware Store / My Place Area)
C38		X		X					X		Crossing from Park and ride to bus stop is difficult
C39		X		X						X	Convert to pedestrian bridge (over Normanskill)
D1		X		X						X	Keep old bridge open for pedestrians unlike Rockefeller which was a bridge. Poor Choice
D5				X							Bike lane along one or both sides of Delaware Ave
D8		X		X							Bus stop lane (Near Speedway)
D9		X		X							Bus stop lane (Normanskill Blvd)
D10		X		X							Bus stop lane (Plaza)
D12		X		X						X	Access to Nature preserve West (Normanskill Blvd)
D14		X		X							Pedestrian cross with pedestrian light only for access from neighborhood to trail (Burhans Pl and Delaware Ave)
D16		X		X						X	Access between rail trail and shopping plaza
D17				X	X					X	Concerns on people driving into neighborhoods to park. Already plenty of access
D19		X	X	X						X	Connect to Trail (Rear of plaza)
D21		X		X						X	Trail entrance (Ellsworth)
D26				X	X	X					(dedicated. Said this 4 times over the years. already!
D27				X	X		X	X			Center turn lane needed, additional pedestrian crossing. Trees! And bike lane too
D32				X					X		School crossing. Should have speed reduction
D33		X		X						X	Repair the stairs at Elsmere and the Rail trail for additional access to the trail
D34		X		X					X		2) dangerous intersections 3) Elsmere fire department
D35				X					X		School crossing. Should have speed reduction
D39		X		X						X	Trail access/Trail connector (Landslide Area)
D40		X		X						X	Trail Access (Rockefeller bridge)

Table 2f

Identified Transportation Issues & Ideas from 2/16/17 Public Meeting (Listed by Category - Geometry / Condition)

Group / #											A-Break-out #1	B-Break-out #2	C-Break-out #3	D-Break-out #4	
	General	Location Specific	Business and Side St Access	Traffic	Bicycle / Pedestrian / Transit	Geometry / Condition	Road diet / yes no	Beautification / Streetscape/Place	Safety & Speeds	Trails					
ID#	Description														
C13	X				X	X									Proposed roundabout (and far side bus stops at plaza and Normanskill Blvd)
A2					X	X									Widen the road to add bike lane. Improve sidewalks.
A5					X	X				X					Widen bike lanes. Maybe protect the lanes to keep bikes off sidewalks
A20					X	X	X			X					A Road Diet seems like it would reduce accidents and slow traffic. It seems it would also improve pedestrian traffic. Add a bike lane.
B3					X	X				X					Needs bus pull offs/ bus bays. Bike conflict concern
D26					X	X	X								Turn Delaware Ave into 2 lanes, EB/WB, 1 lane for turning throughout and 1 lane space for traffic island?/ bike lane (dedicated. Said this 4 times over the years. already!
D27					X	X		X	X						Center turn lane needed, additional pedestrian crossing. Trees! And bike lane too
C28	X	X			X					X					Issue from plaza to Elsmere, Elsmere to Plaza. Need turn lane like Euclid
A28			X		X										At traffic signals, turn lanes with arrows are helpful to seniors.
C1	X				X					X					Make the merge sooner. Too many people speed up to pass at the current merge
D2	X				X					X					Turning lane into Nouve. Multiple Accidents here
D31	X				X										Rotary? (Elsmere and Delaware
D36	X				X					X					Lengthen merge/ provide left turn pocket
B15	X				X										Clean up some driveways. Eliminate/combine/one-way?
A11					X	X									Road Diet! Two lanes, turning lane, and bike lanes
B5					X	X									Make it 2 lanes in each direction with turning lane
B6					X					X					Move EB Merge up the hill
B7					X					X					Commuters high speed merge concern
B29					X										Pavement Conditions. Potholes ETC...
C30					X	X									Make a turning lane throughout from Elsmere to Plaza

Table 2g

Identified Transportation Issues & Ideas from 2/16/17 Public Meeting (Listed by Category - Road Diet Y/N)

Group / #	General	Location Specific	Business and Side St Access	Traffic	Bicycle / Pedestrian / Transit	Geometry / Condition	Road diet / yes no	Beautification / Streetscape/Place	Safety & Speeds	Trails	A-Break-out #1 B-Break-out #2 C-Break-out #3 D-Break-out #4
					X	X	X			X	A Road Diet seems like it would reduce accidents and slow traffic. It seems it would also improve pedestrian traffic. Add a bike lane.
D26					X	X	X				Turn Delaware Ave into 2 lanes, EB/WB, 1 lane for turning throughout and 1 lane space for traffic island?/ bike lane (dedicated. Said this 4 times over the years. already!
A11					X	X					Road Diet! Two lanes, turning lane, and bike lanes
B5					X	X					Make it 2 lanes in each direction with turning lane
C30					X	X					Make a turning lane throughout from Elsmere to Plaza
A27					X	X					Dedicated bicycle lane and change bus stops.
B27					X	X		X			Make it 2 lanes with a turn lane in the middle. Wider shoulder for bikers and pedestrian safety. More places to cross the street
B25	X		X			X					It will be impossible to turn left out of Salisbury
C2	X		X			X	X				Snow piles off of Delaware ave. More trees. Road diet. One more light in middle
A13	X	X				X					The Ellsworth Ave area is my haven from the commercialism on Delaware. It is narrow and we like the privacy. Leave it as is. We already have too much retail look
C29		X				X					No Road Diet. Negative impact on Businesses
B30						X					Road Diet! Lower speed limit
B31						X					Road Diet "good idea"
D42						X					I love 3 lanes

Table 2h

Identified Transportation Issues & Ideas from 2/16/17 Public Meeting (Listed by Category - Beautification)

Group / #											A-Break-out #1	B-Break-out #2	C-Break-out #3	D-Break-out #4	
	General	Location Specific	Business and Side St Access	Traffic	Bicycle / Pedestrian / Transit	Geometry / Condition	Road diet / yes no	Beautification / Streetscape/Place	Safety & Speeds	Trails					
ID#	Description														
C2	X			X			X	X							Snow piles off of Delaware ave. More trees. Road diet. One more light in middle
D27					X	X		X	X						Center turn lane needed, additional pedestrian crossing. Trees! And bike lane too
C27					X			X	X						Safe sidewalks with tree lawns for all the children walking to/from school
C25	X							X							Maybe trees and bushes along sidewalks and curb cuts
D23	X							X							Consolidate telecommunications and electric utilities on one set of poles on one side
B11								X							Park near landslide
B18								X							Trees would be great along the whole corridor. I live in "old" Delmar because of the old tree lined streets
C9								X	X						Street trees to calm Traffic

Table 2i

Identified Transportation Issues & Ideas from 2/16/17 Public Meeting (Listed by Category - Safety & Speeds)

Group / #	General	Location Specific	Business and Side St Access	Traffic	Bicycle / Pedestrian / Transit	Geometry / Condition	Road diet / yes no	Beautification / Streetscape/Place	Safety & Speeds	Trails	Description
											A-Break-out #1 B-Break-out #2 C-Break-out #3 D-Break-out #4
D27				X	X	X	X	X	X		Center turn lane needed, additional pedestrian crossing. Trees! And bike lane too
C27				X			X	X			Safe sidewalks with tree lawns for all the children walking to/from school
C9								X	X		Street trees to calm Traffic
A20				X	X	X			X		A Road Diet seems like it would reduce accidents and slow traffic. It seems it would also improve pedestrian traffic. Add a bike lane.
B27				X		X			X		Make it 2 lanes with a turn lane in the middle. Wider shoulder for bikers and pedestrian safety. More places to cross the street
A5				X	X				X		Widen bike lanes. Maybe protect the lanes to keep bikes off sidewalks
B3				X	X				X		Needs bus pull offs/ bus bays. Bike conflict concern
C28	X	X		X					X		Issue from plaza to Elsmere, Elsmere to Plaza. Need turn lane like Euclid
C1	X			X					X		Make the merge sooner. Too many people speed up to pass at the current merge
D2	X			X					X		Turning lane into Nouns. Multiple Accidents here
D36	X			X					X		Lengthen merge/ provide left turn pocket
B6				X					X		Move EB Merge up the hill
B7				X					X		Commuters high speed merge concern
B20	X	X	X						X		Need traffic light near Euclid or Burhans so cars can turn left onto Delaware Ave and pedestrians can cross
A18	X	X	X						X		Dunkin Donuts drive-thru project, bus stop, and 4 lanes on Delaware make it very difficult and dangerous to make a left hand turn off Lincoln Ave
A7	X		X						X		Bikes/Peds at night their safety a concern. From Bridge, Delaware plaza to Elsmere. Lack of Lights
A21	X		X						X		Groesbeck and Elsmere. The pedestrian crossing light often takes an excessive amount of time to allow people to cross within the crosswalk light.
A22	X		X						X	X	Rail Trail parking issue. Cars Parking on Ellsworth Ave. Its dangerous for pedestrians and cyclists.
A25	X		X						X		Elsmere Ave safety concerns. Road pedestrian crossings especially school children.
A26	X		X						X		There needs to be a red light camera at the corner of Groesbeck and Elsmere. People often run the red lights, turn right on red and are not aware of pedestrians.
A30	X		X						X		Pedestrian Safety issues. (Kenwood Ave and Elsmere Ave.
A32	X		X						X		Pedestrian Safety issues. (Kenwood Ave and Elsmere Ave)
B1	X		X						X		Need for safe cycling access to alley. (Mill Rd)
B23	X		X						X		Too hard to cross Delaware at Salisbury to get #18 bus into city
B26	X		X						X		Sidewalk needed down Salisbury Rd
B41	X		X						X		Need a light at Salisbury and crosswalk
C6	X		X						X		Westbound from bridge where 4 lanes begin, extremely hazardous for bikes. Less than 1 foot of shoulder. Bike lanes would make a huge improvement and attract new riders
C8	X		X						X		This is a terrible bus stop. Hard to cross. (near Grant St)
C10	X		X						X		Dangerous to cross Delaware for the Grant bus stop due to visibility, traffic (speed), and lack of place to stand at bus stop. Bus stop is important here because it serves 2 neighborhoods, both behind Tastee Freez and down the hill.
C36	X		X						X		Access Management (Dunkin Donuts Area)
C38	X		X						X		Crossing from Park and ride to bus stop is difficult
D34	X		X						X		Reduce speed on Elsmere Ave from Bender Ln to Delaware Ave due to : 1) Middle school and Elsmere school crossing 2) dangerous intersections 3) Elsmere fire department
C23	X		X						X		Driveways and sidewalks aren't properly marked. Its tough to walk on sidewalks because people are pulling out of driveways
A4			X						X		Working Bicycle commuters need accomodations especially at night

Table 2i
Identified Transportation Issues & Ideas
from 2/16/17 Public Meeting
(Listed by Category - Safety & Speeds)

Group / #	General	Location Specific	Business and Side St Access	Traffic	Bicycle / Pedestrian / Transit	Geometry / Condition	Road diet / yes no	Beautification / Streetscape/Place	Safety & Speeds	Trails	A-Break-out #1 B-Break-out #2 C-Break-out #3 D-Break-out #4
				X							
A8				X							Bus stop lighting needed
A9				X							Speeding during off-peak hours and bike/peds out at night. Safety concern
A12				X					X	X	Access across Delaware Ave to Rail Trail from north side of Delaware Ave. Difficult, car speeds
B9				X						X	Need more space/shoulder between pedestrians and cars
B10				X						X	Need safe places to cross the street
B12				X						X	Place a clear pedestrian crossing so people aren't crossing to access bus stop by waiting in the roadway
B21				X						X	Crosswalks with lights and fewer bus stops
B28				X						X	Sidewalk too close to high speed traffic
C26				X						X	Crosswalks with lights an fewer bus stops
C35				X						X	Driveway/sidewalks not well marked (Beverage ctr area)
D32				X						X	School crossing. Should have speed reduction
D35				X						X	School crossing. Should have speed reduction
D28	X	X								X	Earlier awareness provided that left hand lane only coming up (intersection of Delaware and Booth)
A15	X	X								X	Lincoln, Leonard PL. Making Left tuns, Dentist office shrubbery
D37	X	X								X	Access Management (W of Novus on S side)
A33	X									X	Safety Issues. (Poplar Ave and Elsmere Ave)
B4	X									X	Hard to turn left to trail head parking (near Mill Rd)
B14	X									X	Left turns are a concern in front of CDTA parking lot and Mercato's restaurant
B22	X									X	Lower Speed limit on Delaware Ave and enforce Snowden Ave
B42	X									X	Crash Area (between Mason Rd and Normanskill Blvd)
C22	X									X	Look at accident data since turning lane was created at Delaware, Elsmere, and Groesbeck
D30	X									X	Halt illegal cut thru of medical lot. Illegal unsafe driving through Ellsworth
D38	X									X	Sight Distance issue looking right (Old Delaware Ave)
A29										X	Likes the idea of lowering speed limit. Will help businesses.
B2										X	More Street lighting
C24										X	Speed limit lowered

Table 2j

Identified Transportation Issues & Ideas from 2/16/17 Public Meeting (Listed by Category - Trails)

Group / #											A-Break-out #1	B-Break-out #2	C-Break-out #3	D-Break-out #4	
	General	Location Specific	Business and Side St Access	Traffic	Bicycle / Pedestrian / Transit	Geometry / Condition	Road diet / yes no	Beautification / Streetscape/Place	Safety & Speeds	Trails					
ID#	Description														
A22		X			X				X	X					Rail Trail parking issue. Cars Parking on Ellsworth Ave. Its dangerous for pedestrians and cyclists.
A12					X				X	X					Access across Delaware Ave to Rail Trail from north side of Delaware Ave. Difficult, car speeds
B4		X							X	X					Hard to turn left to trail head parking (near Mill Rd)
D17				X	X					X					Concerns on people driving into neighborhoods to park. Already plenty of access
C15		X	X		X					X					Connect Rail Trail to Hannaford back parking area
D19		X	X		X					X					Connect to Trail (Rear of plaza)
C16	X	X			X					X					At Delaware: 1) Signs pointing to Rail Trail. 2) Paved bike path access points Plymouth and Ellsworth
B33		X			X					X					Restore Elsmere Ave stairs for trail access
B35		X			X					X					Make room for on-street parking for access to path along Ellsworth
C11		X			X					X					Trail to Delaware Ave. Bike lane near plaza area.
C19		X			X					X					Entrance to Rail Trail (Ellsworth Ave)
C39		X			X					X					Convert to pedestrian bridge (over Normanskill)
D1		X			X					X					Keep old bridge open for pedestrians unlike Rockefeller which was a bridge. Poor Choice
D12		X			X					X					Access to Nature preserve West (Normanskill Blvd)
D16		X			X					X					Access between rail trail and shopping plaza
D21		X			X					X					Trail entrance (Ellsworth)
D33		X			X					X					Repair the stairs at Elsmere and the Rail trail for additional access to the trail
D39		X			X					X					Trail access/Trail connector (Landslide Area)
D40		X			X					X					Trail Access (Rockefeller bridge)
A6		X	X	X						X					Concern that lane reductions on Delaware will cause increase in traffic along Plymouth Ave as drivers attempt to take short cut to Elsmere. Concerned about increased traffic on Plymouth if access to Rail Trail more formalized.
A23		X	X							X					There is a huge parking lot by the Booth Rd access as it is now. Arrange use with existing medical building . It is totally empty on the weekends.
A24		X	X							X					Booth Rd. Formalize parking lot use for Rail Trail/ medical office building.
D20		X	X							X					Get city of Albany on board & get access or ownership to surplus city land (rear of plaza)
B19			X							X					Encourage Businesses to create access points to the trail from their "backyards"
C31			X							X					Use backyards of businesses to access rail trail and provide a place for rail users
A1		X								X					Continue or repair yellow brick road over bridge and other side to connect parks on both sides of bridge
B34		X								X					Lincoln Ave access to Rail Trail?
B40		X								X					Rail Trail access formalize entrance. (From Poplar to rear of plaza)
D3		X								X					Provide access to the nature preserve east
D29		X								X					Weekend parking for rail trail (medical office building at Elsmere and Delaware)
D43		X								X					Trail Access (Mason Rd)
D18	X									X					Trail Parking?
C32										X					Bike Shop large riders on Sunday weekends
C34										X					Replace stairs at the access

Appendix D
Written Comments
(as of May 1, 2017)

Delaware Avenue Complete Streets Feasibility Study



Public Information Meeting #1

Name Lorenz Worden Albany Bicycle Coalition Date 2/16/17

Address _____

City/Town ALBANY State NY Zip Code 12208

Email _____

I/We wish to comment about the following aspects of the project:

I understand that the project scope ends at the Stormanskill bridge. However, could the project recommendations include concrete, specific steps that the City of Albany could/should take to enhance the connectivity between the Town and the city?

2/16/17

Return to:

Rob Leslie
Director of Planning
Town of Bethlehem
445 Delaware Ave.
Delmar, NY 12054

Delaware Avenue Complete Streets Feasibility Study



Public Information Meeting #1

Name Rita Hoffman Date 9/16/17
Address _____
City/Town Delmar State Del Zip Code 12054
Email _____

We wish to comment about the following aspects of the project:

① Booth Rd access to rail trail exists now there is a huge parking area behind the Medical Arts Bldg - it is totally empty on weekends - plenty of parking for all who wish to use rail trail there - People can use it now and if a more formal agreement of the Bldg. owners needs to be made - be sure it could be arranged.

② If there is a need for another access to the rail trail it probably should not be within the Booth → Plymouth area (5 blocks!) Delmar needs a rail trail from this area or Slingshot! Leave the residential privacy of Ellsworth Ave. pristine - it's our haven from the commercialism of Delaware

③ Lower the speed limit in this corridor (Delaware) to 30

④ Beautify the Delaware Ave. area! No more retail, Pub-leezz

Return to: Rob Leslie
Director of Planning
Town of Bethlehem
445 Delaware Ave.
Delmar, NY 12054

Delaware Avenue Complete Streets Feasibility Study



Public Information Meeting #1

Name Jim Giaccone Date _____

Address _____

City/Town _____ State _____ Zip Code _____

Email _____

I/We wish to comment about the following aspects of the project:

No Negative impact on Business

LESS TRAFFIC, LESS BUSINESS

Return to:

Rob Leslie
Director of Planning
Town of Bethlehem
445 Delaware Ave.
Delmar, NY 12054

Delaware Avenue Complete Streets Feasibility Study



Public Information Meeting #1

Name ANN MULLALLY Date 2/16/17

Address _____

City/Town Delmar State NY ZipCode 12054

Email _____

I/We wish to comment about the following aspects of the project:

LOVE the idea of the "ROAD DIET" AND SPEED reduction. I live in the neighborhood.

~~We~~ We'd like more access to the trail, however we DON'T want any parking in the neighborhoods. (X)

We (most of my neighbors) are concerned about the ongoing infrastructure in our area too.

We'd like MORE LAW enforcement, concerning speed, bikers on sidewalks, and protection of desperately needed CROSSWALKS.

Return to:

Rob Leslie
Director of Planning
Town of Bethlehem
445 Delaware Ave.
Delmar, NY 12054

Delaware Avenue Complete Streets Feasibility Study



Public Information Meeting #1

Name Jessy Madzule Date _____

Address _____

City/Town _____ State _____ Zip Code _____

Email _____

I/We wish to comment about the following aspects of the project:

I WOULD LIKE A ROAD DIET. ITS IMPOSSIBLE
TO EXIT MY STREET ON TO DELAWARE IN
THE AM OR PM PEAK TRAVEL TIMES.

Return to:

Rob Leslie
Director of Planning
Town of Bethlehem
445 Delaware Ave.
Delmar, NY 12054

Delaware Avenue Complete Streets Feasibility Study



Public Information Meeting #1

Name DAVID HART Date 2/16/2017

Address _____

City/Town _____ State _____ Zip Code _____

Email _____

I/We wish to comment about the following aspects of the project:

- NYS is the owner of the road. They are NOT included on the title sheet. Are they party to this study? Do they have veto power for alternatives? Being the owner of the facility I find it hard to believe they are not involved in the process considering the town would not be able to finance this project without state/federal funding.

- please strip the bike lane. At the Plaza when the state redid that intersection the right lane was widened (14') to accommodate bike riders. As a daily commuter by bike to Albany for 20+ years this widened lane did nothing for bike riders. Cars had a tendency to drive "centered" on this lane. I believe if there was a curb line giving bike riders the 2' cars would be in their lane. Please strip the lanes intended for cars that way bike riders would have a little room.

- funding, when in the budget is this project: 2018, 19, 20?
What priority does this project have? State priority?

- next step, Alternatives? Including just a rehabilitation project of the existing? Will cost be the deciding factor?

- Even with a ~~cap~~ positive capacity analysis for a section, many will not believe

Return to:
Rob Leslie
Director of Planning
Town of Bethlehem
445 Delaware Ave.
Delmar, NY 12054

three lane
your analysis

- will any alternatives be considered that need additional right of way?
- there are half as many bus stops compared to what existed 10 yrs ago. Reducing additional will be detrimental to bus users.

Comment Form

This form is provided to you for the purpose of making your concerns known to the Town of Bethlehem. Please indicate the date, your name and address, and state your concerns on this form. You may also provide comments on the project website at www.DelawareAveCompleteStreets.com

The completed **Comment Form** may be returned this evening to a project representative or mailed to the address below. It may be returned by folding the form so that the return address is clearly visible and affixing a stamp. Please staple or tape the form closed. **PLEASE POSTMARK YOUR COMMENTS BY March 2nd.**

Thank you for expressing your concerns.

FOLD

~ what did this course HART study cost?

From _____

Stamp

Rob Leslie
Director of Planning
Town of Bethlehem
445 Delaware Ave.
Delmar, NY 12054

FOLD

Delaware Avenue Complete Streets Feasibility Study



Public Information Meeting #1

Name MARIL WAHL Date 8/16/17

Address _____

City/Town _____ State _____ Zip Code _____

Email _____

I/We wish to comment about the following aspects of the project:

Like the road diet. I would like to
see less access to side roads like
Lincoln Ave from local businesses

Return to: Rob Leslie
Director of Planning
Town of Bethlehem
445 Delaware Ave.
Delmar, NY 12054

Delaware Avenue Complete Streets Feasibility Study



Public Information Meeting #1

Name Ellie Prakhon Date 2.16.17

Address _____

City/Town _____ State _____ Zip Code _____

Email _____

I/We wish to comment about the following aspects of the project:

I and also one of my friends found it hard to find the report on the web site. The page that came up was the announcement for the meeting, but I really had to dig to find the report and my friend said he couldn't find it. So hopefully the next report will be more visible.

Return to:

Rob Leslie
Director of Planning
Town of Bethlehem
445 Delaware Ave.
Delmar, NY 12054

Mark Sargent

From: Ryan Curry
Sent: Tuesday, January 31, 2017 1:10 PM
To: Delaware Ave Study
Subject: Delaware Ave Complete Streets

As part of the study please consider the area directly adjacent to the Normanskill bridge where there is a driveway and parking lot. This driveway serves the trail head for the hiking path as well as an engineering business. There are regular accidents in this area as people wait to turn left into the parking lot. Typically people are rear ended as they wait. If the turning lane to extend down to here it would make that turn much safer.

Thank you,
Ryan Curry

Mark Sargent

From: John Cody
Sent: Thursday, February 09, 2017 10:19 PM
To: Delaware Ave Study
Subject: Delaware Avenue Complete Streets Study

We have lived behind the Elsmere School (right next door to and longer in this neighborhood than Maude Easter, one of your committee members) for more than 20 years, so we are well familiar with Delaware Avenue, including the portion under study.

My concerns:

- **Too much development is being allowed on Delaware Avenue.** Recently, multiple houses, apartments and other buildings have been added on Delaware Avenue just east of the Elsmere School, with little to no advance public notice. This corridor is already overdeveloped. It doesn't need a road diet. It needs a development diet. Had this new development not been squished in here and crowded the neighborhood where it doesn't belong, then perhaps you wouldn't need to be studying Delaware Avenue's "feasability."
- **New development is being allowed too close to the road on Delaware Avenue.** Whatever happened to the traditional Delmar style of buildings set back away from the road? Two monstrosities are being built on Delaware Avenue, one just east of the Elsmere School, the other west of Elsmere Avenue, right smack up against the road. They're not completed, but they already look hideous, and dangerously are too crowding to the road.
- **Automobile traffic should always be first priority on Delaware Avenue.** Automobiles should be given first priority over pedestrians and other users. This is a very busy, automobile laden corridor, and it always will be, and should be. Travel east to Albany and beyond is limited because of ravines needing bridges to traverse them. Really, there are only three routes out of Delmar: (1) Kenwood Avenue to Route 32; (2) Kenwood Avenue to Route 85; and (3) Delaware Avenue. Shrinking Delaware Avenue will make the traffic even more backed up than it currently is.
- **Delaware Avenue should be WIDENED, if anything, not narrowed, with a turning lane inserted its whole length.** Rather than a road diet, Delaware Avenue should be widened, to accommodate any sidewalks, turning lanes, middle of the road added curbing, etc.
- **No new traffic lights should be added to Delaware Avenue.** Delmar is a bedroom community, with heavy commuter traffic driving to workplaces. The last thing Delaware Avenue needs is more traffic lights to inhibit the necessary auto traffic even further. The road should be kept as passable as possible, with the speed limit perhaps increased to 45 miles per hour.
- **Bethlehem should be focused on sidewalks, curbing, lighting and pedestrian safety elsewhere in the Town besides Delaware Avenue.** Our neighborhood, behind the Elsmere School, has for all intents and purposes NO SIDEWALKS, yet it is bustling with pedestrians (kids; dog walkers; etc.) and many elderly residents. It also has few streetlights, and National Grid is not timely repairing the existing streetlights that fail. Rather than "sprucing up" (in reality, dumbing down) Delaware Avenue, perhaps you could focus on improving existing neighborhoods.

Thank you for considering my perspective.

John Cody

Mark Sargent

From: Brian Lusignan <
Sent: Thursday, February 16, 2017 11:16 AM
To: Delaware Ave Study
Subject: Comments on Delaware Ave. Complete Streets Draft Report
Attachments: Lusignan Comments on Complete Streets Draft Report.pdf

To Whom It May Concern,

Please find attached my preliminary comments on the Delaware Avenue Complete Streets Draft Existing Conditions Report. Please let me know if you have any problems opening the attached PDF file.

Very truly yours,

-Brian Lusignan

Brian Lusignan

February 16, 2017

Rob Leslie
Director of Planning
Town of Bethlehem
445 Delaware Ave.
Delmar NY 12054

Re: Comments on Delaware Avenue Complete Streets Draft Existing Conditions Report

Dear Mr. Leslie,

I live on Plymouth Avenue in Elsmere, just off Delaware Avenue and within the study area of the Delaware Avenue Complete Streets Feasibility Study. I drive on the section of Delaware Avenue subject to the study every day, I walk from my house to local businesses on a regular basis, and I frequently run along the Delaware Avenue sidewalks. I occasionally bike on the section of Delaware Avenue subject to the study, but I find the conditions too dangerous for frequent use. Although I will not be able to attend the public meeting on February 16, 2017, I have read the January 2017 Draft Existing Conditions Report and would like to offer a few comments.

First, I strongly support the concept of a “road diet” for the study area. I believe that your Draft Report supports the conclusion that the four-to-five lane section of Delaware Avenue subject to the study could be reduced to one lane in each direction, with a central turning lane and wider shoulders, as depicted in the Draft Report at page 4, with minimal negative impacts.

Second, I urge you to consider adding protected bike lanes to the roadway between the sidewalk and the motor-vehicle travel lanes. Although wider shoulders as part of a road diet would provide added safety for bicyclists, protected bike lanes are the best way to encourage access to the roadway by bicyclists who do not feel safe riding in traffic.

Third, there is no basis to believe a road diet would negatively impact the flow of vehicular traffic on Delaware Avenue. The Draft Report mentions, but does not emphasize, that Delaware Avenue narrows to two lanes outside of the Study Area, both before crossing the Normanskill Bridge into Albany to the east, and past the Elsmere Avenue intersection to the west. In my experience, vehicular traffic moves smoothly between the four-lane stretch and the two-lane stretches on either end. Indeed, according to your Draft Report (page 27) traffic speed actually increases when crossing the Normanskill Bridge. Narrowing the section of Delaware Avenue subject to this study would simply conform the conditions of the study area to the roadway as it exists on either side.

Fourth, a dedicated central turning lane would substantially increase traffic safety by allowing left-turning cars to get out of the flow of traffic. Your evaluation of crash data (pages 38-39) shows that a majority of crashes occur at intersections, and that they occur at above the statewide average. Although it is not clear how many of these accidents occurred when a vehicle was turning left across traffic, my personal experience turning left onto Plymouth Avenue on a daily basis is that the experience can be harrowing. While waiting to turn left against the two

lanes of sometimes steady oncoming traffic, vehicles quickly approach from behind, creating an incentive to rush to complete the turn. A central turning lane would allow left-turning vehicles to get out of the flow of traffic while they wait for adequate space to complete the turn. Indeed, this arrangement could actually improve the flow of traffic through the corridor as through-vehicles would no longer get caught behind left-turning vehicles.

Finally, any Complete Streets upgrade to study area must include improved crosswalk access. The current arrangement – which provides two marked crosswalks separated by more than half a mile – is inconvenient and dangerous. In particular, a marked crosswalk is needed at the location of the Delaware Avenue Park & Ride, where commuters need to cross from the parking lot to access the east-bound CDTA bus stop. A crosswalk in the vicinity of Bedell Avenue would also be useful. I often walk from my house on Plymouth Avenue to the businesses on the northside of Delaware. Finding a safe time to cross, especially during busy periods, can involve a long wait, and the only other option is a half-mile walk to the Elsmere or Hannaford Plaza crosswalks. Although additional signaled crossings might be impractical, I encourage you to consider creative ways to raise vehicular awareness of pedestrians and to protect pedestrians who have begun crossing the crosswalk. Signs with flashing crossing lights available “on call” when a pedestrian wishes to cross would be a good start.

Thank you for the opportunity to comment on this important project. Please do not hesitate to contact me if you have any questions or concerns regarding these comments. Also, please include me on any future communications regarding the Complete Streets Feasibility Study.

Very truly yours,

Brian Lusignan

Mark Sargent

From: Peter Ruggiero <pruggiero@delmarva.com>
Sent: Thursday, February 16, 2017 7:36 PM
To: Delaware Ave Study
Subject: Delaware Ave Complete Streets

Hello, as a resident of Delmar living just off Delaware near the Plaza, I regularly walk with my kids and ride the bus. The area certainly needs work and is unpleasantly autocentric. Please consider trees; open, parklike spaces; a narrowed roadway; and bus shelters. All good for business.

Mark Sargent

From: Robert Leslie <rleslie@townofbethlehem.org>
Sent: Friday, February 17, 2017 2:10 PM
To: Mark Sargent; Anne Benware
Cc: Kenneth Kovalchik
Subject: FW: Planning meeting

FYI

Robert F. Leslie, AICP
Director of Planning
Town of Bethlehem
Department of Economic Development & Planning
445 Delaware Avenue, 2nd Floor
Delmar, NY 12054
Tele. (518) 439-4955, Ext. 1157
Fax. (518) 439-5808
rleslie@townofbethlehem.org

From: Jen and Dave Spore
Sent: Friday, February 17, 2017 1:31 PM
To: Robert Leslie <rleslie@townofbethlehem.org>
Subject: Planning meeting

Hi Rob,

I just wanted to let you know how well-received last night's meeting was. The presentation was thorough and understandable and the breakout sessions were a great way to get people talking and sharing ideas. I look forward to being part of the next steps.

Jen Spore

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Mark Sargent

Subject: FW: Complete Streets Meeting

FYI.

Robert F. Leslie, AICP
Director of Planning
Town of Bethlehem
Department of Economic Development & Planning
445 Delaware Avenue, 2nd Floor
Delmar, NY 12054
Tele. (518) 439-4955, Ext. 1157
Fax. (518) 439-5808
rleslie@townofbethlehem.org

-----Original Message-----

From: Brian Gyory
Sent: Friday, February 17, 2017 2:22 PM
To: Robert Leslie <rleslie@townofbethlehem.org>
Subject: Complete Streets Meeting

Rob,

I had to leave early last night, but the part I was there for seems to go really well. I was very impressed by the meeting turnout and the feedback I heard.

Great job.

Brian

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Mark Sargent

From: John DiMura
Sent: Friday, February 17, 2017 5:25 PM
To: Delaware Ave Study
Subject: Complete Streets Workshop Comments

Hello,

I attended the public workshop last evening and have a few comments to share:

Any proposed solution needs to have space for bicyclists. I am an experienced bicyclist, but still do not feel comfortable riding to the bike path along Delaware Ave. Not only is the shoulder only a couple of feet wide, but there are also drainage inlets that are a problem. It's hard to stay out of traffic, and when the speed limit is 40mph, it's not a great situation for shared use.

There is no good reason why the speed limit needs to be 40 mph for the one mile of the road between Elsmere Ave and the Normanskill, when the speed limit is 30 mph at either end.

Any proposed solution needs to have a center turn lane. Waiting in the left lane to make a left turn is really precarious. I was rear ended in 2008 waiting to make a left turn onto Burhans Place. The corridor is not safe for bicyclists and pedestrians but it is also not safe for people in vehicles.

Creating space for cyclists will also create an additional buffer for pedestrians on the sidewalks. This is especially important for the students walking to Elsmere Elementary School. Currently, people on the sidewalk are only a few feet away from cars going 40 mph or more.

I feel that a road diet is the best solution to achieve the project objectives.

Hopefully, any near term solution will occur in less than 5 years. There is urgency to making this happen sooner than later to improve the quality of life and access to businesses in the project area. It seems that lanes can be reconfigured with striping rather than having to wait for a repaving project.

Thank you,
John DiMura

Mark Sargent

From: Nancy King
Sent: Saturday, February 18, 2017 8:30 AM
To: Mark Sargent
Subject: Complete Streets Meeting #1
Attachments: 20170215_070924.jpg; 20170216_071544.jpg

Mark,

You had asked me at the meeting to send you the pictures of the snow & ice on sidewalks taken this past week, so I have attached them. The town does a good job with the plowing of Delaware Ave. Roadways and sidewalks, unfortunately the timing of the two areas needs to be better coordinated so we don't end up with sidewalks like these, which are even more difficult for persons with disabilities and/or the elderly to navigate.

Also, I am keeping my fingers crossed for some type of crossing at, or near Salisbury Road. I really feel a crossing is needed in the half way point between Elsmere Ave and Delaware Plaza.

Thank you for your presentation, it was very informative and I am looking forward to future opportunities to learn more.

Sincerely,
Nancy A. King

Sent from my Verizon 4G LTE smartphone

Mark Sargent

From: Robert Leslie <rleslie@townofbethlehem.org>
Sent: Tuesday, February 21, 2017 5:12 PM
To: Mark Sargent; Anne Benware
Cc: Kenneth Kovalchik
Subject: Comment from Pam Kissler

I received a voicemail from Pam Kissler who resides at the corner of Crannell and Winslow. Pam would like us to "beautify" Delaware Avenue with more street trees. Improvements that would make the roadway appear more inviting. She has spoken with her neighbors who also support these comments.

Mark, please place in the comment folder.

Thanks,
Rob

Robert F. Leslie, AICP
Director of Planning
Town of Bethlehem
Department of Economic Development & Planning
445 Delaware Avenue, 2nd Floor
Delmar, NY 12054
Tele. (518) 439-4955, Ext. 1157
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rleslie@townofbethlehem.org

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Mark Sargent

From: James Garry
Sent: Tuesday, February 21, 2017 8:28 PM
To: Delaware Ave Study
Subject: Delaware Ave Complete Streets

Greetings,

I attended the February 16th public meeting for the Delaware Ave Complete Streets project and have the following comments.

There are so many wonderful elements of the project. But I'd like to point out that when I saw the boards in the room listing all the possible features for citizens to vote on I was struck that hardly anyone chose the basic one which is for automotive traffic. I commented to one of the consultant's engineers that the choice was so basic that it shouldn't have been listed. He replied, "it's a given". I agreed.

So please don't use the votes from that meeting as a determining factor to minimize (to the extent possible) the basic function of Delaware Avenue, which is to move traffic into and through that part of the Town.

While going from four lanes to three lanes with a turning lane and bike lanes is a fine ideal, it seems clear that it would snarl traffic during the traditional commuting times of the day leading to driver frustration which in turn leads to aggressive behavior and additional crashes, thus offsetting the attempt at traffic calming. People can be crazy.

Another problem with going to three lanes is that there are bus stops along the way. Even if the number of bus stops in each direction were reduced from seven to three (if that is even possible), there would be very serious tie ups for the traffic caught behind a bus. This would probably result in the turning lane being used as a bus passing lane.

The 85th percentile speed at the northern portion of the road was shown as 46 mph if I recall correctly. Take those drivers and put them behind folks who drive below the posted speed limit and here's another factor in converting the turning lane into the illegal but defacto passing lane. This is supported by a study titled, **Converting Four-Lane Undivided Roadways to a Three-Lane Cross Section: Factors to Consider.**

The study spoke to many benefits but stated that delays increased and "traffic congestion and queuing during the peak periods was significant enough that some drivers used the [turning lane] as a passing lane."

In the study was a suggestion that moving to 3 lanes was best kept to roads with an ADT range of 5,000 to 12,000 although the authors conceded it was based on old data and that "some three-lane roadways in Minnesota are operating with an ADT as high as 20,000 vpd." I would offer that one of the determining factors on how dense a road can be and still successfully convert to three lanes includes whether there are alternative routes. In Bethlehem the only other realistic main road is Route 32, which for many citizens is out of the way for their destination. Thus there would not be enough drivers simply taking a different route home if and when Delaware Avenue was converted to a longer commute.

During the meeting I asked if there was an estimate of how much delay drivers would face if the road were turned into one lane in each direction. The answer was that this was unknown. Please run a lot of modeling on

this issue as it is very important. If over those three miles I was presented with a 3 or 4 minute delay, it would be unwelcome but accepted.

However, if the conversion caused a 10 minute delay in each direction, that would be nearly an hour per week or over two days additional time per year spent driving down Delaware Avenue to get to and from work. I hope you would agree that this is an unreasonable ask for residents and completely unacceptable.

As for difficulty making left hand turns, I have not experienced this. Here's why. Please keep in mind that the traffic only becomes dense in one direction at a time. In the morning the traffic heading east gets heavy while westbound traffic is not nearly as bad. In the evening the westbound traffic is very heavy while eastbound traffic is very reasonable.

This means that those traveling with the dense traffic and turning left across the light traffic have very short waits. When driving home westbound I have never had to wait behind someone for more than 15 to 20 seconds before they find a safe opening. More usually the wait is on the order of 5 to 10 seconds. And besides, changing lanes is usually not too difficult.

On the other hand, if someone wants to turn across the heavy traffic direction, they may have to wait a minute or more. But those traveling in that direction will not get stuck behind these cars because they are in the lightly traveled direction and can easily change lanes. Therefore their wait will not result in tied up traffic.

I am in favor of getting more people onto their bicycles. But how much would ridership increase if dedicated bike lanes were offered? I don't know but it's pretty likely that as a percentage of use, bicycles used during the work commutes would remain well under 1%. Thus my choice remains that Delaware Avenue should remain configured for maximum efficiency in moving automobiles down the Avenue.

A way to make the road safer for bicycle riders is for the Town to engage in a serious, extended and ongoing effort to educate drivers to share the road. Bikers too should be educated because many (most?) will ride through a red traffic light despite this being illegal and unsafe. Has there been any in-depth study into whether bicycle crashes on Delaware Avenue were caused mostly by poor drivers versus poor riders? I do not know the answer but certainly the police reports would lend some insight. For the record, I always make an effort to give riders a wide berth.

I am very sympathetic to the plight of pedestrians crossing Delaware Avenue. It is safer to get into a car and drive across that road. Therefore I agree that a crosswalk somewhere in between the plaza and Elsemere Avenue is necessary. This is an obvious and important safety issue.

My personal preference for the work that is needed on Delaware Avenue is to increase the attractiveness of the road. I have no specific favorite methods to offer. Anything would help.

In conclusion it is my opinion that the most important role of Delaware Avenue is to provide an efficient mode of automobile travel. Given a blank piece of paper, there are many better designs for a road like Delaware. But we don't have that benefit. Please don't delay traffic on Delaware Avenue.

Sincerely,

James D. Garry

Delmar

Mark Sargent

From: David Easter
Sent: Thursday, February 23, 2017 10:25 AM
To: Delaware Ave Study
Subject: Delaware Ave Complete Streets

I appreciated reading your comprehensive existing conditions report on your website. I am eager to see this project continue as quickly as it can. I am most interested in having the road diet and having the speed limit lowered on Delaware Ave to 30 miles per hour. David

David Easter

Delmar

Received January 31, 2017

As part of the study please consider the area directly adjacent to the Normanskill bridge where there is a driveway and parking lot. This driveway serves the trail head for the hiking path as well as an engineering business. There are regular accidents in this area as people wait to turn left into the parking lot. Typically people are rear ended as they wait. If the turning lane to extend down to here it would make that turn much safer.

Thank you,

Ryan Curry

From: Larry Eckhaus <
Date: March 6, 2017 at 11:07:07 AM EST
To: 'John Clarkson'
Subject: Delaware Avenue

Hi John –

After driving and commuting on Delaware Avenue for many years I make the following suggestion for auto, bike, and pedestrian safety:

1. Reduce speed limit from the Normanskill Bridge to Four Corners to 30 mph, with NO changes near the school.
2. Have one lane in each direction with a center: turning (as at Elsmere) and fire lane.
3. Have a bike lane near the curb in each direction; or signage to direct bikes to the bike path.
4. Add additional pedestrian crossings and signage at *least* every other block.
5. Add bus indents for CDTA bus stops.

And perhaps get the State and Albany to add a lane just before the end of 787 since there are 3 lanes at the very end of 787 anyway!

I think the reasons for all the above should be obvious, but I would be glad to expand if necessary. When might be the next meeting? Is a current draft on-line?

Larry Eckhaus

LIBRARY MATERIALS

Delaware Avenue Complete Streets Feasibility Study

Join Us! PUBLIC MEETING #2

When: September 26, 2017
6:00 to 8:00 p.m.

Where: Bethlehem Town Hall
443 Delaware Avenue
Bethlehem, NY 12034

Agenda:
6:00 PM: Open House
6:15 PM: Presentation
7:00 - 8:00 PM: Q&A
8:00 PM: Parking Exercise

What: Please join us for the second public meeting about the Delaware Avenue Complete Streets transportation planning study. The meeting will focus on presenting the traffic operations and safety improvements resulting from the various roadway design alternatives, including the full road-diet option, partial road-diet options, and enhancements for pedestrian and bicycle safety. There will also be an opportunity to provide your input on these alternatives for this very important corridor in the Town.

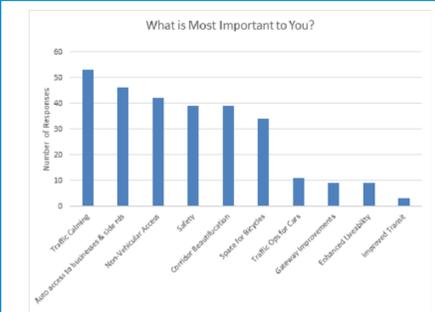
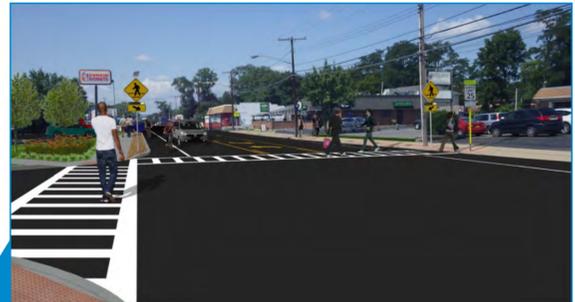
The Town of Bethlehem and the Capital District Transportation Committee (CDTC) are jointly sponsoring this planning study to examine complete streets elements and different lane configurations on Delaware Avenue between Elsmere Avenue and the Normanskill Bridge, in a manner that enhances community quality of life, the local economy, mobility and safety for all users.

Hope to see you there!



Questions: For additional information or questions please visit the project website www.DelawareAveCompleteStreets.com or contact: Rob Leslie - Director of Planning (518) 439-4935, Ext. 1157

Delaware Ave. Complete Streets Feasibility Study
Elsmere Avenue to Normanskill Bridge



Delaware Avenue Complete Streets Feasibility Study
Public Meeting/February 16, 2017

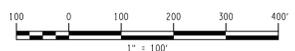
West Segment Option B



East Segment Options B C D E



		Evaluation of Alternatives				
		A	B	C	D	E
		Null	Full Road Diet (1-1-1)	Half Corridor Road Diet	1-1-2 Eastbound	Westbound 2-1-1
Alternative	Performance Measure					
Safety	Crashes	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	Traffic Calming	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	Benefit of Enhancements	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
Access	Travel Time	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	Signal LOS/Queuing	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	Bike LOS	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
Economy	2030 Volume Change	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	Side St/Driveway Delay	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	Cost of Alt	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
Place	Pedestrian Friendliness	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	Streetscape Quality of Life	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●



Delaware Avenue Complete Streets Feasibility Study



Share your Comments Here

For additional information or questions please visit the project website www.delawareavecompletestreets.com or email DelawareAveStudy@cmellp.com.

BUSINESS OWNERS MEETING



Study Goals

“Create a Plan for a more balanced transportation system along Delaware Avenue to enable safe and comfortable ADA compliant access for users of all ages and abilities, including pedestrians, bicyclists, transit users and motor vehicle drivers, otherwise known as Complete Streets.”



Safety



Access



Economy



Place

What are Complete Streets?



Complete Streets are streets for everyone, no matter who they are or how they travel.



National Complete Streets Coalition

Why Complete Streets - Safety

- Safer streets = less costly streets
- Recent Madison Avenue Road Diet in the City of Albany showed a 4:1 cost benefit ratio
- Road diets are one of FHWA's proven safety counter measures
- Reduce crashes by 19 to 47percent
- Speeds likely to be reduced by 3 to 5 mph



Roundabouts



Corridor Access Management



Roundabouts with Retroreflective Borders



Longitudinal Rumble Strips and Stresses on



Enhanced Delineation and Friction for Horizontal



Safety Edgewise



Medians and Pedestrian Crossings in Urban



Pedestrian Hybrid Beacons



Road Diet

Why Complete Streets – Economy & Mobility

- Promotes Community Interaction
- Less \$ on transportation = more spending money
- By 2045 the number of Americans over age 65 will increase by 77 percent
- Increased home values: 15 real estate markets; one-point increase in the walkability scores; \$700 to \$3,000 increase



Older Americans – Redefining Longevity

By 2045, the number of Americans over age 65 will increase by

77%

About **one-third** of people over 65 have a disability that limits mobility. Their access to critical services will be more important than ever.

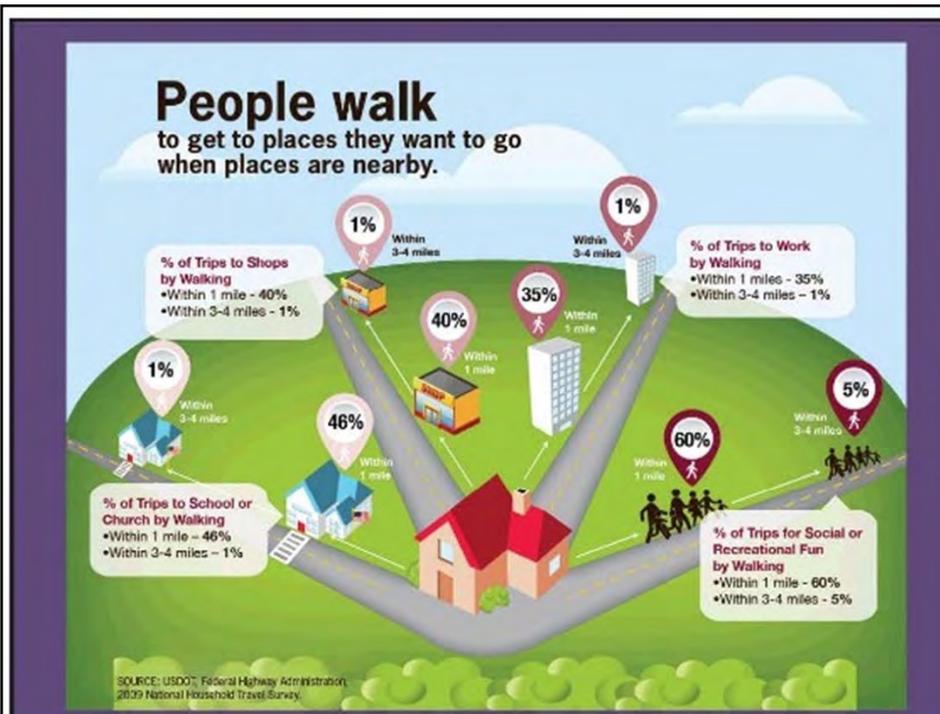
Millennials – Shaped by Technology

There are **73 million Millennials** aged 18 to 34. They are the first to have access to the internet during their formative years and will be an important engine of our future economy.

Millennials are drivers. By the end of the 2000s, they drove over **20% fewer** miles than at the start of the decade.

Income Inequality

10% of the population takes home **one-third** of our national income. Transportation is the **second-largest** expense for U.S. households.



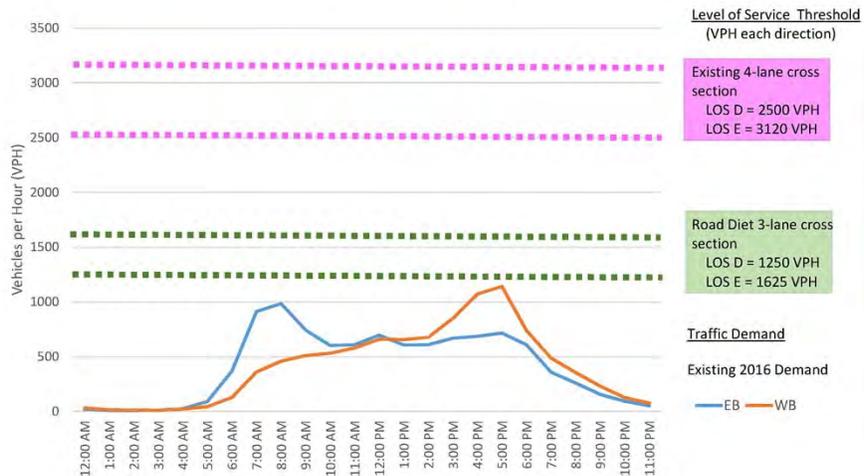
Overall Operations

LOS	Automobile	Bicycle	Pedestrian
A/B			
C/D			
E/F			
Delaware Avenue	LOS B/C	LOS E	LOS B to E

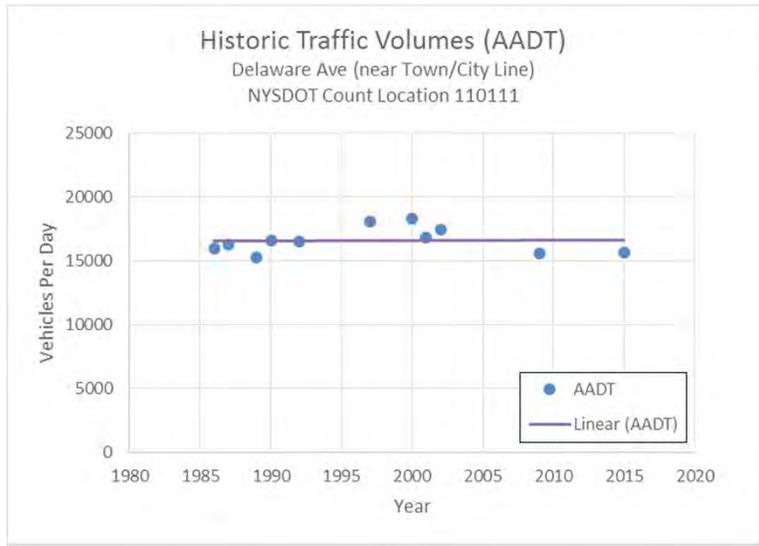
Image Courtesy of State of Florida Department of Transportation 2013 Quality/Level of Service Handbook

Volumes

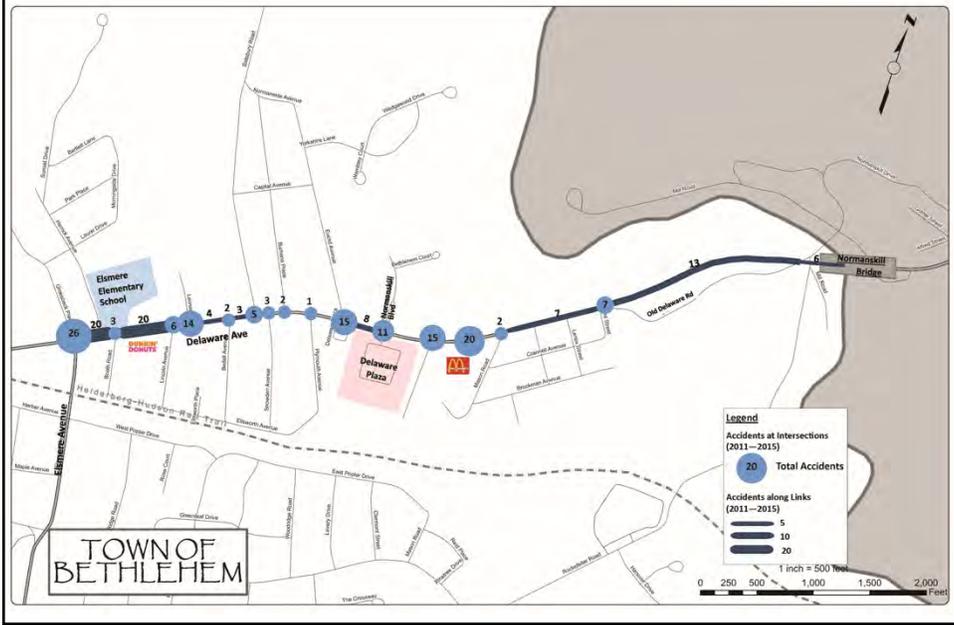
Hourly Traffic Variations (Typical Weekday)
Delaware Ave - East of Salisbury Rd



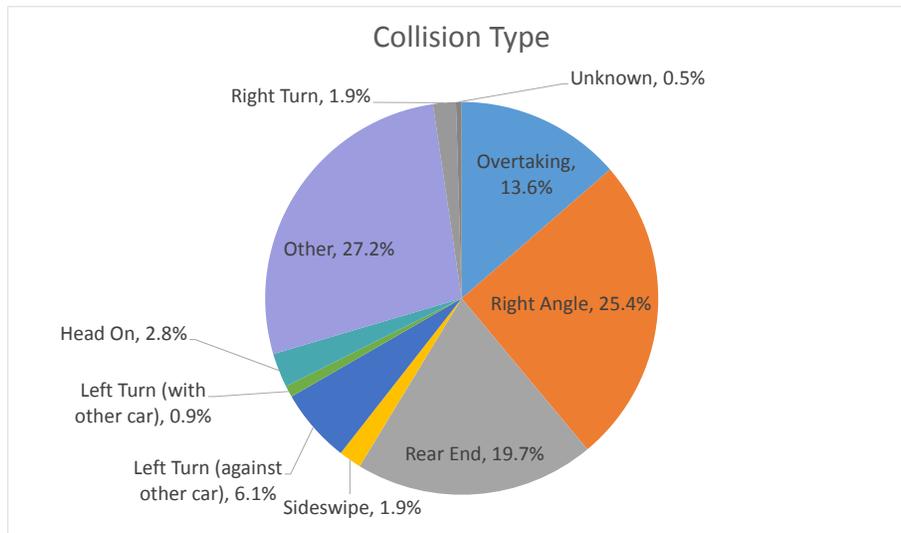
Traffic Volume Consistency



Crashes by Location



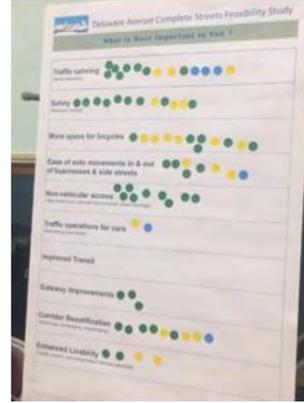
Crashes by Type



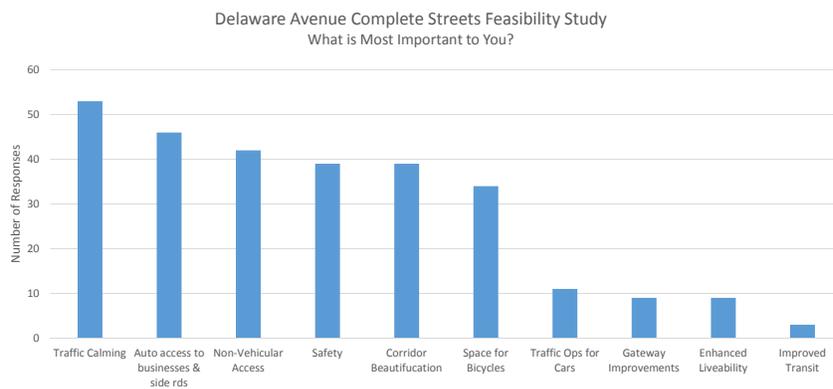
Road Diet Crash Reduction Factors

Countermeasure	Crash Type	Crash Reduction Factor
Narrow roadway cross section (4 to 3 lanes) with two way left-turn lane	All	26%
	Left-turn	24%
	Rear-end	31%
	Right-angle	37%

Public Meeting Recap



What is Most Important to You?



Five Alternatives

- A** Null
- B** Full Road diet (1-1-1)
- C** Half corridor road diet
- D** 1-1-2 Eastbound
- E** Westbound 2-1-1

Would you be willing to exchange...

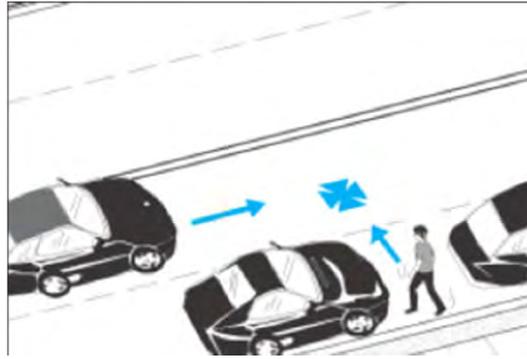
- Up to 50 seconds of travel time during the peak commute
for
- Traffic calming on Delaware Avenue, fewer crashes, better access for left turns, a more comfortable pedestrian environment, greater separation between cars and the sidewalk, improved pedestrian crossings, and space for bicycles?



Existing – Null Alternative

- Pros
 - Maintains current traffic operations
 - No cost
- Cons
 - High crash rate
 - Difficult crossing for pedestrians
 - » Multi-threat
 - Poor bike accommodation
 - Left turn challenge

Multi-threat



Full Road Diet (1-1-1)



• Pros

- Traffic calming
- Improved safety
- Improved bike accommodation
- Improved pedestrian crossing accommodation
- Improved access to/from unsignalized side streets and businesses

• Cons

- Some traffic diversions (3 to 4 %)
 - » Peak hour only
- Increased peak hour signal delay
 - » +15 to 50 seconds (AM)
- Increased corridor travel times - PM Peak end to end
 - » + 45 seconds each way

Half Corridor Road Diet (Delaware Plaza to Normanskill Bridge)



• Pros

- Maintains traffic operations - Elsmere to Plaza.
- Improved safety, traffic calming bike accommodation and pedestrian crossing accommodation in road dieted section
- Improved access to/from unsignalized side streets and businesses – road dieted section

• Cons

- High crash rate Elsmere to Plaza
- Multi-threat Elsmere to Plaza
- Lack of bike lane and pedestrian crossing accommodation Elsmere to Plaza

1-1-2 Eastbound (with full Road Diet Plaza to Bridge)



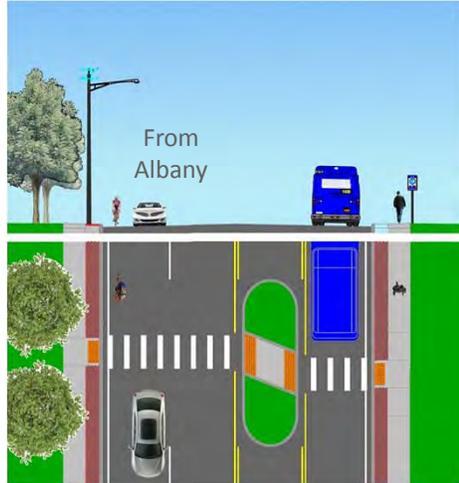
• Pros

- Ties into existing conditions / Enhancements project at Elsmere
- Some safety and traffic calming benefits
- Improved ped crossing opportunities

• Cons

- Lack of bike lane Elsmere to Plaza
- Multi-threat in one direction
- Travel time increase
 - » + 45 seconds WB, + 15 seconds EB

Westbound 2-1-1 (with full Road Diet Plaza to Bridge)



• Pros

- Good PM peak hour traffic operations
- Some safety and traffic calming benefits
- Improved ped crossing opportunities

• Cons

- Lack of bike lane Elsmere to Plaza
- Multi-threat in one direction
- Travel time increase
 - » + 15 seconds WB, + 45 seconds EB

Crashes Reduced (5 years)

- 213 Crashes (2011 to 2015)

Crashes Reduced					
	A	B	C	D	E
Elsmere to Normanskill Bridge	0	60	21	41	41
		28%	10%	19%	19%

Pedestrian Scores

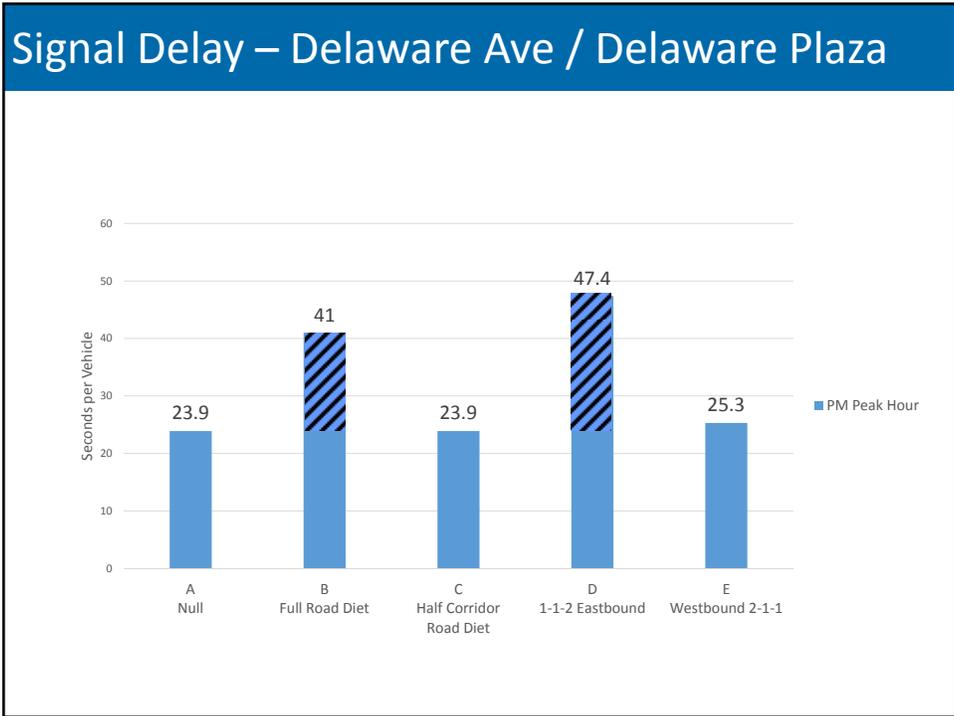
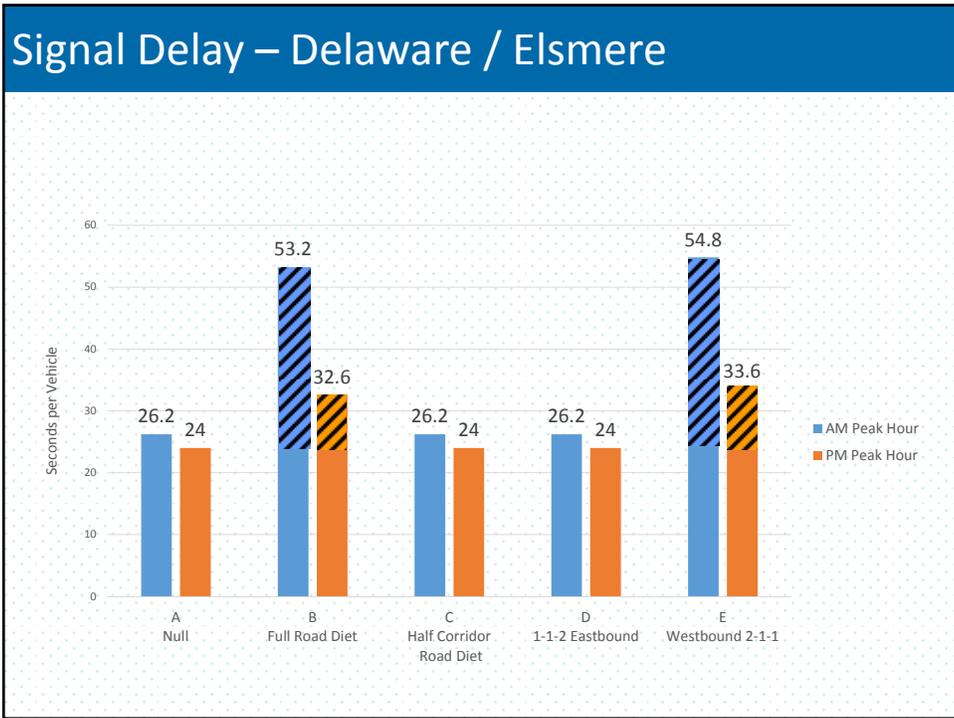


LOS A/B

Pedestrian Scores					
	A	B	C	D	E
Elsmere Ave	B	A	B	B	B
Herrick Ave	D	C	D	D	D
Booth Rd	D	C	D	D	D
Lincoln Ave	D	A	D	B	B
Leonard Place	D	D	D	D	D
Bedell Ave	D	C	D	D	D
Salisbury Rd	D	A	D	B	B
Snowden Ave	D	C	D	D	D
Burhans Place	D	C	D	D	D
Plymouth Ave	D	C	D	D	D
Euclid Ave	D	A	D	B	B
Normanskill Blvd	C	A	C	C	C
Mason Rd	D	C	C	C	C
Winslow St	D	A	A	A	A
Lenox St	D	C	C	C	C
Grant St	D	A	A	A	A
Old Delaware Ave	D	C	C	C	C

Bicycle Level-of-Service

Bicycle LOS					
	A	B	C	D	E
Elsmere to Delaware Plaza	E/D	C	D	D	D
Delaware Plaza to Normanskill	E/D	C	D/C	D/C	D/C



Average Queuing PM Peak Hour Delaware Avenue/Delaware Plaza Drwy/Normanskill Blvd



- A Null
- B Full Road Diet
- C Partial Road Diet
- D 1-1-2 Eastbound
- E Westbound 2-1-1

Average Queuing PM Peak Hour Delaware Avenue/Elsmere Avenue/Groesbeck Place



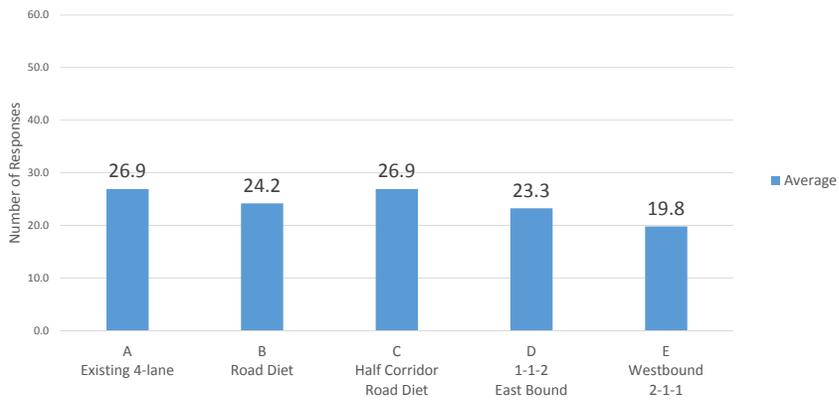
- A Null
- B Full Road Diet
- C Partial Road Diet
- D 1-1-2 Eastbound
- E Westbound 2-1-1

Average Queuing AM Peak Hour Delaware Avenue/Elsmere Avenue/Groesbeck Place

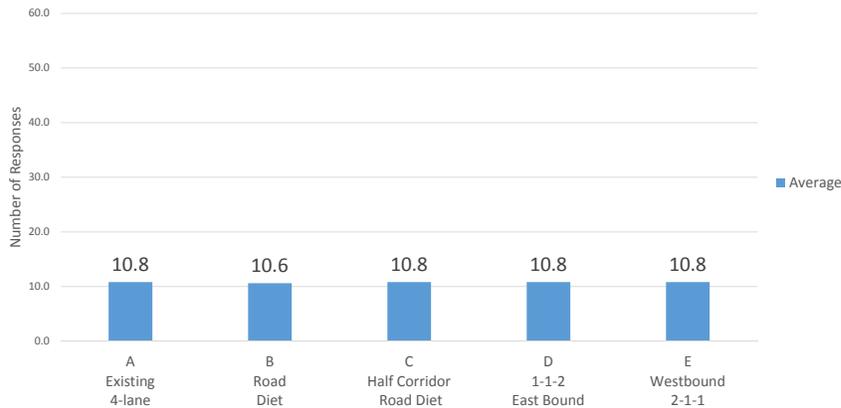


- A Null
- B Full Road Diet
- C Partial Road Diet
- D 1-1-2 Eastbound
- E Westbound 2-1-1

Delay from side streets and driveways



Delay to side streets and driveways



Case Studies

- Economic Impacts of lane elimination (road diet) projects are mixed; most studies point to either no overall economic impacts or some positive impact.
- Business owners are concerned about potential negative economic effects, generally more so if on-street parking is impacted.
- There is little evidence that road diets have a detrimental effect on businesses in terms of their customer volume, revenue, and livelihood.

https://safety.fhwa.dot.gov/road_diets/resources/pdf/fhwas17019.pdf

Enhancements

- Trail connections
- Traffic calming
- Gateway
- Access management
- Street trees
- Sidewalk extension
- Sidewalk upgrades for ADA compliance
- Bus stop / street crossing integration
- Street lighting upgrades as required



Roundabouts



This meeting summary represents the writer's understanding of the major issues discussed. If you wish to suggest edits or additions, please contact the undersigned.

DATE: July 26, 2017
PROJECT: Delaware Avenue Complete Streets Feasibility Study
PLACE: Town of Bethlehem Town Hall
TIME: 4:00 pm
PURPOSE: **The purpose of this meeting was to inform business and property owners on the status of the study, and to receive input on the alternatives.**

ATTENDEES:

<u>Name</u>	<u>Title/Representing</u>	<u>Telephone Number</u>
See attached attendance sheet		

SUMMARY:

1. Welcome/Meeting Purpose – John Clarkson welcomed the business and property owners and thanked them for participating in the study. Mark Sargent explained that the purpose of the meeting was to review progress on the study, and receive input on the alternatives.
2. Background – CM briefly reviewed the study purpose and goals, as well as existing conditions in the corridor. An overview of the public information meeting held on February 16, 2017, was also provided.
 - a. Jim Giacone asked for clarification of the 4:1 cost benefit ratio seen on the Madison Avenue Road Diet in the City of Albany.
 - i. CM responded that the cost benefit ratio analysis considered the construction cost of the road diet in comparison with the cost of crashes saved.
3. Introduce Alternatives – CM briefly outlined the five alternatives (A – Null, B-Full Road Diet, C-Half Corridor Road Diet, D – 1-1-2 Eastbound, E – Westbound 2-1-1) that had been evaluated. During the overview, the following comments and topics were highlighted:
 - a. A question was asked about the safety benefits under the Half Corridor Road Diet alternative.
 - i. CM stated there would be a safety benefit in the eastern segment of the study area. There would be no safety benefit in the western segment.
 - b. A question was asked about the impacts on other roads in Bethlehem as a result of the three to four percent peak hour traffic diversion away from Delaware Avenue under the Full Road Diet alternative.
 - i. CM responded that the diversion would be negligible when considering daily traffic volumes and how traffic dissipates across the network.
 - ii. Rob Leslie stated that in order for traffic to divert from Delaware Avenue, travel times on other routes would need to be shorter than on Delaware Avenue.
 - c. Jim Giacone asked if there would be more crashes in other locations as a result of traffic diversion.

- i. CM responded that it is possible that a diversion in traffic could relocate some of the existing crashes. However, the results of the analysis are based on safer roadway design with a two way left turn (TWLT) lane rather than a reduction in vehicle volumes.
 - d. It was asked if this study was to determine the road configuration for the current construction on Delaware Avenue.
 - i. Rob Leslie clarified that this is a separate project and that it is a planning study to determine the preferred conceptual design to move forward toward construction in the future. The current construction project underwent a similar planning process over five years ago.
- 4. Evaluation of Alternatives and trade-offs – CM provided an analysis of each alternative using specific performance measures including vehicle crashes, traffic volumes, pedestrian and bicycle scores, vehicle delay and queuing.
 - a. Commander Hornick asked if the severity of crashes was examined in addition to crash location.
 - i. Injury accidents were noted in the existing conditions assessment, but the crash reduction factors used are based on average safety benefits which accounts for all types of crashes.
 - b. Commander Hornick responded that TWLT lanes could lead to an increase in head-on collisions.
 - i. Debbie Murray agreed that TWLT lanes can be confusing for motorists.
 - ii. CM responded that based on research by FHWA, TWLT lanes are a proven safety improvement.
 - c. It was asked why the Bicycle LOS could not be improved beyond LOS C even with dedicated bicycle lanes.
 - i. CM responded that the improvement in bicycle LOS is a result of the increased space between bicyclists and passing cars and traffic calming. Based on the formula used, bicycle LOS could not improve beyond LOS C because of the traffic volume in the adjacent lane and the speed of traffic.
 - d. After seeing the vehicle queuing figure, there was discussion regarding traffic operations in the Delaware Plaza parking lot.
 - i. It was noted that the current configuration creates some confusion as motorists arrive in both directions as they exit.
 - ii. It was stated that channelization improvements could be considered in the parking lot, but how would they be paid for? Ideally parking circulation improvements could be made before or during the implementation of a road diet on Delaware Avenue.
 - e. It was asked why a road diet alternative would increase queues for vehicles turning left out of Delaware Plaza.
 - i. CM responded that the queues increased as a result of changes to the traffic signal timing which would increase the green time on Delaware Avenue.
- 5. Alternatives Comparison/Discussion – CM asked for input on the alternatives from the business and property owners.
 - a. Several people spoke in favor of the Full Road Diet as the best alternative. Several people were in favor of considering the 1-1-2 Eastbound and 2-1-1 westbound alternatives. There were concerns that the half corridor road diet alternative would not mitigate crashes in the western segment of the corridor, where crashes are more prevalent. Several people commented that they needed more time to consider the alternatives.

- b. It was noted that without reducing the number of lanes on the west segment of Delaware Avenue, there are few opportunities for safety improvements including enhanced pedestrian crossings.
 - c. Commander Hornick stated that new traffic patterns generally lead to new complaints and issues, and noted that increased queues may impede emergency vehicles.
 - d. Jim Giacone stated that there are pros and cons associated with the proposed alternatives. The traffic calming, beautification and a crosswalk are beneficial, but if traffic diverts from Delaware Avenue it could mean less business.
 - e. Karin Giacone asked how a reduction in lanes would impact large vehicles and their ability to access businesses for deliveries.
 - i. CM responded that trucks would be able to turn as they do today, except to/from the new lane arrangement. It was also clarified that there are currently no proposed raised medians on the west segment of Delaware Avenue.
6. Next Steps/ Schedule – A public meeting is scheduled for 6:00pm on Tuesday September 26, 2017 at the Town of Bethlehem Town Hall.

The meeting concluded at 6:00 p.m.

Jesse Vogl
Assistant Project Planner

cc: Attendees
File

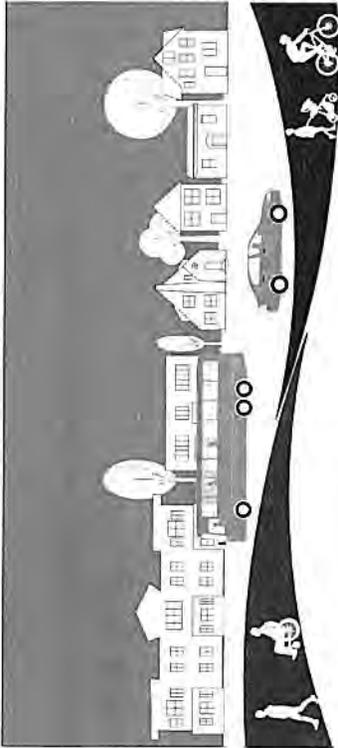
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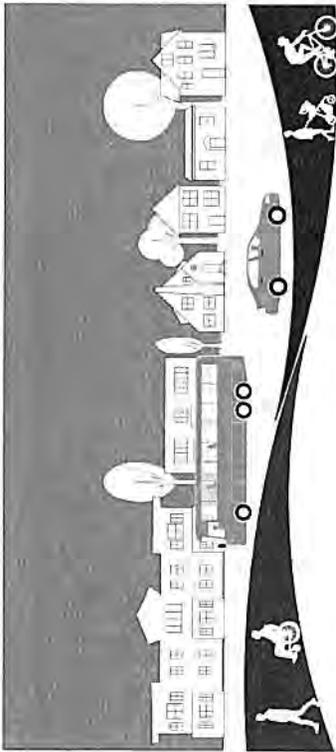
Delaware Avenue Complete Streets
Feasibility Study

Business and Property Owner Meeting

Bethlehem Town Hall, Albany, NY
Thursday, July 26, 2017
4:00 p.m.



Name	Representing	Email
Brent Haining	LDTA	brent1@cdta.org
Liz Stauber	Town of Bethlehem	
John J. Hooper	DELMAR MARKETPLACE	HOOPSAMR@GMAIL.COM
Mark Sargent	Creighton Manning	msargent@cmulip.com
Jesse Koop	Creighton Manning	jrog1@cmulip.com
John Mooney	GEURTZE BUILDERS	GEURTZE@GMAIL.COM
Jim McLean	BEST CLEANERS	fin@bestcleaners.net
Aubrey Buijssen	NYS DOT RA Planning	aubrey.buijssen@dot.ny.gov
Brian Kirch	NYS DOT Region 1	bram.kirch@dot.ny.gov
Daniel Sanders	200 DELAWARE, LLC	DSANDERS@SANDERSARCHITECTS.COM
Ken Karschil	TOB	
Spin Croce	4 Corners Pharmacy	SCROCE@FOURCORNERSX.COM
Laurin Giaccone	My Place + Co.	keg.jard@myplace.com
Tom Giaccone	My Place + Co	jin@myplace.com
Alison Kurland	The Clicker Center	kurland@overion.net



Delaware Avenue Complete Streets
Feasibility Study

Study Advisory Committee Meeting

Bethlehem Town Hall, Albany, NY
Wednesday, July 26, 2017
4:00 p.m.

Name	Representing	Email
Deb Murray	Delaware Plaza	debbie@thedelawareplaza.com
Gregg Biche	Quality P.M. Inc	Gregg@Quality.pm.com
Tony CELIK	Mercato's Restaurant	tony2681152@gmail.com
Jennifer Kucayne	BETHLEHEM CHAMBER	
Erica Hogan	bethlehem Chamber	
Commander Hornick	BPD	
David Van Loven	Beth Town Board	

PUBLIC INVOLVEMENT MEETING #2

**Meeting Summary – Public Information Meeting #2
Delaware Avenue Complete Streets Feasibility Study
September 26, 2017**



The second public information meeting for the Delaware Avenue Complete Streets Feasibility Study was held on Tuesday, September 26, 2017, at the Town of Bethlehem Town Hall. The meeting was well advertised and attended with approximately 100 attendees including residents, business owners, stakeholders, and study advisory committee members. The meeting began with introductions by John Clarkson, Town of Bethlehem Supervisor, and Michael Franchini, Capital District Transportation Committee (CDTC) Executive Director. Following the introductions, Jesse Vogl (Project Planner) provided a synopsis of the study goals and existing conditions, followed by Mark Sargent (Project Manager) who summarized the feedback from the first public meeting, presented the alternatives including pros and cons and technical studies, and facilitated a question and answer period. See Appendix A for the PowerPoint presentation.

The purpose of the meeting was to present and receive feedback on five complete streets alternatives being considered for the section of Delaware Avenue from Elsmere Avenue to the Albany City line.



Meeting attendees had several opportunities to take in the information and provide input, including a poster and a comment box at the library, an open house prior to the technical presentation, the technical presentation itself, a question and answer session, a comment box at the meeting, website address and project email address, and a ranking activity at the end of the meeting. There were two map areas (both alike) with posters of the five alternatives and corridor enhancement concepts.

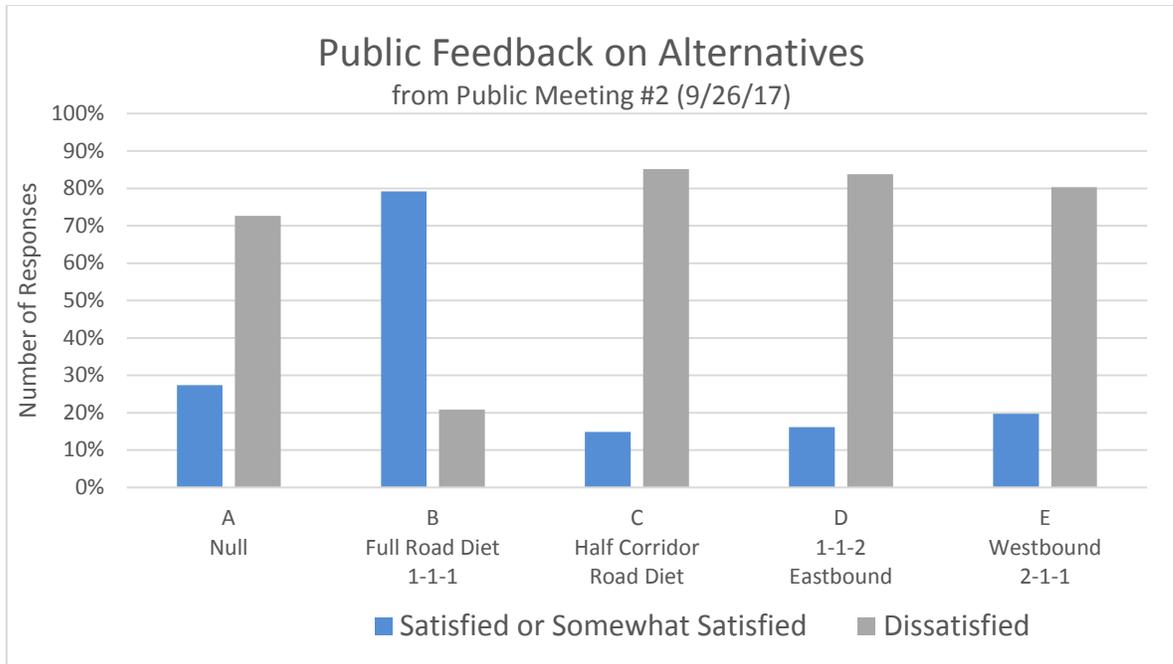
During the Q&A, the following general comments and responses were provided.

1. After the slide with pedestrian crossings was presented, the comment was made that more pedestrian traffic would slow vehicles down and cause additional delay that was not included in the model –
 - It was agreed there could be incidental additional vehicle delay when pedestrians cross the street.
2. Someone asked how there is only an additional 50 seconds of delay if the queues increase –
 - It was explained that motorists move through signals at about two to three seconds per vehicle.
3. It was asked if the speed limit would be changed on Delaware Ave. After responding that it would be pursued, the follow-up question asked how much of the delay was caused by the change in speed limit rather than the roadway reconfiguration –
 - It was reported to be about 1/3 of the additional travel time.
4. It was asked if the model factored in driver behavior, particularly at merges –
 - It does.
5. The comment was made that focusing on the peak hour commuting patterns would not provide an accurate representation of the overall travel on Delaware Ave –
 - It was explained that traffic analysis is typically done for the highest traffic volume time period.
6. There was a question regarding buses and where they would stop under the road diet configuration –
 - Answer, at the curb for the lower volume stops, and pursue bus bays at the higher volume stops.
7. A comment was made that the current school bus traffic in and out of Herrick Ave is a concern and that stop lines should be pulled back to improve turns for large vehicles –
 - Answer, stop lines are not appropriate and would violate the MUTCD, but “Do Not Block Side Road” signs should be considered. Do not block intersection pavement markings or turn prohibitions may also be considered. Based on this comment, the Town observed school bus operations on Friday 10/6/17 during the morning and afternoon school periods. The school is served by 8 buses that arrived during a 10 minute window from 9:03 a.m. to 9:12 a.m. 6 of the 8 buses made a left turn onto Herrick from Delaware Ave, 1 made a right turn in, and 1 arrived by going straight through Elsmere onto Groesbeck and arrived from the rear. 2 of the 6 left turning buses were delayed by about 15 seconds when making the left turn in, this would cause temporary delay to eastbound motorists under the full road diet alternative. The 9:00 a.m. time period does not coincide with the peak commuter traffic which is 7:30 to 8:30.
 - During the afternoon beginning at 2:55, 4 buses were already on site. 3 of the 4 remaining arrivals made a left turn onto Herrick from Delaware Ave. The 4th made a right turn in. 2 of the 3 left turners were delayed about 15 to 30 seconds which would temporarily delay eastbound through motorists under the full road diet alternative. The afternoon school peak (2:50 to 3:30) does not coincide with the afternoon commuter peak (4:45 to 5:45).
 - During the PM peak traffic count conducted by CDTC on 6/16/16, 8 vehicles were observed making a left from Delaware Ave onto Herrick during the PM commuter peak.
8. It was suggested that two lanes be maintained at the signalized intersections and taper down to one lane after the intersection –
 - Comment noted.

9. It was asked if pedestrian bridges were examined as well as the possibility of road widening to add capacity –
 - Answer, they were considered and rejected.
10. Someone asked if RRFBs were under consideration as part of this study –
 - Answer, yes, particularly in the western segment.
11. There was a question on why the null alternative doesn't include pedestrian crossings. The comment was made that since the width of the roadway isn't changing that crossings would be acceptable regardless of lane configuration –
 - It was explained that marking crosswalks on four-lane 40-mph facilities does not improve safety.
12. The comment was made that crashes seem to be located at turning lanes and that a road diet would not help that. The speaker continued that there are no bicyclists on Delaware Ave. and that they can use the rail trail. It was requested that we examine road widening rather than a road diet –
 - Crashes are concentrated in areas without turn lanes. Even though there are few bicyclists does not mean roadways should not accommodate them. The same goes for other users such as the young and the old, and disabled. Road widening alternatives are not consistent with the objectives of the study.
13. It was commented that the queues on Delaware Ave are greater than what the model shows –
 - Answer, the queues shown are averages.
14. Someone noted that increasing bicycle access to businesses would encourage cyclists and improve the economy –
 - Comment noted.
15. The comment was made that the model is wrong and that a road diet would slow traffic. There was also concern about buses stopping that would slow traffic –
 - The models are reliable for order of magnitude changes. There will be additional delay for motorists that are traveling behind a bus, which was believed to be 3 times per hour.
16. It was noted that it is not likely that another study will be done for another 20 years so this is an opportunity to encourage alternative modes of transportation that should not be missed –
 - Comment noted.
17. It was asked if right turn lanes into Delaware Plaza were examined –
 - Answer, they were not.
18. Someone asked if there was a contingency plan in case the model is wrong –
 - Answer, probably need to get the useful life out of the project before significant changes would be considered again.

1. Alternative Ranking Activity

Each attendee was given five dots, and instructed to place one on each alternative by selecting "Satisfied", "Somewhat satisfied", or "Dissatisfied" with each alternatives. The results are shown on the following bar chart and show that the majority of attendees favored the full Road Diet Alternative at approximately 80 percent favored. There was little support for the other four alternatives, at approximately 15 to 30 percent each.



2. Written comments

As of this writing (November 15, 2017), 41 people provided written comments either by email, or in one of the comment boxes. A synopsis of the comments shows that a majority of the written comments are in support for the full road diet (17 for, 11 against), and with 13 comments not related to a specific alternative.

The public meeting concluded with an invitation for meeting attendees to attend the upcoming Town Board meeting on October 11th, where the team will provide a summary of the Study and the feedback from Public Meeting to the Town Board.

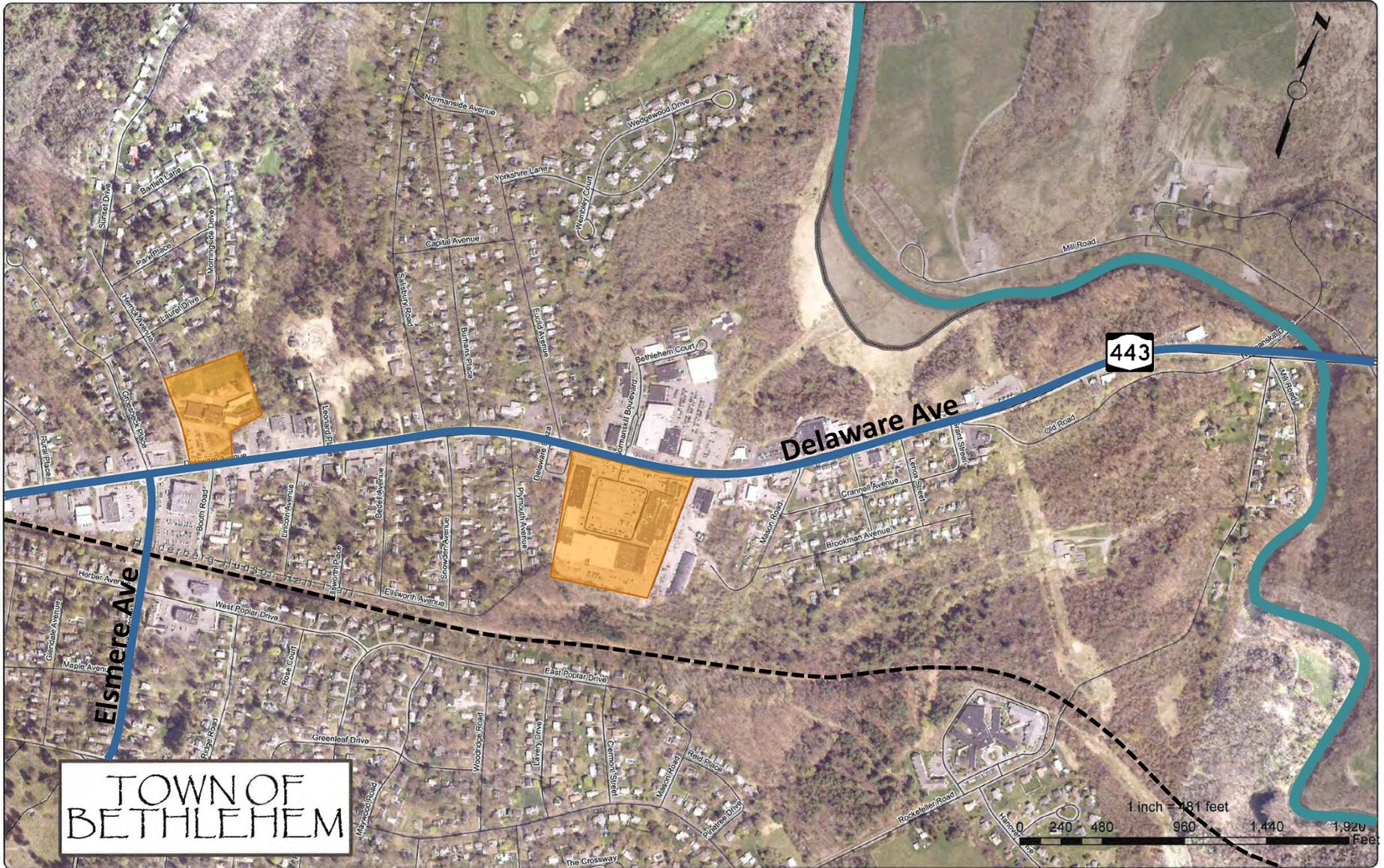
Appendix A - Powerpoint Presentation



Delaware Avenue Complete Streets FEASIBILITY STUDY

Scope / Meeting Purpose

- ✓ Initiation and Data Gathering
- ✓ Existing Conditions
- ✓ Public Meeting #1
- ✓ Draft Conceptual Complete Streets Alternatives
- ✓ Evaluation of Alternatives
- ✓ Public Meeting #2
- Report and Implementation Strategy
- Final Presentation



TOWN OF
BETHLEHEM

Study Goals

“Create a Plan for a more balanced transportation system along Delaware Avenue to enable safe and comfortable ADA compliant access for users of all ages and abilities, including pedestrians, bicyclists, transit users and motor vehicle drivers, otherwise known as Complete Streets.”



Safety



Access



Economy



Place

What are Complete Streets?



Complete Streets are streets for everyone, no matter who they are or how they travel.



National Complete Streets Coalition

Why Complete Streets - Safety

- Safer streets = less costly streets
- Recent Madison Avenue Road Diet in the City of Albany showed a 4:1 cost benefit ratio
- Road diets are one of FHWA's proven safety counter measures
- Reduce crashes by 19 to 47percent
- Speeds likely to be reduced by 3 to 5 mph



Why Complete Streets – Economy & Mobility

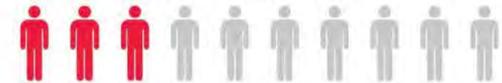
- Promotes Community Interaction
- Less \$ on transportation = more spending money
- By 2045 the number of Americans over age 65 will increase by 77 percent
- Increased home values: 15 real estate markets; one-point increase in the walkability scores; \$700 to \$3,000 increase



Older Americans — Redefining Longevity

By 2045, the number of Americans over age 65 will increase by

77%



About **one-third** of people over 65 have a disability that limits mobility. Their access to critical services will be more important than ever.

Millennials — Shaped by Technology

There are **73 million Millennials** aged 18 to 34. They are the first to have access to the internet during their formative years and will be an important engine of our future economy.

Millennials are driving less. By the end of the 2000s, they drove over **20% fewer** miles than at the start of the decade.



Income Inequality

10% of the population takes home **one-third** of our national income.

Transportation is the **second-largest** expense for U.S. households.



People walk

to get to places they want to go
when places are nearby.



Road Diet Guidance vs Area Roads

Up to 25,000 Vehicles Per Day – Seattle DOT		
21,100	Route 32 (Broadway)	Menands
≤ 20,000 Vehicles Per Day “ May be a good candidate” - FHWA		
18,900	Route 5	Schenectady
18,300	Delaware Ave (Elsmere Ave to Plaza)	Bethlehem
16,600	Fuller Road (RR Ave to Central)	Albany
15,500	Madison Avenue	Albany
15,500	Delaware Ave (Plaza to City Line)	Bethlehem

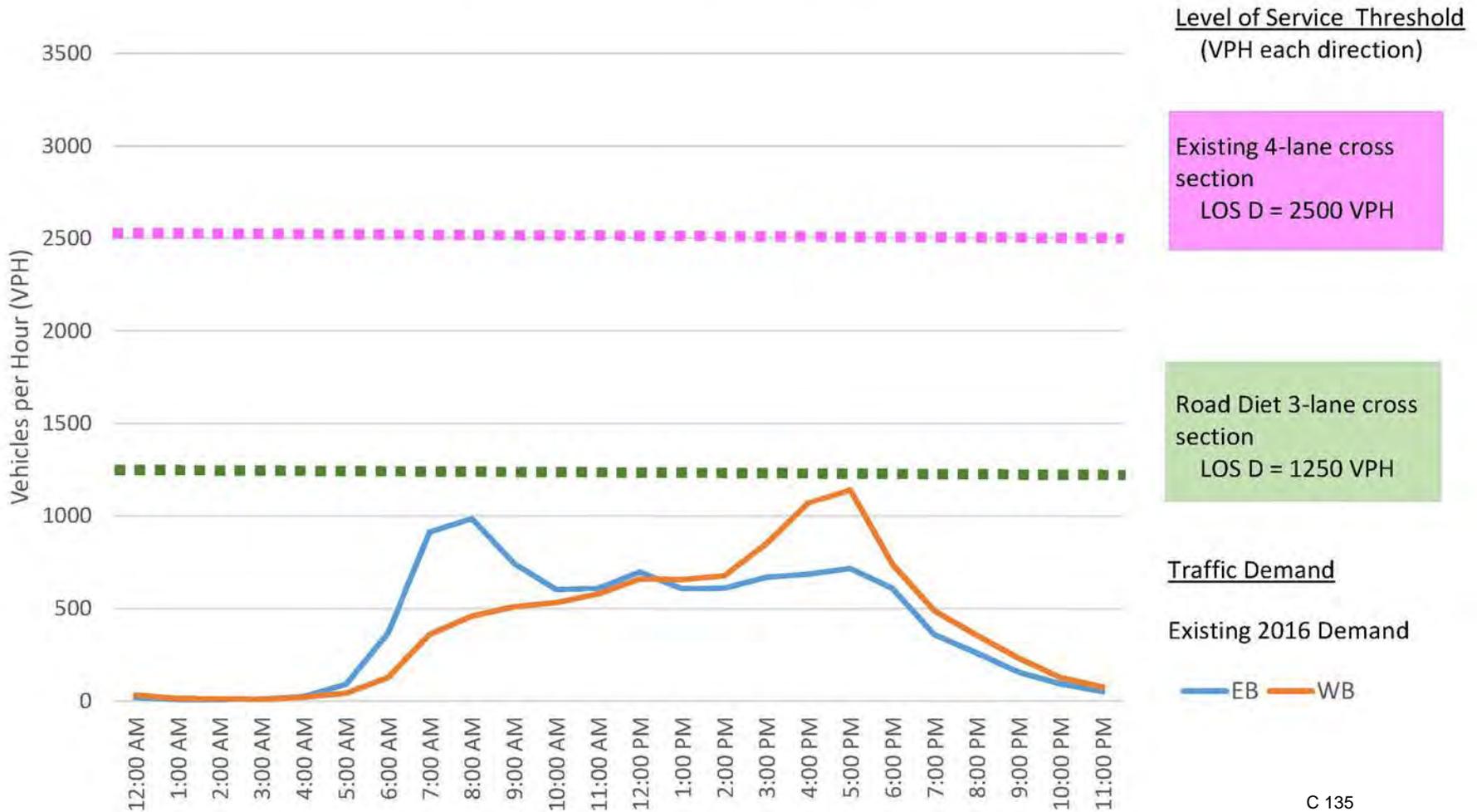
Existing Conditions

Overall Operations

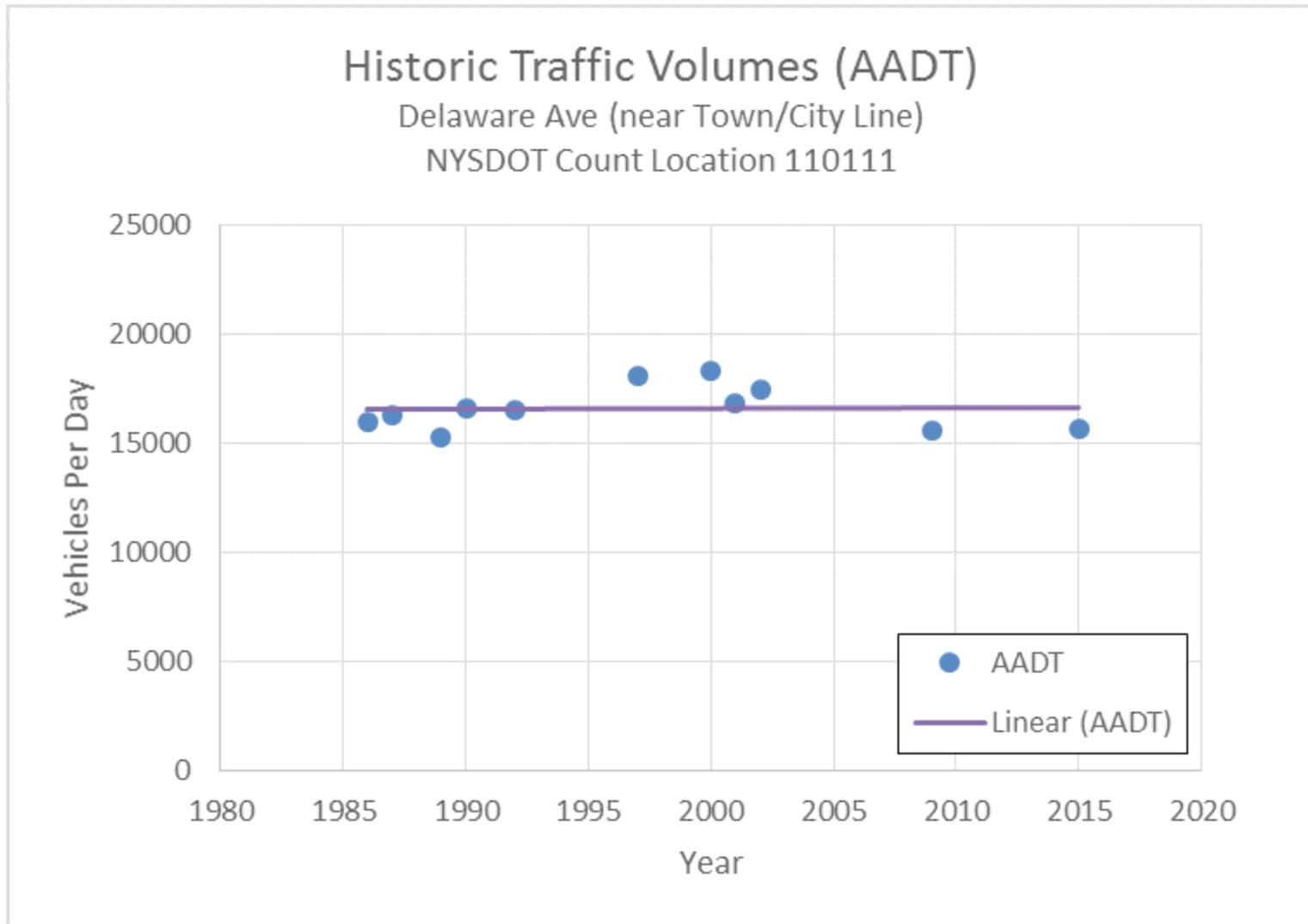
LOS	Automobile	Bicycle	Pedestrian
A/B			
C/D			
E/F			
Delaware Avenue	LOS B/C	LOS E	LOS B to E

Volumes

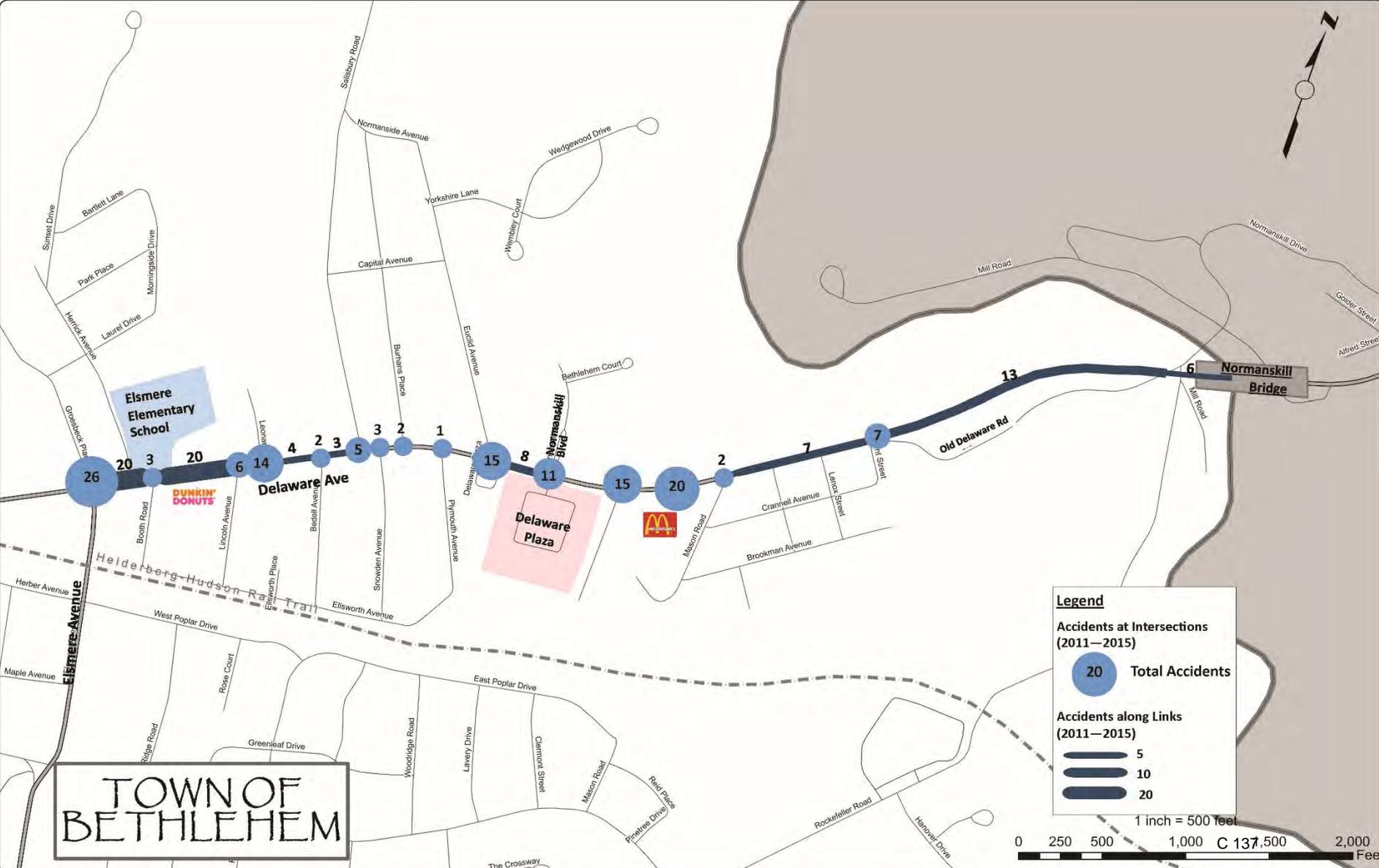
Hourly Traffic Variations (Typical Weekday) Delaware Ave - East of Salisbury Rd



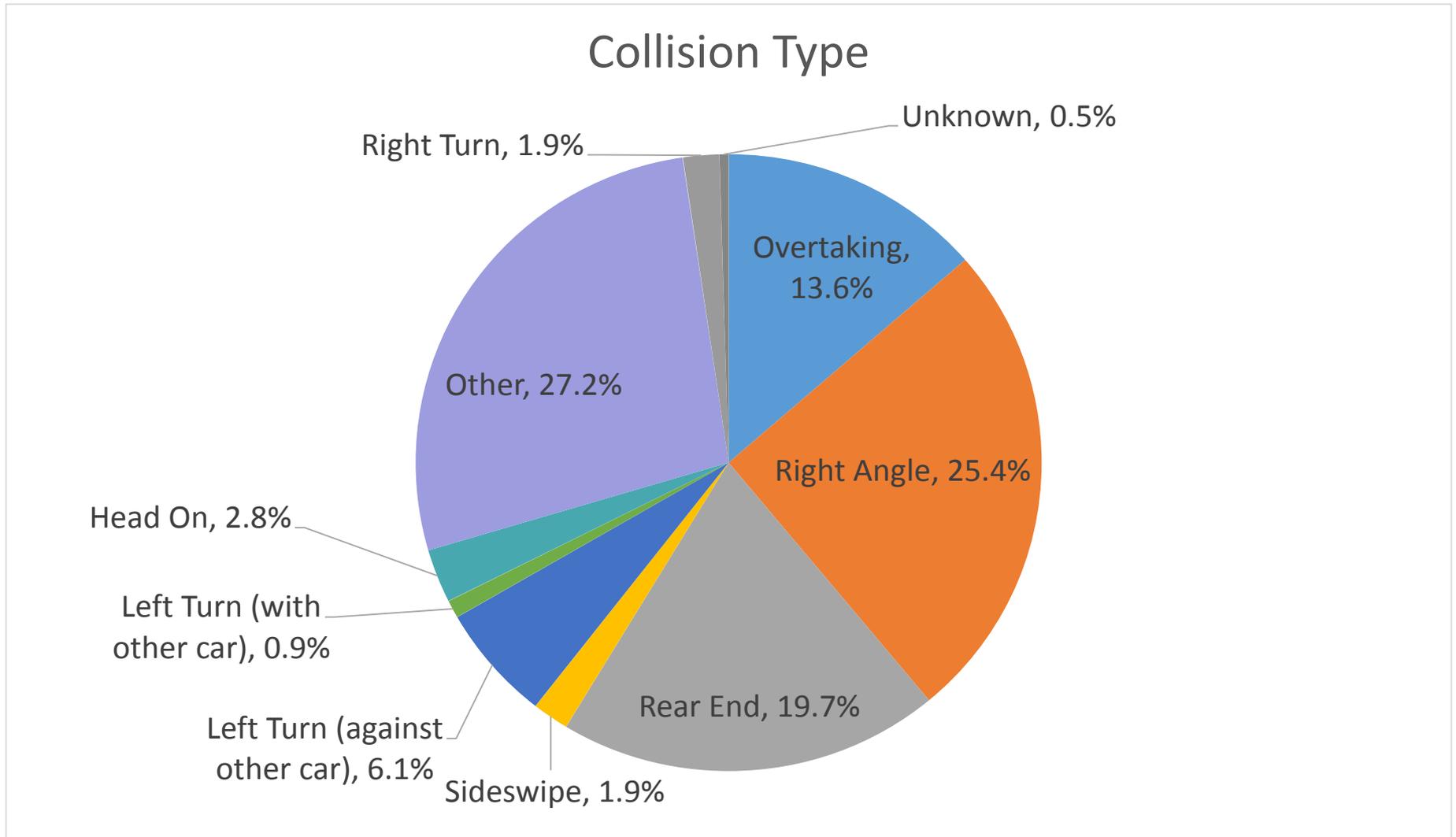
Traffic Volume Consistency



Crashes by Location



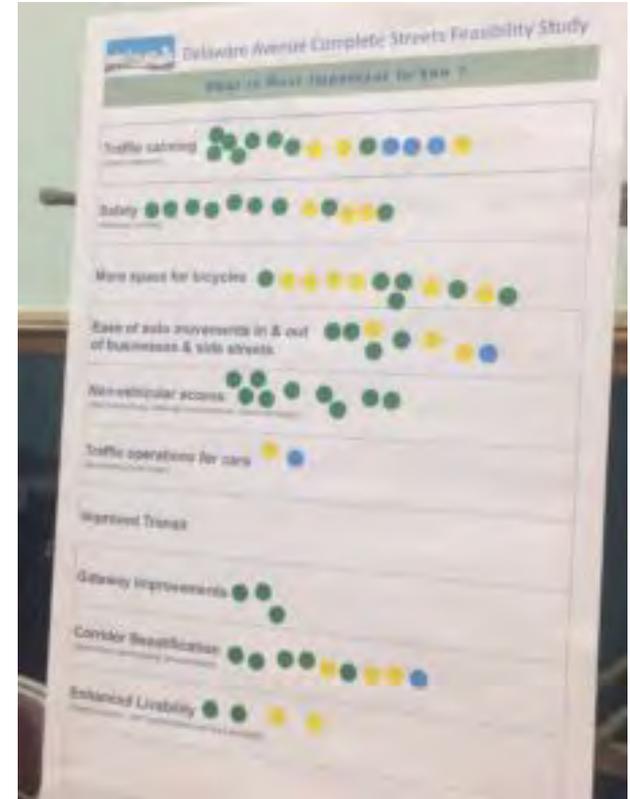
Crashes by Type



Road Diet Crash Reduction Factors

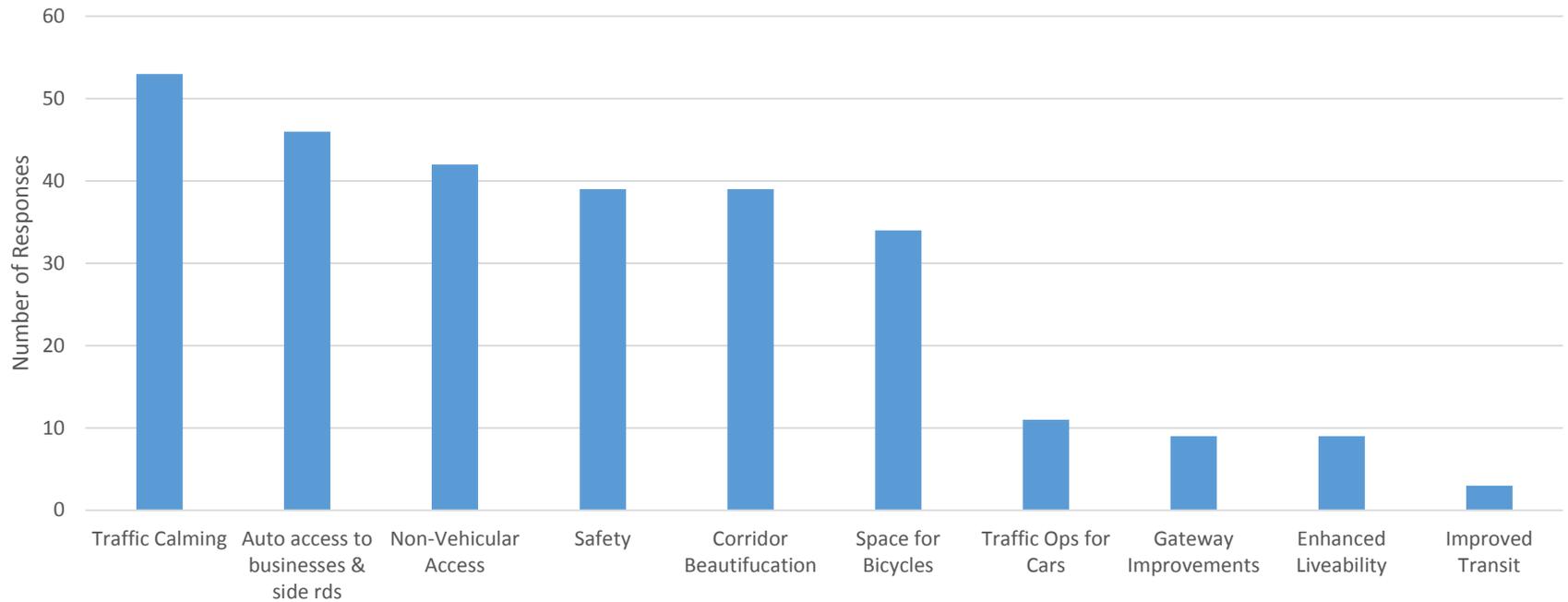
Countermeasure	Crash Type	Crash Reduction Factor
Narrow roadway cross section (4 to 3 lanes) with two way left-turn lane	All	26%
	Left-turn	24%
	Rear-end	31%
	Right-angle	37%

Public Meeting Recap



What is Most Important to You?

Delaware Avenue Complete Streets Feasibility Study
What is Most Important to You?



Five Alternatives

- A** Null
- B** Full Road diet (1-1-1)
- C** Half corridor road diet
- D** 1-1-2 Eastbound
- E** Westbound 2-1-1

Would you be willing to exchange...

- Up to 50 seconds of travel time during the peak commute

for

- Traffic calming on Delaware Avenue, fewer crashes, better access for left turns, a more comfortable pedestrian environment, greater separation between cars and the sidewalk, improved pedestrian crossings, and space for bicycles?

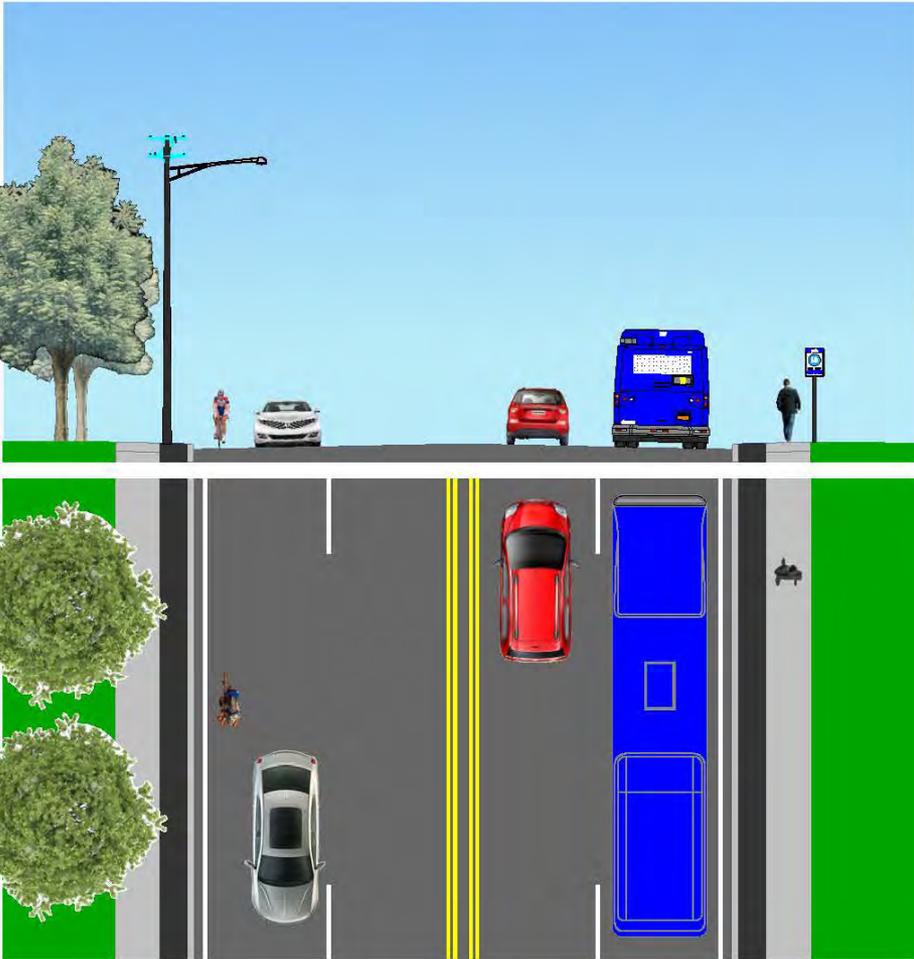








Existing – Null Alternative



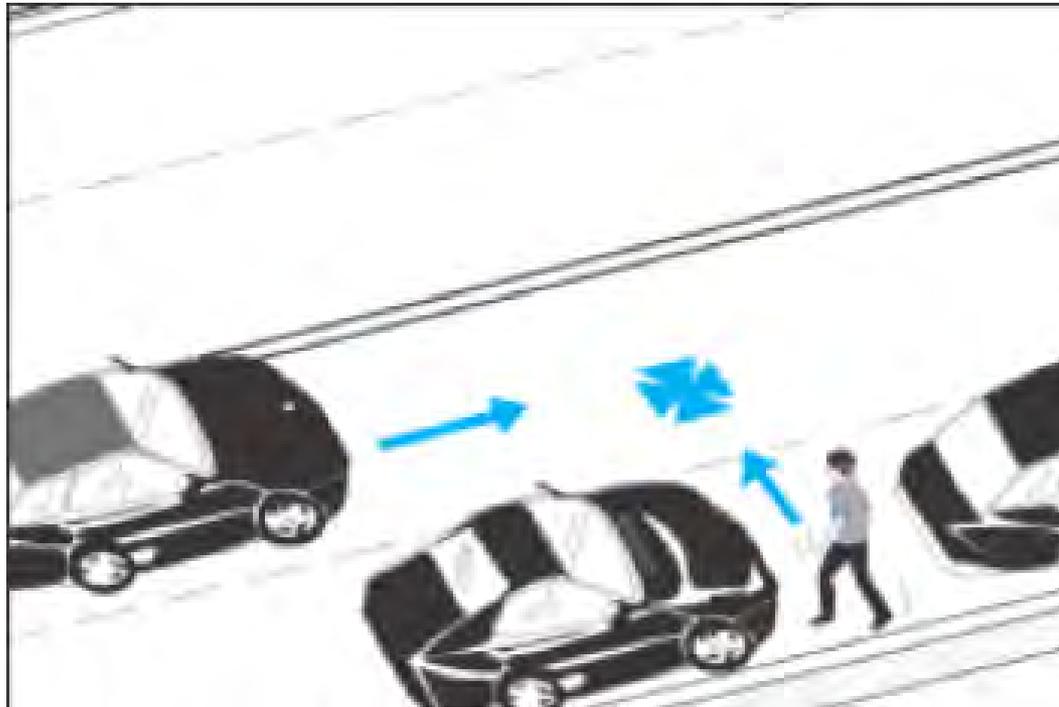
• Pros

- Maintains current traffic operations
- No cost

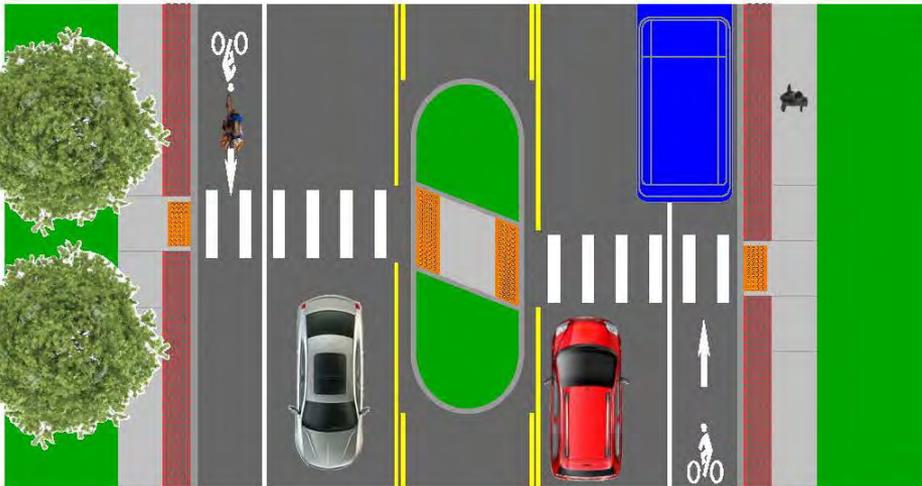
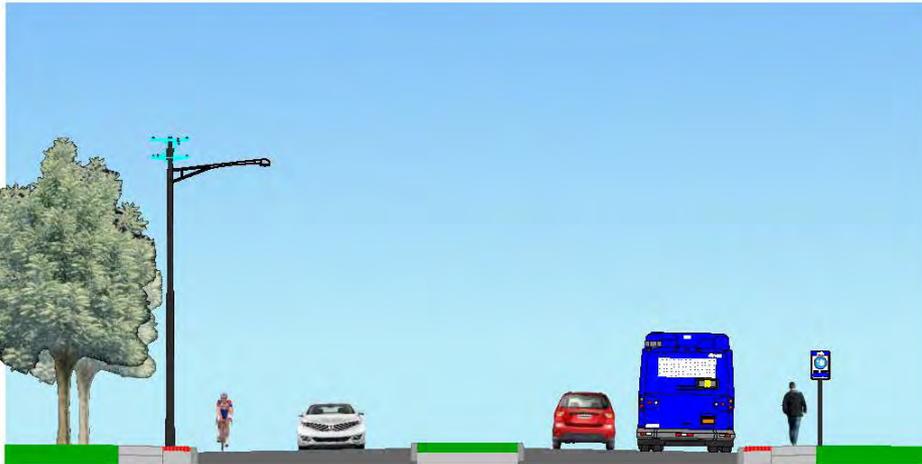
• Cons

- High crash rate
- Difficult crossing for pedestrians
 - » Multi-threat
- Poor bike accommodation
- Left turn challenge

Multi-threat



Full Road Diet (1-1-1)



• Pros

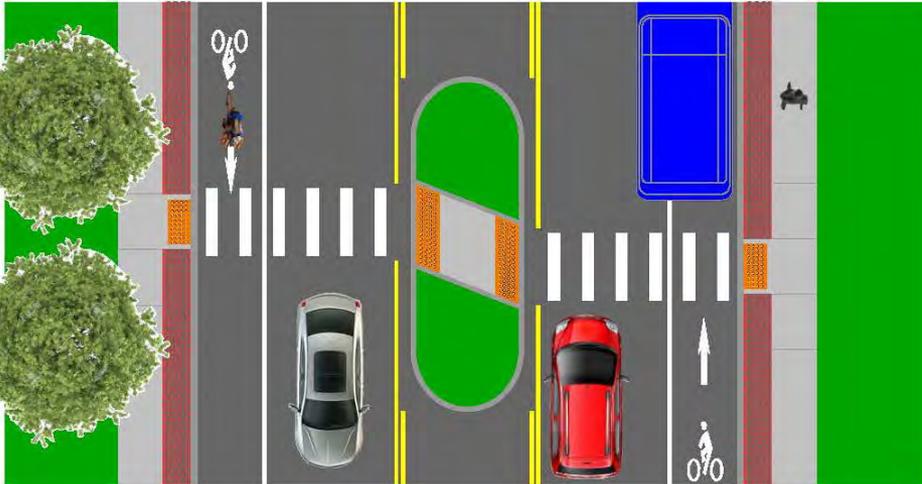
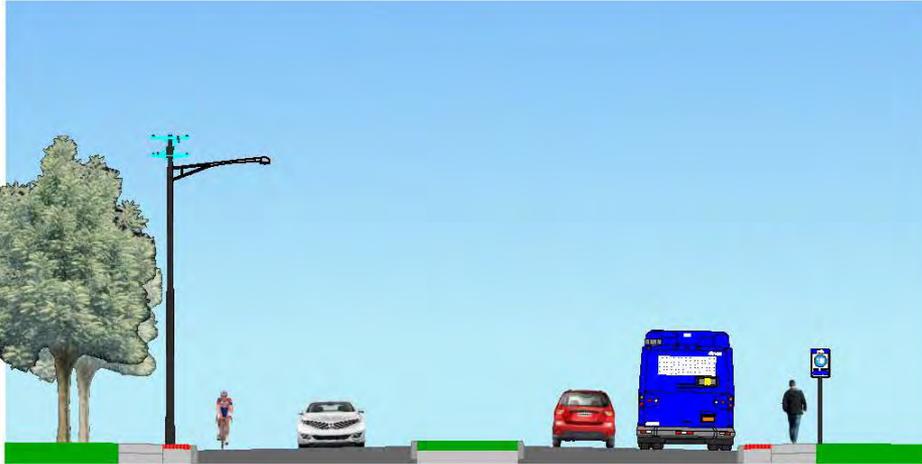
- Traffic calming
- Improved safety
- Improved bike accommodation
- Improved pedestrian crossing accommodation
- Improved access to/from unsignalized side streets and businesses

• Cons

- Some traffic diversions (3 to 4 %)
 - » Peak hour only
- Increased peak hour signal delay
 - » +15 to 50 seconds (AM)
- Increased corridor travel times - PM Peak end to end
 - » + 45 seconds each way

Half Corridor Road Diet

(Delaware Plaza to Normanskill Bridge)



• Pros

- Maintains traffic operations - Elsmere to Plaza.
- Improved safety, traffic calming bike accommodation and pedestrian crossing accommodation in road dieted section
- Improved access to/from unsignalized side streets and businesses – road dieted section

• Cons

- High crash rate Elsmere to Plaza
- Multi-threat Elsmere to Plaza
- Lack of bike lane and pedestrian crossing accommodation Elsmere to Plaza

1-1-2 Eastbound (with full Road Diet Plaza to Bridge)



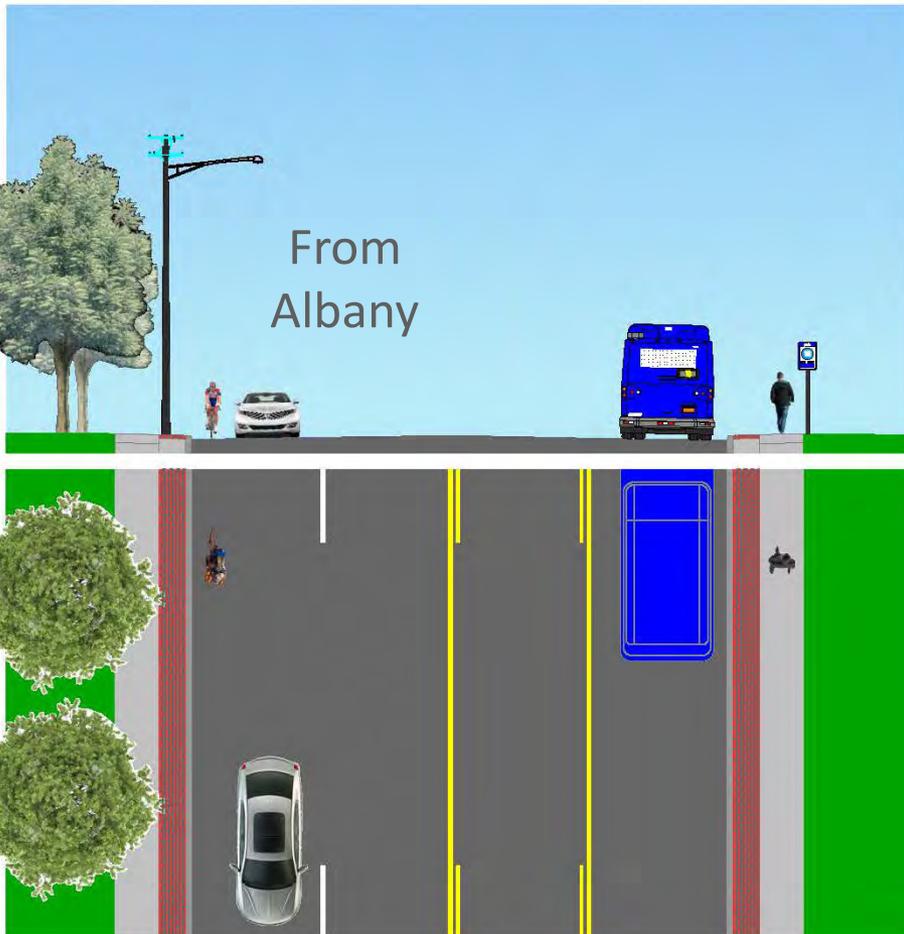
• Pros

- Ties into existing conditions / Enhancements project at Elsmere
- Some safety and traffic calming benefits
- Improved ped crossing opportunities

• Cons

- Lack of bike lane Elsmere to Plaza
- Multi-threat in one direction
- Travel time increase
 - » + 45 seconds WB, + 15 seconds EB

Westbound 2-1-1 (with full Road Diet Plaza to Bridge)



• Pros

- Good PM peak hour traffic operations
- Some safety and traffic calming benefits
- Improved ped crossing opportunities

• Cons

- Lack of bike lane Elsmere to Plaza
- Multi-threat in one direction
- Travel time increase
 - » + 15 seconds WB, + 45 seconds EB



Safety

Crashes Reduced (5 years)

- 213 Crashes (2011 to 2015)

Crashes Reduced					
	A	B	C	D	E
Elsmere to Normanskill Bridge	0	60	21	41	41
		28%	10%	19%	19%



Access

Pedestrian Scores



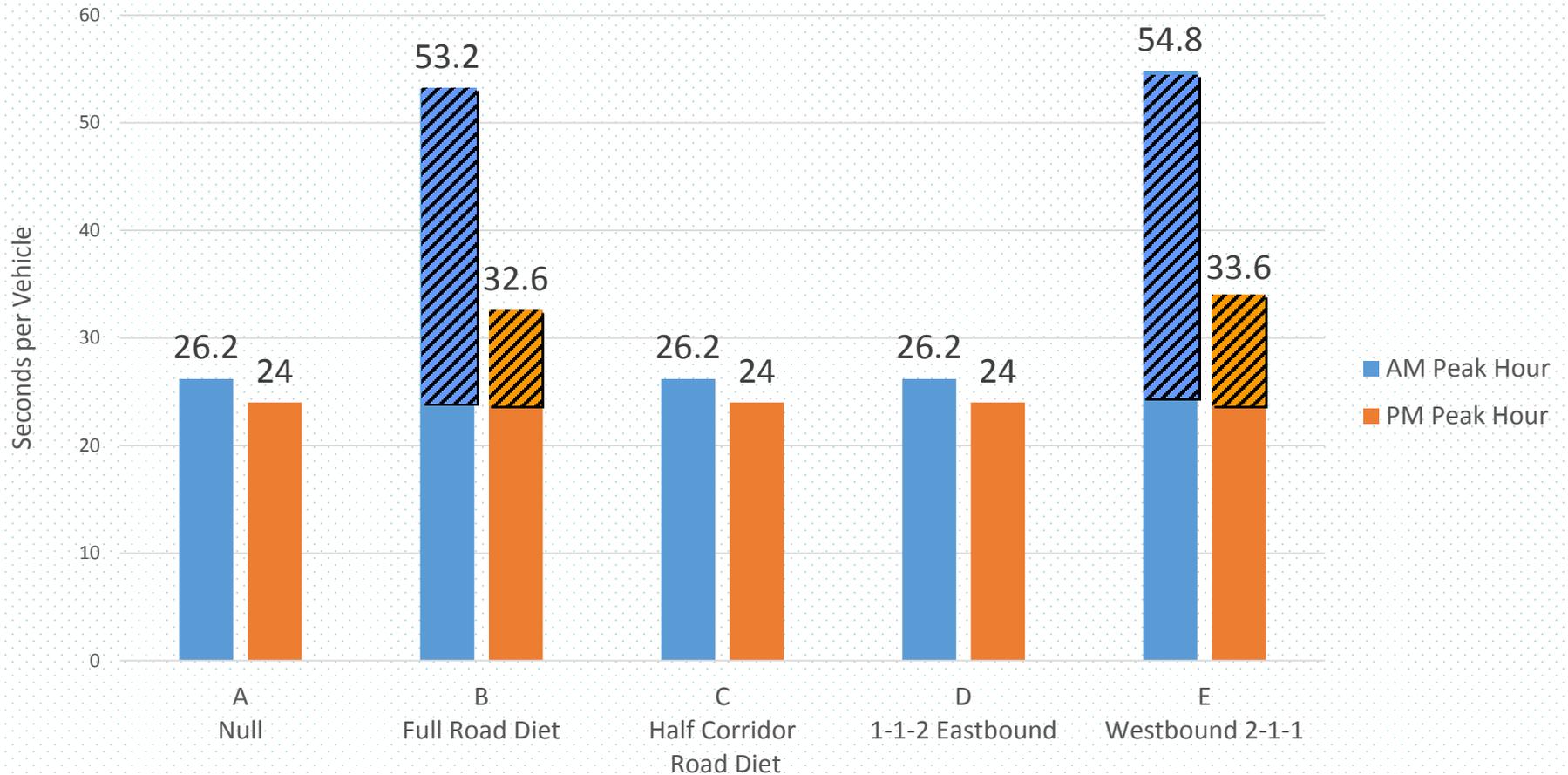
LOS A/B

Pedestrian Scores					
	A	B	C	D	E
Elsmere Ave	B	A	B	B	B
Herrick Ave	D	C	D	D	D
Booth Rd	D	C	D	D	D
Lincoln Ave	D	A	D	C	C
Leonard Place	D	D	D	D	D
Bedell Ave	D	C	D	D	D
Salisbury Rd	D	A	D	C	C
Snowden Ave	D	C	D	D	D
Burhans Place	D	C	D	D	D
Plymouth Ave	D	C	D	D	D
Euclid Ave	D	A	D	C	C
Normanskill Blvd	C	A	C	B	C
Mason Rd	D	C	C	C	C
Winslow St	D	A	A	A	A
Lenox St	D	C	C	C	C
Grant St	D	A	A	A	A
Old Delaware Ave	D	C	C	C	C

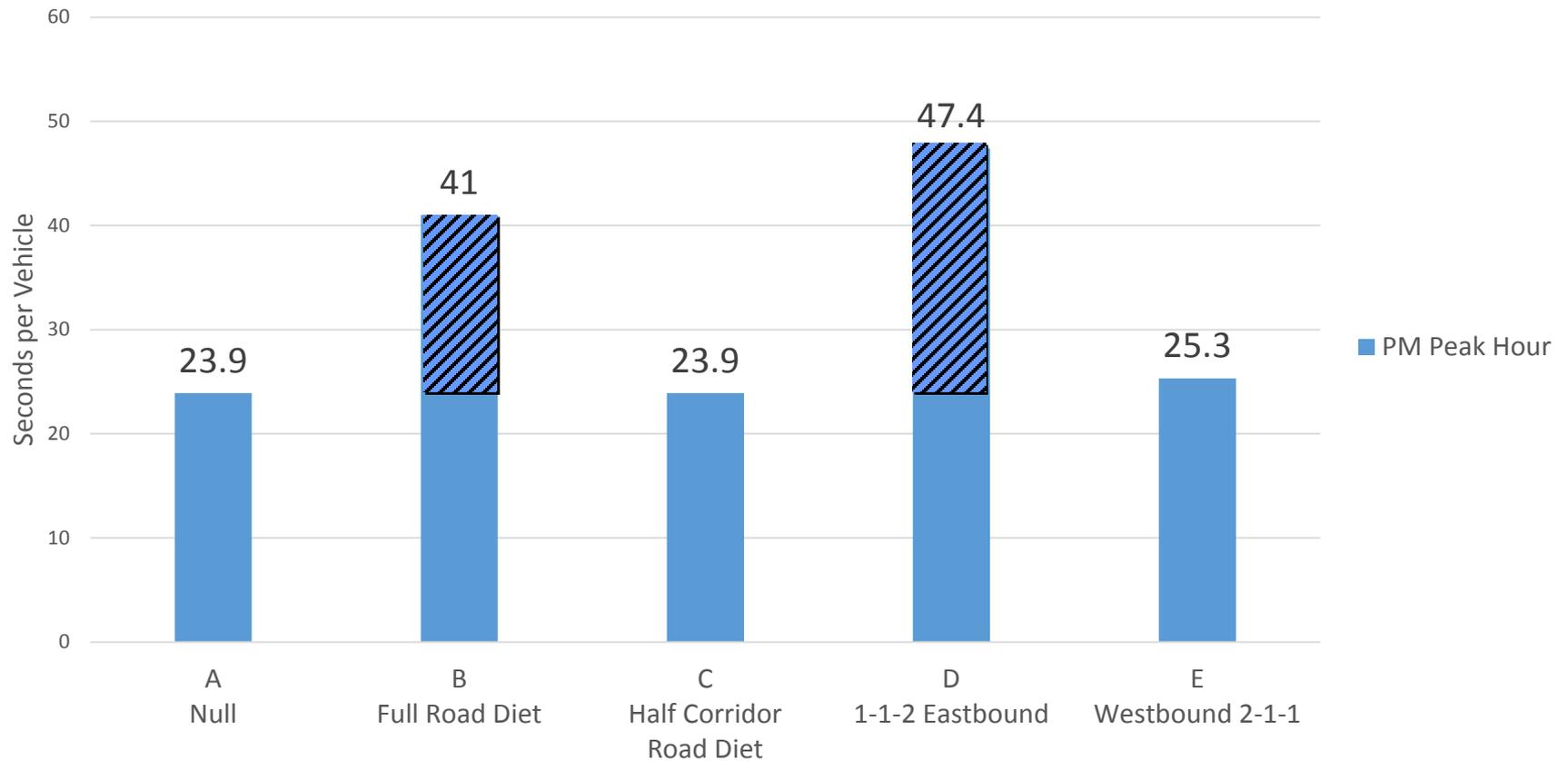
Bicycle Level-of-Service

Bicycle LOS					
	A	B	C	D	E
Elsmere to Delaware Plaza	E/D	C	D	D	D
Delaware Plaza to Normanskill	E/D	C	D/C	D/C	D/C

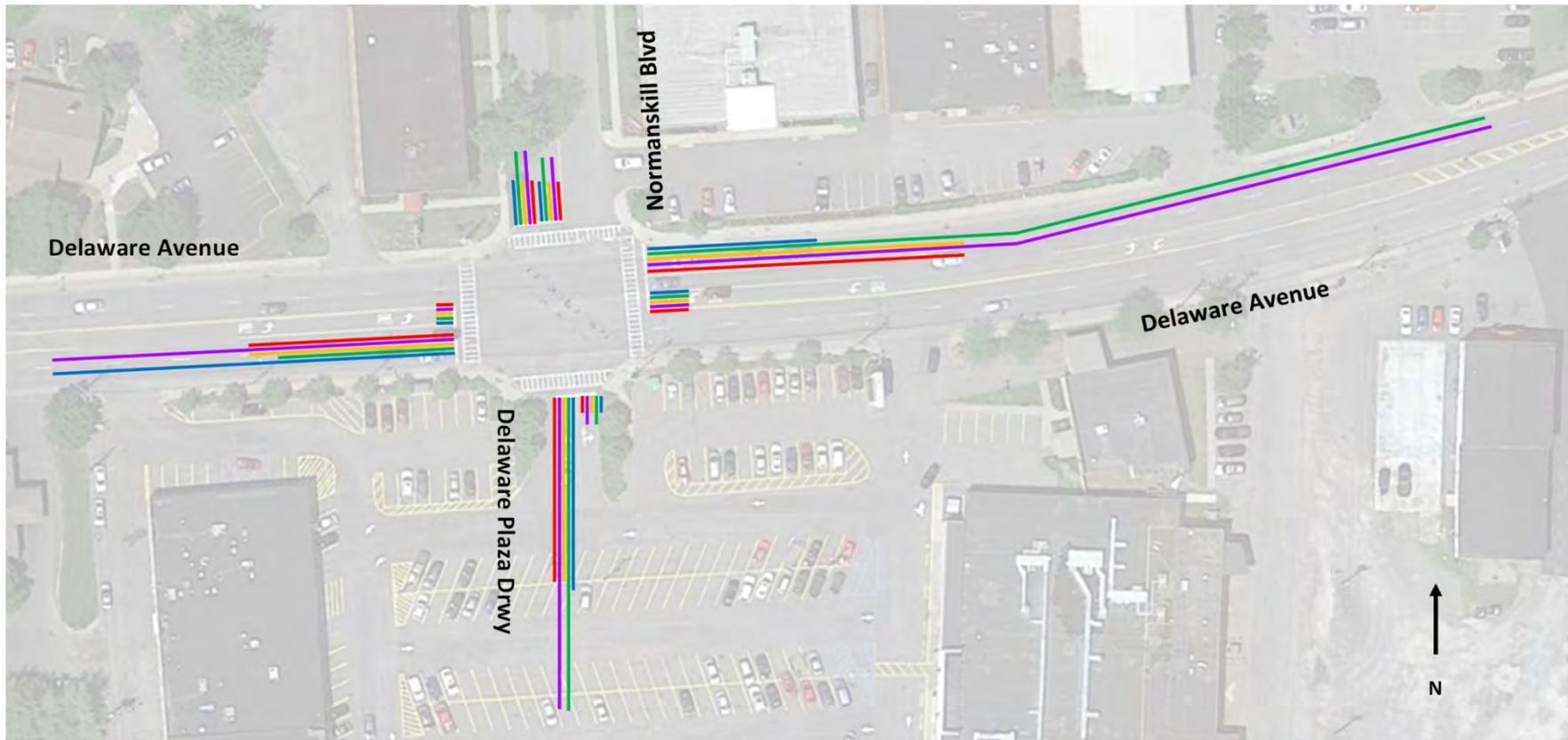
Signal Delay – Delaware / Elsmere



Signal Delay – Delaware Ave / Delaware Plaza



Average Queuing PM Peak Hour Delaware Avenue/Delaware Plaza Drwy/Normanskill Blvd



A Null

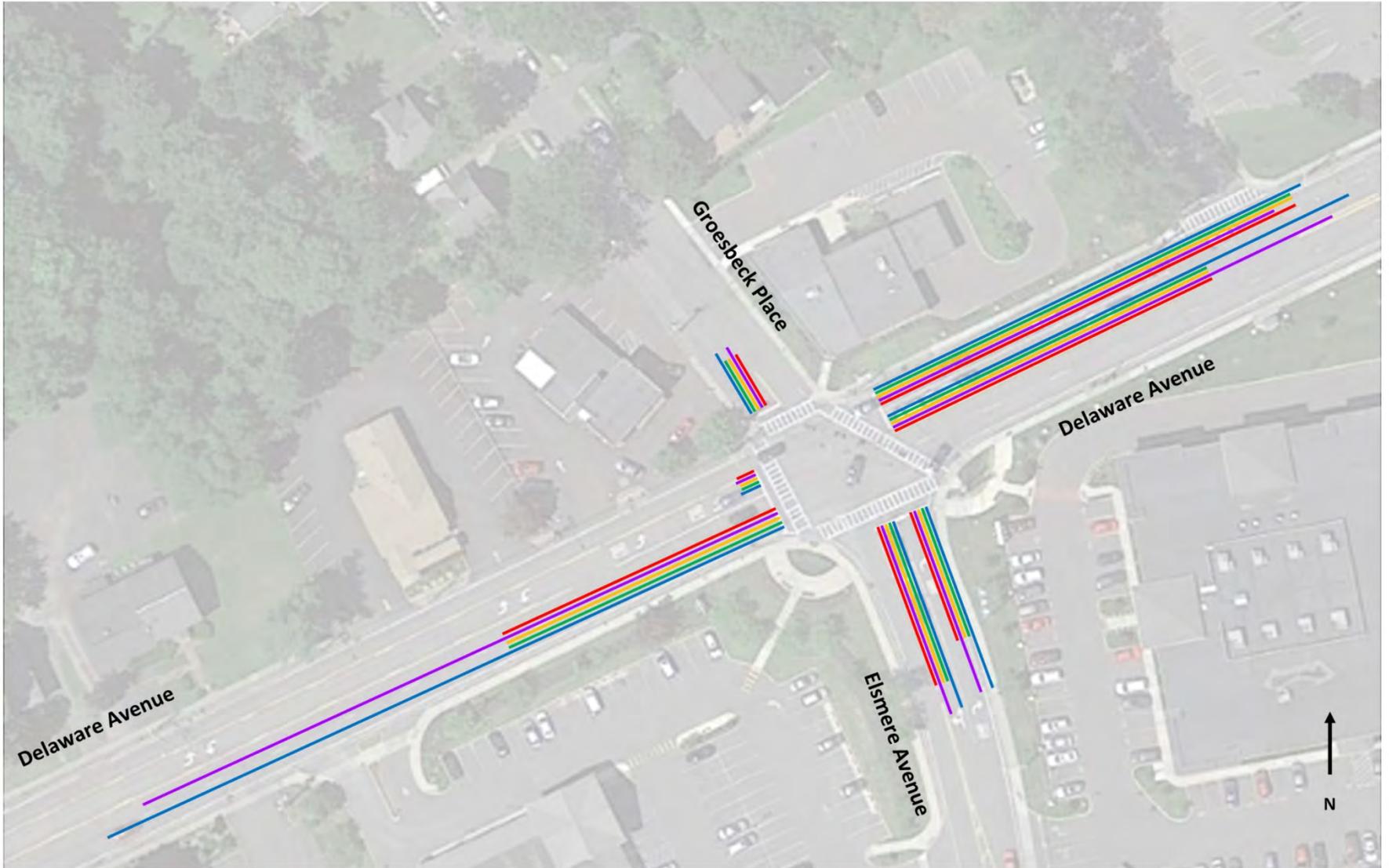
B Full Road Diet

C Partial Road Diet

D 1-1-2 Eastbound

E Westbound 2-1-1

Average Queuing PM Peak Hour Delaware Avenue/Elsmere Avenue/Groesbeck Place



- A Null
- B Full Road Diet
- C Partial Road Diet
- D 1-1-2 Eastbound
- E Westbound 2-1-1

Average Queuing AM Peak Hour Delaware Avenue/Elsmere Avenue/Groesbeck Place

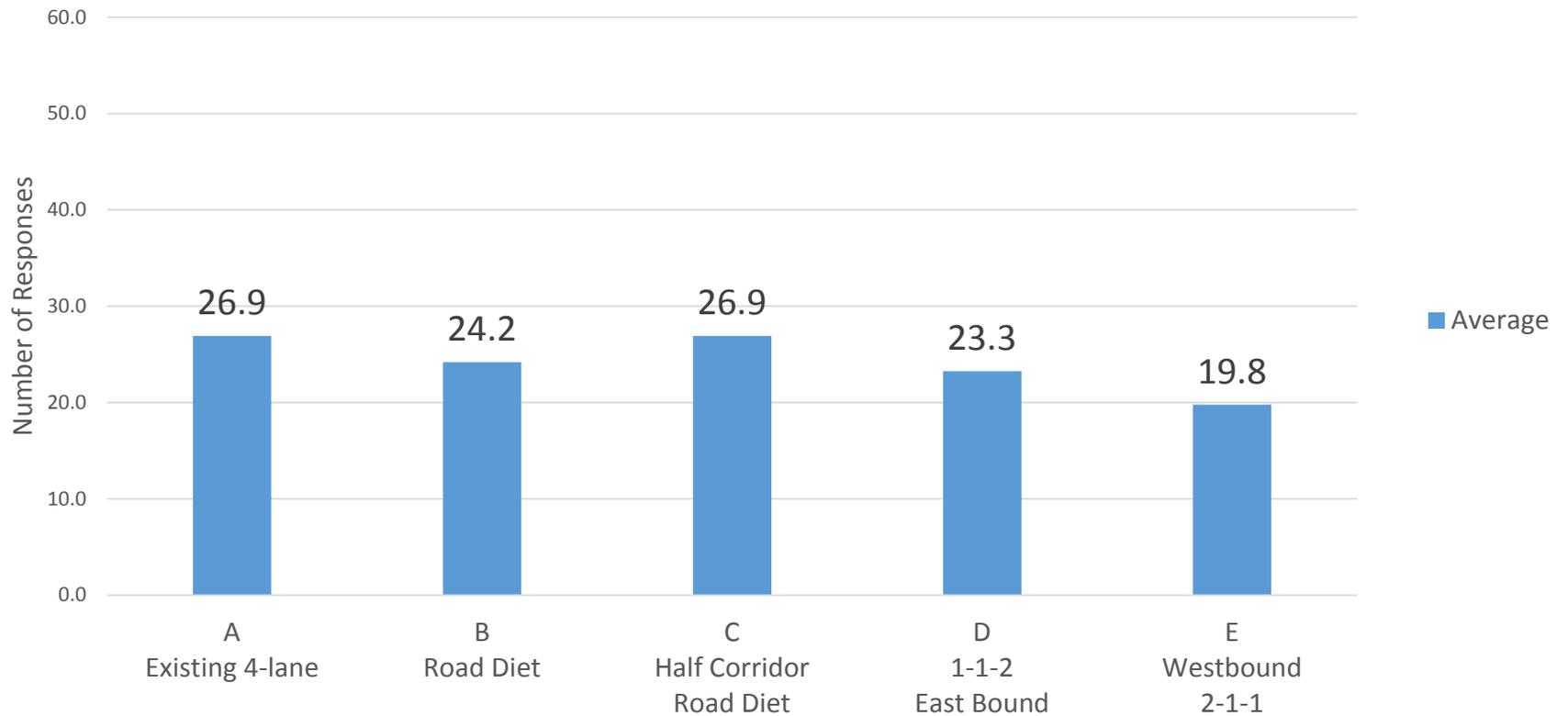


- A Null
- B Full Road Diet
- C Partial Road Diet
- D 1-1-2 Eastbound
- E C.163 Westbound 2-1-1

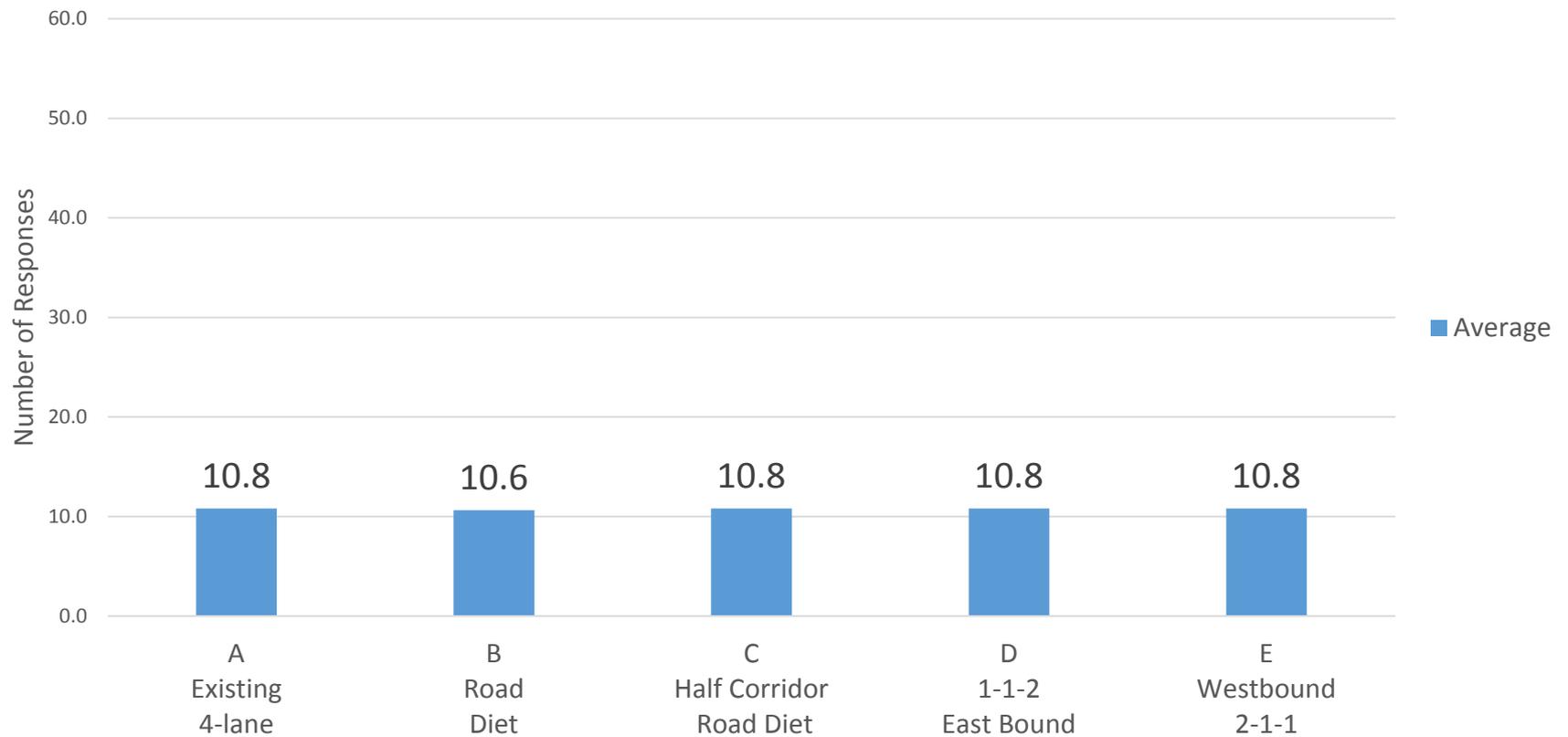


Economy

Delay from side streets and driveways



Delay to side streets and driveways



Case Studies

- Economic Impacts of lane elimination (road diet) projects are mixed; most studies point to either no overall economic impacts or some positive impact.
- Business owners are concerned about potential negative economic effects, generally more so if on-street parking is impacted.
- There is little evidence that road diets have a detrimental effect on businesses in terms of their customer volume, revenue, and livelihood.



Place









Would you be willing to exchange...

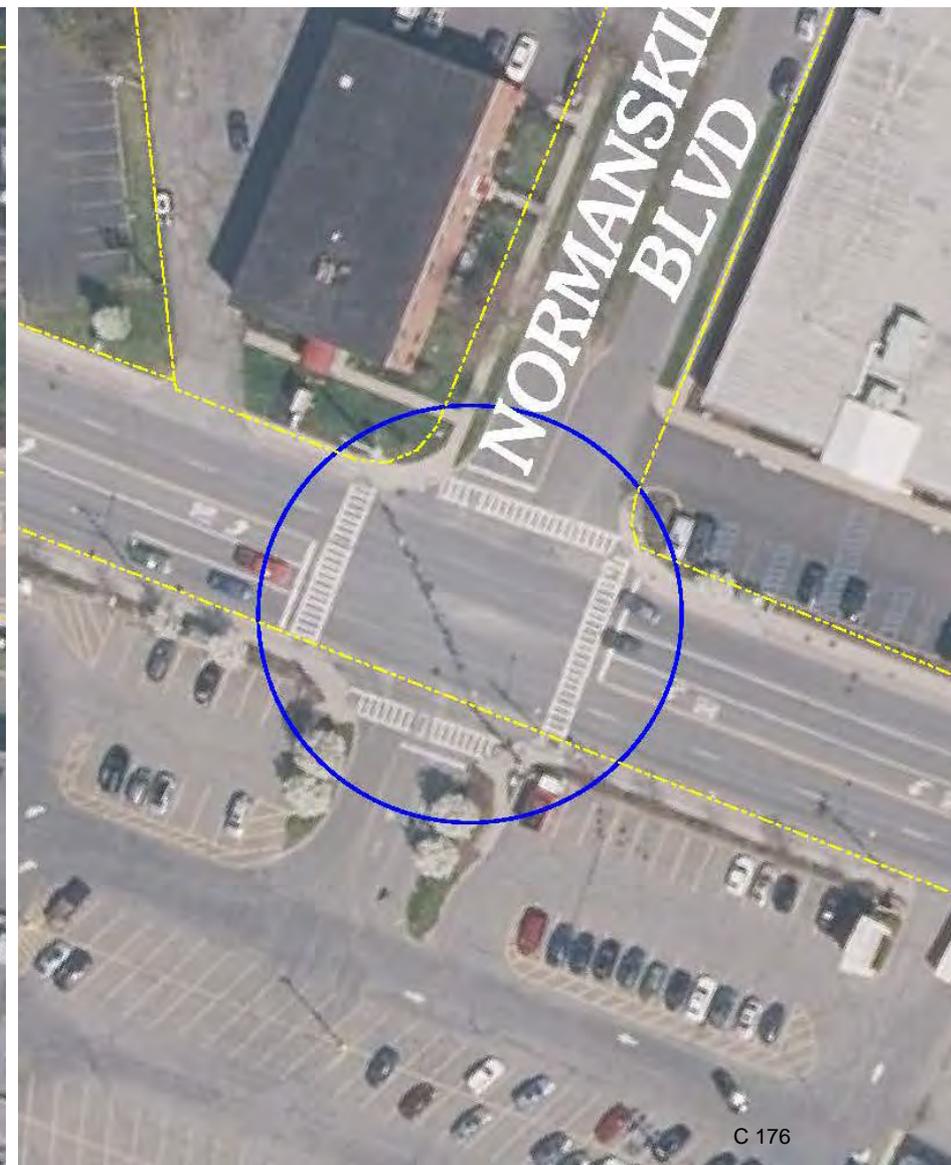
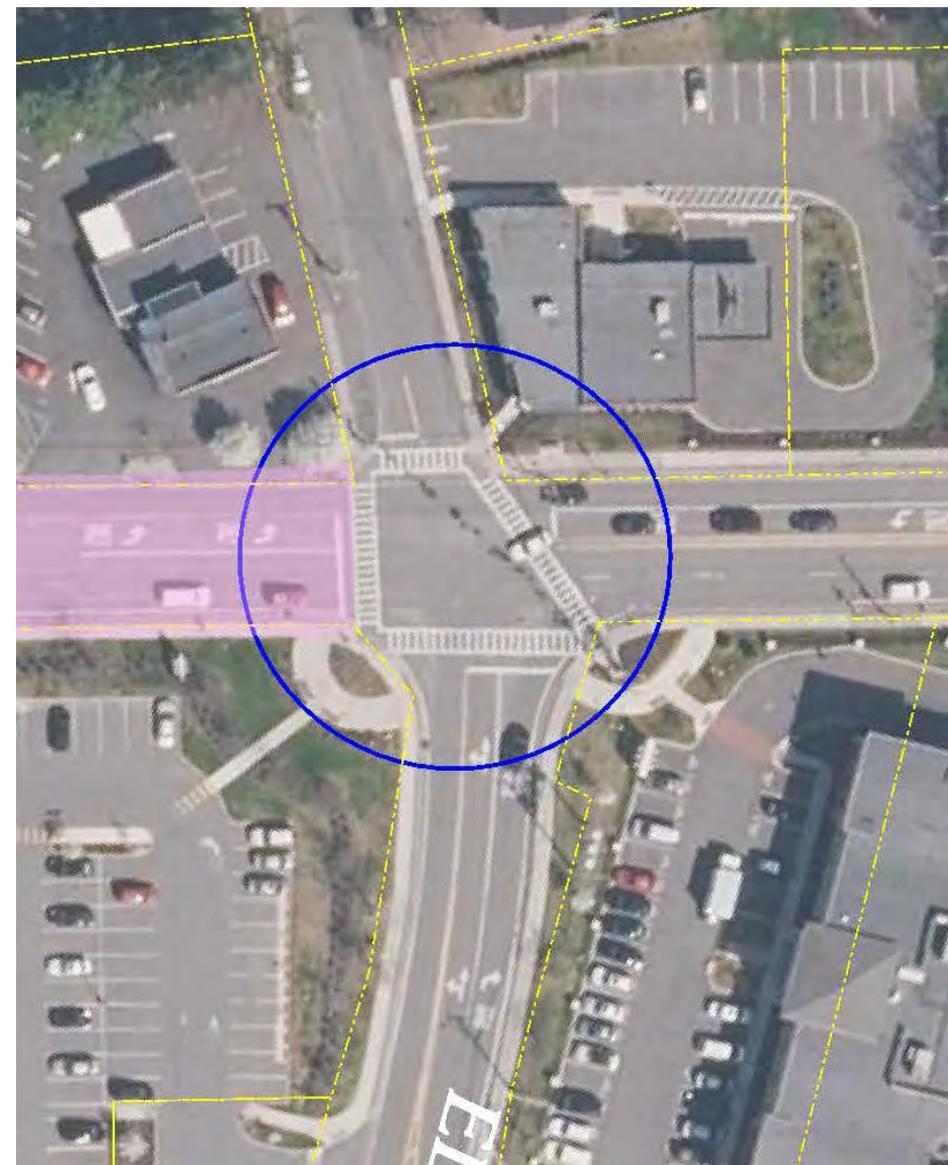
- Up to 50 seconds of travel time during the peak commute

for

- Traffic calming on Delaware Avenue, fewer crashes, better access for left turns, a more comfortable pedestrian environment, greater separation between cars and the sidewalk, improved pedestrian crossings, and space for bicycles?

 Negative Neutral Positive		Evaluation of Alternatives				
		A Null	B Full Road Diet (1-1-1)	C Half Corridor Road Diet	D 1-1-2 Eastbound	E Westbound 2-1-1
Alternative						
Performance Measure						
 Safety	Crashes	● ○ ○ ○ ○	● ● ● ● ●	● ● ● ○ ○	● ● ● ○ ○	● ● ● ○ ○
	Traffic Calming	● ○ ○ ○ ○	● ● ● ● ●	● ● ● ○ ○	● ● ● ○ ○	● ● ● ○ ○
	Benefit of Enhancements	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○
 Access	Travel Time	● ● ● ● ●	● ● ● ○ ○	● ● ● ● ○	● ● ● ○ ○	● ● ● ○ ○
	Signal LOS/Queuing	● ● ● ● ●	● ● ● ○ ○	● ● ● ● ●	● ● ● ● ○	● ● ● ○ ○
	Bike LOS	● ○ ○ ○ ○	● ● ● ● ●	● ● ● ○ ○	● ● ● ○ ○	● ● ● ○ ○
	Ped Access to Transit	● ○ ○ ○ ○	● ● ● ○ ○	● ● ● ○ ○	● ● ● ○ ○	● ● ● ○ ○
 Economy	2030 Volume Change	● ● ● ● ●	● ● ● ● ○	● ● ● ● ●	● ● ● ● ●	● ● ● ● ●
	Side St/ Driveway Delay	● ● ● ○ ○	● ● ● ○ ○	● ● ● ○ ○	● ● ● ○ ○	● ● ● ○ ○
	Cost of Alt	● ● ● ● ●	● ● ● ○ ○	● ● ● ● ●	● ● ● ○ ○	● ● ● ○ ○
 Place	Pedestrian Friendliness	● ○ ○ ○ ○	● ● ● ● ○	● ● ● ○ ○	● ● ● ○ ○	● ● ● ○ ○
	Streetscape	● ○ ○ ○ ○	● ● ● ● ○	● ● ● ○ ○	● ● ● ○ ○	● ● ● ○ ○
	Quality of Life	● ● ○ ○ ○	● ● ● ● ○	● ● ● ○ ○	● ● ● ○ ○	● ● ● ○ ○

Roundabouts



Next steps

- Draft Recommendations
- Town Board Meeting (6:00 p.m. Oct 11, 2017)
- Report

- Q & A
- Ranking
- Comment form
- Website

Ranking Instructions

- 2 areas
- Visit all 5 stations
- One dot per station

		Evaluation of Alternatives				
		A Null	B Full Road Diet (1-1-1)	C Half Corridor Road Diet	D 1-1-2 Eastbound	E Westbound 2-1-1
Alternative	Performance Measure					
		Safety Crashes Traffic Calming Benefit of Enhancements	●●●●●	●●●●●	●●●●●	●●●●●
	Access Travel Time Signal LOS/Queuing Bike LOS Ped Access to Transit	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	Economy 2030 Volume Change Side St/ Driveway Delay Cost of Art	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	Place Pedestrian Friendliness Streetscape Quality of Life	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●

Satisfied

Somewhat Satisfied

Dissatisfied

Appendix B - Response to Comments



Responses to Comments - Public Meeting #2

Project: Delaware Avenue Complete Streets Feasibility Study	
Meeting Date: September 26, 2017	Reviewer: Various

Comment #	Comment	Response
A. Anonymous Comments		
1	I suggest some attention be given to a connection between Delaware Ave and the Bike & foot trail. This would enhance the community access to businesses as well as increasing options for non-vehicle movement. Thanks!	The Study includes potential trail connections
B. Anonymous Comments		
1	The traffic on Herber Ave has been horrible. Many people have used Herber & Adams as a cut through to avoid taking Kenwood all the way to Elsmere.	This is likely due to the current construction project on Delaware Avenue, which is outside this study area
C. Anonymous Comments		
1	Please reprint road diet FAQ print is unreadable.	No action.
D. Anonymous Comments		
1	I support the full road diet	Comment noted. The majority of attendees at the public meeting favored this option.
E. Anonymous Comments		
1	The existing project is a nightmare and behind schedule. Finish the existing project and do not do these bike paths.	Comment noted
F. Anonymous Comments		
1	"You know this is a street" shouted the driver of a car as I cycled on Delaware Ave. He had to roll his window down and shout across the passenger seat to make his ridiculous point-all the while still driving (but not looking at the road) Do the complete plan-all of is so that drivers like the one I encountered understand that a street is to be shared and privilege of driving comes with the greatest responsibility for care of neighbor.	Comment noted.
G. Anonymous Comments		
1	I live in the neighborhood that will be impacted by the East Segment. Its hard enough to get in and out of my neighborhood as is without unnecessary congestion of lanes & turns not to mention no foot traffic on the one side of the street. Going down to 2 lanes in this area will irreparably damage my quality of life and that of my neighbors. I can only assume our neighborhood has not been taken into account because of our proximity to Albany "Lower income".	This neighborhood has been taken into account. The road diet option would calm traffic on Delaware Avenue in the area and make it more of a complete street.
H. Anonymous Comments		
1	Get a food truck here	Comment noted.
I. Anonymous Comments		

Comment #	Comment	Response
1	I live on Bookman Ave, It is already hard enough to turn onto Delaware out of my neighborhood. Any change will force me to plan even more time for my daily commute. For those of us who live in the affected area Plan A (Null) is the only option.	Comment noted.
J. Anonymous Comments		
1	I think there is room for improvement e.g. addressing pedestrian safety near Elsmere Elementary School, but the principal plan is poor. All marked crosswalks should be at street intersections ?flashing traffic retail?, not in the middle of the intersection. That is bad planning.	
K. Donna Liquori Comments		
1	I think the Full Road diet would be great. It would encourage me to ride my bike more. I've lived here for 20 years and moved to Delmar because it was the most walkable town I could find in the area. This enhancement will only encourage more walking and cycling.	Comment noted.
2	Looking forward to the changes	Comment noted
3	Also I'd suggest a public relations campaign for education purposes – to let people know about the benefits	This study included some educational components during both public meetings and within the written report. Additional public relations / educational material will be decided in the next phase of the project, assuming a project is funded and moves forward.
L. George Harder Comments		
1	Would it be feasible to have a sidewalk (doublewide) that could be shared by pedestrians and bicyclists in order to act bicyclists out of the vehicle lanes? Bicyclists would be able to travel unimpeded the length of Delaware Ave.	This alternative would be a separated path. Separated paths are problematic in areas with numerous driveway and intersections like Delaware Avenue.
M. Anonymous Comments		
1	I'm generally supportive, but the consultant (Mark) seemed to be advocating for at least some change from the do-nothing alternative. I think this is not appropriate. His job is to provide analysis so the citizens and elective officials can decide.	Comment noted. The four alternatives that involved some change all do a better job of meeting the project objective than the do-nothing alternative.
2	Consider cutouts for bus stops so cars are not stuck behind a stopped bus.	This is recommended at the higher volume bus stop locations
3	I agree with the speaker who said traffic character is different in the AM and commuters are slower in the AM. This needs to be reflected in the study if the study is going to be a good basis for decision making.	The AM traffic was analyzed at the Elsmere Avenue intersection, and showed a projected increase in delay of approximately 50 seconds for eastbound through traffic on Delaware Avenue during the morning commute, between Elsmere Ave and the City line.
N. Donald Hinsdale Comments		
1	There are few bicyclists on Delaware Ave even with bike lanes, they are risking their lives because of the high volume of car traffic and buses.	Some cyclists are more comfortable riding on Delaware Avenue, than others.
2	We had 2 pedestrians killed a few years ago on Town roads bicycling on Delaware Ave is not safe even with bike lanes. They can use the sidewalks of the rail trail.	By law, bicyclists are allowed on Delaware Ave. Four of the five alternatives would improve the environment for bicyclists over existing conditions.
3	Other than school kids, I see few pedestrians on Delaware Ave. They can cross at the 2 traffic lights, but I am not against additional crossing places.	Comment noted.
4	How about repaving the road? That would make it better and safer.	Repaving is consistent with the study. This study is determining if the road should be striped differently when it is repaved.
O. Richard Hamm Comments		
1	While I am strongly supportive of full road diet – I hope that for better use of sidewalks that the snow removal on sidewalks needs to come after the road is cleared.	Comment noted.
P. JF Briere Comments		
1	Reducing delays on Delaware Ave following the road diet could be done by modifying the length of red area green lights. Not much was said about that during the meeting.	This signal optimization was accounted for in the analysis presented at the meeting and it is agreed. It will be an important part of the road diet, if the road diet is implemented.
Q. Christie Robinson Comments		
1	Keep the 4 lanes - You have to do something half corridor – Null half corridor	Comment noted. Only a few people at the public meeting liked this option.

Comment #	Comment	Response
2	With golf course traffic and Euclid Burhans, Salisbury coming out Delaware Ave we need two lanes. It would be hard with 1 lane of solid traffic headed toward CVS ?? too hard to break into traffic	Comment noted. Under the road diet alternatives, there will be increase delay for motorists turning right from side streets onto Delaware Avenue.
R. Robert Hansen Comments		
1	Open Mason Lane for multiuse trail connection	This is one of the trail connections identified in the study and would be a good priority for the Town to pursue.
2	Pave Albany Co Water Line between Poplar and the Delaware Plaza	This is one of the trail connections identified in the study and would be a good priority for the Town to pursue.
S. Anonymous Comments		
1	Thank you for balancing bikes, walkers and cars – my hope is that we go for the full road diet – I will feel that my kids are safer, as now they are walking/biking, but will soon be new drivers. The full diet is not that big of a change and the road should be safer & quieter in the middle of a bustling town.	Comment noted.
2	Wish we were still considering a pedestrian bridge over Delaware Ave to get from Old Delmar to the Rail Trail and to Del Ave businesses. I love that small, local businesses are increasing in Delmar and want to walk & bike to them!	Comment noted.
3	Please consider more native plantings and street trees for calming and cooling area. Please consider modern, LED lighting.	Comment noted. The study will include recommendations for plantings and lighting in general.
T. Bert Schou Comments		
1	Do not miss this chance to improve the livability of the Delmar area with this project	Comment noted.
2	For safety & encouraging all travel modes, consider it is 20-25 years before another reconstruction project. Do it now! Full road diet – YES!	Comment noted.
U. David Hart Comments		
1	NYSDOT is the owner of Delaware Ave. I see they are on the advisory committee but are not listed as parties to the report. As owner of the road they should be on the title payee.	The NYSDOT is participating in the study. This study is led by the Town and CDTC.
2	Are traffic management improvements individual in the no build alternative, such as 30mph, signal coordination, minute costs.	It is unlikely that the NYSDOT will approve a lower 30mph speed limit under the no-build alternatives. Signal optimization was included in the n-build alternative, but signal coordination is not needed as traffic flows very well, and the two signals have different natural cycle lengths.
3	At the October 11 Town Board meeting, will the preferred alternate be presented & selected? What are the next steps? Is there a proposed construction schedule?	
4	As the owner will NYSDOT be the selecting official?	The decision will ultimately involve the responsible local official, and the NYSDOT, and will consider the community input and technical studies.
5	Next steps?	Finalize report; pursue funding, design the project with additional public involvement; then construction.
V. Kevin Doherty Comments		
1	The web version of the minutes from the 7/26/17 Business Stakeholder meeting indicate that a list of attendees is attached to the document, but there is no attachment. Can an attachment listing the attendees be added to the online document?	Done.
W. Roman Hedges Comments		
1	The most important element of any plan to improve Delaware Avenue is pedestrian safety. Without a safe pedestrian crossing between Delaware Plaza and the intersection of Elsmere Avenue and Delaware Avenue, Delaware Avenue will remain a hostile corridor.	The full road diet alternative provides the best opportunity for improved crossings, as compared to the other alternatives.

Comment #	Comment	Response
2	It matters little where the crossing is located, but Salisbury Road, Snowden Avenue, Bedell Avenue, Burhans Place, or Plymouth Avenue would all be good candidates for a traffic light on Delaware Avenue from a pedestrian safety point of view. If you wish to add to overall convenience for drivers, Salisbury Road is probably the best bet for a traffic light because of the large amount of car traffic generated by the golf club at the end of Salisbury Road.	Comment noted.
3	The effect of a "road diet" on Delaware Avenue will likely be to dramatically stretch the flow of cars (so that the same volume of traffic can move through the reduced number of lanes). That will mean that pedestrians trying to cross Delaware will face much longer periods of time when crossing will not be an option anywhere between Delaware Plaza and Elsmere Avenue. A "road diet" will make Delaware Avenue even more hostile to pedestrians than it already is unless something is done to enhance pedestrian options.	Under the road diet alternative, the addition of crosswalks gives the pedestrian the right of way and motorists should yield to pedestrians and make it easier to cross. Traffic will also be moving more slowly which will be more comfortable for pedestrians.
4	Because Delaware Avenue is such an inhospitable pedestrian environment today, it is unlikely that any observational study of pedestrian traffic will provide any useful information about pedestrian traffic. No one in their right mind walks anywhere near Delaware Avenue because it is so unsafe. Only someone with no options dares to venture along that corridor.	Comment noted.
X. Erin Rightmyer Comments		
1	I attended tonight's public meeting and want to stress the importance of this project. I am a cyclist and a runner and have had numerous close calls while trying to cross Delaware Ave near Euclid Ave. I fully support the need for a road diet on Delaware Ave. Our children's and citizens's safety should be our highest concern.	Comment noted.
Y. Brian Gyory Comments		
1	<p>As a Town Planning Board Member, lifelong resident & Landscape Architect I wanted to let you know that I thought you all did a great job at the public meeting.</p> <p>I'm wondering what other public advertising or input has been requested? I noticed that on my way home from the meeting that there appeared to be a large event at the Middle School, which probably took a lot of parents with kids away from the meeting.</p> <p>Has any consideration been given to a <u>mailing</u> of residents who live in this corridor to ask for their input? I think that this would be a really good idea to tell people about the project and make sure they are able to voice their opinion.</p>	<p>We advertised the meeting in the following manner:</p> <ul style="list-style-type: none"> • Over 750 meeting flyers were mailed to homeowners, property owners, and business owners along Delaware Avenue and all the side streets from Elsmere Ave to the Normanskill (i.e. Booth, Lincoln, Snowden, Salisbury, Euclid, Mason, etc.). • Emails were sent to all those participants who attended the first public meeting in February (over 100) • Spotlight Newspaper ran a story on their website the week of Sept. 11th , and printed a story the week of Sept. 18th • Town website had a meeting announcement since early September • Since Sept. 16th, there was a display placed in the lobby of the Bethlehem library announcing the meeting date and providing information on the study. • In July, we held a special business owner meeting...inviting all the business owners along this section of Delaware Avenue to discuss with them the study and the results of the road diet analysis. A letter from the Supervisor was sent inviting the business owners to the meeting. • A few weeks ago the Times Union ran a story about the Town's complete streets study (this was a result of my announcement at a Planning Board meeting about the upcoming Sept. 26th public meeting). <p>Based on these announcement activities, we believe we've provided several opportunities to make residents and business owners aware of the complete streets study.</p>

Comment #	Comment	Response
2	Thank you for your response. Is there any way to also advertise in the school districts or through anything current publication with the school?	
Z. John Morse Comments		
1	I would like to have attended, but I had a scheduling conflict with an out-of-towner's personal milestone. Thank you all for your activism and actions in support of pedestrians and bicyclists in the Town of Bethlehem	Comment noted.
AA. Joe Scalzo Comments		
	First, Thank You for the meeting last evening.	Comment noted.
1	I mentioned to another observer that nothing was brought up about the plans playing out in the Winter months what with snow, plowing, ice and melting of same. This surely has an effect on both cyclist and pedestrian traffic and not in a positive way. Plows would push snow into the bike paths and eventually onto the nearby sidewalks thus causing problems for the non-motor vehicle users.	Comment noted. This is maintenance concern. The Town has a proactive sidewalk program including plowing and maintaining over 30 miles of sidewalk.
2	Only in government can moving from two driving lanes in each direction to one without implementing many other changes seem like a good move. The basic premise of 'addition by subtraction' simply does not seem to play here.	Road diets are a proven safety improvement identified by the FHWA.
3	The plan also mentions the planting of trees along the/a route—does anyone see a fiscal situation here both with the initial installation and then the continuing leaf issues and then to the eventual limb overhang and finally the removing of them? If trees were an advantage then private property owners would have planted them. A highway is not the best place for trees—they pose problems for utility lines and their eventual need for trimming.	Comment noted. A street environment can be difficult for trees to thrive, but they are an important part of green infrastructure practices.
4	On a regular basis, traffic heading Eastbound from Elsmere Avenue is backed up from the Delaware Avenue traffic signal all the way back to Elsmere Avenue—granted mostly in the morning drive time but still a fact made even worse by school and CDTA buses. All this occurs with two driving lanes that cannot be made better by moving to a single driving lane. The audience member who spoke of the Elsmere School Bus traffic has a very good point—the buses are necessary and do present a very serious traffic problem. Was a dedicated school bus turning lane even considered? Something needs to be done---maybe even having buses travel a different route to the school. Was the BCSD consulted regarding this problem?	Traffic will not be better with the road diet. Delays and travel times will increase which can be an acceptable trade-off for a complete street. School bus operations were studied further by the Town. A meeting is being scheduled with the BCSD.
5	I really feel the project should have included the route from Elsmere Avenue to the Four Corners with the unused Railroad Bridge being removed and the man-made 'valley' filled with the road moved to four lanes—ditto for the similar Elsmere Avenue bridge, albeit to two wide lanes. As one cyclist in attendance said 'cyclists unfortunately have to abide by the same traffic laws as do the motorized vehicles—therefore, they would have to learn to cross the vehicle lanes as motor vehicles do. The Delaware Avenue underpass has always been a problem what with excess water after heavy rains that ultimately lead to road and bridge repairs leaving motor vehicle operators to deal with the resulting poor conditions.	This is outside the study area.
6	It was mentioned that past road diet installations indicated a small—I believe it was stated as 4%--was diverted to other routes after the diet implementation. Discussion was centered around the traffic move to the By-Pass and that was perceived as a good thing. Well, I think the businesses along the Delaware Avenue route will be unhappy and the/any lost business will not go to other Bethlehem Businesses but to Albany ones as there are very few businesses along the By-Pass route, hence the name 'By-Pass'. I think this is not a desirable outcome.	Comment noted.

Comment #	Comment	Response
7	<p>I think the meeting was sort of 'stacked' for passage of the road diet plan as the significant number of cyclists, even to the point of an Albany resident in the audience who praised the Madison Avenue diet plan as it helped him along with the other residents of the area. As I understand it, the plan for Delmar was traffic safety, cyclists and pedestrians, making the Madison Avenue comparison to our plan a poor one. The labeling of the 'None' option being left naked without any changes at all. We all know that when you label something as 'None' when discussing changes just puts that option in the hole. Certainly adding a turn lane for a few more intersections could be added where land is available. Right turn lanes from side streets could be added to help us access Delaware Avenue, however, nothing was added so as to leave the option as a true 'None' and unattractive. A left turn lane was suggested at the business entrance just down the hill from the Car Wash—why not other places? I believe it is because the option was not really designed to be considered as a real alternative.</p>	<p>There was no stacking. The meeting and content was responsive to the goals of the study as set forth by the Town and CDTC. The null or "none" alternative is fundamental to all transportation studies as a base line. Alternatives that would add capacity for cars such as turn lanes, did not align with the study's project objectives. The study did include analysis of existing traffic operations and determined there is sufficient motor vehicle capacity and good LOS at the intersections. The study did examine motor vehicle "needs" to determine the feasibility of integrating complete streets elements into design concepts that did not include widening the road as widening the road would have negative impacts on business and residential properties and would be cost prohibitive.</p> <p>The turn lane at the bottom of the hill is the termini of a turn lane that would extend the entire length of the study area under the full road diet alternative.</p>
8	<p>It appears the underlying plan all along was/is to have the plan approved in one way or the other. Not much attention was given to the 'no changes' option even to the point when I asked if consideration was given to a right turn lane into Delaware Plaza and was told it was not! That lane is a logical one and to me the fact it was not considered pointed to very little attention being paid as traffic into Delaware Plaza has to be one of the major attractions for Delaware Avenue traffic. Ironically at about 4:35 PM today I was sitting in traffic heading West on Delaware just past Delaware Plaza and decided to turn left at the first side street and taking it around to Elsmere Avenue—and along the way passed two entrances to the NYS bike path which could be utilized by cyclists to access Delaware Plaza. By the way, please note the line of traffic was two lanes deep due to the traffic light backup from Elsmere Avenue.</p>	<p>Alternatives that would add capacity for cars such as turn lanes, did not align with the study's project objectives. Traffic engineering analysis was completed and a right turn lane is not needed for access into the Plaza. (see above response to comment 7)</p> <p>There is construction taking place on Delaware Avenue west of where the commenter was "sitting in traffic", which may have contributed that experience.</p>
9	<p>I also think we are making this drastic change to suit so very few of our residents. Even the moderators spoke of relatively miniscule numbers of pedestrians and cyclists as compared to the 16,000+ vehicles on Delaware Avenue. The tail is wagging the dog here. We vehicle users pay a lot of taxes to use our vehicles and roads while that is not the case for the others. The sales tax we pay when we purchase our vehicles goes to pay for our local highway department budgets and can similarly be said of our gasoline taxes while cyclists and pedestrians have no input in these areas. While everybody counts the needs of vast majority would seem to have priority.</p>	<p>Comment noted.</p>
10	<p>I agree the pedestrians' inability to safely cross Delaware Avenue is a serious problem—even at Delaware Plaza where there are traffic signals. I do not know the answer to this nor do I know the numbers of pedestrians who are interested in making the crossing—this is a very important factor. One of the audience members indicated there already was a useful bike path using the NYS route and side streets to arrive at Delaware Plaza—this was immediately brought down by a cyclist who said he regularly travels on Delaware Avenue and the existing route was not convenient to him. He also said he shopped while riding his cycle and his business was important. Simply put, we do not agree as inconveniencing the vastly larger vehicle traffic group is beyond inconvenience (note-I mentioned this route in #9 above).</p>	<p>Comment noted. Some bicyclists will not feel comfortable on Delaware Avenue, even with the road diet, and there are local street options that could be used for a good portion of the corridor. The road diet alternative is not all about bicyclist, but improved safety for motorists as well.</p>
11	<p>As an additional consideration, I ask if CDTA been brought into the discussion and the possibility of offering free or low cost transportation to and from local traffic as done in Albany to the uptown Broadway Bar district? The buses can provide safe transportation for bicycles in addition to the obvious help to pedestrians.</p>	<p>CDTA is part of the study and has participated at Committee meetings and expressed a willingness to consolidate and relocate bus stops to help the corridor. Their service is low cost and a good option for many downtown trips.</p>

BB. Carolyn King Comments

Comment #	Comment	Response
1	<p>I wanted to let you know that I am very pleased by your proposal for a road diet. The drawings and information at the library/online were very comprehensive and well thought out. It will definitely improve pedestrian and bike mobility in our part of Bethlehem. The intermittent grass medians are attractive and will aid crossing the street. This is a part of town that has significant pedestrian and bike traffic. Currently, most bikers must bike on the sidewalks for their safety. My oldest son bikes to the Middle School most days, and my youngest son walks to/from Elsmere Elementary every weekday. Most of the Elsmere children in my neighborhood walk or bike to school, and many of the Middle School children living near me walk home. Better and safer walking/biking access to the rail trail and neighborhood businesses is currently much needed. You have done an excellent job planning a roadway that keeps traffic moving and improves the neighborhood's accessibility to bikes and pedestrians.</p>	<p>Comment noted.</p>
2	<p>My only criticism to the overall plan is that the utilities are still above ground. They are rather unsightly and the most of the poles are listing and are often being held up by other poles. Many were replaced only a few years ago, and they are already leaning. Any attempt to plant larger variety trees along the road will result in giant "C" shaped swaths being cut out of the trees by the power company to keep the trees away from the power lines. Small trees need to be ducked under by pedestrians and provide little shade. If the sidewalk, etc. are being ripped up, now would be the time to submerge the utilities. I'm sure this would add considerably to the project cost and is probably unfeasible, but I thought it was at least worth mentioning.</p>	<p>Comment noted. Underground utilities can be a significant expense and wind up just as unsightly as overhead utilities. Drive the Northway to Exit 18 Corinth Road into Glens Falls and you will see unsightly bollards and utility boxes frequently along the corridor.</p>
3	<p>Thank you again for all of your hard work on this project. I am excited to see it come to fruition!</p>	<p>Comment noted.</p>
CC. Barry Hecht Comments		
1	<p>That was a fine presentation that y'all gave on 9/26 for the Delaware Ave Road Diet proposal. The current and projected traffic volumes seem to be within the range where the full road diet can deliver all of the benefits with few adverse impacts.</p>	<p>Comment noted.</p>
2	<p>The full road diet makes a lot of sense to me, but I want to make one recommendation. The major problem that I see is the performance deterioration at the two signalized intersection during peak hours. This is manifest by increased queue lengths during peak periods. This is already a problem in the PM peak hour at Elsmere Ave. The reason for this is the reduction of through lanes from two to one in each direction on Delaware Avenue. As is well known in traffic engineering, a travel lane can generally carry 1500 vph at an acceptable level of service. But this is reduced by 50% (or more) at signalized intersections. This can be alleviated by increasing the number of through lanes at the intersection, and tapering the lanes back (to one) after the intersection. But you don't have to add lanes...you merely need to retain the current profile of two lanes each direction at these intersections, and taper them to one beyond the intersection. The problem with having only one lane through the intersection is that the signalized intersection will be overloaded. This will increase queue length both on Delaware and on the cross approaches. Your presentation shows this. The delay to the side street increases because you must increase green time on Delaware to accommodate the reduced number of lanes. The bottom line is, that if the current lane configuration is retained, everyone will benefit. Queues will be reduced on all approaches. No additional ROW or construction would be needed. (Note: there could be a small issue with Bike Lanes, should not be an issue for buses (since there are only three buses per hour, max))</p>	<p>This would reduce vehicle delay at the intersection, but introduce conflicts at the merging areas just beyond the intersections.</p>

Comment #	Comment	Response
DD. Ted Smith Comments		
1	<p>As follow up to this past week’s meeting pertaining to the planning for eventual Delaware Avenue improvements I wish to restate my concern regarding access into and out of Herrick Avenue from Delaware Avenue. As I stated at the meeting, no mention of congestion due to significant traffic arriving and leaving Elsmere Elementary School was referenced. Hundreds of autos and at least 12 school buses enter and exit Herrick Avenue twice each school day. The remark by the project consultant that a “do not block side street” sign would be sufficient appeared to be merely an after-thought in addressing my concern. Rather, an appropriately marked stop line on the east corner of Herrick Avenue and signage “Stop Here on Red” would indicate to west bound drivers on Delaware Avenue that it would be illegal to proceed beyond this point when the Elsmere traffic light is red. If the skinny road option is to be successful there will be the absolute need for cars and buses to have access into Herrick Avenue from Delaware Avenue or a major eastbound traffic jam will result due to gridlock conditions at this intersection. It will be further complicated by the Elsmere Avenue traffic light which is less than 10 car lengths way. The existence of a center turning lane will be insufficient to address this volume of traffic. Worse yet would be the suggestion that vehicles should approach the Elsmere School via Groesbeck Avenue due to the resulting increase in vehicular traffic. I am most supportive the skinny road design and the effort to slow traffic through our community. Greater consideration and planning to address a serious, existing problem at the Herrick Avenue turn is warranted. I am available to speak with you or your committee if I can be of any assistance.</p>	<p>The commenter rightly points out that the Herrick Avenue intersection is a critical intersection and there are operational concerns at this intersection that need to be worked through if the road diet moves forward. The commenter’s proposal for a stop line and stop here on red sign at Herrick would violate the MUTCD and is not an acceptable option. The consultant’s remark at the meeting was not an after-thought, but rather conveying ideas that had been discussed leading up to the public meeting. Further study was completed in this area as discussed in the public meeting summary response to comment 7. “Do not block side road” signs” should be considered. Do not block intersection signs or turn prohibitions may also be considered, if the road diet project moves forward.</p>
EE. Dr. Manzi Comments		
1	<p>I have read all of the information on the street diet proposal for Delaware Ave between Elsmere Ave and the Albany Delaware bridge. I understand the need for greater safety for pedestrians and bikers but in all fairness reducing the lanes will create a greater bottleneck especially during rush hours. The few bikers who utilize this stretch of road are being given greater consideration versus the more than 18000 cars that travel this road. Pedestrians have safe walking sidewalks already. And anyone who wishes to access the avenue from a side street will have more difficulty with only one lane in either direction since all of the traffic will be more compressed from 2 lanes to 1. I don’t think the study takes into consideration that a large number of cars from Albany take the left turn onto Elsmere Ave during rush hour but one lane will back up the traffic beyond Delaware Plaza. My suggestion is change the speed limit to 35 or even 30 mph (too many changes in speed limit along the road already). This alone will create greater safety and will make it easier for motorists to access the Avenue from a side street. What you are considering is something like trying to make Wolf Rd in Colonie one lane in each direction. Can you imagine what traffic would be like there, which is what you are proposing here on Delaware Avenue.</p>	<p>The road diet alternative is not all about bicyclist, but improved safety for motorists as well.</p> <p>The study specifically takes into account the large number of cars from Albany that take the left turn onto Elsmere Ave during rush hour.</p> <p>Traffic volumes on Wolf Road are 50% higher than they are on Delaware Avenue and Wolf Road is not a good comparison.</p>
FF. Tim Talmage		

Comment #	Comment	Response
1	<p>I am strongly against the idea of a road diet for Delaware Avenue for many reasons. Many good arguments against are stated in the letters attached to the summary of the first public meeting. In particular I like Jim Giaccone's concise statement: "No. Negative impact on business; less traffic, less business." Jim Garry and John Cody provide excellent reasons why commuters would be negatively impacted.</p> <p>The main purpose of Delaware Avenue for the stretch in question is to allow people to commute to and from Albany and to reach the various businesses in this section of town. The road diet would make rush hour and lunch time traffic far worse, inhibit travel and negatively impact business. The traffic at peak hours is already congested and slow.</p> <p>Our business is an excellent example of one which would be negatively impacted. Our busiest times of day (like many business) are before work, lunch time and after work. I can't imagine the congestion of all the cars that travel into Albany in the morning or away from Albany in the afternoon being forced into one lane. A TWLTL would be a big negative for us.</p> <p>It does not make sense to diminish the ability of cars to travel this stretch so bike lanes can be added when there are no bike lanes on either end! The business that depend on car traffic would suffer so that a couple mile stretch of road has a bike lane with no connection.</p> <p>Many of the goals of the study are excellent. Better sidewalks, easier road crossing for pedestrians, bike accessibility, better safety, beautification. All should be accomplished without diminishing the capacity for people to travel to work or visit their local business.</p>	<p>Motor vehicle travel will be impacted with a road diet, which can be an acceptable trade-off for a complete street.</p>
GG. Barbara Pats		
1	<p>I write to strongly support the proposed road diet for Delaware Ave. I live in Delmar (Fernbank Ave) and my work is as a psychologist at Bethlehem Counseling Associates at 200 Delaware Avenue.</p> <p>In our offices, we have 11 psychotherapists who see multiple patients throughout the day and evening. Making a left turn in and out of our driveway can be difficult and the middle turn lane would be a big improvement for all who utilize this building.</p> <p>In addition, the proposed slower speed limit, crosswalks and bike lanes would greatly improve the ability to use nearby businesses and services.</p> <p>Getting across the street on foot to get to the bank is something I do quite often and it feels dangerous with the way the traffic patterns are now.</p> <p>Thank you for working to improve these conditions</p>	<p>Comment noted.</p>
HH. Glenn Sandberg		

Comment #	Comment	Response
1	<p>(I attended public meeting #1, but was out of town for meeting #2.) A friend who attended meeting #2 Sep. 26 mentioned a comment made there, by a person who "never sees any bicyclists on Delaware Avenue."</p> <p>My reply: well, of course you don't! Although I've ridden my bike on Delaware Avenue occasionally, and although I'm a very experienced urban cyclist, I specifically avoid Delaware Avenue. The terrible shoulders combined with high speeds currently make it completely unsuitable for cycling.</p> <p>Speaking as a motorist now: if a dedicated left-turn lane is installed, I am more likely to patronize businesses on the other side of the street, since I can access them without worrying about being rear-ended. Likewise, if I pull out to pass someone, I need not worry about rear-ending a car in front of me that suddenly stops to turn left in the current four-lane configuration. Combining this with the increased business from bicyclists (who up till now have avoided Delaware altogether), the proposed traffic calming would be a net win for business owners along Delaware Avenue.</p> <p>Footnote: although I'm an Albany resident, I'm a regular visitor to the Bethlehem Library, Perfect Blend Coffee, and the Town Hall. I've been dealing with Delaware Avenue in Delmar for nearly twenty years.</p>	Comment noted.
HH. Janet Reilly		
1	<p>As a cyclist and resident who lives just off Delaware Ave., I walk, bike and drive on Delaware every day. Generally I only bike on it for as short a period as possible since there is no room for bikes, and cars drive much too close and way too fast. Even in the sections of Delaware where the speed limit is 30 mph, cars go much faster than that. I strongly support the proposed changes that add bike lanes and other traffic calming features to Delaware Ave. from Elsmore into the City of Albany. I frequently cross the Normanskill Bridge on (by bike) Delaware Ave. and then need to ride on the sidewalk until I can cut through Delaware Plaza to the bike path. This is neither legal nor safe but actually riding on Delaware when it goes to 4 lanes is truly life threatening. Walking on Delaware Ave. is doable but not pleasant – and crossing Delaware is death defying. Please make Delmar bike & pedestrian friendly by implementing the option that reduces the road to one lane each way, with turn lane in the center and bike lanes on each side. It will save lives – possibly mine – and it will enhance the daily lives of residents who walk & ride bikes – as well as those who drive.</p> <p>Thank you!</p>	Comment noted
II. Oliver Holmes		

Comment #	Comment	Response
	<p>I attended the Public meeting #2 of the Delaware Avenue Complete Street but was unable to stay long enough to provide comments.</p> <p>The presentation was informative and well presented. A suggestion for the Q & A session would be to repeat the questions for those who were unable to hear the questions. Some people asking questions were not speaking loud enough.</p> <p>As a long time resident and cyclist I favor the complete road diet alternative. The other alternatives do not provide a level of safety necessary for cyclists on Delaware Avenue. As a motorist I understand the slight delays possible at peak travel times but they are a small price to pay for the potential of saving lives and injuries to both cyclists and motorists. Decreasing the number of vehicle collisions is also an important aspect.</p> <p>Given that Delaware Avenue from the four corners to Elsmere Avenue is only two lanes and the bridge and road into Albany is also only two lanes it makes sense to develop two travel lanes and a center lane for vehicles.</p> <p>The Complete Streets program is an integral part of the Sustainable Bethlehem initiative. It was unfortunate that this was not mentioned at the public meeting.</p> <p>Thanks for the opportunity to comment.</p>	<p>Comment noted.</p>
JJ. Joe Scalzo		
1	<p>Hello. First, Thank You for the meeting last evening.</p> <p>Based on the agenda and discussions I have compiled a list of questions/observations on the 'road diet' plan discussed at Monday nights' meeting and I offer them in no particular order but looking for information on an item by item basis.</p> <p>Before starting I need to say I do not know the original objective of this project and what is/was its overall budget and would like to see this detailed.</p>	<p>The goal of the Study is to find a way to provide a balanced transportation system along Delaware Avenue that accommodates all modes of travel...motorists, pedestrians, and bicyclists. Ideally, the recommended solution can be achieved through a roadway resurfacing project at the time NYSDOT is scheduled to repave the road. The overall study budget is \$60,000.</p>
2	<p>I mentioned to another observer that nothing was brought up about the plans playing out in the Winter months what with snow, plowing, ice and melting of same. This surely has an effect on both cyclist and pedestrian traffic and not in a positive way. Plows would push snow into the bike paths and eventually on to the nearby sidewalks thus causing problems for the non-motor vehicle users.</p>	<p>This is continuing maintenance issue and not one that is only related to this section of Delaware Avenue, and not easily solved. Typically, plows clear the road first (up to the curbing), and then the Town's sidewalk snow plows clear the sidewalk a day or two after, depending on the severity of the snow storm.</p>
3	<p>Only in government can moving from two driving lanes in each direction to one without implementing many other changes seem like a good move. The basic premise of 'addition by subtraction' simply does not seem to play here.</p>	<p>Road diets are a proven safety improvement identified by the FHWA. The Study's goal is to balance the transportation system...complete streets. Currently, the roadway operates well for motor vehicles (except for the high accident rate) but poorly for bicyclists and pedestrians. The Study is consistent with the Town's Complete Streets resolution adopted in 2009. A review of the accident data over the last 5 years shows that there were a majority of right-angle crashes 54/213 (25%) and rear-end crashes 42/213 (20%). Based on FHWA Desktop Reference for Crash Reduction Factors, road diets can reduce all crash types by 26 percent and are effective at reducing the predominant crash types in the corridor - right angle and rear-end.</p>

Comment #	Comment	Response
4	The plan also mentions the planting of trees along the/a route—does anyone see a fiscal situation here both with the initial installation and then the continuing leaf issues and then to the eventual limb overhang and finally the removing of them? If trees were an advantage then private property owners would have planted them. A highway is not the best place for trees—they pose problems for utility lines and their eventual need for trimming.	The Town currently has a street tree planting program, of which this section of Delaware Avenue has been a focus. Several property owners have already participated in the program and received assistance from the Town to plant trees along the roadway. Street trees are a beautification measure that provides much benefit to the roadway. The fiscal impacts, if any, are minor compared to the greater benefits street trees provide to the community.
5	On a regular basis, traffic heading Eastbound from Elsmere Avenue is backed up from the Delaware Avenue traffic signal all the way back to Elsmere Avenue—granted mostly in the morning drive time but still a fact made even worse by school and CDTA buses. All this occurs with two driving lanes that cannot be made better by moving to a single driving lane. The audience member who spoke of the Elsmere School Bus traffic has a very good point—the buses are necessary and do present a very serious traffic problem. Was a dedicated school bus turning lane even considered? Something needs to be done---maybe even having buses travel a different route to the school. Was the BCSD consulted regarding this problem?	The Town has reached out to the School District Transportation Director to discuss the road diet option and any potential impacts to school bus turning movements that may result. We are currently looking to schedule a meeting within the next week. A few options to address this concern is signing that would restrict cars from blocking the intersection during periods of the day (AM/PM) and a revised bus travel route. Buses could travel along Grosbeck to Laurel to Herrick rather than taking a left turn from Delaware to Herrick directly. These options will be discussed with the School District.
6	I really feel the project should have included the route from Elsmere Avenue to the Four Corners with the unused Railroad Bridge being removed and the man-made 'valley' filled with the road moved to four lanes—ditto for the similar Elsmere Avenue bridge, albeit to two wide lanes. As one cyclist in attendance said 'cyclists unfortunately have to abide by the same traffic laws as do the motorized vehicles—therefore, they would have to learn to cross the vehicle lanes as motor vehicles do. The Delaware Avenue underpass has always been a problem what with excess water after heavy rains that ultimately lead to road and bridge repairs leaving motor vehicle operators to deal with the resulting poor conditions.	The area described is outside the limits of the study area. The Delaware Avenue streetscape improvement project that is currently underway is replacing the catchbasins and stormwater drainage pipes, which should help to address stormwater ponding at the Delaware Avenue underpass. The Delaware Avenue and Elsmere Avenue railroad bridges serve to carry many bicyclists and pedestrians along the Albany County Rail Trail. Removal of these bridges would introduce new pedestrian and bicycle crossing issues/conflicts at Elsmere Avenue and Delaware Avenue. There are no plans or recommendations to remove these bridges.
7	It was mentioned that past road diet installations indicated a small—I believe it was stated as 4%—was diverted to other routes after the diet implementation. Discussion was centered around the traffic move to the By-Pass and that was perceived as a good thing. Well, I think the businesses along the Delaware Avenue route will be unhappy and the/any lost business will not go to other Bethlehem Businesses but to Albany ones as there are very few businesses along the By-Pass route, hence the name 'By-Pass'. I think this is not a desirable outcome.	The potential for diverted trips was related to the PM peak hour only. The road diet is expected to improve access to and from businesses for left turning vehicles. It is also expected to improve travel conditions for bicyclists and pedestrians.
8	I think the meeting was sort of 'stacked' for passage of the road diet plan as the significant number of cyclists, even to the point of an Albany resident in the audience who praised the Madison Avenue diet plan as it helped him along with the other residents of the area. As I understand it, the plan for Delmar was traffic safety, cyclists and pedestrians, making the Madison Avenue comparison to our plan a poor one. The labeling of the 'None' option being left naked without any changes at all. We all know that when you label something as 'None' when discussing changes just puts that option in the hole. Certainly adding a turn lane for a few more intersections could be added where land is available. Right turn lanes from side streets could be added to help us access Delaware Avenue, however, nothing was added so as to leave the option as a true 'None' and unattractive. A left turn lane was suggested at the business entrance just down the hill from the Car Wash—why not other places? I believe it is because the option was not really designed to be considered as a real alternative.	There was no stacking. The meeting and content was responsive to the goals of the study as set forth by the Town and CDTC. The null or "none" alternative is fundamental to all transportation studies as a base line. Alternatives that would add capacity for cars such as turn lanes, did not align with the study's project objectives. The study did include analysis of existing traffic operations and determined there is sufficient motor vehicle capacity and good LOS at the intersections. The study did examine motor vehicle "needs" to determine the feasibility of integrating complete streets elements into design concepts that did not include widening the road as widening the road would have negative impacts on business and residential properties and would be cost prohibitive. The turn lane at the bottom of the hill is the termini of a turn lane that would extend the entire length of the study area under the full road diet alternative.

Comment #	Comment	Response
9	<p>It appears the underlying plan all along was/is to have the plan approved in one way or the other. Not much attention was given to the 'no changes' option even to the point when I asked if consideration was given to a right turn lane into Delaware Plaza and was told it was not! That lane is a logical one and to me the fact it was not considered pointed to very little attention being paid as traffic into Delaware Plaza has to be one of the major attractions for Delaware Avenue traffic. Ironically at about 4:35 PM today I was sitting in traffic heading West on Delaware just past Delaware Plaza and decided to turn left at the first side street and taking it around to Elsmere Avenue—and along the way passed two entrances to the NYS bike path which could be utilized by cyclists to access Delaware Plaza. By the way, please note the line of traffic was two lanes deep due to the traffic light backup from Elsmere Avenue.</p>	<p>Alternatives that would add capacity for cars such as turn lanes, did not align with the study's project objectives. Traffic engineering analysis was completed and a right turn lane is not needed for access into the Plaza. (see above response to comment 7). Regarding "sitting in traffic", there is construction taking place on Delaware Avenue west of the Elsmere Avenue intersection that prohibits the westbound through movement. This most likely contributed to your experience at that time of day. The Town is exploring additional access points along Ellsworth Place that would connect the Rail Trail to the Delaware Plaza.</p>
10	<p>I also think we are making this drastic change to suit so very few of our residents. Even the moderators spoke of relatively miniscule numbers of pedestrians and cyclists as compared to the 16,000+ vehicles on Delaware Avenue. The tail is wagging the dog here. We vehicle users pay a lot of taxes to use our vehicles and roads while that is not the case for the others. The sales tax we pay when we purchase our vehicles goes to pay for our local highway department budgets and can similarly be said of our gasoline taxes while cyclists and pedestrians have no input in these areas. While everybody counts the needs of vast majority would seem to have priority.</p>	<p>The goal of the Study is to find a way to provide a balanced transportation system along Delaware Avenue that accommodates all modes of travel (all users)...motorists, pedestrians, and bicyclists. There will be trade-offs from the road diet, which would add additional travel time to motorists yet provide a safer environment for pedestrians and bicyclists.</p>
11	<p>I agree the pedestrians' inability to safely cross Delaware Avenue is a serious problem—even at Delaware Plaza where there are traffic signals. I do not know the answer to this nor do I know the numbers of pedestrians who are interested in making the crossing-this is a very important factor. One of the audience members indicated there already was a useful bike path using the NYS route and side streets to arrive at Delaware Plaza—this was immediately brought down by a cyclist who said he regularly travels on Delaware Avenue and the existing route was not convenient to him. He also said he shopped while riding his cycle and his business was important. Simply put, we do not agree as inconveniencing the vastly larger vehicle traffic group is beyond inconvenience(note-I mentioned this route in #8 above).</p>	<p>Some bicyclists will not feel comfortable on Delaware Avenue, even with the road diet, and there are local street options that could be used for a good portion of the corridor. The road diet alternative is not all about bicyclist, but improved safety for motorists as well.</p>
12	<p>As an additional consideration, I ask if CDTA been brought into the discussion and the possibility of offering free or low cost transportation to and from local traffic as done in Albany to the uptown Broadway Bar district? The buses can provide safe transportation for bicycles in addition to the obvious help to pedestrians.</p>	<p>CDTA is part of the study and has participated at Study Advisory Committee meetings, (along with NYSDOT representative) and expressed a willingness to consolidate and relocate bus stops to help the corridor. Their service is low cost and a good option for many downtown trips.</p>

Comment #	Comment	Response
13	<p>I am writing to let you know of an issue I was involved in last Friday, November 10 when I was going to the supermarket in Delaware Plaza. I have made a crude attempt to diagram the situation as it developed, and while nothing happened, it serves to point out the/an issue I have described in earlier notes to the group.</p> <p>As I have attempted to show, I was pulling into the West entrance of Delaware Plaza near Brueggers when a vehicle was backing out of a parking spot and I had to stop to wait for the vehicle backing up so I could enter. Meanwhile, there was a car behind me and I assume it was going to follow me in but it had to wait when I stopped. As soon as I realized that the 2nd vehicle was partially sticking out on Delaware Avenue, I pulled in as far and as close as I could so as to allow as much room behind me.</p> <p>Instead, the car moved back a bit and just pulled out into the 2nd driving lane and continued on-as did I shortly thereafter.</p> <p>The point of this note is that, while there is a 2nd driving lane now there would/might not be one later-meaning a car/cars could be lined up on Delaware Avenue awaiting uncertain fate, depending on the variety of Road Diet plan implemented. I am sure this was not the only time this happened during the day/week/month and it certainly was at least a very uneasy situation that could have been a lot worse.</p> <p>A direct right turn lane needs to be put together as an entrance to the Plaza whether it be at the location of the intersection where the current traffic signal is installed or elsewhere. I don't want to minimize the work involved but do want to emphasize what a problem situation we currently have there.</p>	<p>This issue has been referred to the Town's internal pedestrian and traffic working group composed of Police, Engineering, Highway and Planning., who will look into this concern outside of the Study.</p>
KK. Wes Greenman		
1	<p>First – Thank you for the well-organized meetings and presentations on the complete streets feasibility study. I have attended both meetings and found them to be very informative.</p> <p>My only concern is that it seems to me the majority of those attending and voting are more of the walking, biking and “green” set than the day to day commuters. I agree that the overall idea is good and appreciated that four options were given, and I sincerely hope that the good of the whole town is considered in the final proposal. I believe keeping 2 lanes for the west bound traffic is essential for the project success. At almost any time of the day there are a significant number of cars turning left from Delaware to Elsmere Ave. Reducing the west bound traffic to one lane will certainly cause long backups, eliminating the benefits of the project.</p> <p>Thank you.</p>	<p>Comment noted. Commenter supports Alternative E (Westbound 2-1-1)</p>
LL. Albany Bicycle Coalition		

Comment #	Comment	Response
1	<p>I am writing on behalf of the Albany Bicycle Coalition in support of the Full Road Diet proposal for Delaware Avenue from Elsmere Avenue to the Normanskill Bridge. The Albany Bicycle Coalition promotes cycling and cycling safety throughout the Capital Region. We have reviewed the Delaware Avenue Complete Streets Feasibility Study and several of our members were able to attend the recent presentations. We are familiar with this busy section of road as both cyclists and drivers.</p> <p>The lack of bike lanes, narrow shoulders (if any) and the speed of cars make cycling on this section of Delaware Avenue especially hazardous. The four lanes of traffic make the road difficult to cross except in the two widely separated places that have crosswalks. We agree that slower speeds, two motor vehicle traffic lanes with a turning lane and bike lanes will vastly improve the safety and appeal of this area.</p> <p>One especially bothersome complaint opposing the plan is that walkers and cyclists have the new and popular Albany County Helderberg Hudson Rail Trail so should not need bike lanes and pedestrian improvements on Delaware Avenue. Pedestrians and cyclists are not just participating in these activities for the sake of walking or cycling. They are going somewhere. There should be a safe way to walk and cycle to the many businesses and other destinations along the Delaware Avenue corridor. People in cars are not "giving up something" for people on busses, on foot or on bicycles – these latter groups are merely demanding their fair and proper share of the road space. Improving and increasing foot and bike traffic is not only good for pedestrians and cyclists, it is good for businesses and good for building an appealing community.</p> <p>It is also important to remember that for many Delaware Avenue is the only practical connection between Albany and the southwest communities of Delmar and Elsmere. The rail trail has no designated access between Elsmere and South Pearl Street in Albany. For walkers and cyclists wanting to go anywhere in between the rail trail is not a solution. Delaware Avenue is the only route for many people that commute to work by bicycle and for many people that commute by bus who must then walk from bus stops to their destinations. These people must be able to get to and from work safely.</p> <p>Lastly, if the success of the Rail Trail has shown anything, it has shown how so many people in this community want to get out of their cars to walk and bicycle. While the rail trail is a safe place to walk and bicycle, it is hazardous to get to the Rail Trail if your route follows Delaware Avenue. We urge the Town Board to approve the Full Road Diet plan and to see that this plan is carried out without delay.</p> <p>Thank you for your efforts and consideration.</p>	Comment noted.
MM. Mark Hansen		
1	<p>I am opposed to reducing the number of traffic lanes on Delaware Avenue from Delmar to Albany. While residents are concerned about additional traffic jams the last thing the town needs is to create more traffic jams on its' main artery, even if it is given a ridiculous name like "road diet." There are no statistics that show the need for little-used bike lanes or additional pedestrian safety. And, for bikers, they can ride parallel to Delaware on the rail trail with no cars at all. If you want to improve Delaware Ave, simply pave it and keep it in good repair and don't fall victim to stupid names like "road diet" that really means "more traffic jams."</p>	<p>The study documents the poor environment for bicyclists and pedestrians and the limited number of formal pedestrian crossings (Elsmere Ave, and Delaware Plaza). The road diet option allows for new crosswalks and a reasonable spacing so pedestrians have additional crossing options other than the two existing traffic signal locations.</p>
NN. Scott Merritt		

Comment #	Comment	Response
1	<p>As a 30+ year resident of Elsmere, I am strongly opposed to the idea of reducing the number of travel lanes on Delaware Ave.</p> <p>Travel times and congestion on Delaware Ave are already inconvenient - restricting the roadway to make things slightly more convenient for a decided minority of the town residents is not wise, nor fair.</p> <p>There is also the matter of the substantial construction costs that would be incurred to make such a change - and that we would have to pay for, one way or another (just because some of the money might come from the State or Federal Government doesn't make it free ...).</p> <p>I'd like to point out that the small number of folks that show up for meetings on such topics are not representative of the town at large. In particular, there will be a very strong bias toward those folks that are either retired, or at least not fully consumed with their other work responsibilities.</p> <p>I would strongly suggest that you conduct a town wide referendum, perhaps on election day in 2018, to get a representative sampling before embarking on any such project.</p> <p>Thank you for your service and consideration.</p>	<p>There was plenty of opportunity to provide comment from a wide cross section of residents and businesses. The majority of people who commented, favored the road diet alternative. We advertised the meeting in the following manner:</p> <ul style="list-style-type: none"> • Over 750 meeting flyers were mailed to homeowners, property owners, and business owners along Delaware Avenue and all the side streets from Elsmere Ave to the Normanskill (i.e. Booth, Lincoln, Snowden, Salisbury, Euclid, Mason, etc.). • Emails were sent to all those participants who attended the first public meeting in February (over 100) • Spotlight Newspaper ran a story on their website the week of Sept. 11th , and printed a story the week of Sept. 18th • Town website had a meeting announcement since early September • Since Sept. 16th, there was a display placed in the lobby of the Bethlehem library announcing the meeting date and providing information on the study. • In July, we held a special business owner meeting...inviting all the business owners along this section of Delaware Avenue to discuss with them the study and the results of the road diet analysis. A letter from the Supervisor was sent inviting the business owners to the meeting. • the Times Union ran a story about the Town's complete streets study (this was a result of an announcement at a Planning Board meeting about the upcoming Sept. 26th public meeting). <p>Based on these announcement activities, several opportunities have been provided to make residents and business owners aware of the complete streets study.</p>
OO. James Meerdink		
1	<p>Nice presentation – alternatives, benefit, drawbacks were well presented.</p> <p>Please think about prioritizing connections to the rail trail. It is a well-used facility, and will increase in popularity when further developed to Voorheesville.</p> <p>Wayfinding signage to business district geared towards cyclists and pedestrians (also transit users) would be nice “future opportunity” to include in the report.</p> <p>More information on rail trail usage @ PTNY.org</p>	<p>Comment noted.</p>

TOWN BOARD MEETING



Delaware Avenue Complete Streets FEASIBILITY STUDY

Study Goals

“Create a Plan for a more balanced transportation system along Delaware Avenue to enable safe and comfortable ADA compliant access for users of all ages and abilities, including pedestrians, bicyclists, transit users and motor vehicle drivers, otherwise known as Complete Streets.”



Safety



Access



Economy



Place

What are Complete Streets?



Complete Streets are streets for everyone, no matter who they are or how they travel.



National Complete Streets Coalition

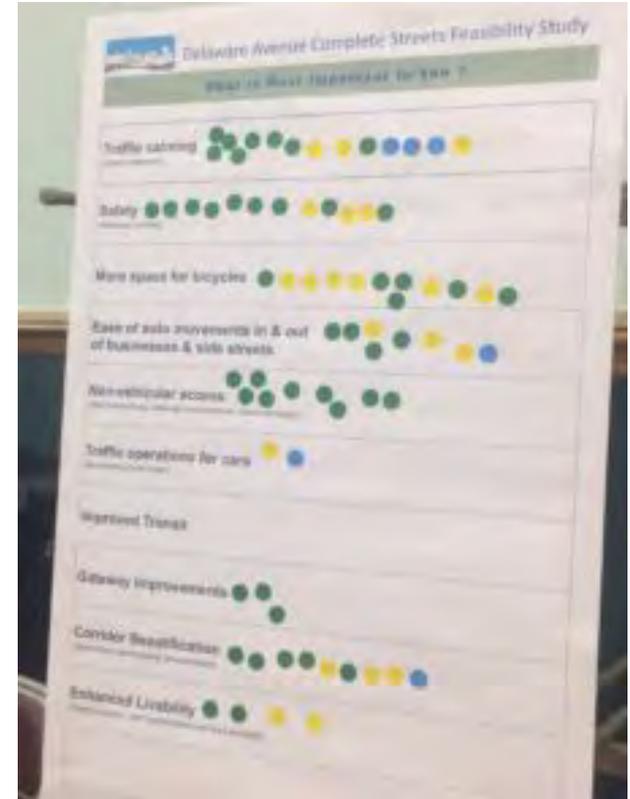
Context

- 1960s four-lane roadway
- Through route vs Main street
- Stable volumes and limited growth potential
- Uninviting to walkers and bicyclists
- Crash history
- Traffic speed concern
- Volumes in range where road diet is feasible
- Trade-off is increased travel time and queuing
- Local and regional plans and policies

Road Diet Guidance vs Area Roads

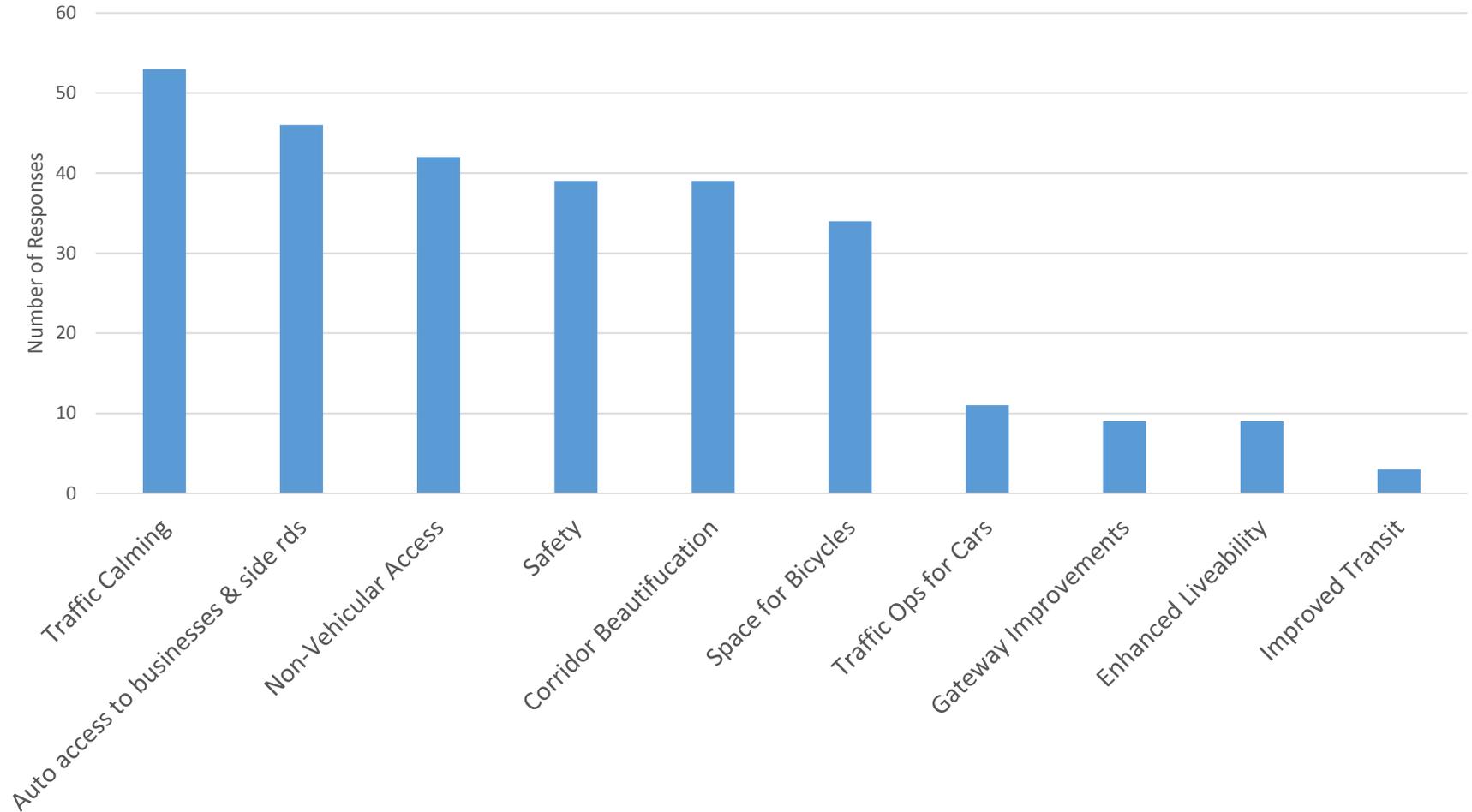
Up to 25,000 Vehicles Per Day – Seattle DOT		
21,100	Route 32 (Broadway)	Menands
$\leq 20,000$ Vehicles Per Day “ May be a good candidate” - FHWA		
18,900	Route 5	Schenectady
18,300	Delaware Ave (Elsmere Ave to Plaza)	Bethlehem
16,600	Fuller Road (RR Ave to Central)	Albany
15,500	Madison Avenue	Albany
15,500	Delaware Ave (Plaza to City Line)	Bethlehem

Public Meeting #1 (February 16, 2017)



What is Most Important to You?

Delaware Avenue Complete Streets Feasibility Study
What is Most Important to You?



Five Alternatives

- A** Null
- B** Full Road diet (1-1-1)
- C** Half corridor road diet
- D** 1-1-2 Eastbound
- E** Westbound 2-1-1

Would you be willing to exchange...

- Up to 50 seconds of travel time during the peak commute

for

- Traffic calming on Delaware Avenue, fewer crashes, better access for left turns, a more comfortable pedestrian environment, greater separation between cars and the sidewalk, improved pedestrian crossings, and space for bicycles?









Existing – Null Alternative

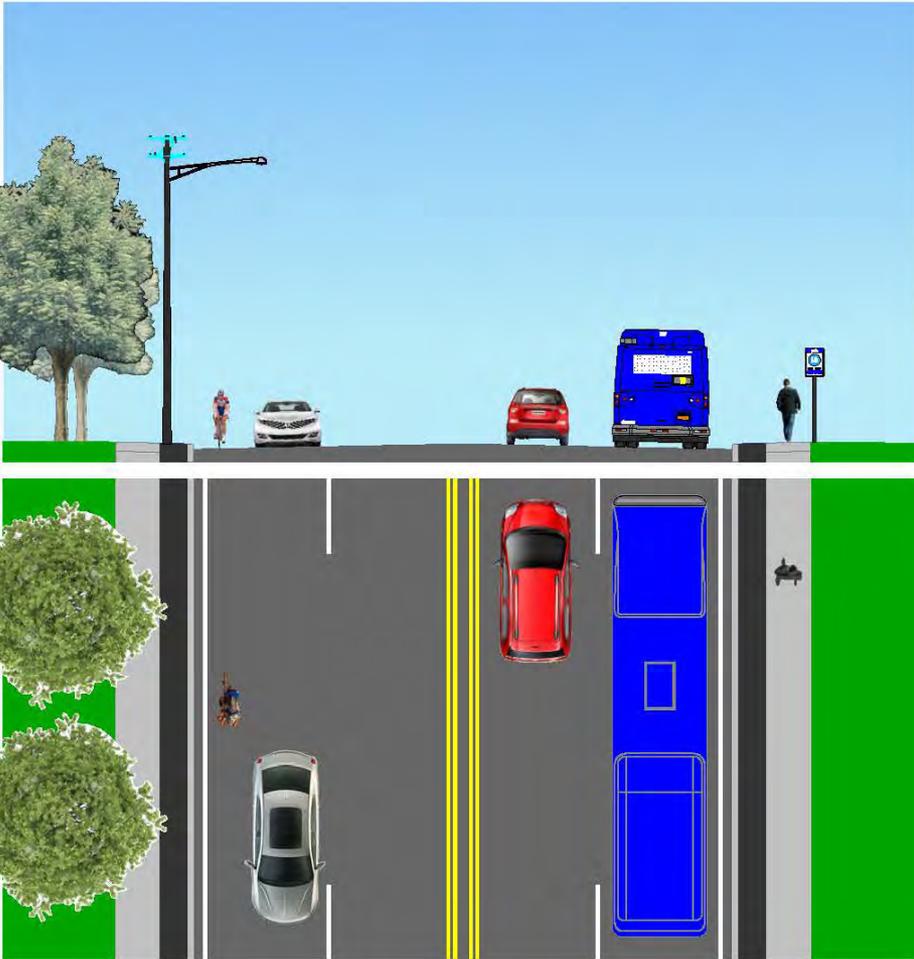


- Pros

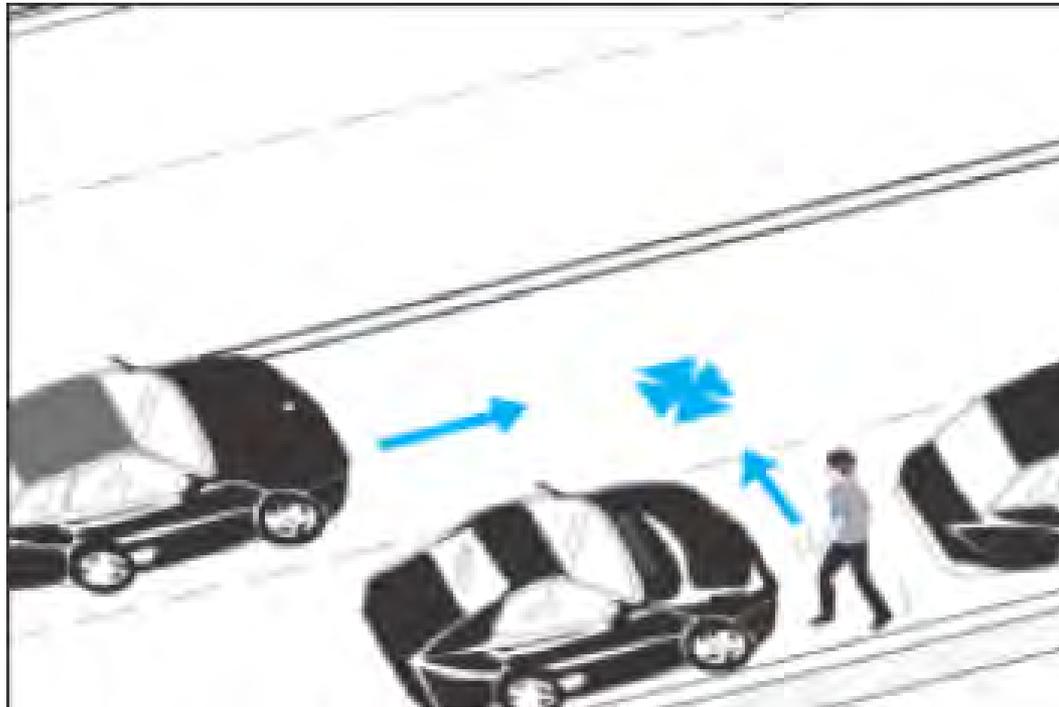
- Maintains current traffic operations
- No cost

- Cons

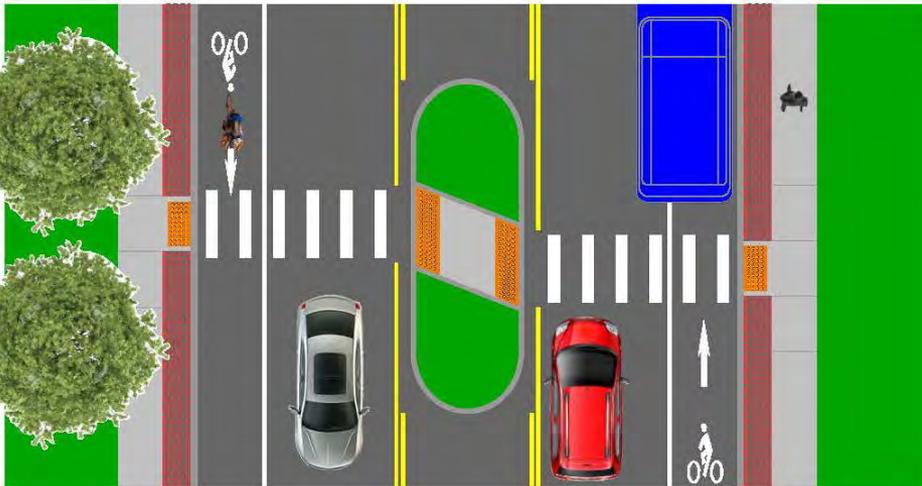
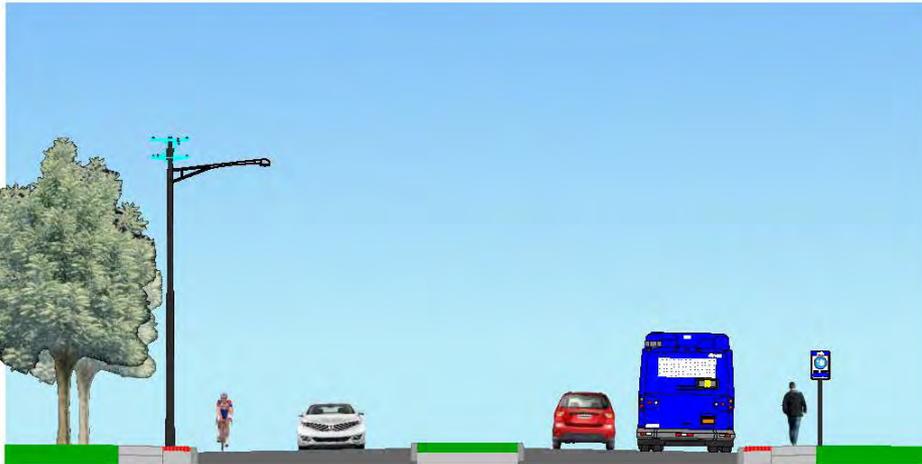
- High crash rate
- Difficult crossing for pedestrians
 - » Multi-threat
- Poor bike accommodation
- Left turn challenge



Multi-threat



Full Road Diet (1-1-1)



• Pros

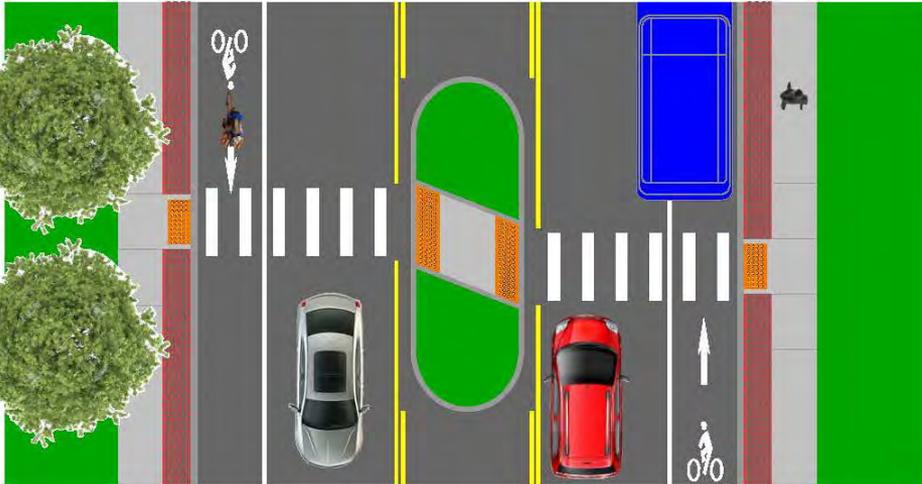
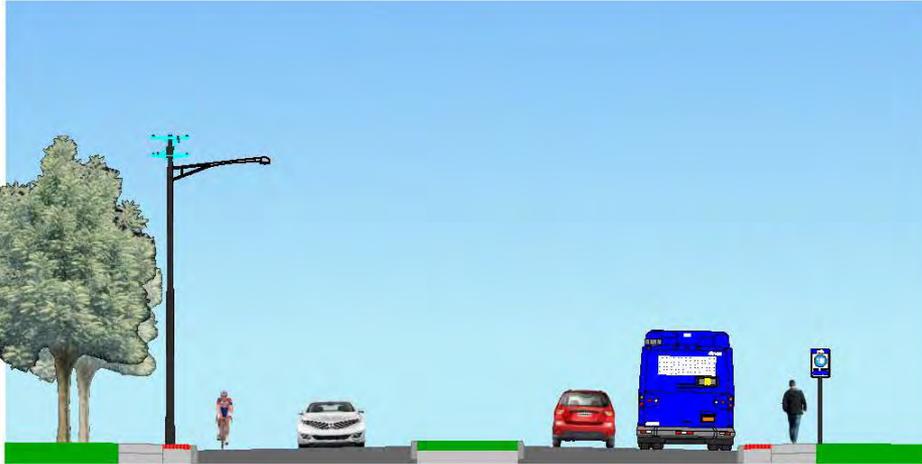
- Traffic calming
- Improved safety
- Improved bike accommodation
- Improved pedestrian crossing accommodation
- Improved access to/from unsignalized side streets and businesses

• Cons

- Some traffic diversions (3 to 4 %)
 - » Peak hour only
- Increased peak hour signal delay
 - » +15 to 50 seconds (AM)
- Increased corridor travel times - PM Peak end to end
 - » + 45 seconds each way

Half Corridor Road Diet

(Delaware Plaza to Normanskill Bridge)



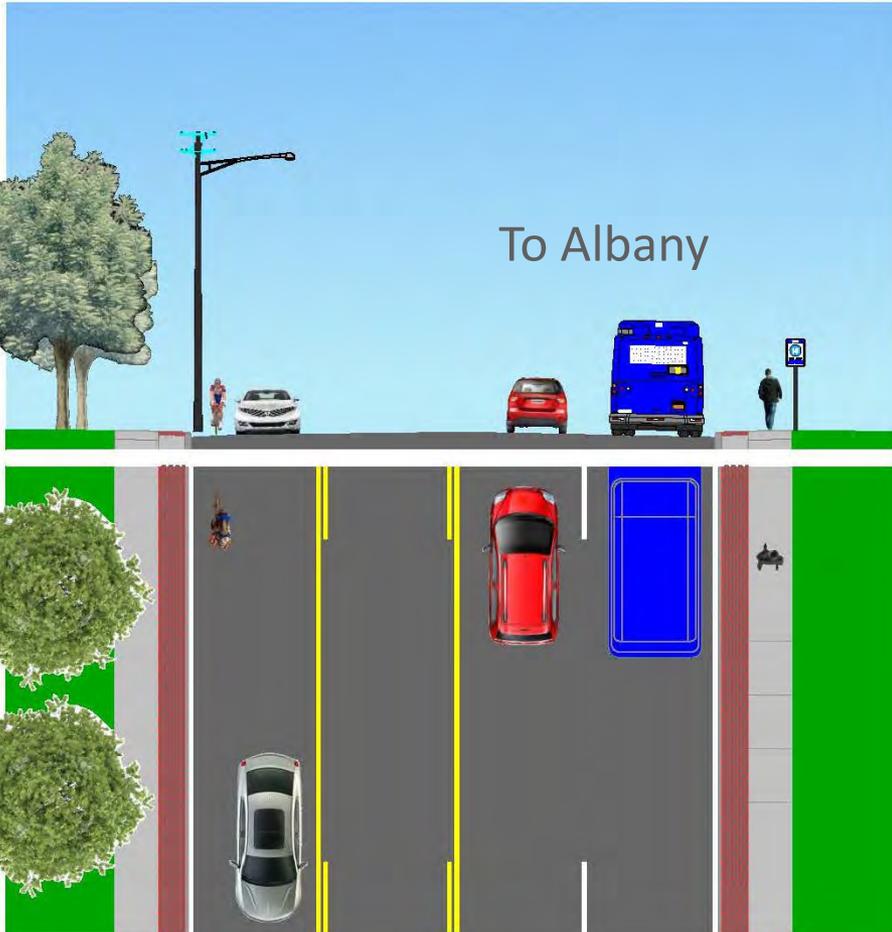
• Pros

- Maintains traffic operations - Elsmere to Plaza.
- Improved safety, traffic calming bike accommodation and pedestrian crossing accommodation in road dieted section
- Improved access to/from unsignalized side streets and businesses – road dieted section

• Cons

- High crash rate Elsmere to Plaza
- Multi-threat Elsmere to Plaza
- Lack of bike lane and pedestrian crossing accommodation Elsmere to Plaza

1-1-2 Eastbound (with full Road Diet Plaza to Bridge)



• Pros

- Ties into existing conditions / Enhancements project at Elsmere
- Some safety and traffic calming benefits
- Improved ped crossing opportunities

• Cons

- Lack of bike lane Elsmere to Plaza
- Multi-threat in one direction
- Travel time increase
 - » + 45 seconds WB, + 15 seconds EB

Westbound 2-1-1 (with full Road Diet Plaza to Bridge)



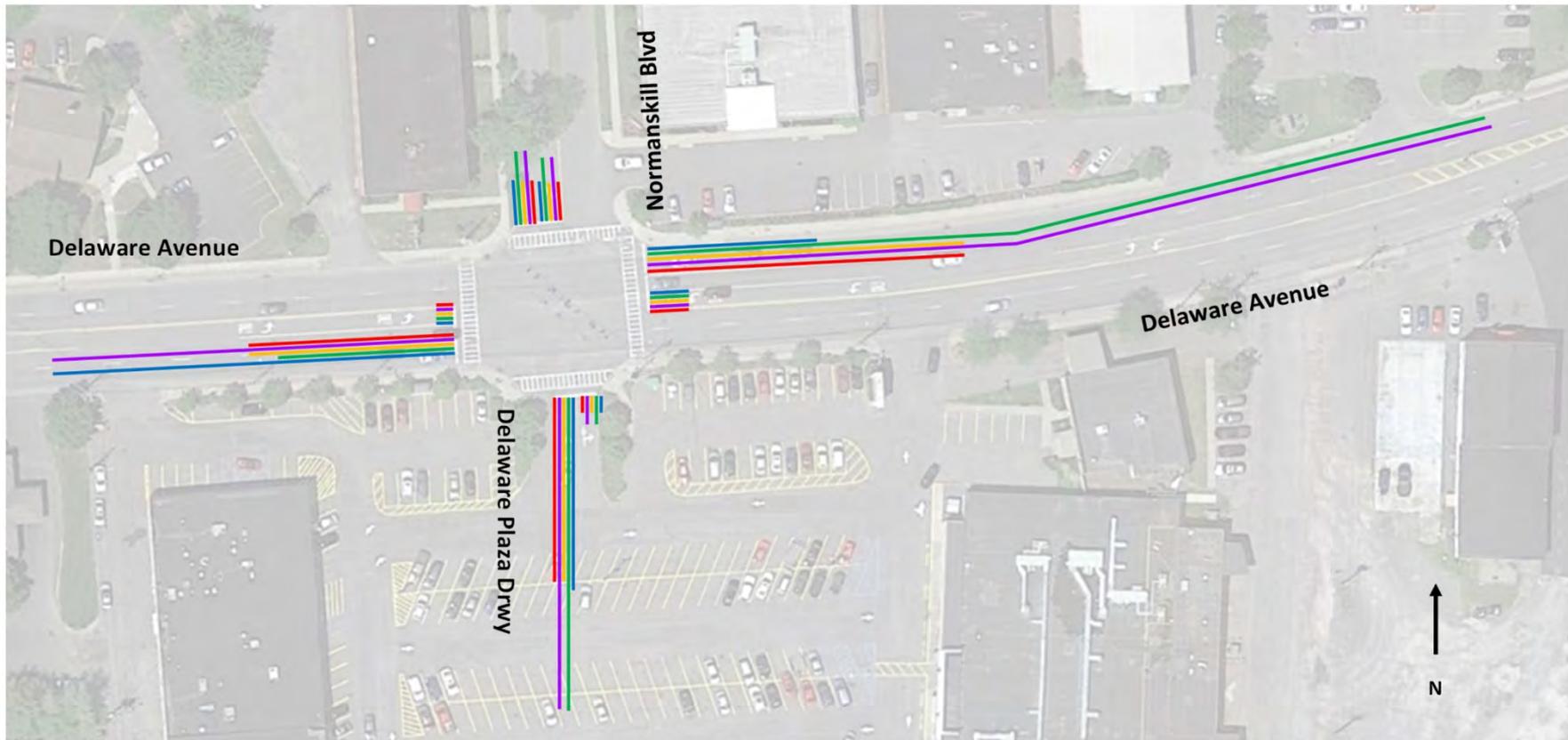
• Pros

- Good PM peak hour traffic operations
- Some safety and traffic calming benefits
- Improved ped crossing opportunities

• Cons

- Lack of bike lane Elsmere to Plaza
- Multi-threat in one direction
- Travel time increase
 - » + 15 seconds WB, + 45 seconds EB

Average Queuing PM Peak Hour Delaware Avenue/Delaware Plaza Drwy/Normanskill Blvd



A Null

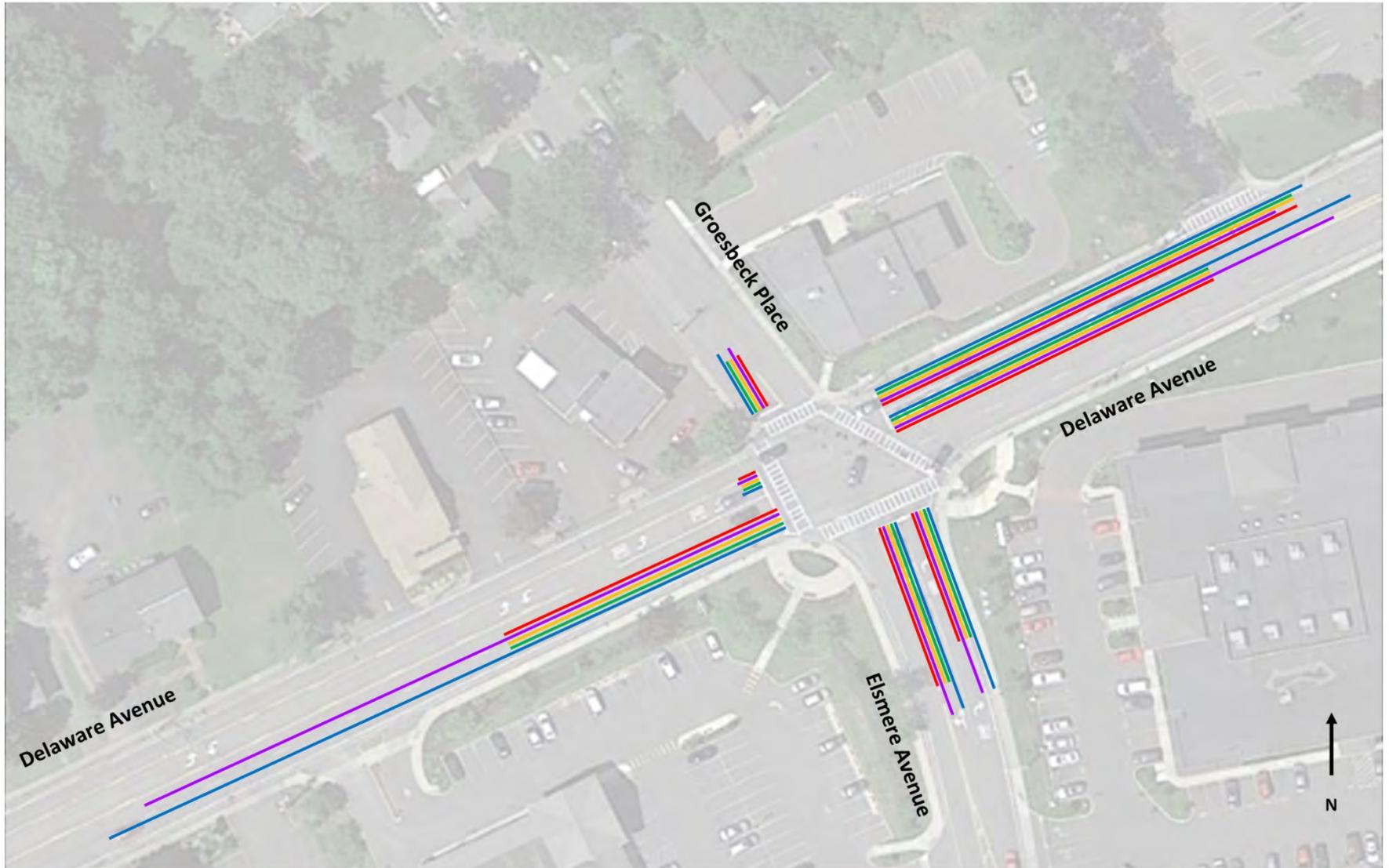
B Full Road Diet

C Partial Road Diet

D 1-1-2 Eastbound

E Westbound 2-1-1

Average Queuing PM Peak Hour Delaware Avenue/Elsmere Avenue/Groesbeck Place

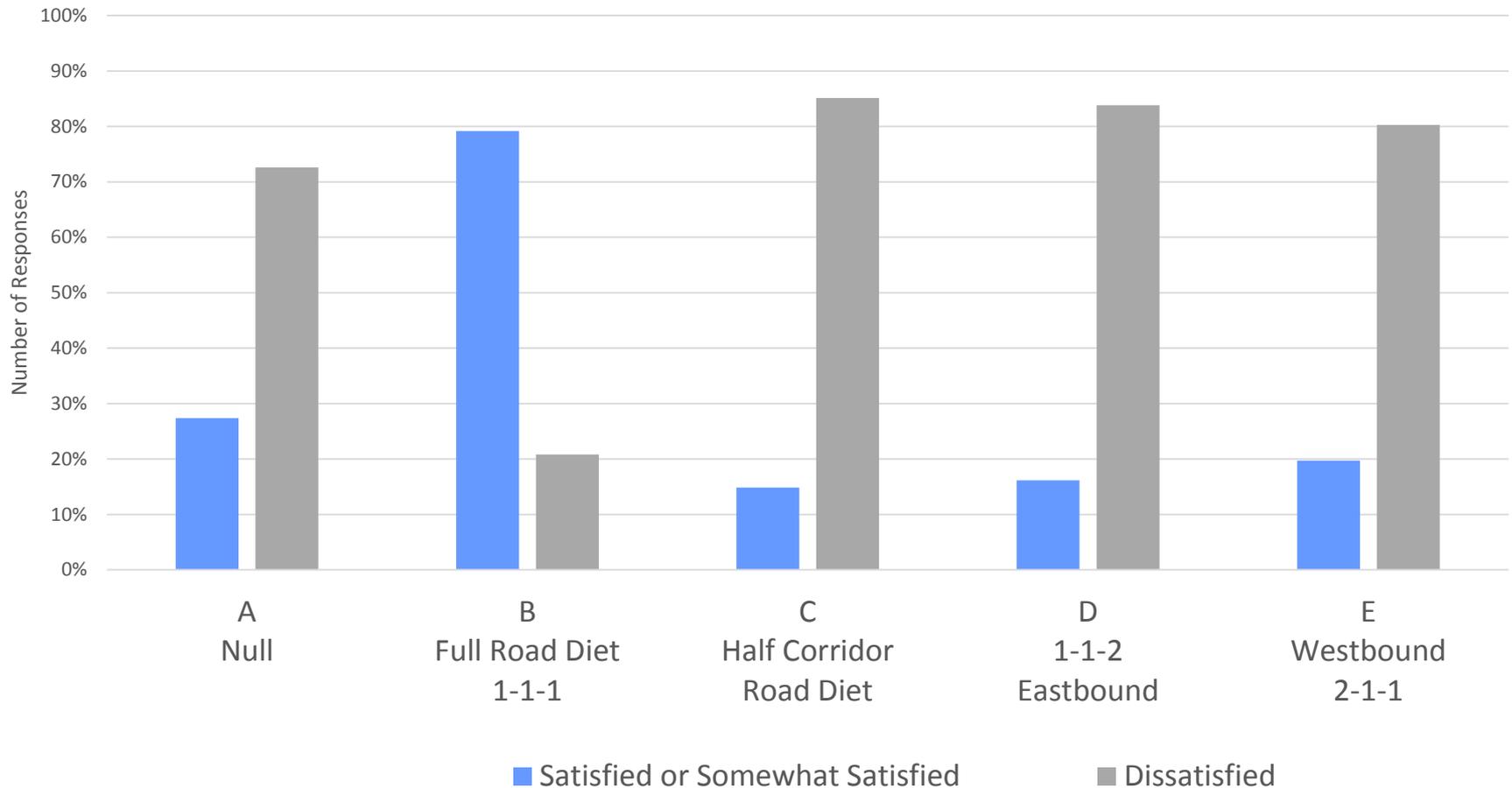


- A** Null
- B** Full Road Diet
- C** Partial Road Diet
- D** 1-1-2 Eastbound
- E** Westbound 2-1-1

		Evaluation of Alternatives				
		A Null	B Full Road Diet (1-1-1)	C Half Corridor Road Diet	D 1-1-2 Eastbound	E Westbound 2-1-1
Alternative						
Performance Measure						
	Safety					
	Crashes	● ○ ○ ○ ○	● ● ● ● ●	● ● ● ○ ○	● ● ● ○ ○	● ● ● ○ ○
	Traffic Calming Benefit of Enhancements	● ○ ○ ○ ○	● ● ● ● ●	● ● ● ○ ○	● ● ● ○ ○	● ● ● ○ ○
	Access					
	Travel Time	● ● ● ● ●	● ● ● ○ ○	● ● ● ● ○	● ● ● ○ ○	● ● ● ○ ○
	Signal LOS/Queuing	● ● ● ● ●	● ● ● ○ ○	● ● ● ● ○	● ● ● ○ ○	● ● ● ○ ○
	Bike LOS	● ○ ○ ○ ○	● ● ● ● ●	● ● ● ○ ○	● ● ● ○ ○	● ● ● ○ ○
Ped Access to Transit	● ○ ○ ○ ○	● ● ● ○ ○	● ● ● ○ ○	● ● ● ○ ○	● ● ● ○ ○	
	Economy					
	2030 Volume Change	● ● ● ● ●	● ● ● ● ○	● ● ● ● ●	● ● ● ● ●	● ● ● ● ●
	Side St/ Driveway Delay Cost of Alt	● ● ● ○ ○	● ● ● ○ ○	● ● ● ○ ○	● ● ● ○ ○	● ● ● ○ ○
	Place					
	Pedestrian Friendliness	● ○ ○ ○ ○	● ● ● ● ○	● ● ● ○ ○	● ● ● ○ ○	● ● ● ○ ○
	Streetscape Quality of Life	● ○ ○ ○ ○	● ● ● ● ○	● ● ● ○ ○	● ● ● ○ ○	● ● ● ○ ○

Public Feedback on Alternatives

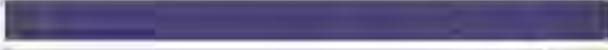
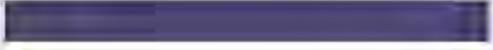
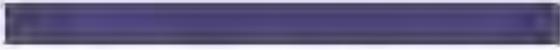
Public Meeting #2 September 26, 2017



Bethlehem Chamber Survey

Please rank your choices for the Delaware Avenue corridor.

1 = Least

Answer	1	2	3	4	5	Number of Response(s)	Ranking Score*
Null Alternative (keep roadway as is)						27	2.7
Full Road Diet (1-1-1)						27	3.4
Half Corridor Road Diet (Delaware Plaza to Normanskill Bridge)						27	3.0
1 1 2 Eastbound (with full Road Diet Plaza to Bridge)						27	2.7
Westbound 2 1 1 (with full Road Diet Plaza to Bridge)						27	3.1

*The Ranking Score is the weighted average calculated by dividing the sum of all weighted rankings by the number of total responses.

Written comments - 37 Individuals

Opinion on Full Road Diet

- 16 for
- 9 against
- 12 not specific to an alternative

Public Meeting #2 Concerns (September 26, 2017)

- Travel time / delay / queuing
- Questioning validity of model & delay projections
- Questioning safety benefit
- Focus on PM peak hour
- Operations near Herrick
- Why no crossing enhancements considered under the 4-lane alternative?

Schedule

- Nov – Study Advisory Committee meeting
- Dec – Final Report with implementation strategy
- Dec - Town Board Meeting
- Pursue funding

Questions?



SAC Meeting 1



Delaware Avenue Complete Streets FEASIBILITY STUDY

What are Complete Streets?



Complete Streets are streets for everyone, no matter who they are or how they travel.



National Complete Streets Coalition

What are Complete Streets?

Safe, comfortable and convenient



National Complete Streets Coalition

What are Complete Streets ?



Complete Streets Overview

- National and local efforts support Complete Streets

- NYS Law “...shall consider the safe travel on the road network by all users of all ages, including motorists, pedestrians, bicyclists, and public transportation users...”

- Bethlehem Resolution “...shall consider the safe and efficient accommodation of bicyclists and pedestrians in all new street construction and reconstruction...”

Complete Streets Fundamentals

“There is no one design prescription for complete streets. Ingredients that may be found on a complete street include: sidewalks, bike lanes (or wide paved shoulders), special bus lanes, comfortable and accessible public transportation stops, frequent crossing opportunities, median islands, accessible pedestrian signals, curb extensions, and more. A complete street in a rural area will look quite different from a complete street in a highly urban area. But both are designed to balance safety and convenience for everyone using the road.”

- National Complete Streets Coalition



National Complete Streets Coalition

What are they?

- Not just bike lanes and sidewalks
- Network based
- Context Sensitive



What are they?



What are they?



What are they?





MADISON

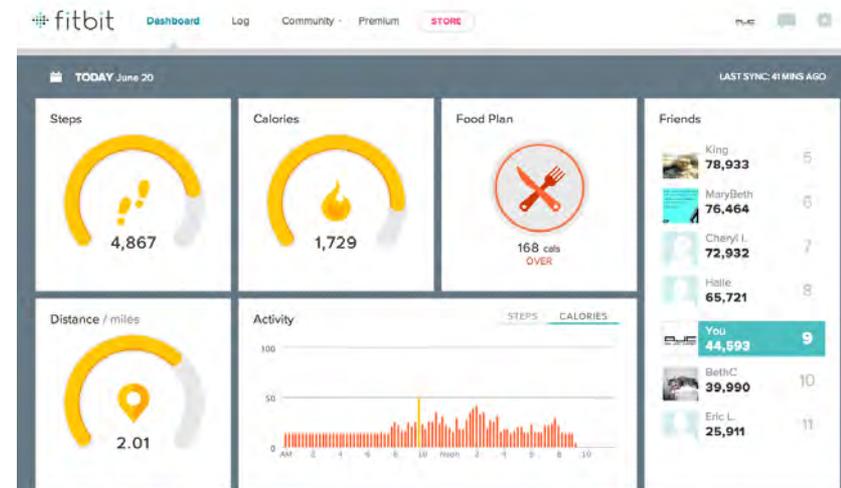
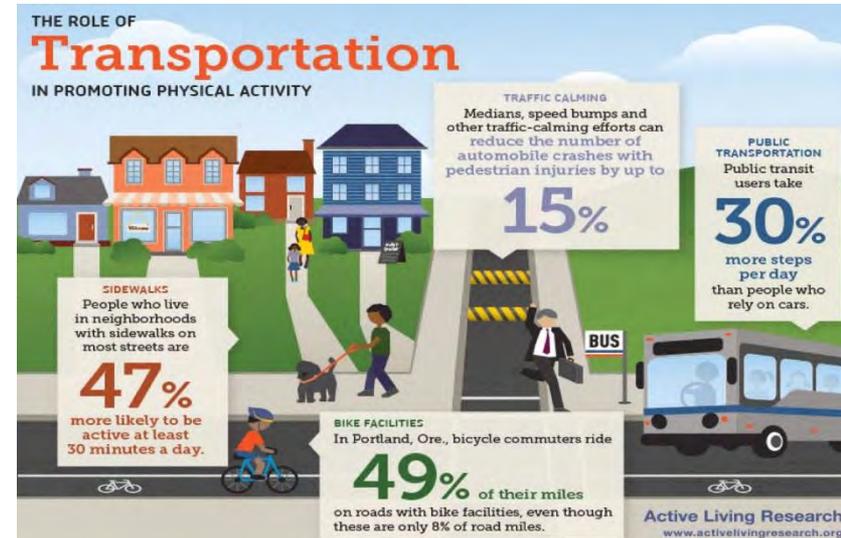
PERFORMING ARTS CENTER

8/27 MAD LAUGHS
9/10 WHISKEY TREATY

LAST UNICORN	1	5	7
SCARLET STREET	2	5	8
MULHOLLAND DRIVE		5	8
SHAKESPEARE LIVE	2	7	

Why Complete Streets - Health

- Promotes Physical Activity and Healthy Lifestyle.
- 31% of Americans are obese. 65 % are overweight or obese.
- Obesity results in \$117 billion of direct health related costs each year.
- People who live in neighborhoods with sidewalks on most street are 47% more likely to be active at least 30 minutes per day.



People walk

to get to places they want to go
when places are nearby.



Why Complete Streets - Economy

- Promotes Community Interaction
- Less \$ on transportation = more spending money
- Increased private investment in community
- Increased home values: 15 real estate markets; one-point increase in the walkability scores; \$700 to \$3,000 increase



Why Complete Streets - Mobility

- Equity
- By 2045 the number of Americans over age 65 will increase by 77 percent
- About one-third of people over 65 have a disability
- Millennials are driving less and looking for other transportation options



Older Americans — Redefining Longevity

By 2045, the number of Americans over age 65 will increase by



77%

About **one-third** of people over 65 have a disability that limits mobility. Their access to critical services will be more important than ever.

Millennials — Shaped by Technology

There are **73 million Millennials** aged 18 to 34. They are the first to have access to the internet during their formative years and will be an important engine of our future economy.

Millennials are driving less. By the end of the 2000s, they drove over **20% fewer** miles than at the start of the decade.



Income Inequality

10% of the population takes home **one-third** of our national income.

Transportation is the **second-largest** expense for U.S. households.



Why Complete Streets - Safety

- Safer streets = less costly streets
- Recent Madison Avenue Road Diet in the City of Albany showed a 4:1 cost benefit ratio
- Road diets are one of FHWA's proven safety counter measures
- Reduce crashes by 19 to 47percent
- Speeds likely to be reduced by 3 to 5 mph



Complete Streets Resources

- Capital District Transportation Committee
 - <http://www.cdtcmpo.org>
- Smart Growth America
 - <https://smartgrowthamerica.org>
- National Complete Streets Coalition
 - <https://smartgrowthamerica.org/program/national-complete-streets-coalition/>
- FHWA Road Diet Guide
 - http://safety.fhwa.dot.gov/road_diets/info_guide/
- NYSDOT Complete Streets Report and Checklist
 - https://www.dot.ny.gov/programs/completestreets/repository/Complete%20Streets%20Final%20Report_NYSDOT.pdf
 - https://www.dot.ny.gov/divisions/engineering/design/dqab/hdm/hdm-repository/chapt_18a.doc
- NACTO Urban Street, Bicycle and Transit Guides
 - <http://nacto.org/>
- ITE Designing Walkable Urban Thoroughfares
 - <http://library.ite.org/pub/e1cff43c-2354-d714-51d9-d82b39d4dbad>
- AASHTO Bicycle Guide
 - https://bookstore.transportation.org/item_details.aspx?ID=1943

Thank you



Agenda / Meeting Outline

1. Welcome / Purpose
2. Review Complete Streets Material
3. Scope / Schedule / Milestones
4. Draft Project Goals
5. Outcomes
6. Other
7. Recap / Next Steps

Draft Study Goals

- Create a more balanced transportation system along Delaware Avenue to enable safe and comfortable ADA compliant access for users of all ages and abilities, including pedestrians, bicyclists, transit users and motor vehicle drivers, otherwise known as Complete Streets.

Draft Study Goals

- Ensure an effective public involvement process to engage the community in learning about the benefits and potential tradeoffs of complete streets designs along Delaware Avenue and to seek and obtain public input on conceptual designs that balance the needs of all roadway users.

Draft Study Goals

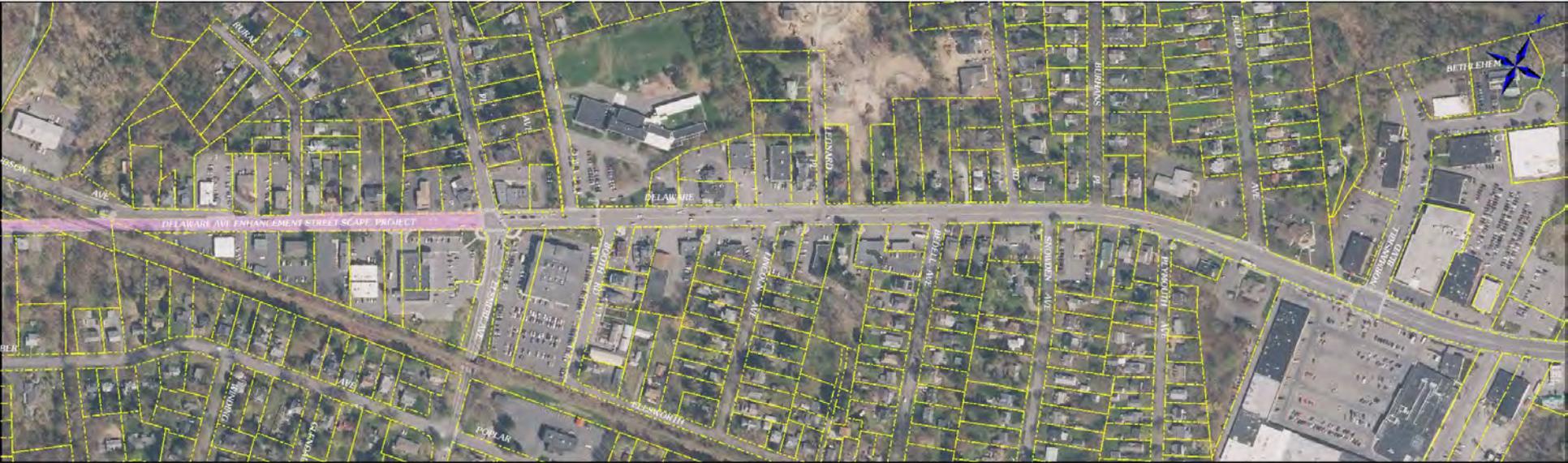
- Explore the feasibility a full range of context-sensitive complete streets elements in a manner that enhances community quality of life, the local economy, and safety for all users along this multi-modal and increasingly mixed use corridor and its adjacent residential neighborhoods.

Draft Study Goals

- Continue to implement the Town's stated goals of fostering a walkable, bikeable and transit friendly community serving the needs of all ages and abilities.
- Develop conceptual future roadway designs that are acceptable to the town, its residents and businesses and NYSDOT as the road owner.

Study Area, Scope and Milestones

Study area



Critical Success Factors

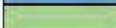
- Road diet feasibility
- Complete streets enhancements
 - “Preservation First” vs “Beyond Preservation”
 - Multimodal access
- Speed reduction / traffic calming
- Safe pedestrian crossing
- Gateway
- Trail access
- Others ?

Project Schedule

Delaware Avenue Complete Streets Feasibility Study
 Elsmere Avenue to Normanskill Bridge
 CM No. 116-149

Task	Description	Month																																															
		Sept				Oct				Nov				Dec				Jan				Feb				Mar				Apr				May				June				July				Aug			
		Week	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4							
Task 1.0	Study Initiation and Data Gathering																																																
Task 2.0	Existing Conditions																																																
Task 3.0	Public Workshop #1																																																
Task 4.0	Complete Streets Alt Development																																																
Task 5.0	Evaluation																																																
Task 6.0	Public Meeting #2																																																
Task 7.0	Final Report Development																																																
Task 8.0	Final Presentation																																																
	Public Involvement																																																

M1 T1 M2 P1 M3 I1 M4 P2 M5 T2

-  Task Schedule
-  Meetings
- M1 SAC #1 - kick-off
- T1 Town Board Presentation
- M2 SAC #2
- P1 Public Workshop #1
- M3 SAC #3
- I1 Informal Progress Meeting
- M4 SAC #4
- P2 Public Workshop #2
- M5 SAC #5
- T2 Town Board Presentation

Roles and Responsibilities

- Advisory Committee
 - CDTC
 - Town
 - NYSDOT
 - CDRPC
 - CDTA
 - Residents
 - Businesses
- CM / LA Group

Draft Project Goals

Complete Streets Goals

- What is the industry using?
 - Access
 - Economy
 - Environment
 - Place
 - Safety
 - Equity
 - Public health

What is our neighbor doing?

- City of Albany Complete Streets Policy and Design Manual



Accessibility includes the ability to move from one location to another with ease regardless of age or ability. Accessibility is enhanced with the presence of pedestrian, bicycle and transit facilities.



Connectivity is the ability to connect modes of transportation as well as neighborhoods, major destinations and nodes of activity.

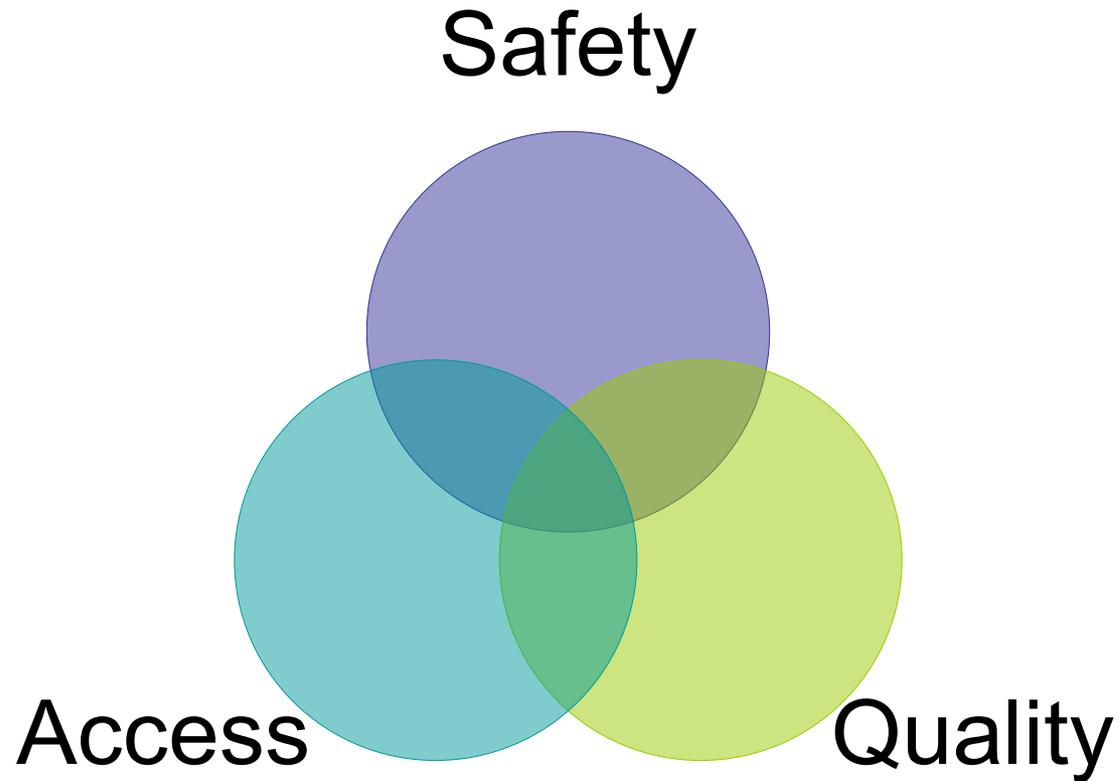


Safety includes providing a safer environment for all users regardless of transportation mode.



Placemaking involves creating a livable, walkable, and vibrant community by incorporating elements that enhance the quality of life and assist in neighborhoods developing a sense of place.

Delaware Ave Project Goals



Outcomes

Is a road diet right for Delaware Avenue?

1. satisfies the purpose and need as agreed to by a full range of stakeholders
2. is a safe facility
3. is in harmony with the community
4. exceeds expectation of and achieves excellence in people's minds
5. involves efficient and effective use of time and budget
6. is designed and built with minimal disruption to the community
7. is seen as having lasting value to the community.

- See critical success factors slide

Critical Success Factors

- Road diet feasibility
- Complete streets enhancements
 - “Preservation First” vs “Beyond Preservation”
 - Multimodal access
- Speed reduction / traffic calming
- Safe pedestrian crossing
- Gateway
- Trail access
- Others ?

Other / Next Steps

This meeting summary represents the writer's understanding of the major issues discussed. If you wish to suggest edits or additions, please contact the undersigned.

DATE: October 11, 2016
PROJECT: Delaware Avenue Complete Streets Feasibility Study
PLACE: Town of Bethlehem Town Hall
TIME: 4:00 pm
PURPOSE: **The purpose of this meeting was to officially kick-off the project with the Study Advisory Committee (SAC) and review the project goals and objectives.**

ATTENDEES:

<u>Name</u>	<u>Title/Representing</u>	<u>Telephone Number</u>
--------------------	----------------------------------	--------------------------------

See attached attendance sheet

SUMMARY:

1. Rob introduced the study and explained that the goal is to build from the good work being done on the Delaware Avenue Enhancements Project, and begin planning for the improvements in this next segment from Elsmere Ave to the Albany City line.
2. Creighton Manning (CM) noted that the role of the SAC is to help guide the study and make decisions about corridor improvements. An overview of the draft study Goals was also presented. Any comments or suggestions on the study Goals should be sent to Rob and will be considered as the Goals are finalized. **Action: Send any comments regarding the study Goals to Rob.**
3. Educational material related to Complete Streets was presented and opened up for discussion. Comments / discussion included the following:
 - a. Regarding balancing the need of all users on the roadway, there was a concern that a road diet could make traffic worse. CM will develop a traffic model that will help inform this.
 - b. There are several new developments and people moving into the Town. With the influx of people, the corridor needs to be more sensitive to walkers, cyclists, and others not in cars.
 - c. The NYSDOT will be involved in the study, and a goal of the study is to help define and enable funding for a future transportation project.
4. The idea of "Critical Success Factors" (CSF) was introduced. Critical Success Factors are key items that need to be addressed by the study. This is not to suggest that these are the only items that will be addressed, but these are known up front and are integral to the study's success. The follow CSF were identified.
 - a. Feasibility of a road diet – Is it feasible to reduce the number of travel lanes on Delaware Avenue from four lanes to three?
 - b. Complete streets enhancements
 - i. "Preservation first" vs "Beyond preservation" – This means that study recommendations need to take into consideration where potential funding might

come from, since there is a programming emphasis on maintaining existing infrastructure.

- ii. Multimodal access – This means that the needs of bikes, and pedestrians and transit users needs to be studied.
 - c. Speed reduction / traffic calming
 - d. Safe pedestrian crossing
 - e. Gateway
 - f. Trail access
5. The detailed scope of work was circulated. The group reviewed the Scope and schedule at a high level. This is Planning Study which should be completed in 12 months. There is some flexibility with the schedule to make sure issues are addressed, and that there is ample opportunity for public input. Two public meetings are planned with the first proposed in December or January. Regarding the scope, there was a general discussion about the following:
- a. It was noted that more public transit should be encouraged in the corridor. Sam noted that transit improvements could help increase ridership. The apartment in-fill and increased density in the corridor will also support transit.
 - b. Improved connections to the rail trail are also desired.
 - c. Improved public space is desired, such as pocket parks.
 - d. There are some concerns about traffic speeds, notably at night when fewer cars are on the road.
 - e. School zones are 20 MPH in Albany, and 30MPH on Delaware Ave, based on 10 MPH below the posted limit.
 - f. There are concerns with growth. Need to accommodate growth and maintain reasonable traffic, and don't do anything that will hurt corridor businesses.
 - g. There was a question if the road diet could be applied in segments, and Mark answered yes. For example, it was noted that traffic volumes are lower on the east end between Delaware Plaza and the Albany City line which might make this segment more feasible.
 - h. Dave explained that the speed issue should not be focused on speed limit alone, but that speeds can be reduced by establishing a "target speed", and then designing the roadway to achieve the target speeds.
 - i. There was a question if bike accommodations will be looked at, and the answer is yes. A road diet could create more room for bicyclists, or there may be other bike improvements identified.
 - j. Commercial vehicles with a trailer in tow sometimes have long delays and difficulty entering Delaware Avenue from side streets. Truck access needs to be accounted for in the study.
 - k. In response to a question about the NYSDOT's criteria for road diets, Audrey explained that the NYSDOT planning threshold for a road diet is $\leq 20,000$ vehicles per day.
6. The Group discussed the draft Project Objectives. Seven typical complete streets objectives advocated by the National Complete Streets Coalition were shared, along with other examples. A preliminary list of three objectives for Delaware Avenue was presented and discussed - Safety, Access and Quality. It was explained that the final objectives will include a short narrative for each one, and will be used during the evaluation to make sure the corridor recommendations align with the project objectives.
- a. There was a concern that "Quality" was too ambiguous, while the group generally supported the "Safety" and "Access" objectives.
 - b. The group liked the "Place making" goal used by the Complete Streets Coalition and others.
 - c. There was consensus that a thriving business environment needed to be reflected in the final objectives, possible something like "Economy/Business".

- d. There is a concern that a road diet could reduce traffic and hurt businesses. Anne noted that road diet case studies could be pulled together, and that the project web site could link videos or other materials to help inform this. **Action: A public involvement plan will be developed.**
- e. There was a discussion about keeping the objectives to a limited number, three or four, so they are memorable. **Action: The Objectives will be updated with narrative included, and discussed at the next SAC meeting.**

7. Next Steps

- a. It was noted that the study will be introduced to the Town Board with a short presentation on Thursday October 13, 2016.
- b. An optional field walk was scheduled for Tuesday October 18 with interested members of the SAC to walk the corridor and to begin to identify issues and improvement ideas. Ken was asked to be prepared to highlight a few pending projects that are currently before the Town, such as the Dunkin Donuts drive-thru, and a few different apartment projects.

Summary of Actions:

Creighton Manning

- 1. **Initiate technical studies and summarize existing conditions - speed studies, traffic model development, and crash analysis.**
- 2. **Prepare Draft Project Objectives with narrative**
- 3. **Prepare Public Participation Plan**
- 4. **Facilitate field walk**

Study Advisory Committee

- 1. **Send any comments regarding the study Goals to Rob.**

The meeting concluded at 5:30 p.m.

Kristie Di Cocco, PE
Project Engineer / Planner

cc: Attendees
File

File

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Delaware Avenue Complete Streets
Feasibility Study

Advisory Committee Meeting

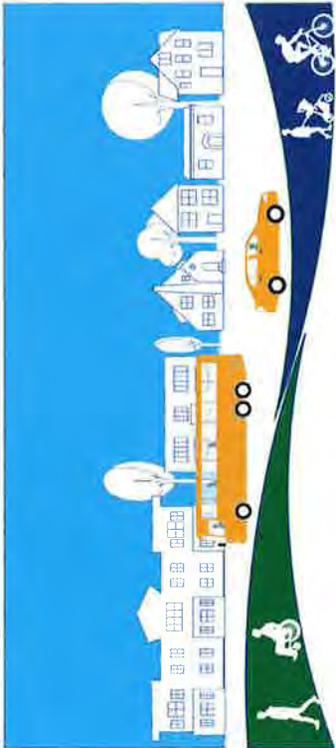
Bethlehem Town Hall, Albany, NY
Tuesday, October 11th, 2016
4:00 p.m.

Name	Representing	Email
Kristie Di Goco	Craigton Manning Engineering	kdioco@cmuellp.com
Christian Frese	Frese's Landscaping	Offize@FreseLandscaping.com
DAN BIRLOCK	Frese's Landscaping	DBIRLOCK@FRESELANDSCAPING.COM
MARY-JOSEPH KELLY	TOWN SQUARE	MY@MANNJOSHPKELLY.COM
Virginia Gaynor	Resident of Delmar/Del Ave	Pratula@aol.com
JEREMY MARTELLE	RESIDENT	JEREMY@MARTELLE.US
Mark Sargent	Craigton Manning	msargent@cmuellp.com
Scott Lewendon	President/Bikeped Committee	JSLEWENDON@VERIZON.NET
Maud Easter	Resident	maudeaster@nycap.nyc.gov
JIM GIRONIS	Business + Resident	jim@myplcagent.com.ny.gov
Gregg Biche	Quality P.M. Inc	Gregg@Quality-PM.com
LIZ SLABARTH	Town of Bethlehem	slabarth@townofbethlehem.org
KENNETH FICOPE	BETHLEHEM CHAMBER OF COMMERCE	jkfcope@bethlehemchamber.com
Ellie Madden	Golfers Club	emadden1@verizon.net
JULIE SASSO	Town Board + Business owner	Julie.Sasso@gmail.com

Delaware Avenue Complete Streets
Feasibility Study

Advisory Committee Meeting

Bethlehem Town Hall, Albany, NY
Tuesday, October 11th, 2016
4:00 p.m.



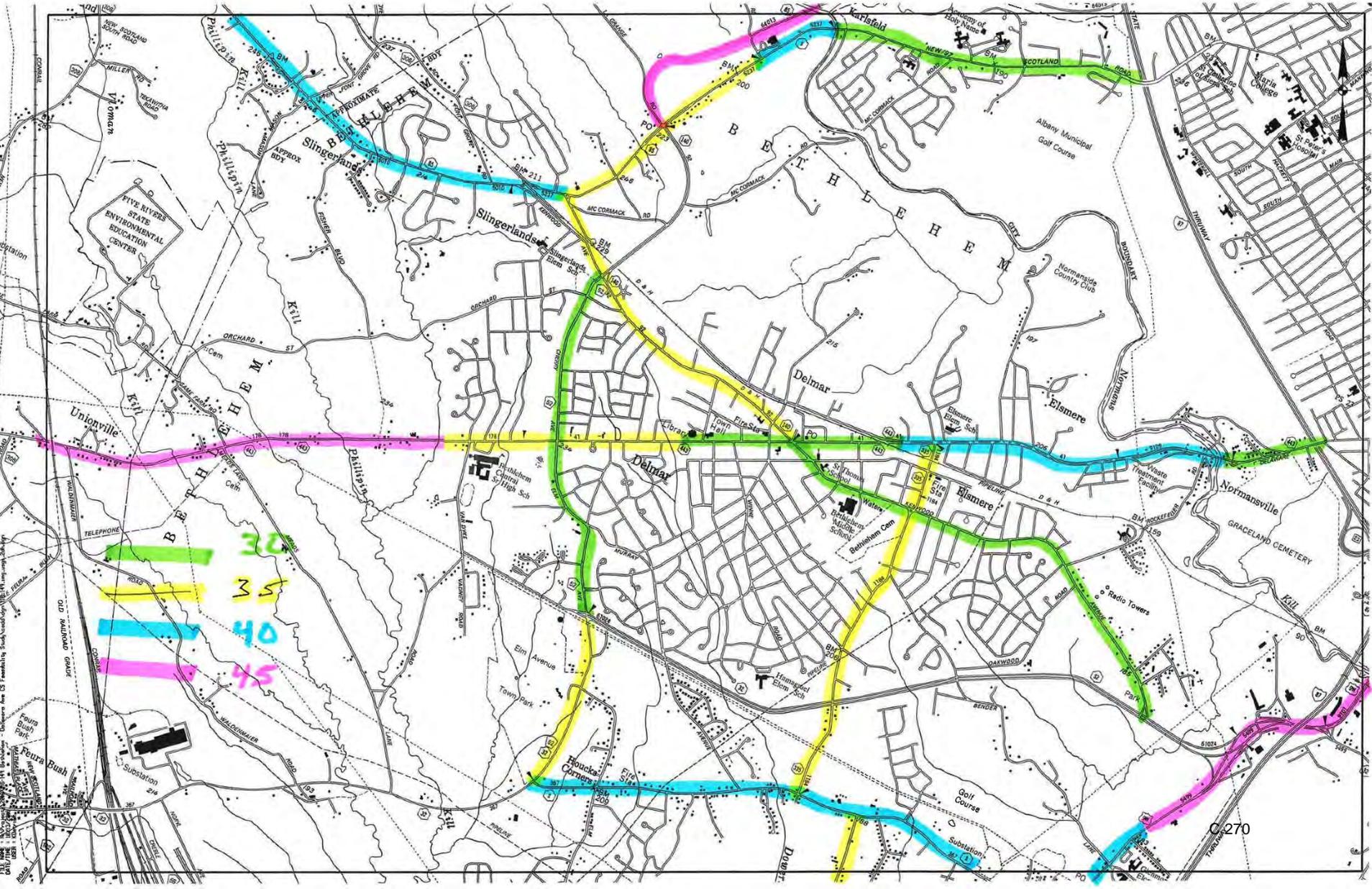
Name	Representing	Email
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Samuel Wells	CDTA	samuelw@cdta.org
Anne Demware	COTC	ademware@cdtepo.org
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Wilma DeLuco	Delmar Progress Club	wilmad228@AOL.com
Debbie Murray	Delaware Plaza	debbie@thedelawareplaza.com
Jon Phillips	Phillips Hardware	jp.hardware@shoppillips.com

SAC MEETING #2



Delaware Avenue Complete Streets FEASIBILITY STUDY

Area Speed Limits



Field Walk (Oct 18, 2016)

- Access Management: Delaware Plaza; 163, 210, 212, 214 Delaware Ave, etc.
- Sidewalk / Crosswalk upgrades / Crossing locations
- Proposed Dev: DD drive-thru, 224 Delaware Apts; Leonard Pl 16 units, etc.
- Trees / green space: Good Examples; + south side of Delaware Ave opportunity, +Albany Med building
- Gateway / median
- Pocket Park(s)
- Bus stop spacing
- Maintenance Strip: condition / appearance
- Trail connection: Mason Rd / Plymouth Ave
- Sign clutter





Safety

People should be able to move around safely by any mode. The safety benefits of a transportation action – capital or operational -- various complete streets alternatives can be calculated and described. Quantitatively, crash reduction factors will be used to calculate the safety attendant to certain types of improvements. Qualitatively, the presence of an accommodation, or perceptions about safety will also be used to convey safety benefits. [for example, the presence of sidewalks in good condition or midblock pedestrian crossings or cycling space can help protect walkers, cyclists, and transit users can be used as a measure of risk reduction]



Access

The transportation system of a community should provide mobility choices and/or connections for all modes. Will the proposed action or treatment make it easier for the community to access a business, school, housing, etc.? Access can be measured by simply noting the presence of a facility or service, or by noting where gaps in the system are closed. [examples can include easements across properties to make it easier to walk between land uses; direct connection to transit; shared parking; new or better ped crossings, etc]



Economy

There are legitimate concerns about how certain actions (eliminating travel lanes, lane repurposing, driveway consolidation, etc) might negatively affect traffic operations for automobile travel, and perceptions that increased travel times might negatively affect businesses. Changes in vehicle travel time and other service level measures using accepted traffic engineering methods will be reported. Changes in accessibility (how easy it is to drive or walk to businesses) will be described, drawing upon the experiences in other communities across the country.



Place

The Town's Comprehensive Plan calls for creating an attractive and livable community, especially along the town's major street corridors. Ensuring that Delaware Avenue is transformed into a high quality corridor helps project a positive image of the community. A vibrant and economically healthy transportation system supports the goals of improving public health by providing an environment that supports and encourages physical activity. Condition and presence of transportation and land use features are good ways of measuring place. Improved quality of transportation features, low vacancy rates, reasonable levels-of-service by mode, cultural or public art, and streetscape improvements can be used to evaluate place.

Major Street Alternatives

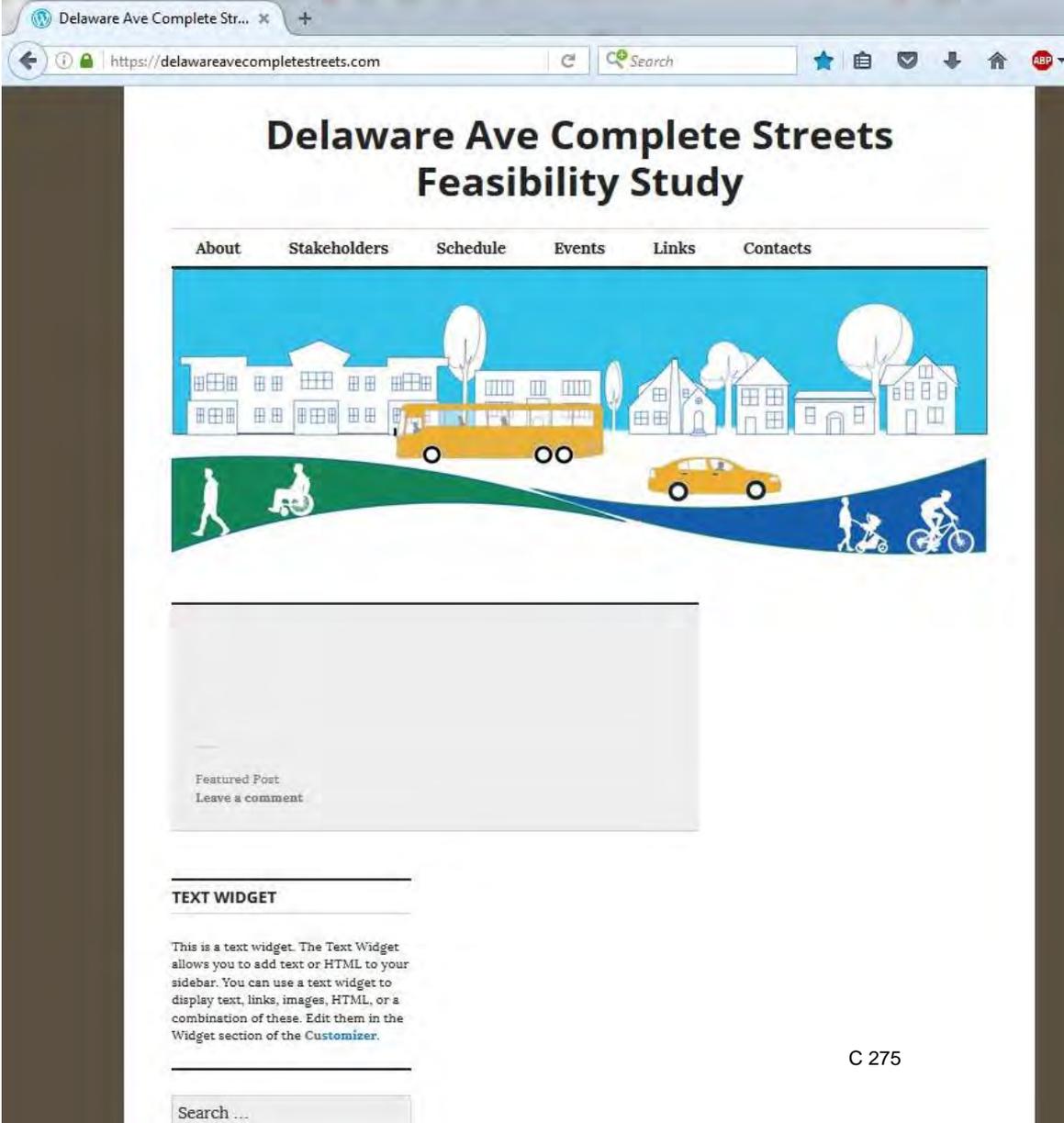
1. Null Alternative: Maintain four Lanes
2. Full Road Diet
3. Partial Road Diet
4.
5. ..

Public Participation Plan (PPP)

- What is the goal of the PPP
- Who
 - Technical Advisory Committee (TAC)
 - Study Advisory Committee (SAC)
 - General Public
- How
 - Meetings
 - » TAC
 - » SAC
 - » Public
 - Website and Social Media
 - Print Media
 - Email

Public Meeting 1 – Before the Meeting

- Get the word out
 - Flyer
 - Websites
 - Email
 - Press Release
 - Town notices



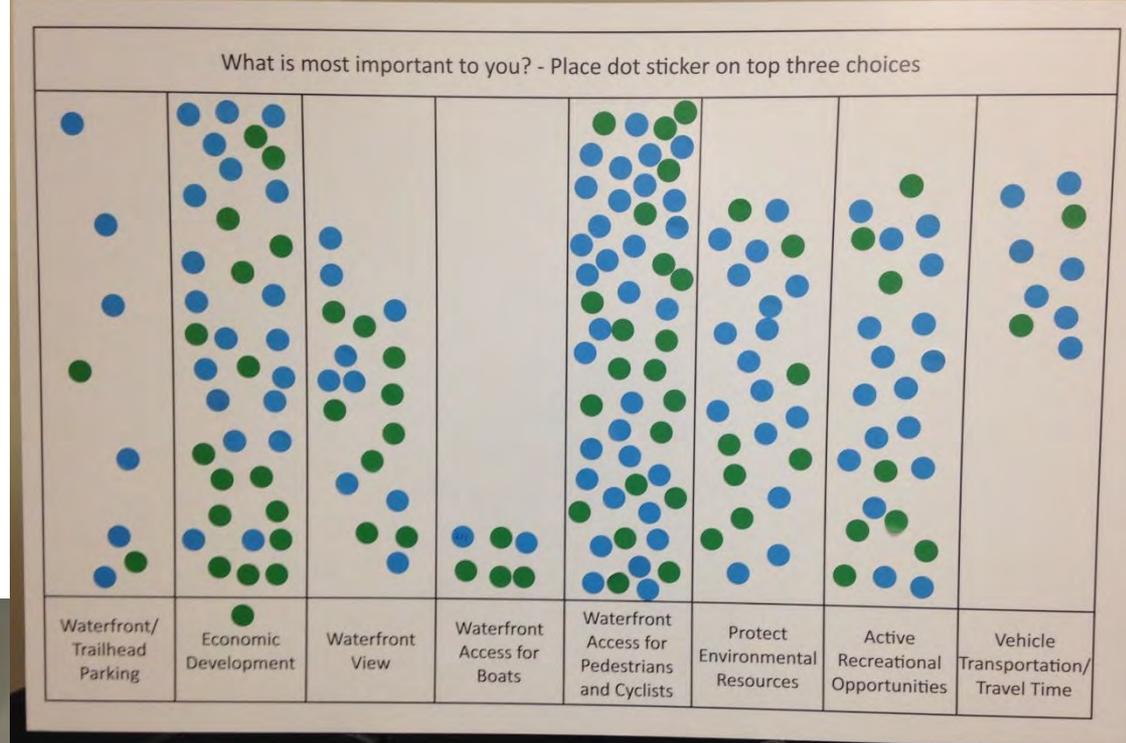
The screenshot shows a web browser displaying the website for the Delaware Ave Complete Streets Feasibility Study. The browser's address bar shows the URL <https://delawareavecompletestreets.com>. The website's main heading is "Delaware Ave Complete Streets Feasibility Study". Below the heading is a navigation menu with links for "About", "Stakeholders", "Schedule", "Events", "Links", and "Contacts". The main content area features a large illustration of a street scene with a yellow bus, a yellow car, a person walking, a person in a wheelchair, a person pushing a stroller, and a person riding a bicycle. Below the illustration is a "Featured Post" section with a "Leave a comment" link. At the bottom of the page, there is a "TEXT WIDGET" section with a search bar and a search button.

Public Meeting 1 - Approach

- Welcome/Sign-in
 - Presentation Boards
 - » Goals and Objectives
- Activity #1
- Presentation
 - Purpose / Ex. Cond.
 - What are Complete Streets?
 - Road Diet Definition & Potential Benefits
- Activity #2



Activity #1 - Define Priorities



Activity # 2 - Issues and Ideas

- 4 groups
- 1 Facilitator per group
- Approx. 20-30 min.
- Goals
 - Identify Issues
 - Brainstorm Ideas



Tentative
Public Meeting
on
February 16th, 2017

Thank you



SUMMARY OF MEETING



ENGINEERS
PLANNERS
SURVEYORS

This meeting summary represents the writer's understanding of the major issues discussed. If you wish to suggest edits or additions, please contact the undersigned.

- DATE:** January 12, 2016
- PROJECT:** Delaware Avenue Complete Streets Feasibility Study
- PLACE:** Town of Bethlehem Town Hall
- TIME:** 4:00 pm
- PURPOSE:** **The purpose of this 2nd Study Advisory Committee (SAC) Meeting was to discuss progress made to date and plan for the 1st public information meeting.**

ATTENDEES:

<u>Name</u>	<u>Title/Representing</u>	<u>Telephone</u>
See attached attendance sheet		

SUMMARY:

1. Welcome – CM informed the group that since the last meeting, consultant efforts have been focused on putting together the existing conditions report. The objective of this SAC meeting was to verify the project goals/objectives and make sure that the existing conditions report can go live on the website.
 - a. As a follow-up to a comment from the last SAC meeting that speed limits were inconsistent in the area, CM presented a summary of speed limits on area roadways and noted that speed limits are relatively consistent and generally 30 or 35 mph. It was noted that Feura Bush is now 35 mph as of December 2016. Rob Cherry noted that the section of New Scotland Road between Mahar Road and the City line would be transferred to the town from NYSDOT and the speed limit is being lowered. Supervisor Clarkson commented that along Delaware Avenue the speed limit changes from 30 mph (in the City of Albany), to 40 mph within the study area, and back down to 30mph (west of the study area towards Four Corners).
 - b. Project Goals/Objectives – based on discussions at the first SAC meeting a more streamlined set of draft study performance measures was crafted. A hand out showing the pared down list was distributed and briefly discussed. The group agreed that this set will be useful to compare alternatives yet to be developed as well as against the existing conditions.
2. Draft Existing Conditions Overview – CM briefly covered the topics discussed in more detail in the existing conditions report. Any additional comments on the report besides those that are discussed below should be sent to Rob Leslie. During the overview that CM provided, the following comments and topics were highlighted:
 - a. Existing volumes on Delaware Ave. are acceptable for a Road Diet based on NYSDOT and FHWA guidelines.
 - b. Rob Leslie asked about the side street and driveway volumes. Some commercial driveways have more volume than the side streets during peak travel times.

SUMMARY OF MEETING

- i. CM noted that the volumes on Delaware Ave. are high, however, traffic flows fairly well for that volume.
- ii. CM notes that in general, not a lot of vehicles are turning in and out of the driveways and side streets. Volumes are in the 20-30 vehicle per hour range turning in and out of roads/entrances during peak travel times.
- iii. Regarding traffic volumes, there was no significant generator in the corridor besides Delaware Plaza.
- iv. Traffic volume peak hour is 4:45-5:45 PM.
- v. Jim Giacone asked
 1. If reducing vehicle speed would reduce level of comfort for bikes/pedestrians. CM responded that generally speed is a factor in the level of comfort for bikes and pedestrians and that reducing vehicle speeds would increase bike/ped comfort.
 2. Under the road diet scenario, with only 1 lane of vehicle traffic per direction and vehicles waiting in line at the Elsmere Ave traffic light, how would turning vehicles be able to turn from Delaware Ave? CM responded that a two-way left turn lane and left-turn lane at the intersections would be implemented. The Traffic model developed for the project will be used later in the study to understand the operational effects of the road diet alternative, including vehicle queues.
- vi. Scott Lewendon had the following comments:
 1. Suggested an additional narrative on Delaware Ave. as a bicycle commuting corridor to help identify its significance to the biking community. The average bike trip is approximately 5 miles or 20 minutes. Delaware Ave. makes a great connection between the Town of Bethlehem and employment locations in the City of Albany that the Rail Trail doesn't address due to its location.
 2. Suggested reviewing the bike crashes and confirm whether they were on sidewalks or crosswalks.
 3. Noted that sun glare is an issue for cyclists because of the direction of travel.
 4. Suggested CM clarify within the report that the bike/ped crashes were crashes of bikes/peds with motor vehicles. .
- vii. Virginia Acquario asked if the provisions for bicyclists would be improved by the road diet. She further noted that it is critical to maintain the character of the hamlet feel. CM responded that the Road Diet would add space for bicyclists.
- viii. Rob Leslie suggested the Existing Conditions report's finding could be summarized as: motor vehicle flow is good, accidents/crashes are poor, bike and pedestrian facilities are poor. Rob then noted that the alternatives to be evaluated need to maintain vehicular traffic, while addressing accidents and improving the bike/ped environment. CM responded that there are several competing demands and that the SAC should consider what level of travel time change would be an acceptable trade-off for improved safety and bike/ped accommodation.

SUMMARY OF MEETING

- ix. Supervisor Clarkson questioned how travel times were measured and do they consider areas beyond the Normanskill Bridge (eastern end of the study area). CM responded that end to end running times were conducted within the study area, but did not take into consideration areas beyond the Normanskill. The results indicate a 2 and ½ to 3 minute travel time from one end of the study area to the other. Dave Jukins added that the CDTC STEP model can provide travel times beyond the study area. Jeremy Martell noted that it would be useful to look at trip times for different neighborhoods along Delaware Ave. such as around Crannell Ave where it can take 5 to 7 minutes to take a left turn out in the morning.
 3. Field Walk Recap – CM noted that a field walk was conducted on October 18th. It was noted that the maintenance strip through the corridor is in poor shape. It is possible that a maintenance strip theme from the current Delaware Ave Enhancements project, could be carried through this section of the corridor.
 - a. Rob Leslie noted that there is an application for the Albany Med building at 99 Delaware Ave. They are looking for variances to parking and landscaping to have less parking and landscaping on the site. There will be a public hearing on the project. The Town Planning Board’s goal is to have the required landscaped islands in the parking lot run perpendicular to the roadway to add trees along the property edge facing Delaware Ave which will help aesthetics there. The applicant is looking to change the façade of the building to look like 3 different buildings. There are 3 curb cuts, Town has asked for owner to remove at least 1.
 - i. This Planning Study will identify recommended limits of sidewalk in this area.
 - ii. Virginia Acquario asked if the Board can be sensitive to the hamlet look of the façade.
 1. **ACTION: Rob Leslie to send an email link to the agenda, plans, pdfs, and views of the building.**
 - b. Preliminary Discussion of alternatives. CM noted that alternatives will be developed in the next phase of the study after the 1st public meeting. A road diet will be considered.
 - i. Ken Kovalchik noted that we need to consider the partial road diet alternative more to see if it’s really worth it if we only consider east of Delaware plaza.
 - ii. Dave Jukins provided that the goal for the roadway is not a road diet, the goal is to create a complete street. Further under a full road diet, there are several alternatives for lane configurations.
 - iii. Alternatives will be the subject of the next SAC meeting after considering Public input as well.
4. Public Participation Plan (PPP) – CM provided an overview of what the PPP includes with a more in depth discussion on the following topics:
 - a. Overview
 - b. Web site – CM noted the website will go live once all comments on the existing conditions report are finalized and the report is ready to be provided to the public.
 - c. Public Meeting – The meeting date is scheduled for February 16th. The meeting will include two activity sessions; “Sticky-dot” exercise to identify priorities for meeting attendees and an issues and ideas session that will break attendees into four groups to discuss issues and brainstorm ideas to improve the corridor.

SUMMARY OF MEETING

- d. Discussion
 - a. The group confirmed the best way to provide notice to the public is to send out mailers to the property owners. However, owners are encouraged to reach out to the tenants.
 - b. The DPW might have thoughts on putting notices in the mailboxes.
 - c. Supervisor noted getting the people notified is critical
 - d. CDTC reach out to CDTA to see if flyers could be released by CDTA to help spread the word.
 - e. Jennifer Kilcoyne offered that the Chamber of Commerce would disburse notice to the chamber members.
 - f. SAC members will help get the word out as well.
- 5. Other / Close
 - e. A Technical Advisory Committee (TAC) will be held to confirm logistics for the public meeting, and to address CDTC's comments about the Performance Measures.

Summary of Actions:

Creighton Manning

1. Prepare Draft "Sticky-Dot" list of priorities
2. Schedule TAC meeting (Done. TAC meeting scheduled for 1/25/17)

Study Advisory Committee

1. Send any comments regarding the Existing Conditions report to Rob Leslie.
2. Rob Leslie to send an email link to the agenda, plans, pdfs, and views of the Albany Med building

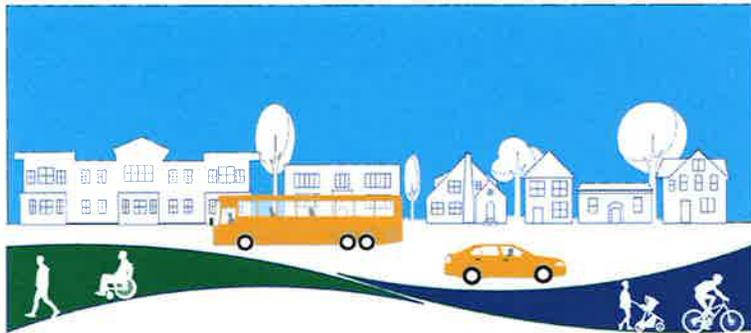
The meeting concluded at 5:30 p.m.

Kristie Di Cocco, PE
Project Engineer / Planner

cc: Attendees
File

File

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Delaware Avenue Complete Streets
Feasibility Study

Study Advisory Committee Meeting

Bethlehem Town Hall, Albany, NY
Thursday, January 12th, 2016
4:00 p.m.

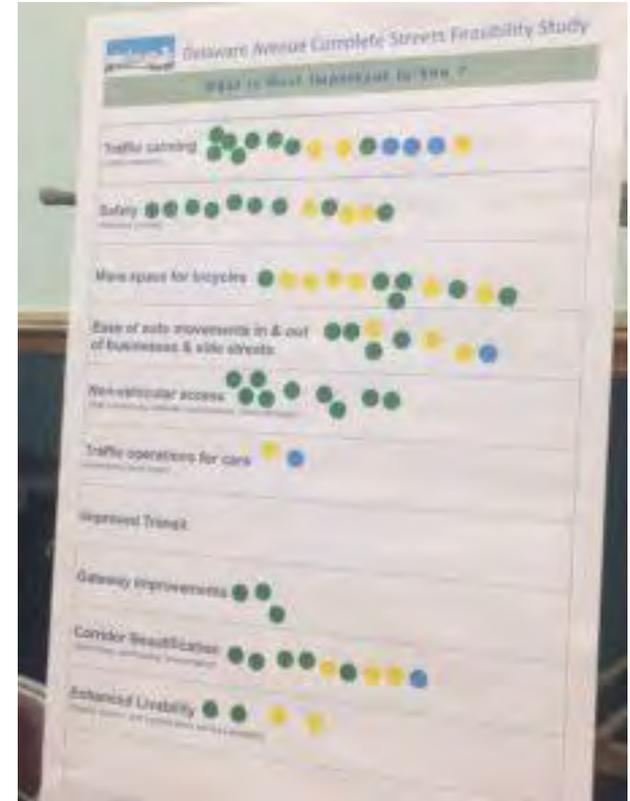
Name	Representing	Email
Kristie DiCocco	Creighton Manning (Design Consultant)	kdicocco@cszcellp.com
Audrey Burneson	NYS DOT - R1	audrey.burneson@dot.ny.gov
Anne Benware	CDTC	abenware@cdtcmpo.org
Ken Kovalchik	TOB	KKovalchik@townofbethlehem.org
Robert J. Cherry Robert J. Cherry	NYS DOT - R1	rob.cherry@dot.ny.gov
Scott Lewendon	set City Ped Committee	LSLEWENDON@VERIZON.NET
Julie Sasso	TOB / Delaware Biz Assoc	jsasso@townofbethlehem.org
Wilma Delurco	Delmar Program Club	wilmed228@AOL.COM
Jennifer Kilkoyne	BETHLEHEM CHAMBER OF COMMERCE	JKilkoyne@bethlehemchamber.com
Viviana Arguini	neighborhood	Pratula@caal.com
Jim Giaccone	Myrtle + Community	jim@myrtleandcommunity.com
John Clark	TOB	
Julie Sasso	TOB	
Ellie Pralhen	Beth Garden Club	
Debbie Nolan Murray	Delaware Plaza	debbie@thedelawareplaza.com

SAC MEETING #3



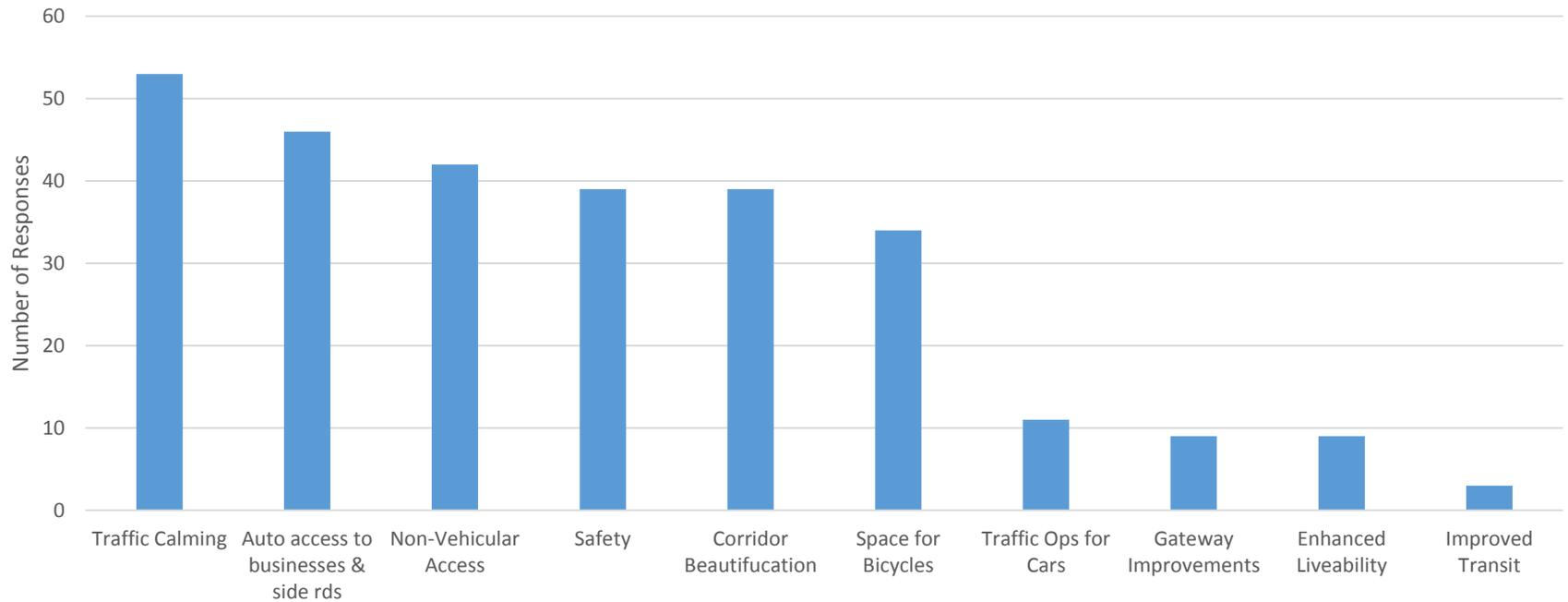
Delaware Avenue Complete Streets FEASIBILITY STUDY

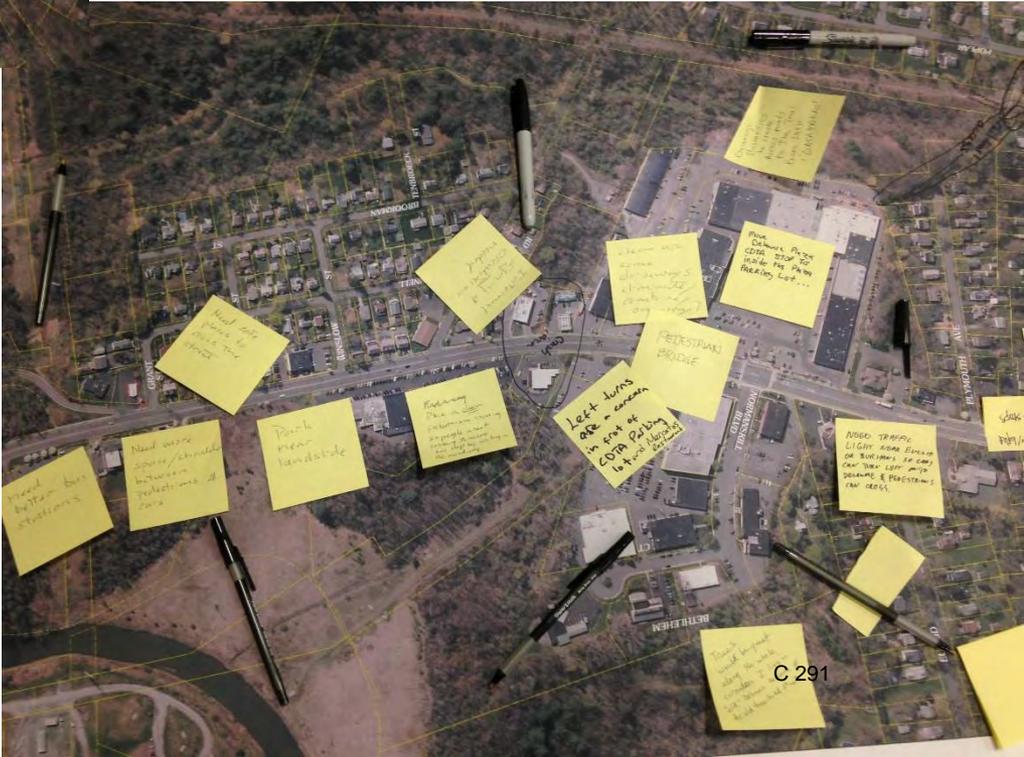
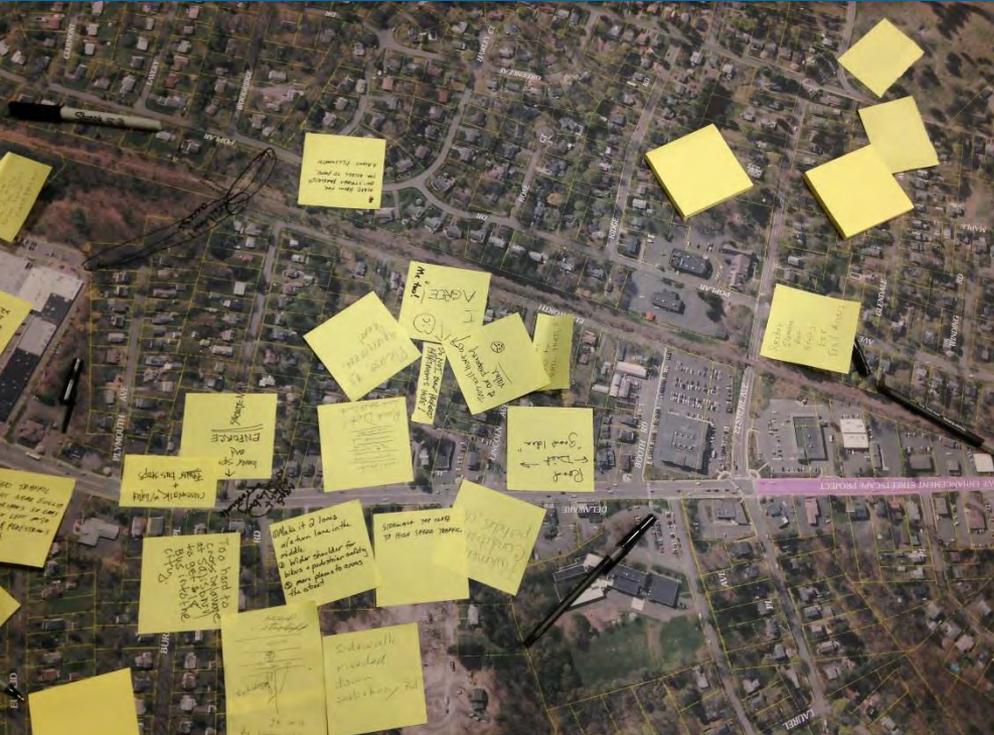
Public Meeting Recap



What is Most Important to You?

Delaware Avenue Complete Streets Feasibility Study
What is Most Important to You?





More than 150 Issues and Ideas recorded (Summarized into 10 categories)

1. General
2. Location Specific
3. Business and Side Street Access
4. Traffic
5. Bike/Ped/Transit
6. Geometry / Condition
7. Road diet / Yes-no
8. Beautification
9. Safety / Speeds
10. Trails

Enhancements

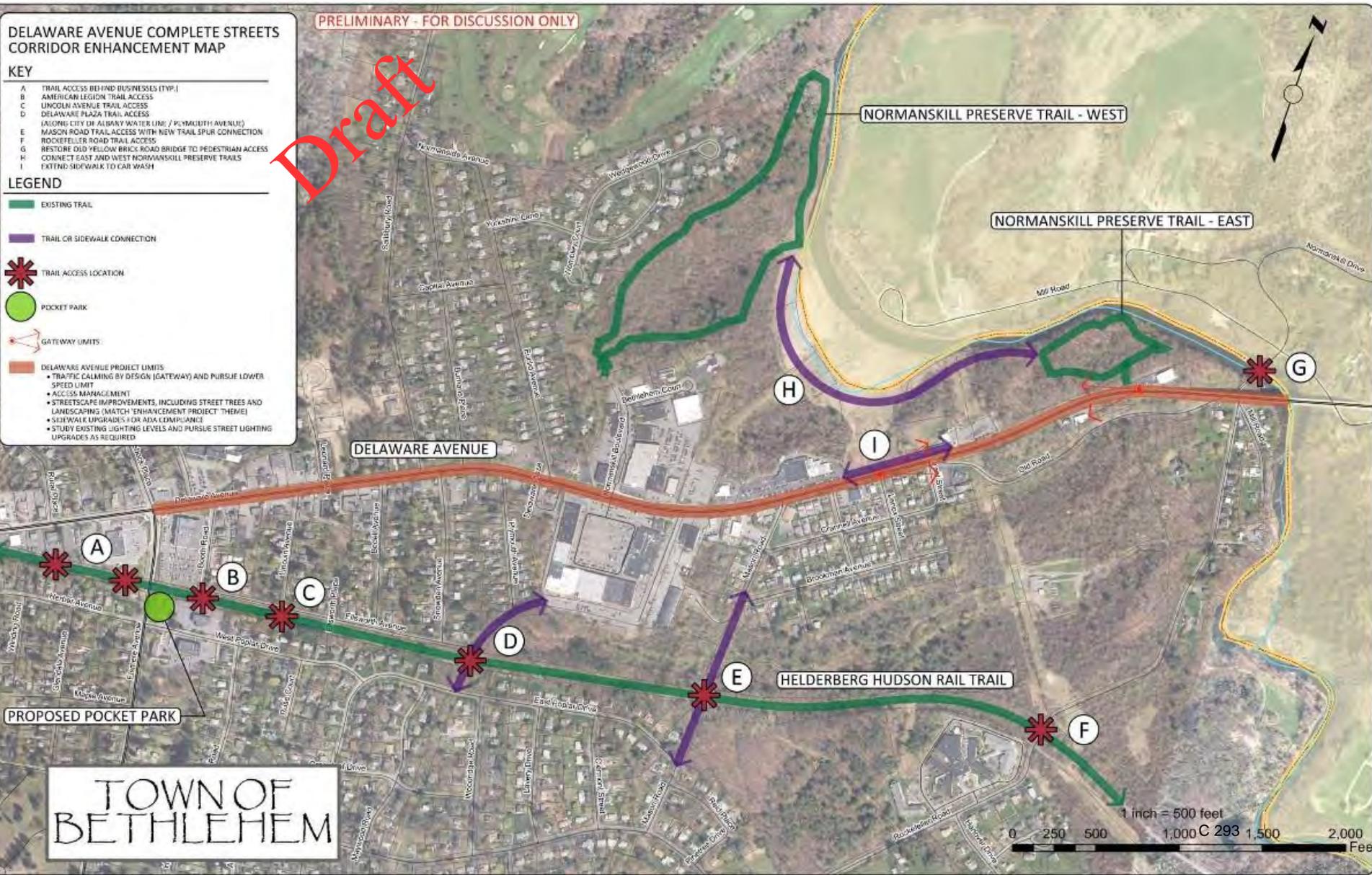
DELAWARE AVENUE COMPLETE STREETS CORRIDOR ENHANCEMENT MAP

PRELIMINARY - FOR DISCUSSION ONLY

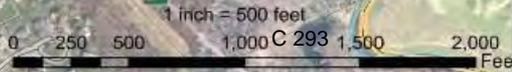
Draft

- KEY**
- A TRAIL ACCESS BEHIND BUSINESSES (TYP.)
 - B AMERICAN LEGION TRAIL ACCESS
 - C LINCOLN AVENUE TRAIL ACCESS
 - D DELAWARE PLAZA TRAIL ACCESS
 - E ALONG CITY DR. ALBANY WATER LINE / PLYMOUTH AVENUE
 - F MASON ROAD TRAIL ACCESS WITH NEW TRAIL SPUR CONNECTION
 - G ROCKEFELLER ROAD TRAIL ACCESS
 - H RESTORE OLD YELLOW BRICKS ROAD BRIDGE TO PEDESTRIAN ACCESS
 - I CONNECT EAST AND WEST NORMANSKILL PRESERVE TRAILS
 - J EXTEND SIDEWALK TO CAR WASH

- LEGEND**
- EXISTING TRAIL
 - TRAIL OR SIDEWALK CONNECTION
 - TRAIL ACCESS LOCATION
 - POCKET PARK
 - GATEWAY LIMITS
- DELAWARE AVENUE PROJECT LIMITS**
- TRAFFIC CALMING BY DESIGN (GATEWAY) AND PURSUE LOWER SPEED LIMIT
 - ACCESS MANAGEMENT
 - STREETSCAPE IMPROVEMENTS, INCLUDING STREET TREES AND LANDSCAPING (MATCH 'ENHANCEMENT PROJECT THEME')
 - SIDEWALK UPGRADES FOR ADA COMPLIANCE
 - STUDY EXISTING LIGHTING LEVELS AND PURSUE STREET LIGHTING UPGRADES AS REQUIRED



TOWN OF
BETHLEHEM



Existing – Null Alternative

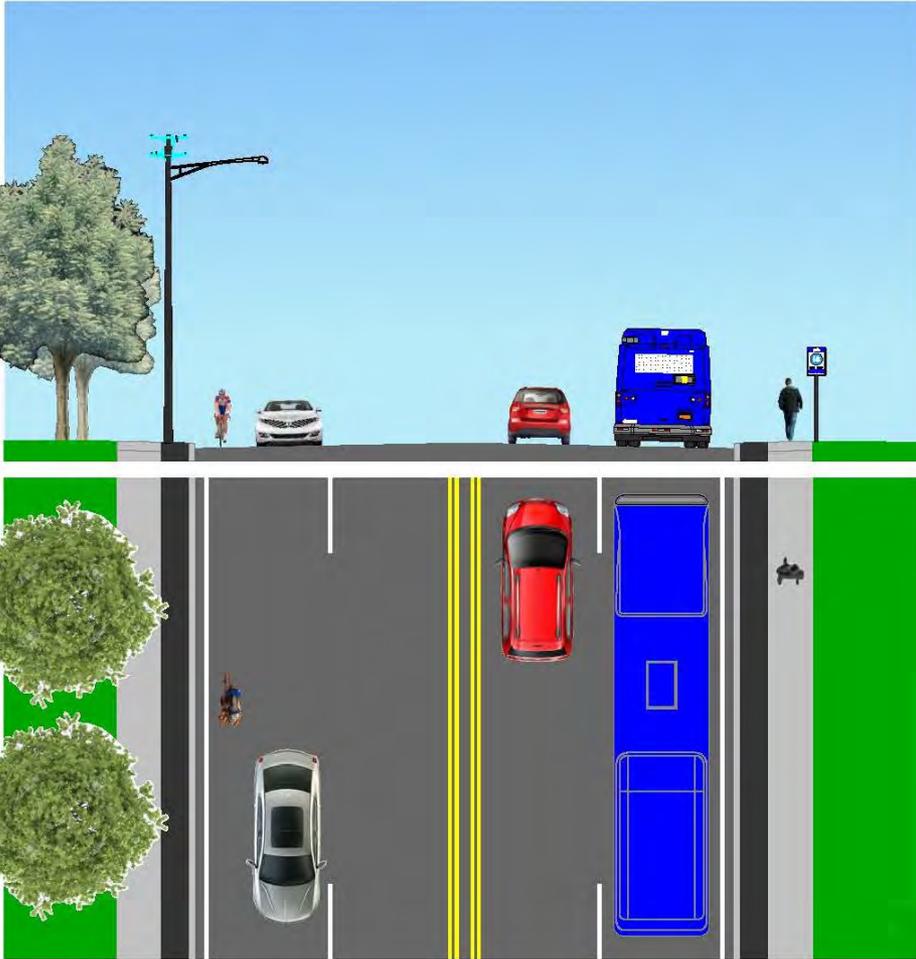


- **Pros**

- Maintains current traffic operations
- No cost

- **Cons**

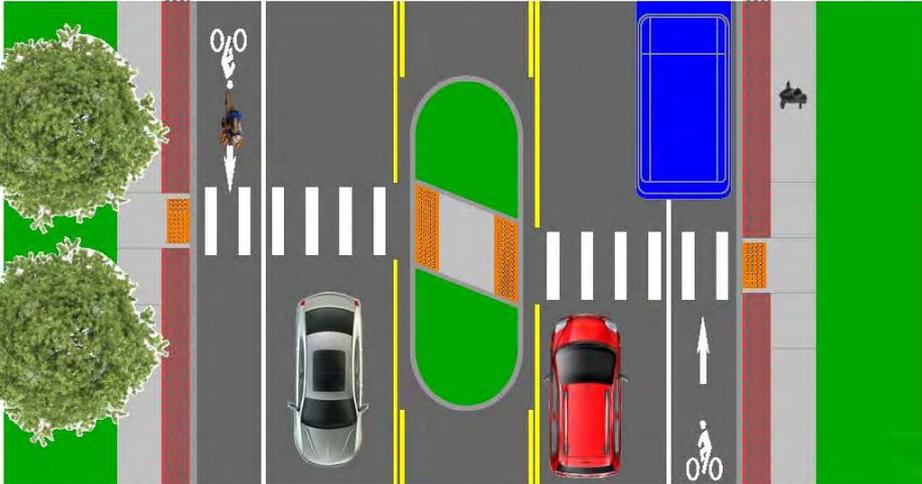
- High crash rate
- Difficult crossing for pedestrians
- Poor bike accommodation



Road Diet Alternative



Draft



• Pros

- Traffic calming
- Improved safety
- Improved bike accommodation
- Improved pedestrian crossing accommodation
- Improved access to/from unsignalized side streets and businesses

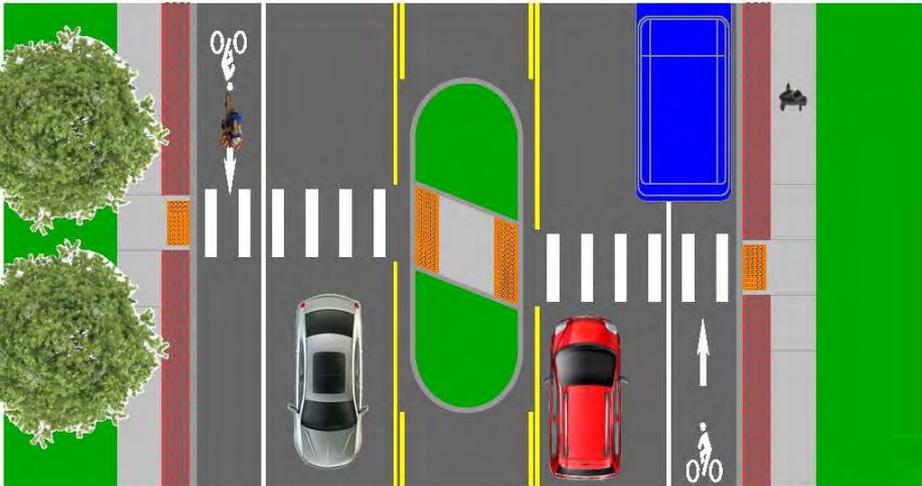
• Cons

- Some traffic diversions (3 to 4 %)
- Increased peak hour signal delay
 - » +15 to 50 seconds
- Increased corridor travel times
 - » + 45 sec WB, + 12 sec EB

Partial Road Diet (Plaza to Normanskill)



Draft



• Pros

- Maintains traffic operations - Elsmere to Plaza.
- Improved safety, bike accommodation and pedestrian crossing accommodation in road dieted section
- Improved access to/from unsignalized side streets and businesses – road dieted section

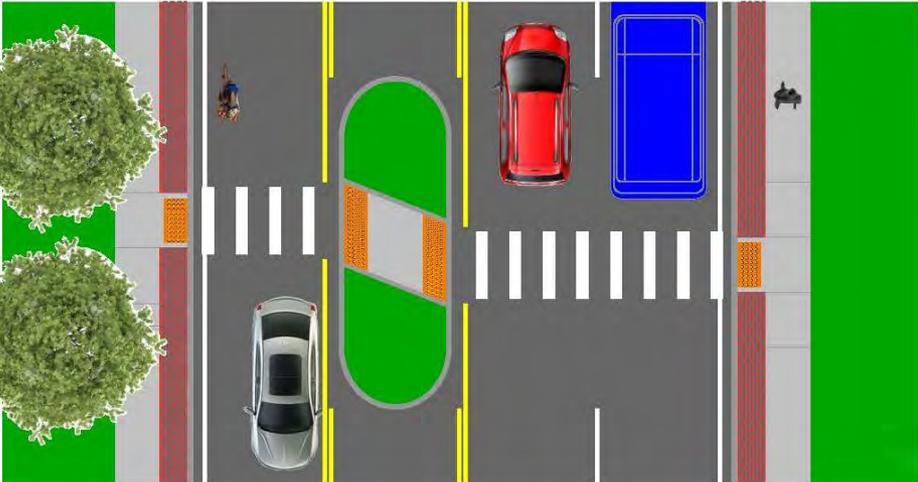
• Cons

- High crash rate Elsmere to Plaza
- Lack of bike accommodation and ped crossing accommodation Elsmere to Plaza

1-1-2 Alternative



Draft



• Pros

- Ties into Enhancements project at Elsmere
- Some safety and traffic calming benefits
- Improved ped crossing opportunities

• Cons

- Lack of bike accommodation

HDM Exhibit 18-19 – Recommendations for installing Marked Crosswalks...

No. of Lanes and Median Type	Vehicle AADT < 9,000			Vehicle AADT > 9,000 to 12,000			Vehicle AADT > 12,000 to 15,000			Vehicle AADT > 15,000		
	Speed Limit**											
	<50 km/h	57 km/h	65 km/h	<50 km/h	57 km/h	65 km/h	<50 km/h	57 km/h	65 km/h	<50 km/h	57 km/h	65 km/h
2 Lanes	C	C	P	C	C	P	C	C	N	C	P	N
3 Lanes	C	C	P	C	P	P	P	P	N	P	N	N
4 or more Lanes With Raised Median	C	C	P	C	P	N	P	P	N	N	N	N
4 or More Lanes Without Raised Median	C	P	N	P	P	N	N	N	N	N	N	N

C = Candidate sites for marked crosswalks alone (≥ 20 peds/hour)

P = Possible increase in pedestrian crash risk without adequate design

N = Marked crosswalks alone are insufficient

This meeting summary represents the writer's understanding of the major issues discussed. If you wish to suggest edits or additions, please contact the undersigned.

DATE: May 10, 2017
PROJECT: Delaware Avenue Complete Streets Feasibility Study
PLACE: Town of Bethlehem Town Hall
TIME: 3:00 pm
PURPOSE: **The purpose of this meeting was to discuss the comments from the public information meeting and review the proposed alternatives with the Study Advisory Committee (SAC).**

ATTENDEES:

<u>Name</u>	<u>Title/Representing</u>	<u>Telephone Number</u>
See attached attendance sheet		

SUMMARY:

1. Welcome – CM informed the group that since the last meeting, consultant efforts have been focused on compiling comments received at the public information meeting and developing design alternatives for the corridor. The objective of the SAC meeting was to verify the public comments in order to guide the continuing alternatives analysis effort and to review the draft complete streets alternatives with the SAC before moving into the more detailed evaluation phase
2. Public Meeting Recap – CM briefly covered the comments received during the public information meeting held on February 16, 2017 and noted that over 100 people attended. During the overview that CM provided, the following comments and topics were highlighted:
 - a. Jim Giacone stated that the attendance at the public information meeting was not a full representation of the business community within the study area and that the public may have overlooked unintended consequences that would adversely impact businesses.
 - i. In response, the group discussed the need to involve the business community and receive their input. It was suggested that CM schedule a business specific event, such as a focus group through the Bethlehem Chamber. Jen from the Chamber offered to help get the word out.
 1. Rob Leslie remarked that not all of the businesses within the corridor are members of the Bethlehem Chamber.
 2. Jim Giacone noted that business owners are often busy and might be more amenable to a short phone survey.
 - ii. **Action: CM coordinate with the TAC and plan to reach out to businesses after the next SAC meeting.**
 - b. Discussion of Pocket Parks
 - i. Rob Leslie stated that there is an opportunity to design a small pavilion on Town land adjacent to the Helderberg Hudson Rail Trail at Elsmere Avenue.

- ii. Virginia Acquario stated that adding another pocket park along Delaware Avenue closer to the businesses would be beneficial for employees and customers.
 - 1. The CDTA Park and Ride Lot was discussed as a possible location due to low utilization. The group determined that it was not ideal due to its location and ownership by the Albany Water Board.
 - 2. The property adjacent to the car wash was also discussed as a possible location for a pocket park.
 - iii. The group discussed the possibility of enhancing green space within the corridor without adding a full pocket park, for example adding inviting spaces, even small ones, where a bench or two could be placed.
 - 1. Rob Leslie noted the enhancements being made to the Albany Medical Center Building in the form of additional landscaping in the parking lot.
 - iv. **Action: CM to continue looking for greenspace opportunities within the corridor.**
- c. Discussion of Trail Connections
- i. Virginia Acquario noted that there is concern that individuals using the rail trail will occupy on-street parking and asked if formal parking arrangements will be pursued.
 - 1. Rob Leslie stated that it may be possible to pursue an agreement with the American Legion where a majority of people are already parking.
 - 2. Debbie Murray noted that it could be possible to park at Delaware Plaza and access the trail if individuals were allowed to cross the City of Albany water line.
 - ii. Jim Giacone stated that the proposed connections at Lincoln Avenue and Booth Road were too close together and that the Booth Road connection would be preferred.
 - iii. The group discussed the possibility of restoring the old yellow brick road bridge for pedestrian access. It was noted that it had been explored in the past and ownership of the bridge is an obstacle. **Action: Rob Leslie will forward history to CM, regarding potential upgrades to the yellow brick road bridge.**
 - iv. The group discussed a connection and sidewalk enhancement along Delaware Avenue in the vicinity of Lenox Street and Grant Street.
 - 1. It was determined that it would be a good idea to extend the sidewalk on the north side of Delaware Avenue east to the car wash, provided it is determined to be feasible at a later time, but there was no need to extend it to the Town Line.
- d. Discussion of Additional Priority Enhancements
- i. A suggestion was made to add signage directing individuals to designated parking areas for the rail trail.
 - ii. Jim Giacone suggested looking at shared parking arrangements with schools (Elsmere Elementary School and Bethlehem Middle School) as they provide empty parking lots on weekends when people would like to use the rail trail.

- iii. Scott Lewendon asked if there would be any roundabouts considered on Delaware Avenue to provide people the opportunity to make a U-turn instead of turning left.
 - 1. CM noted that a roundabout at Elsmere Avenue was probably not feasible and that the only other possible location would be at the Plaza which needs to be further examined.
- 3. Overview of Draft Major Street Alternatives – CM outlined the preliminary limited list of pros and cons of the Null (i.e. existing road layout) plus three different draft alternatives (Null, Full Road Diet, Partial Road Diet, and 1-1-2 eastbound) that are being considered for Delaware Avenue. CM explained that for the east end of the corridor (east of the Delaware Plaza) all of the alternatives would transition to a typical three-lane road diet.
 - a. A question was asked about the crash reduction factor associated with the full road diet alternative.
 - i. CM stated that a typical road diet results in a 25% crash reduction and that crash severity will also be examined.
 - b. It was noted that in the road diet alternatives, buses were proposed to stop in the lane or in the bicycle lane, otherwise, road widening and ROW acquisition would likely be necessary.
 - c. Jeremy Martelle asked why the 1-1-2 alternative was oriented with 2 lanes eastbound and one lane westbound.
 - i. CM stated that this alignment was examined because it naturally ties into the existing condition at Elsmere Avenue and allows Elsmere Ave intersection to operate the same as it does today. Jeremy asked to have the 2-1-1 alternative also looked at with 2 through lanes westbound.
 - ii. Rob Leslie stated the alternatives should be renamed 1-1-2 eastbound and westbound 2-1-1 or something similar for ease of understanding which direction carries the 2 travel lanes.
 - iii. **Action: CM to consider the 2-1-1 alternate with 2 lanes westbound.**
 - d. Debbie Murray stated that there is concern on the impacts a road diet will have on businesses, noting that the economy is bad and extra travel time is not good.
 - e. It was noted that evaluation results on travel time and differences in motor vehicle delay related to alternatives will include delay related to lowering the speed limit from its current 40 mph.
 - f. Overall the road diet from the Albany City Line to Delaware Plaza was well received. There was some discussion about how the full road diet could transition to a partial road diet near Delaware Plaza.
 - g. A gateway concept was discussed on the east end of the corridor near the bridge over the Normanskill. The group generally agreed that it would calm traffic entering the Town.
 - h. Several potential enhanced pedestrian crossing locations were presented including one near Tasty Freeze with the possibility of a center median.
 - i. CM noted that the properties on the south side of Delaware Avenue between Lenox St and Grant St would still have access due to an inter-connected driveway behind the buildings.
 - ii. Rob Leslie asked if there were legal easements or if this driveway was an informal arrangement that could cause problems in the future.
 - iii. **Action: CM to look into easements.**

4. The group discussed the Performance Measures to be used to evaluate the various alternatives. Rob Leslie asked if they will be presented in table format. **Action: CM/CDTC to confirm presentation format.**
5. Next Steps/ Schedule
 - a. The next Study Advisory Committee (SAC) meeting will be held towards the end of June after more analysis has been conducted and the alternatives have been further refined.
 - b. **Action: CM to confirm date of next SAC meeting.**
 - c. Following the SAC meeting the business owner meeting will held.

Summary of Actions:

1. **CM coordinate with the TAC and plan to reach out to businesses after the next SAC meeting.**
2. **Continue looking for greenspace opportunities within the corridor.**
3. **Rob Leslie will forward history to CM, regarding potential upgrades to the yellow brick road bridge.**
4. **Consider 2-1-1 Alternative with 2 through lanes westbound.**
5. **Look into easements between Lenox St and Grant St**
6. **CM/CDTC confirm performance measure presentation format**
7. **Confirm date of next SAC meeting.**

The meeting concluded at 4:30 p.m.

Jesse Vogl
Assistant Project Planner

cc: Attendees
File

File

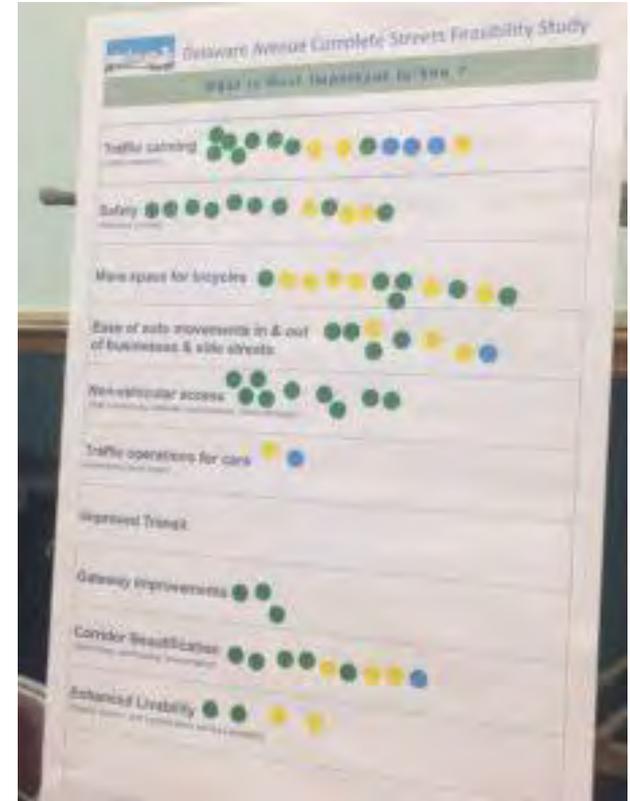
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SAC MEETING #4



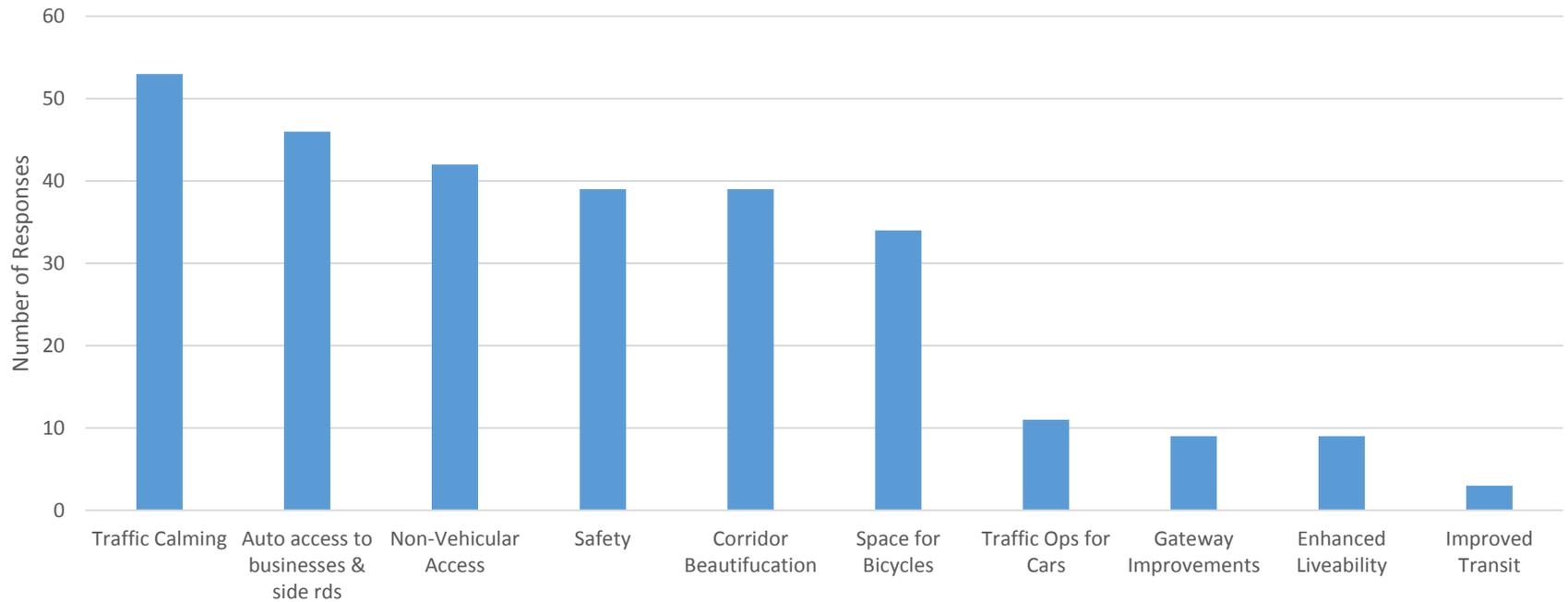
Delaware Avenue Complete Streets FEASIBILITY STUDY

Public Meeting Recap



What is Most Important to You?

Delaware Avenue Complete Streets Feasibility Study
What is Most Important to You?



Five Alternatives

- A** Null
- B** Full Road diet (1-1-1)
- C** Half corridor road diet
- D** 1-1-2 Eastbound
- E** Westbound 2-1-1

Would you be willing to exchange...

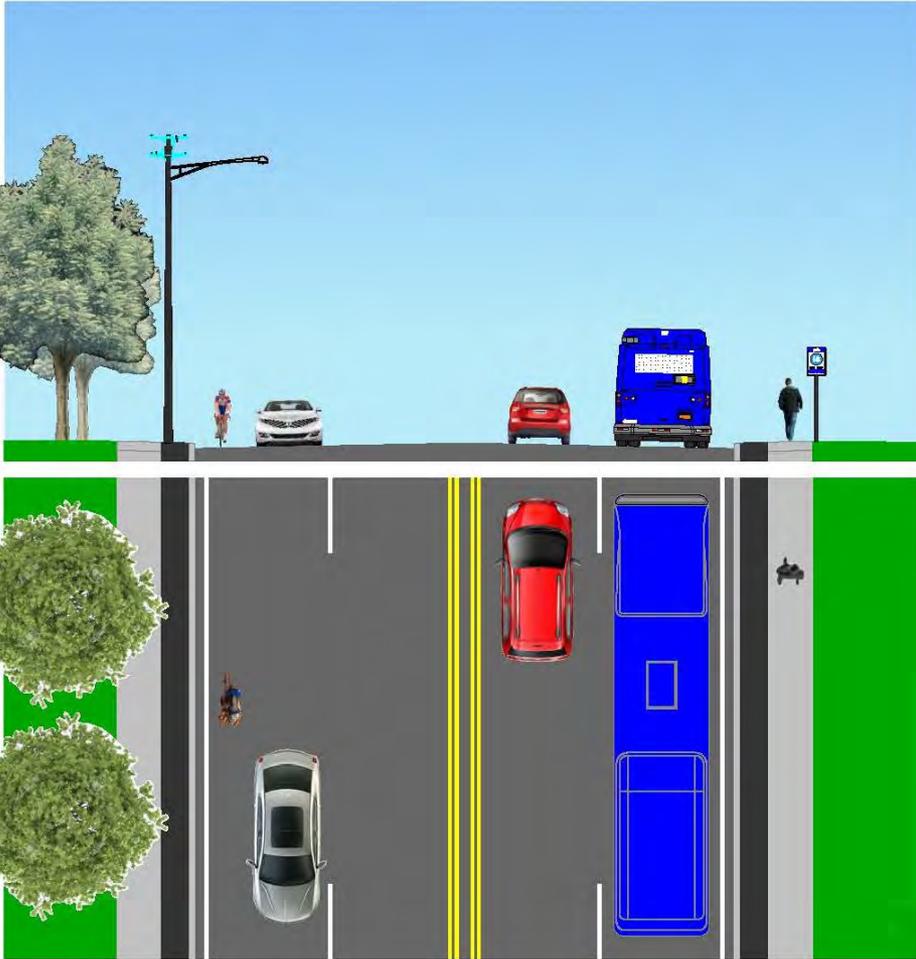
- Up to 50 seconds of travel time during the peak commute

for

- Traffic calming on Delaware Avenue, fewer crashes, better access for left turns, a more comfortable pedestrian environment, greater separation between cars and the sidewalk, improved pedestrian crossings, and space for bicycles?



Existing – Null Alternative



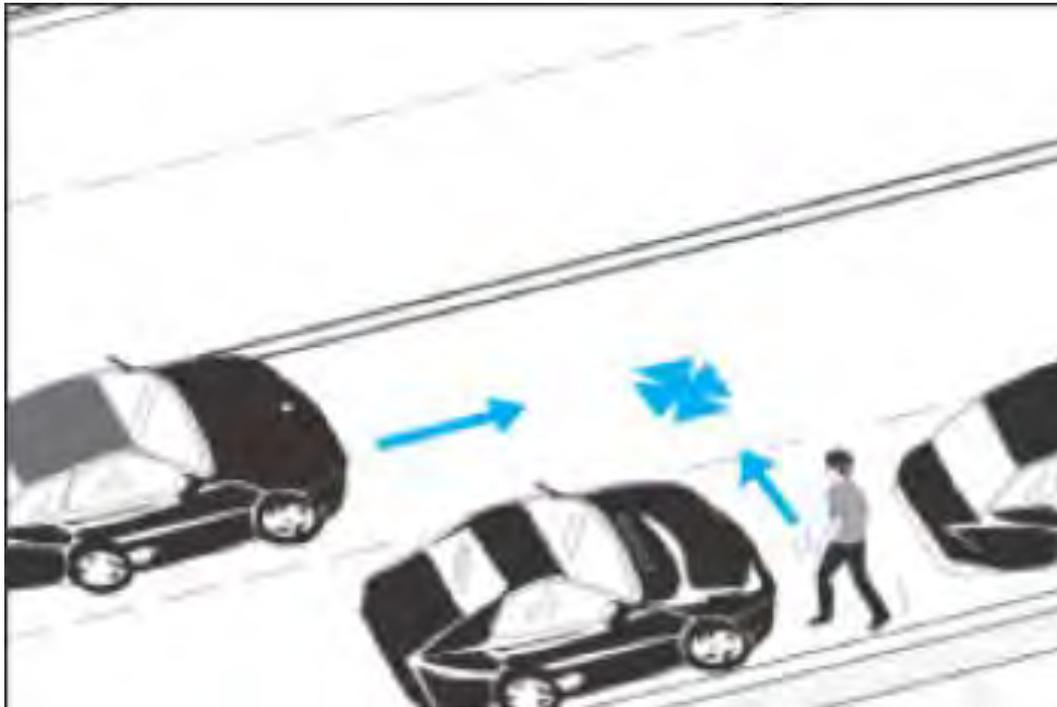
• Pros

- Maintains current traffic operations
- No cost

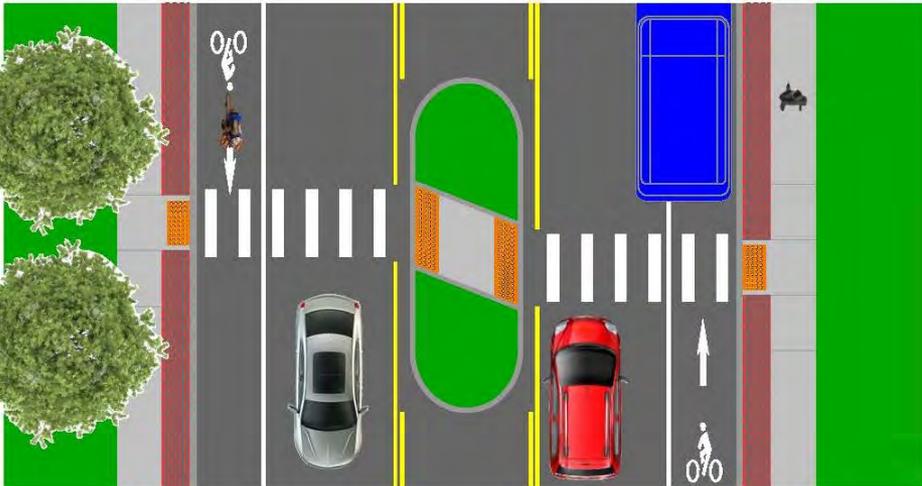
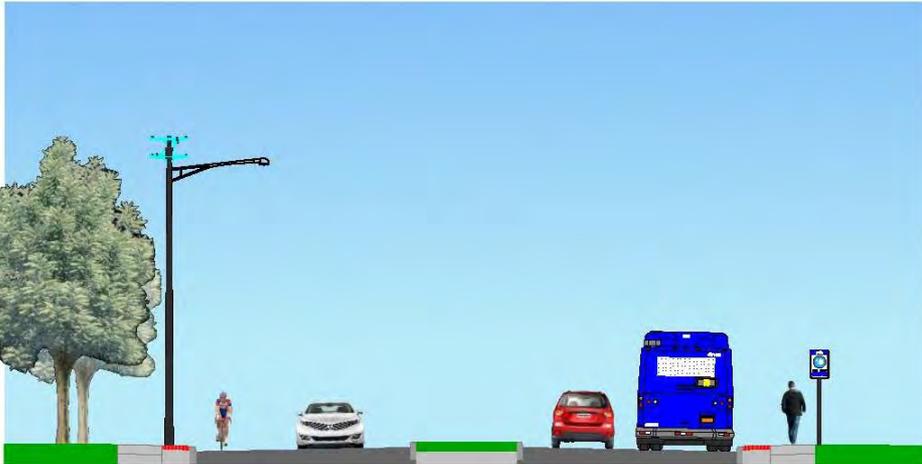
• Cons

- High crash rate
- Difficult crossing for pedestrians
 - » Multi-threat
- Poor bike accommodation
- Left turn challenge

Multi-threat



Full Road Diet (1-1-1)



• Pros

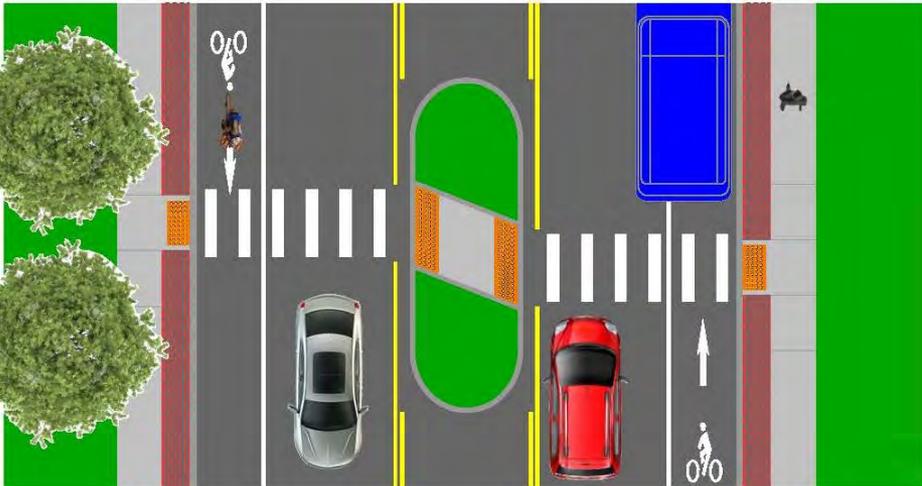
- Traffic calming
- Improved safety
- Improved bike accommodation
- Improved pedestrian crossing accommodation
- Improved access to/from unsignalized side streets and businesses

• Cons

- Some traffic diversions (3 to 4 %)
 - » Peak hour only
- Increased peak hour signal delay
 - » +15 to 50 seconds (AM)
- Increased corridor travel times - PM Peak end to end
 - » + 45 seconds each way

Half Corridor Road Diet

(Delaware Plaza to Normanskill Bridge)



• Pros

- Maintains traffic operations - Elsmere to Plaza.
- Improved safety, traffic calming bike accommodation and pedestrian crossing accommodation in road dieted section
- Improved access to/from unsignalized side streets and businesses – road dieted section

• Cons

- High crash rate Elsmere to Plaza
- Multi-threat Elsmere to Plaza
- Lack of bike lane and pedestrian crossing accommodation Elsmere to Plaza

1-1-2 Eastbound



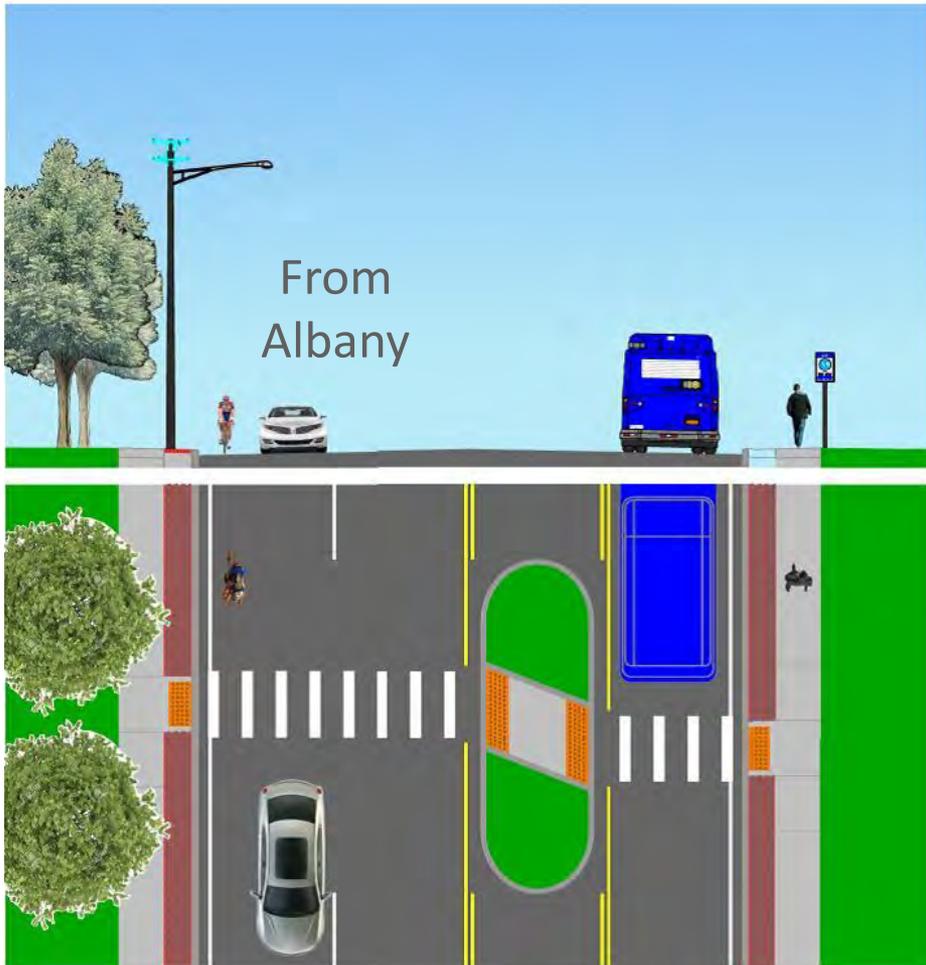
• Pros

- Ties into existing conditions / Enhancements project at Elsmere
- Some safety and traffic calming benefits
- Improved ped crossing opportunities

• Cons

- Lack of bike lane Elsmere to Plaza
- Multi-threat in one direction
- Travel time increase
 - » + 45 seconds WB, + 15 seconds EB

Westbound 2-1-1



• Pros

- Good PM peak hour traffic operations
- Some safety and traffic calming benefits
- Improved ped crossing opportunities

• Cons

- Lack of bike lane Elsmere to Plaza
- Multi-threat in one direction
- Travel time increase
 - » + 15 seconds WB, + 45 seconds EB



Safety

Crashes Reduced (5 years)

- 213 Crashes (2011 to 2015)

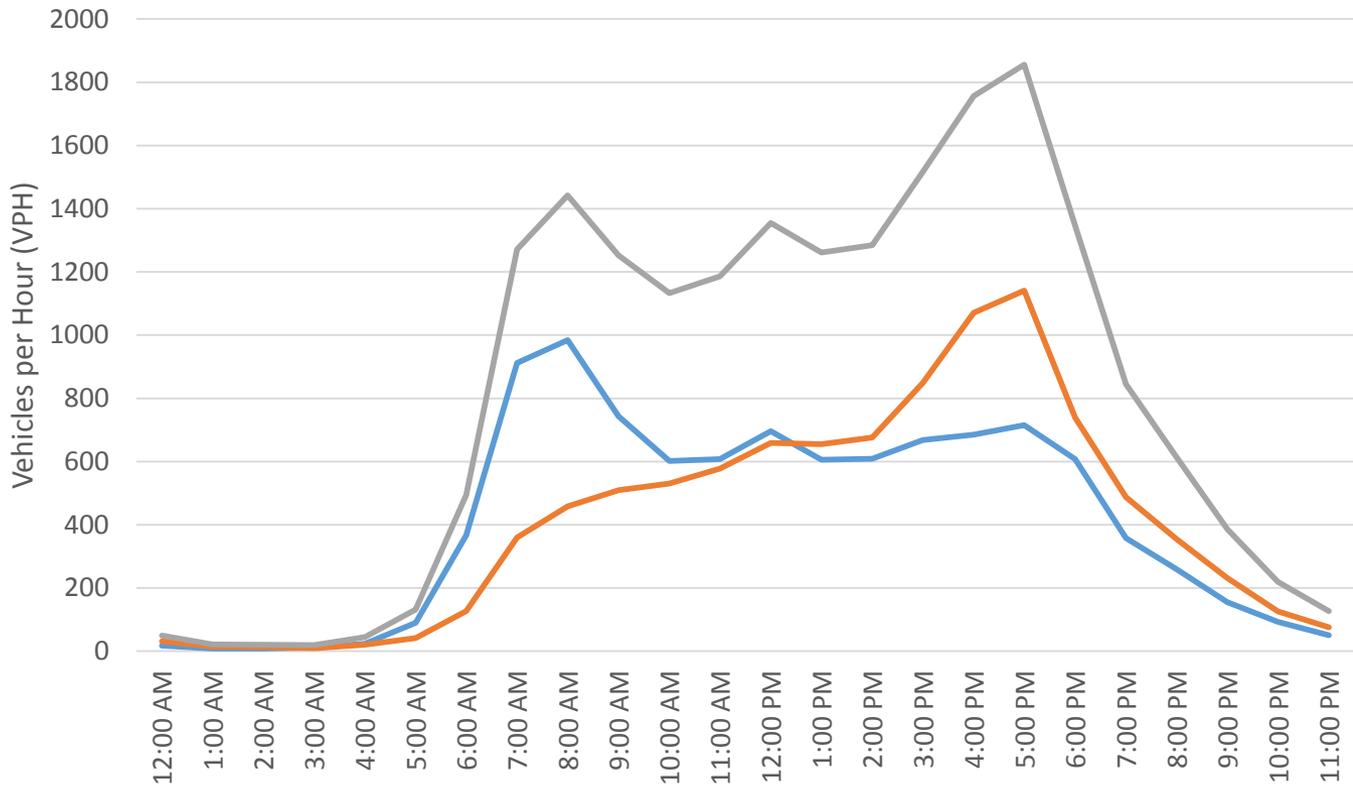
Crashes Reduced					
	A	B	C	D	E
Elsmere to Normanskill Bridge	0	60	21	41	41
		28%	10%	19%	19%



Access

Hourly Traffic Variations

Hourly Traffic Variations (Typical Weekday) Delaware Ave - East of Salisbury Rd



Legend

Traffic Demand

- Existing 2016 Demand
- EB
- WB
- Two-Way

Pedestrian Scores



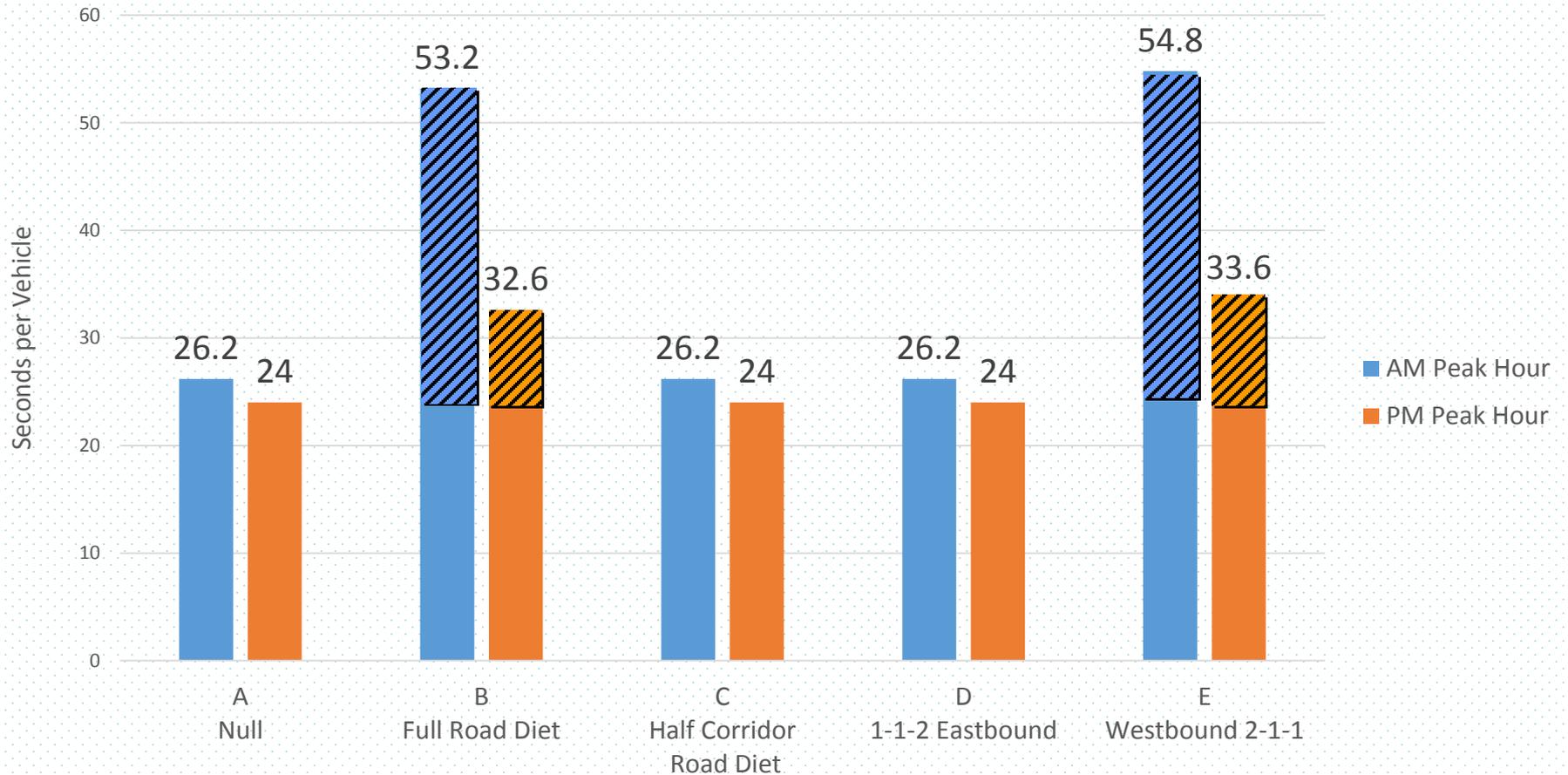
LOS A/B

Pedestrian Scores					
	A	B	C	D	E
Elsmere Ave	B	A	B	B	B
Herrick Ave	D	C	D	D	D
Booth Rd	D	C	D	D	D
Lincoln Ave	D	A	D	B	B
Leonard Place	D	D	D	D	D
Bedell Ave	D	C	D	D	D
Salisbury Rd	D	A	D	B	B
Snowden Ave	D	C	D	D	D
Burhans Place	D	C	D	D	D
Plymouth Ave	D	C	D	D	D
Euclid Ave	D	A	D	B	B
Normanskill Blvd	C	A	C	C	C
Mason Rd	D	C	C	C	C
Winslow St	D	A	A	A	A
Lenox St	D	C	C	C	C
Grant St	D	A	A	A	A
Old Delaware Ave	D	C	C	C	C

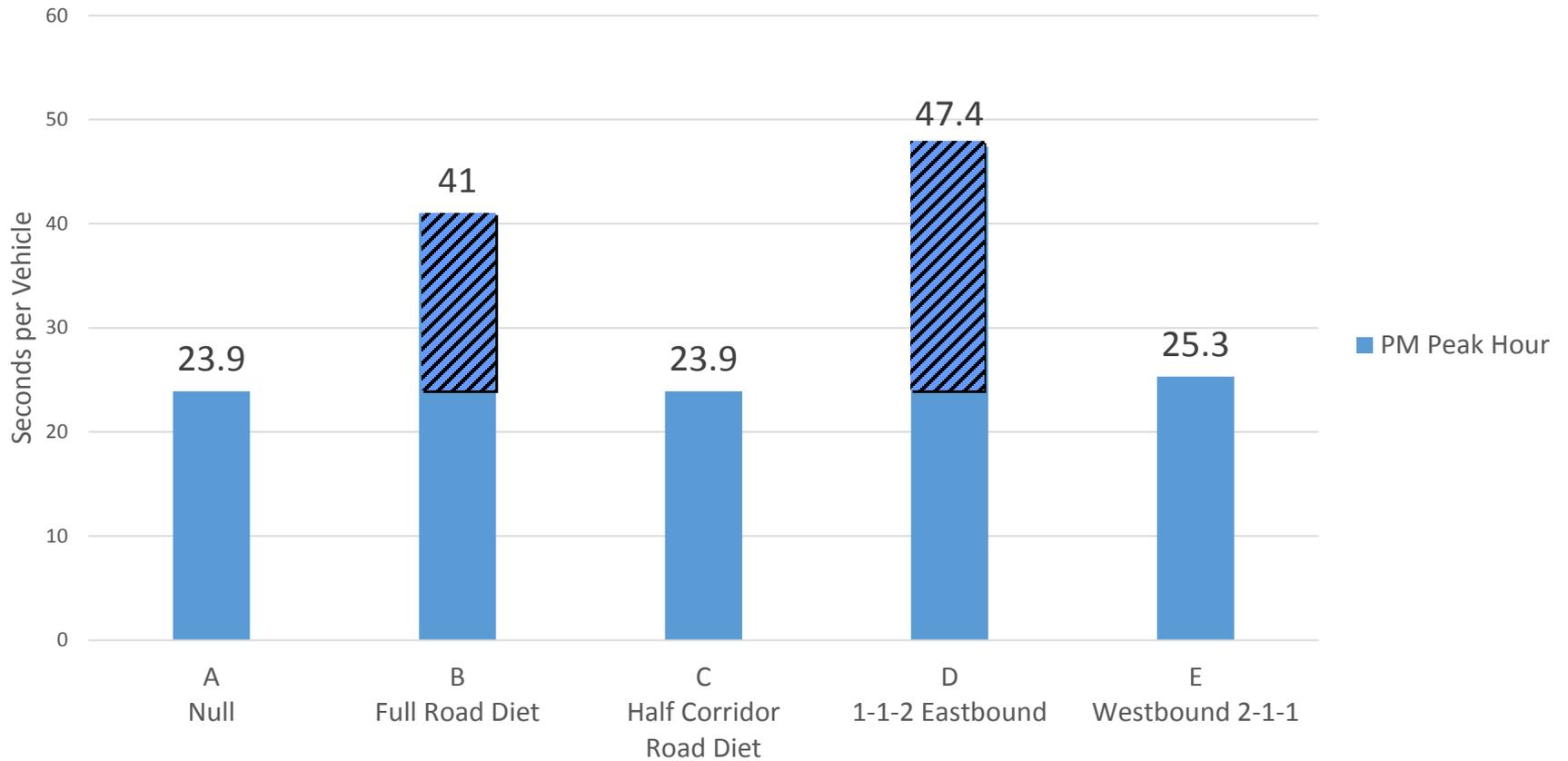
Bicycle Level-of-Service

Bicycle LOS					
	A	B	C	D	E
Elsmere to Delaware Plaza	E/D	C	D	D	D
Delaware Plaza to Normanskill	E/D	C	D/C	D/C	D/C

Signal Delay – Delaware / Elsmere



Signal Delay – Delaware Ave / Delaware Plaza



Average Queuing PM Peak Hour Delaware Avenue/Delaware Plaza Drwy/Normanskill Blvd



A Null

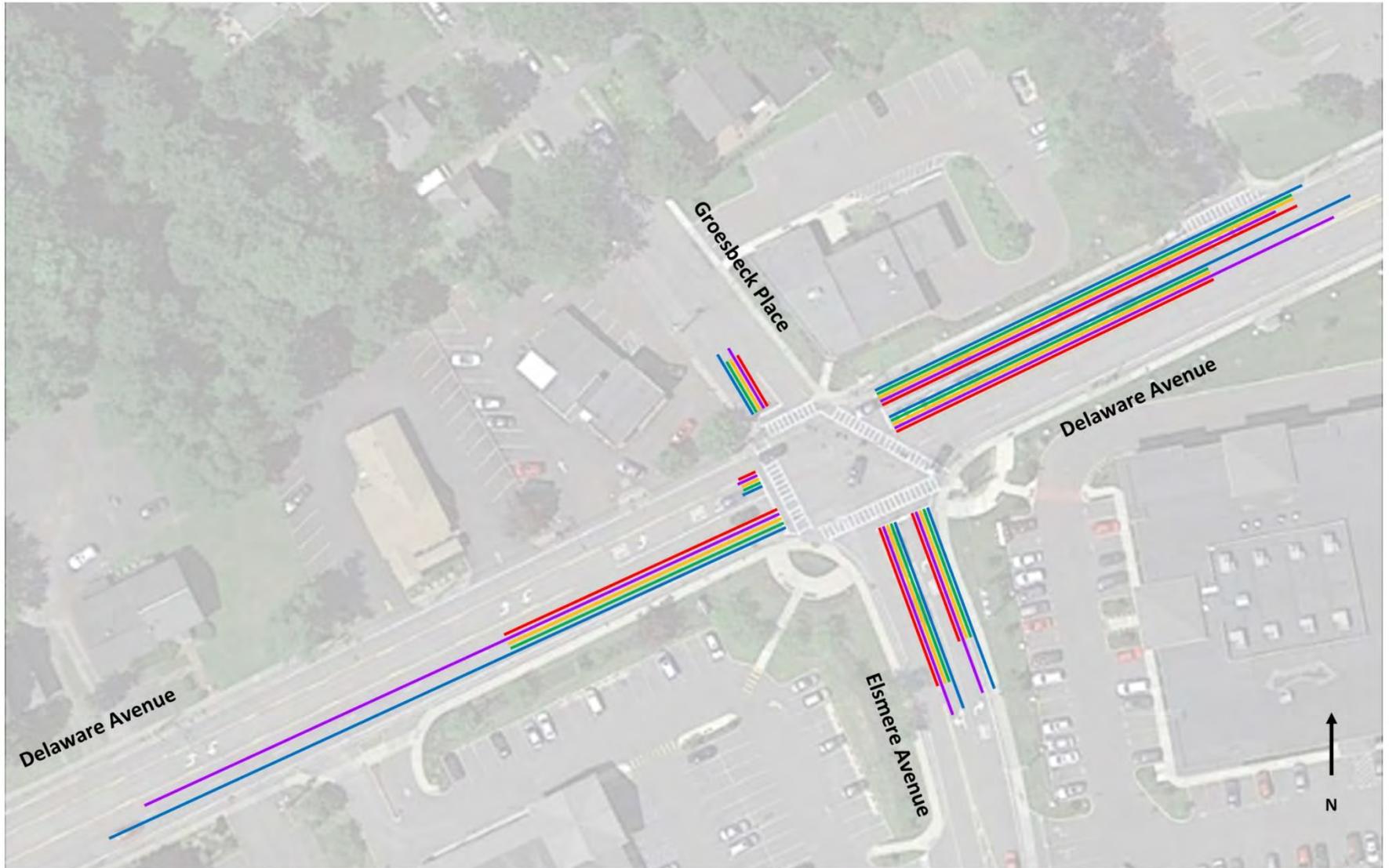
B Full Road Diet

C Partial Road Diet

D 1-1-2 Eastbound

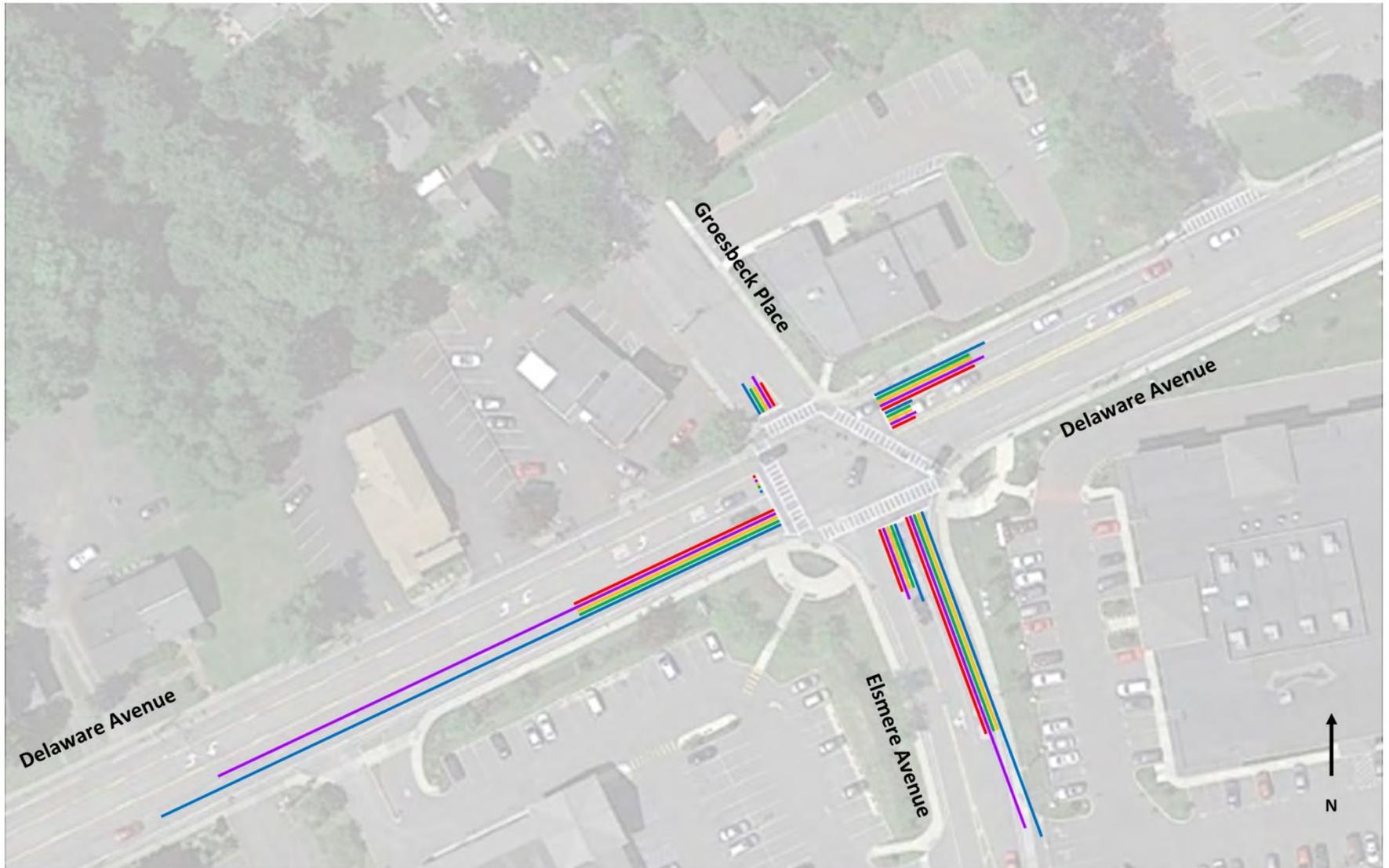
E Westbound 2-1-1

Average Queuing PM Peak Hour Delaware Avenue/Elsmere Avenue/Groesbeck Place



- A** Null
- B** Full Road Diet
- C** Partial Road Diet
- D** 1-1-2 Eastbound
- E** Westbound 2-1-1

Average Queuing AM Peak Hour Delaware Avenue/Elsmere Avenue/Groesbeck Place

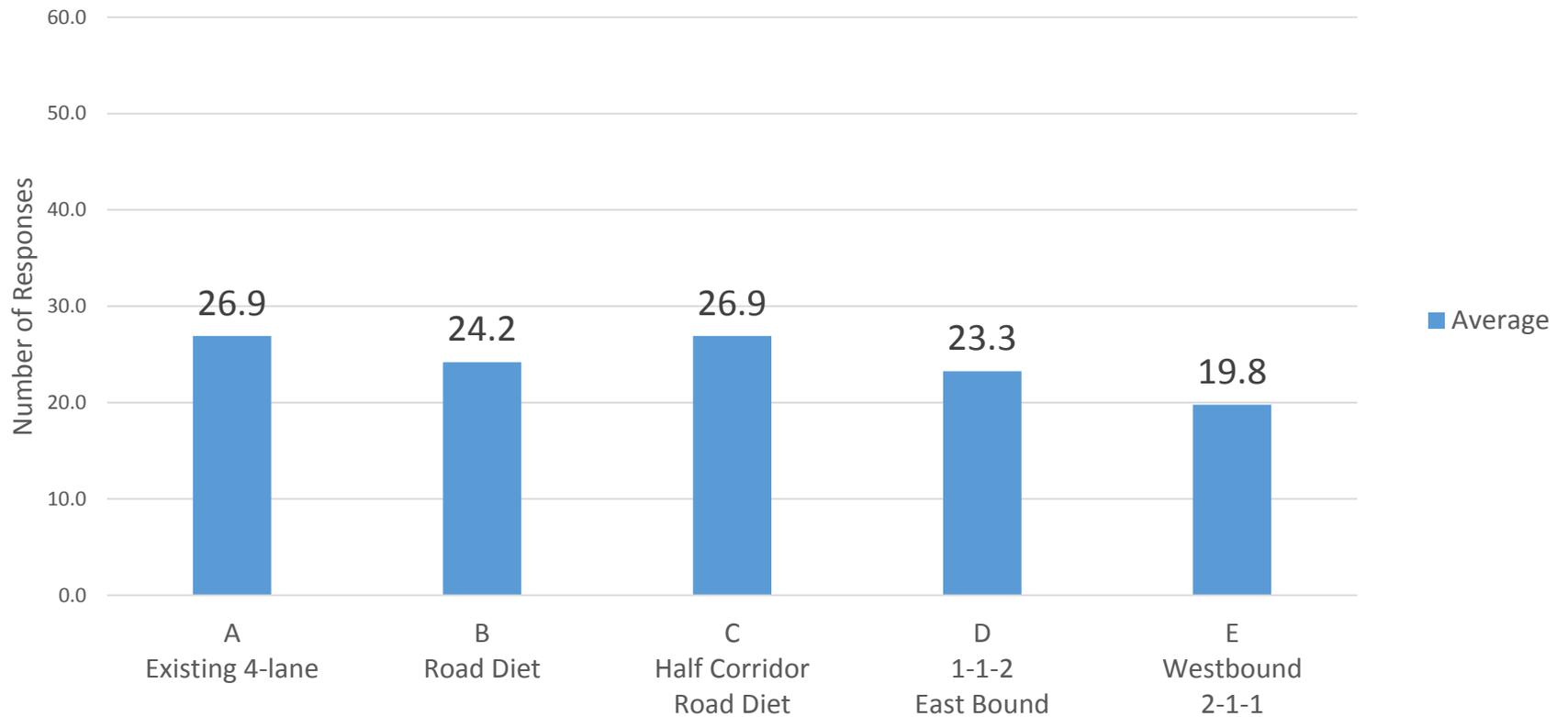


- A Null
- B Full Road Diet
- C Partial Road Diet
- D 1-1-2 Eastbound
- E C 326 Westbound 2-1-1

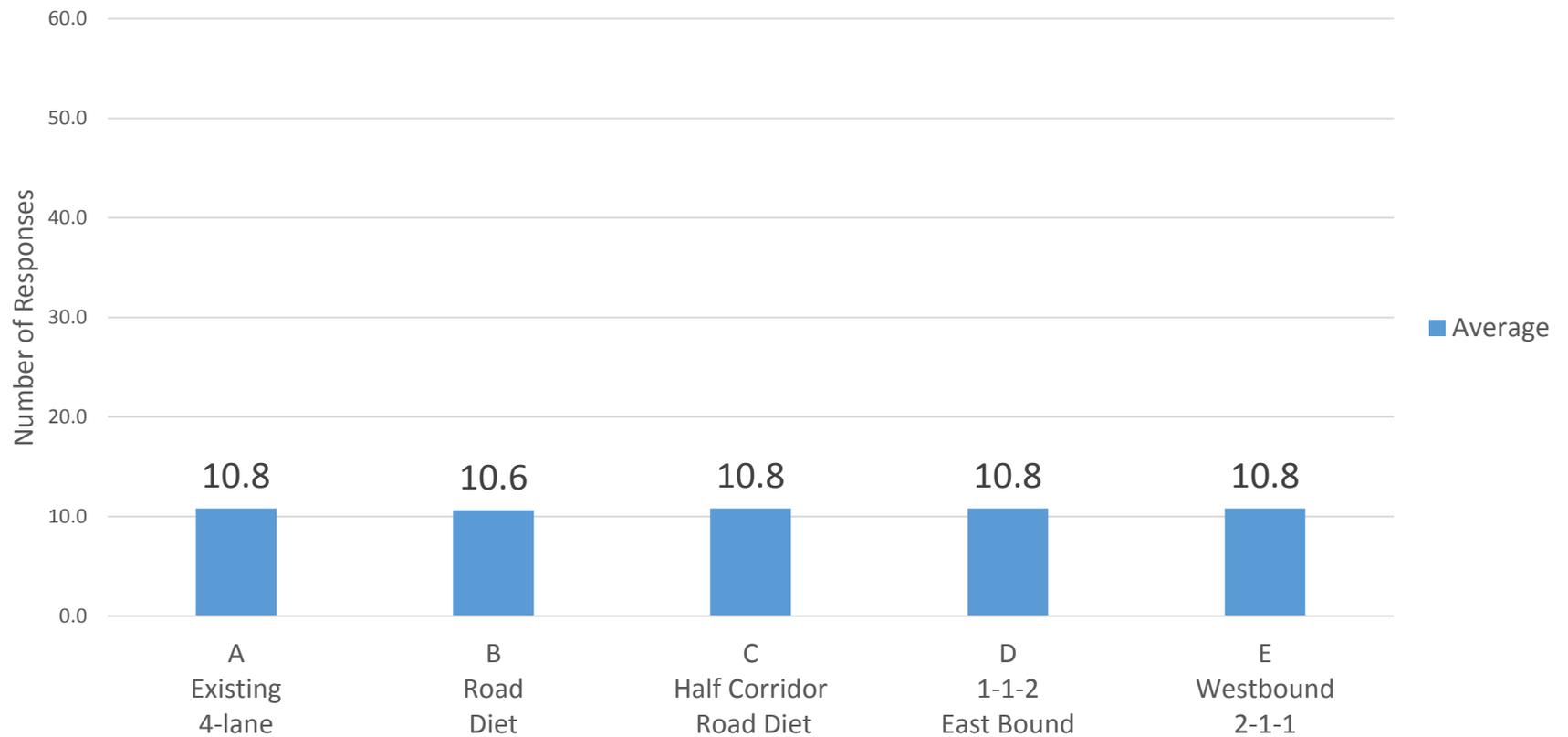


Economy

Delay from side streets and driveways



Delay to side streets and driveways



Case Studies

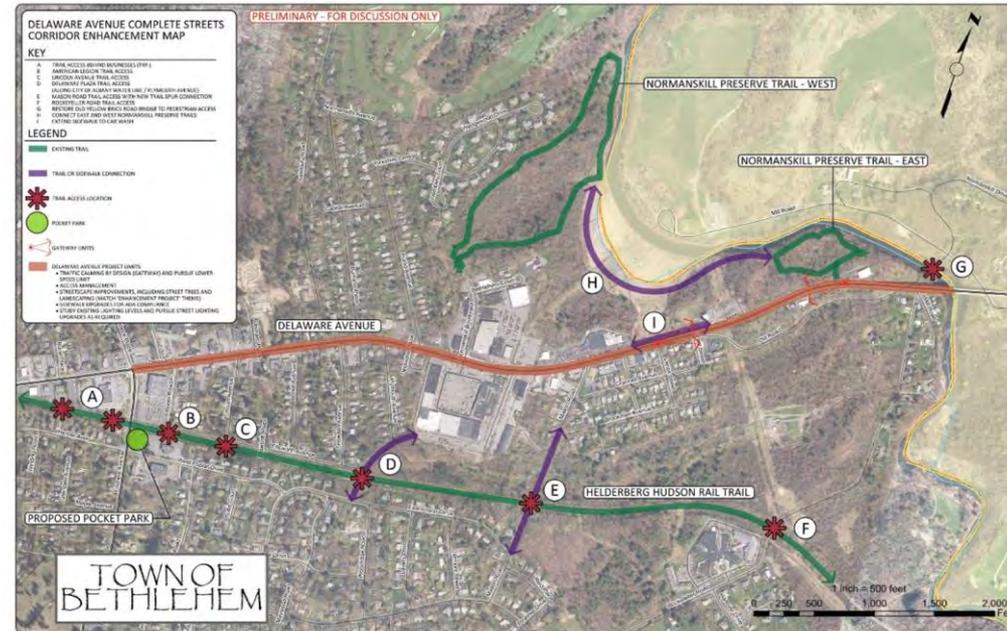
- Economic Impacts of lane elimination (road diet) projects are mixed; most studies point to either no overall economic impacts or some positive impact.
- Business owners are concerned about potential negative economic effects, generally more so if on-street parking is impacted.
- There is little evidence that road diets have a detrimental effect on businesses in terms of their customer volume, revenue, and livelihood.



Place

Enhancements

- Trail connections
- Traffic calming
- Gateway
- Access management
- Street trees
- Sidewalk extension
- Sidewalk upgrades for ADA compliance
- Bus stop / street crossing integration
- Street lighting upgrades as required





Would you be willing to exchange...

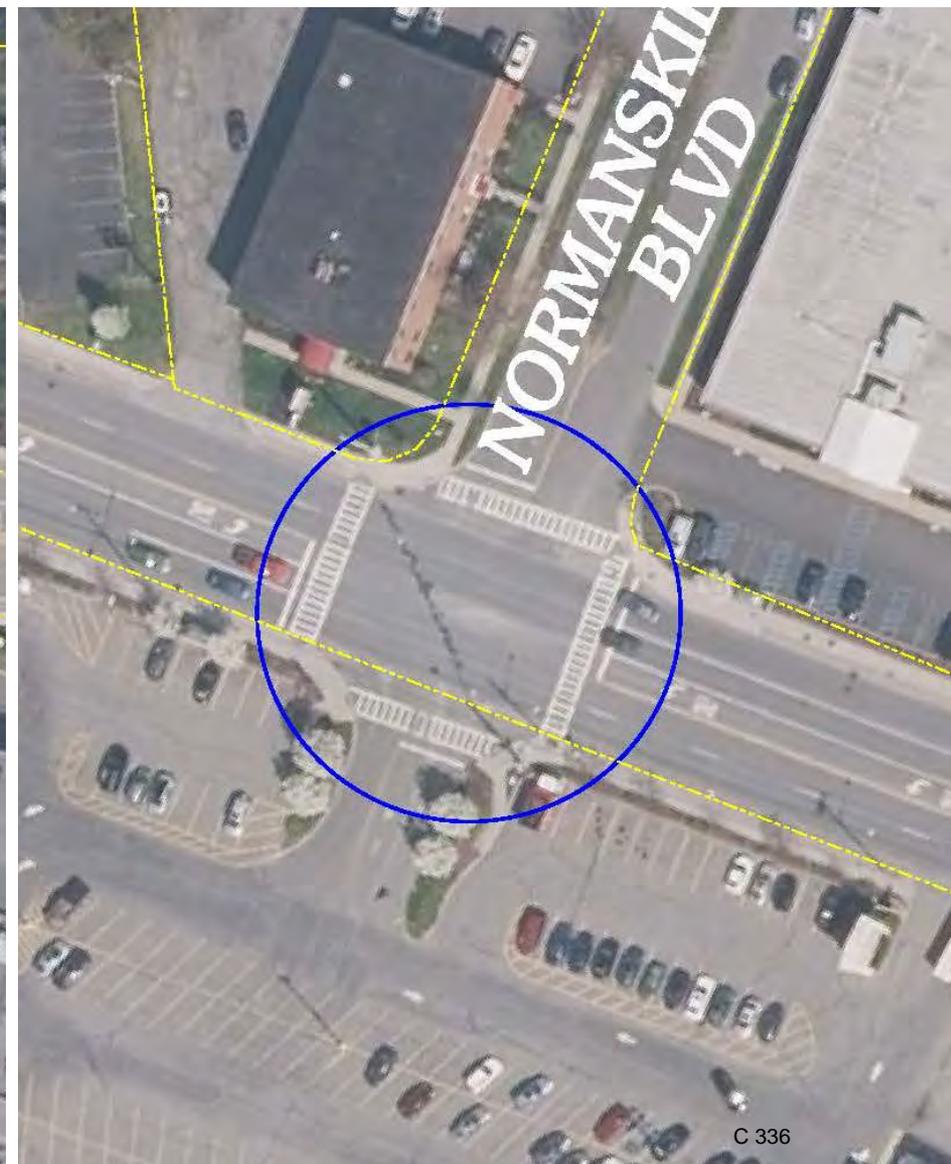
- Up to 50 seconds of travel time during the peak commute

for

- Traffic calming on Delaware Avenue, a more comfortable pedestrian environment, greater separation between cars and the sidewalk, improved pedestrian crossings, and space for bicycles?

		Evaluation of Alternatives				
		A Null	B Full Road Diet (1-1-1)	C Half Corridor Road Diet	D 1-1-2 Eastbound	E Westbound 2-1-1
Negative Neutral Positive						
Alternative						
Performance Measure						
 Safety Crashes Traffic Calming Benefit of Enhancements						
		4 Lanes: Elsmere Ave to Delaware Plaza 3 Lanes: Delaware Plaza to Albany City Line	4 Lanes: Elsmere Ave to Delaware Plaza 3 Lanes: Delaware Plaza to Albany City Line	1-1-2: Elsmere Ave to Delaware Plaza 3 Lanes: Delaware Plaza to Albany City Line	1-1-2: Elsmere Ave to Delaware Plaza 3 Lanes: Delaware Plaza to Albany City Line	2-1-1: Elsmere Ave to Delaware Plaza 3 Lanes: Delaware Plaza to Albany City Line
		  	  	  	  	  
 Access Travel Time Signal LOS/Queuing Bike LOS Ped Access to Transit		   	   	   	   	   
 Economy 2030 Volume Change Side St/ Driveway Delay Cost of Alt		  	  	  	  	  
 Place Pedestrian Friendliness Streetscape Quality of Life		  	  	  	  	  

Roundabouts



This meeting summary represents the writer's understanding of the major issues discussed. If you wish to suggest edits or additions, please contact the undersigned.

DATE: June 22, 2017
PROJECT: Delaware Avenue Complete Streets Feasibility Study
PLACE: Town of Bethlehem Town Hall
TIME: 3:00 pm
PURPOSE: **The purpose of this meeting was to review the proposed alternatives and discuss the analysis with the Study Advisory Committee (SAC).**

ATTENDEES:

<u>Name</u>	<u>Title/Representing</u>	<u>Telephone Number</u>
See attached attendance sheet		

SUMMARY:

1. Welcome – CM informed the group that since the last meeting, consultant efforts have been focused on analyzing the design alternatives for the corridor. The objective of the SAC meeting was to present and discuss the alternatives evaluation effort.
2. Review Alternatives – CM briefly outlined the five design alternatives (A – Null, B-Full Road Diet, C-Half Corridor Road Diet, D – 1-1-2 Eastbound, E – Westbound 2-1-1) that had been evaluated since SAC Meeting #3 on May 10, 2017. During the overview, the following comments and topics were highlighted:
 - a. Dave Jukins asked about enhanced pedestrian crossings on the western segment of the corridor under the half corridor road diet alternative.
 - i. CM responded that it is difficult to provide pedestrian crossings on a four-lane roadway and that there would be more crossing opportunities under other alternatives.
 - ii. Dave Jukins then asked about looking into another signalized intersection to accommodate pedestrian crossings.
 - iii. CM answered that the traffic conditions in the corridor do not warrant another traffic signal.
 - b. Maud Easter asked about pedestrian safety at the Delaware Plaza intersection under the full road diet alternative.
 - i. CM responded that of the design alternatives, the full road diet has the largest benefit to safety, based on crash reduction factors.
 1. Rob Leslie added that all alternatives would have a reduction in the speed limit which would also improve safety.
3. Evaluation of Alternatives/Discussion – CM outlined the pros and cons of the five design alternatives. CM explained that a tradeoff of 50 seconds of travel time during the PM peak commute could provide benefits to safety, accessibility, the economy, and overall sense of place.

- a. Martin Daley asked whether the diversion factor applied to the full road diet alternative was mode specific.
 - i. Chris O'Neill responded that it was for autos and that most vehicles that do divert would likely use NY Route 32 instead of Delaware Avenue.
 - 1. Martin Daley responded that although the model estimates that there will be some vehicular diversion from the corridor during the PM Peak Hour, other modes such as transit and bicycling could see increased use.
 - b. The group discussed the half corridor alternative and noted that it really only addresses problems on the eastern end of the corridor. It was reiterated that while an enhanced pedestrian crossing may be possible in the western half of the corridor it will likely be difficult and won't reduce the multiple threat pedestrian crash type. (This type of crash can occur on a multi-lane road when one vehicle stops to let a pedestrian cross and another vehicle traveling in the same direction in the adjacent lane doesn't see the pedestrian that's crossing and the pedestrian can't see the oncoming vehicle.)
 - c. Jim Giacone stated that the 3% diversion traffic under the full road diet alternative would have a negative impact on business. He continued that the street currently works well as is, although he can understand the benefits of the Westbound 2-1-1 alternative for the PM peak hour.
 - i. John Clarkson responded that traffic diversion seemed acceptable and that businesses may benefit from increased pedestrian access and businesses will have better access for cars with the center left turn lane. There was brief discussion of ways people access businesses now and how they sometimes go out of their way to avoid making left turns in and out
 - ii. Rob Leslie questioned what the 3% PM peak hour traffic diversion actually means to businesses.
 - iii. Martin Daley noted that the changes on Madison Avenue in Albany make it easier to cross the street and as a result he feels more comfortable visiting businesses in that area.
 - iv. Maud Easter stated that diverting vehicle trips to transit should be encouraged and enhanced crossings at CDTA bus stops would help.
 - 1. Jim Giacone stated that CDTA stops need to be carved out in the one lane section of each alternative.
 - a. CM responded that this would be happening at Delaware Plaza where there is enough width. At locations where the road is narrower, buses would likely stop in the bike lane.
4. Alternatives Comparison/Discussion – CM provided a detailed analysis of each alternative using specific performance measures including vehicle crashes, traffic volumes, pedestrian and bicycle scores, vehicle delay and queuing.
- a. Jim Giacone asked if the crash reduction was analyzed based on a reduction in speed only.
 - i. CM responded that the analysis was linked to lane configuration using accepted crash reduction factors, however speed reduction should improve safety.
 - ii. Dave Jukins requested that a dollar value be assigned to the crashes to emphasize the economic benefits of crash reduction.
 - b. Jim Giacone noted that vehicle queues at Elsmere Avenue in the eastbound direction are longer in the PM peak than shown in the graphic.
 - i. CM responded that there are rolling queues which may be longer than shown.

- ii. Martin Daley stated that the two way left turn lane could eliminate queuing for vehicles turning into driveways which is not taken into consideration at the signalized intersection.
 - c. Virginia Acquario questioned the slide about economic concerns when bike lanes impact parking.
 - i. CM responded that there is no on-street parking on Delaware Avenue in the study area and therefore none of the alternatives would have this concern.
 - 1. Martin Daley noted that on-street parking was one of the biggest obstacles to a separated bike lane on the Madison Avenue project in Albany.
 - ii. Rob Leslie noted a recent bicycle crash on Delaware avenue at the intersection of Leonard on a Saturday afternoon.
 - d. John Clarkson acknowledged that there is a tradeoff between thru traffic and retail business and that Delaware Avenue businesses would benefit from slower speeds.
 - i. CM confirmed that the alternatives analysis assumed that the speed limit would be lowered to 35mph under all five alternatives.
 - 1. John Clarkson asked if the models produced different results using a 30mph speed limit, to which CM responded that there were no significant changes.
 - 2. Martin Daley mentioned that although the speed limit could be reduced, speed is also determined by road design.
 - 3. Rob Leslie noted that speed relates to severity of crashes and lower speeds would improve safety.
 - 4. Anne Benware stated that a lower speed would slightly increase travel time if people drive slower.
 - ii. The group discussed the speed limit further, noting that it is 30mph at either end of the study area. It was said that changes in the speed limit on Delaware Avenue are confusing to motorists and most people do not know the posted speed limit.
 - iii. Rob Leslie noted that higher speeds cause more noise and a reduction in speed limit would provide a nicer walking environment.
 - 1. Jim Giacone stated that noise was a factor in the design of the patio at his restaurant.
 - e. Maud Easter stated that a 50 second increase in travel time is a small price to pay for increased safety benefits.
 - i. Virginia Acquario agreed and stated that people shouldn't be willing to trade neighborhood aesthetics for quicker travel time.
- 5. Next Steps/ Schedule
 - a. There will be a meeting with business owners scheduled through the Bethlehem Chamber on July 26, 2017 at 4:00pm.
 - b. There will be a public meeting scheduled late Summer or early Fall. There are no plans for the SAC to meet again before the public meeting.

Summary of Actions:

The meeting concluded 5:00 p.m.

Jesse Vogl
Assistant Project Planner

cc: Attendees
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SAC MEETING #5

DATE: November 2, 2017
PROJECT: Delaware Ave Complete Streets Feasibility Study
PLACE: Bethlehem Town Hall
TIME: 3:00 p.m.
SUBJECT: SAC 5 – Public Meeting Results and Study Recommendations

1. Welcome
2. Feedback from Public
 - Ranking exercise
 - Chamber survey
 - Concerns
3. Draft Conclusions and Recommendations
4. Schedule
5. Other / Close

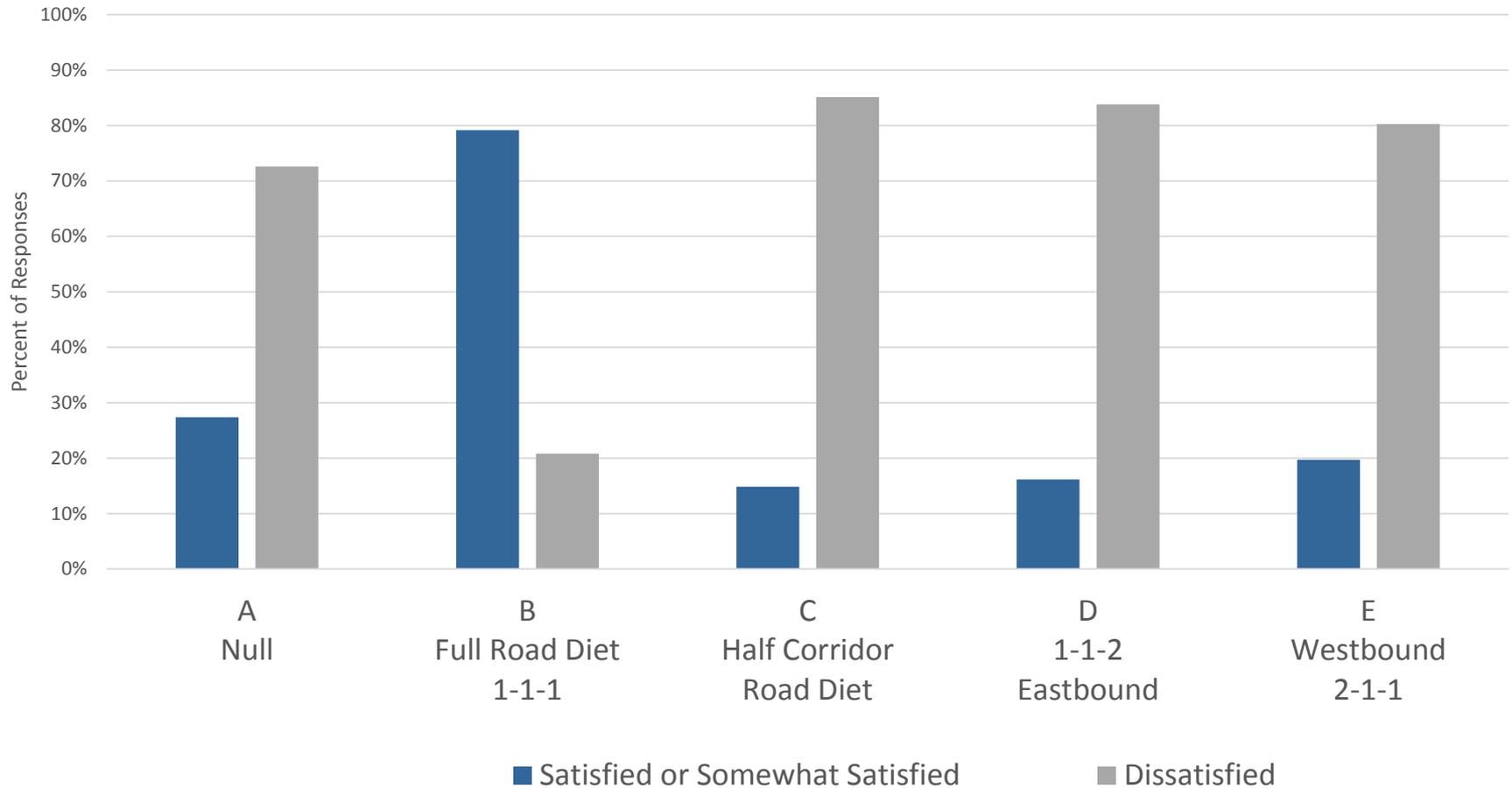
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Delaware Avenue Complete Streets FEASIBILITY STUDY

Public Feedback on Alternatives

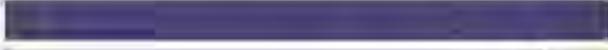
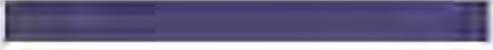
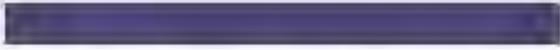
Public Meeting #2 September 26, 2017



Bethlehem Chamber Survey

Please rank your choices for the Delaware Avenue corridor.

1 = Least

Answer	1	2	3	4	5	Number of Response(s)	Ranking Score*
Null Alternative (keep roadway as is)						27	2.7
Full Road Diet (1-1-1)						27	3.4
Half Corridor Road Diet (Delaware Plaza to Normanskill Bridge)						27	3.0
1 1 2 Eastbound (with full Road Diet Plaza to Bridge)						27	2.7
Westbound 2 1 1 (with full Road Diet Plaza to Bridge)						27	3.1

*The Ranking Score is the weighted average calculated by dividing the sum of all weighted rankings by the number of total responses.

Written comments - 37 Individuals

Opinion on Full Road Diet

- 16 for
- 9 against
- 12 not specific to an alternative

Public Meeting #2 Concerns (September 26, 2017)

- Travel time / delay / queuing
- Questioning the delay projections
- Questioning safety benefit
- Focus on PM peak hour
- Operations near Herrick
- Getting stuck behind a bus
- Why no crossing enhancements considered under the 4-lane alternative?

Conclusions and Recommendations

- A road diet is feasible
- Majority favor the full road diet
- Some are strongly opposed
- Travel time impact is off-set by the benefits of a Complete Street
- Address left turns at Herrick Avenue
- Adopt study and pursue funding

Schedule

- mid Nov – Draft Report
- Dec – Final Report
- Dec 13 - Town Board Meeting
- Pursue funding

Questions?



This meeting summary represents the writer's understanding of the major issues discussed. If you wish to suggest edits or additions, please contact the undersigned.

DATE: November 2, 2017

PROJECT: Delaware Avenue Complete Streets Feasibility Study

PLACE: Town of Bethlehem Town Hall

TIME: 3:00 pm

PURPOSE: **The purpose of this Study Advisory Committee (SAC) meeting was to review feedback from Public Meeting #2 and discuss the draft study recommendations.**

ATTENDEES:

Name **Title/Representing** **Telephone Number**

See attached attendance sheet

SUMMARY:

1. Welcome – Rob Leslie opened the meeting and reported that since the last SAC meeting, the project had been presented to the public as well as the Town Board. The objective of the SAC meeting was to review the public comments and discuss the draft conclusions and recommendations to be included in the final report.
2. Feedback from Public – CM briefly summarized the public comments received to date. This included the ranking exercise during the public meeting held on September 26, 2017 and the results of the survey administered by the Bethlehem Chamber. Based on the comments received, the full road diet alternative was favored by those who participated. About 20 to 30 percent of those who provided input are opposed to the road diet and are very concerned about traffic impacts (delay). CM noted that based on the technical analysis and the public input, the draft Study will conclude that a road diet is feasible. During the overview, the following points were discussed:
 - a. Jim Giacone noted that the CM had previously indicated that the Half Corridor Road Diet would work well, but that the Town had indicated it would not achieve what they are trying to do.
 - b. Jim Giacone stated that the attendance at the public information meeting and responses to the survey do not accurately represent the feelings of the business community. He noted 27 responses to the Chamber survey, while the Chamber has approximately 400 members. He also stated that the way in which the project is framed as a 50 second tradeoff for the benefits of a road diet is misleading.
 - i. CM and Rob Leslie noted that the process has been inclusive and that business owners had opportunities to participate (notified through direct mailings, and invited to a separate business owners meeting).
 - ii. Jim Giacone stated that the null alternative is disliked and that there should be an option that slows traffic and increases safety without inconveniencing motorists.

- iii. Martin Daley noted that the model includes speed reduction which is desired even if it contributes to the 50 seconds of delay.
 - c. Jeremy Martelle stated that the positives associated with the road diet alternative outweigh the negatives and that 50 seconds of delay is acceptable in exchange for added safety benefits.
 - i. Rob Leslie added that currently Delaware Avenue is not a complete street because it works well for cars but not bicyclists and pedestrians.
 - 1. Maud Eastev stated that Delaware Avenue is not safe for cars as it is and that a road diet would improve safety for motorists as well as bicyclists and pedestrians.
 - ii. Virginia Acquario stated that walking along Delaware Avenue isn't comfortable because of vehicle speeds. It was also noted that beyond the study area Delaware Avenue is a 2-lane roadway and there is no sense in encouraging cars to rush through the 4-lane segment. A road diet presents an opportunity to create a destination and improve business opportunities.
 - d. Dave Jukins commented that the public concerns will be noted in the final report. Likewise, there will be a design process through a NYSDOT Design Report which will have more opportunity for comment. It was also noted that the study is not proposing to move curbs but rather repaint the road which could be changed if traffic delays are unacceptable.
 - i. Jim Giacone stated that the reduction of vehicles during rush hour will hurt businesses.
 - 1. Dave Jukins responded that the street network along Delaware Avenue is not a grid and because of that the diversion is less appealing to motorists because there is no convenient alternative to Delaware Avenue.
 - ii. Rob Leslie stated that the data collection process met the standards of calibrating the model.
 - 1. Dave Jukins concurred stating that this is the accepted engineering practice.
 - e. CM discussed potential changes to the Delaware Avenue/Herrick Avenue intersection in order to minimize the impacts of the road diet. These included rerouting buses to use Grosbeck, Laurel and Herrick roadways, as well as signs and street markings that would prohibit blocking the side street.
 - i. Maud Eastev noted that redirecting buses would not alleviate traffic generated by parents picking up/dropping off children.
 - 1. Rob Leslie noted that the solutions would be presented as an "and/or" option.
- 3. Implementation – CM outlined the process for implementing a road diet as part of a Pavement Preservation project.
 - f. Debbie Murray asked if the Town has gotten any feedback on the current construction project.
 - i. John Clarkson noted that businesses have complained about the disruption but are able to tolerate it. Enhancements to the street will help businesses in the long run.

- ii. Rob Leslie commented that businesses want to move to the 4-corners area because it is pedestrian friendly. It was also noted that the current construction project required replacement of water lines which is more disruptive than a typical repaving project.
 - 1. Jim Giacone asked about the condition of the underground infrastructure within the study area.
 - a. Rob Leslie responded that it is newer than the section which is under construction now. However, if replacement is needed that work will be coordinated in order to minimize disruption to businesses.
4. Next Steps – CM noted the following schedule:
- a. Draft Report will be available in mid-November and posted on the project Website.
 - b. The SAC and Public should provide comments by the end of November
 - c. Report to be finalized in early December
 - d. Present the Final Report to Town Board on December 13th.

Jim Giacone asked if the TB will act on the Study on the 13th. Rob Leslie and John Clarkson noted that it would be appropriate to ask the Board for their input and recognize the Study on the 13th.

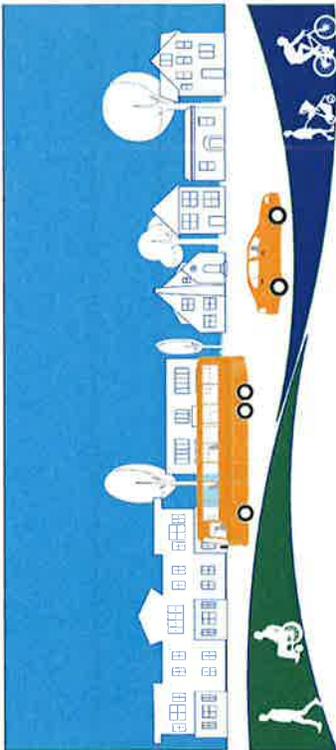
The meeting concluded at 4:30 p.m.

Jesse Vogl
Assistant Project Planner

cc: Attendees
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Delaware Avenue Complete Streets
Feasibility Study

Study Advisory Committee Meeting

Bethlehem Town Hall, Albany, NY
Thursday, November 2, 2017
3:00 p.m.

Name	Representing	Email
Mark Sargenti	C - m -	msargenti@cmwellp.com
Rob Leslie	Town of Bethlehem	
JEREMY MARTELLO	RESIDENT	JMARTELLO@MAC.COM
Jim GIALONÉ	Bicycle + Resident	jimemyplaceandcompany.com
DAVID P. JUKINS	CDTC	djujins@cdtcmpo.org
Brian Kirch	NYS DOT - Region 1 Planning	brian.kirch@dot.ny.gov
Audrey Burneson	NYS DOT - RA - Planning	audrey.burneson@dot.ny.gov
John Clarken	TOB	
Maud Easter	Resident	maudpeaster@gmail.com
Anne Benware	COTC	abenware@cdtcmpo.org
Ken Kovalchik	TOB	
Mark Dles	CDRPC	Mdaley@CDRPC.ORG
Virginia Acquario	Resident Beth. Garden Ch.	Vatula@aol.com
Kedde Vogt	CM'E	svogt@cmwellp.com

TAC MEETING #1

Delaware Avenue Complete Streets Feasibility Linkage Study Partner Meeting Notes: June 16, 2016

Attendees: Rob Leslie and Ken Kovalchik (Town of Bethlehem), Rob Cherry, Pete Rea and Audrey Burneson (NYSDOT Region 1), Mark Sargent and Kristie Di Cocco (Creighton Manning), Martin Daley (CDRPC), Dave Jukins, Chris O'Neill, Chanchilo Ezung, and Anne Benware (CDTC)

The purpose of the meeting was to discuss the proposed micro-simulation task in the context of the overall scope of work for the study and the capped study budget of \$60,000.

Micro-simulation: Creighton Manning expects this task to take three days of labor. The base model can be built in 1.5 days. The key to keeping the budget manageable for the micro-simulation is to reasonably limit the number of alternatives tested, say 3 to 5 total. Tested alternatives will include at a minimum a 4 to 3 lane conversion (1 lane each direction with a center two way left turn lane) as well as a 4 to 2 + 1 + 1 conversion (2 lanes one direction with a center two way left turn lane plus 1 lane one direction) – both of which would be considered “road diets”. It will be important to exercise discipline with respect to micro-simulation in terms of agreeing on a limited well-defined set of alternatives and to limit questions and detailed refinements.

There was discussion on appropriate methods for the two spot speed studies, one of which is slated for the school zone in front of Elsmere Elementary; spot speed studies should be conducted in the fall when school reopens. Creighton Manning explained the different methods that are Highway Design Manual compliant (speed gun vs stop watch, etc). NYSDOT staff said there should be some prior available speed data for the corridor that can be reviewed. From a modeling standpoint speeds/speed limit alternatives could impact micro-simulation alternatives. It was noted that speed limit setting is a policy process; Town staff expects study deliverables to be acceptable for use in a speed limit reduction request.

CDTC and the Town will provide traffic forecasts using CDRPC forecasts and Town knowledge of planned/potential future land use changes. Simulation results and traffic forecasts can feed into the regional STEP model to identify diversions.

The group reviewed data needs for the study. CDTC staff will develop a table listing each data set, details and who will be collecting/compiling it and needed format information, etc.

CDTC has been conducting the signalized intersection turn counts as well as for some side streets. Creighton Manning said data for up to 10 side streets should be collected. Town staff noted that in terms of side streets, residents have told them that many people that live in the Snowden Ave/Lincoln Ave area use Ellsworth Ave to travel to Booth Rd to then travel through the medical facility parking lot to Elsmere Avenue where they then access the signal at Elsmere and Delaware.

Finally, the schedule was discussed. The contract has begun making the rounds and should be all set within 30 days or so. The first SAC meeting is part of Task 1 (Study Initiation and Initial Data Gathering/Synthesis) to be followed by the initial presentation to the Town Board. These two meetings should occur in mid to late September.

Prep for the 1st SAC meeting includes putting together the SAC by the Town and collaborative development of: 1) a preliminary draft of study principles and objectives; 2) draft list of expected study outcomes and measures of effectiveness; 3) draft public outreach/stakeholder involvement process; and draft educational materials.

REQUEST FOR EXPRESSIONS OF INTEREST

TOWN OF BETHLEHEM DELAWARE AVENUE COMPLETE STREETS FEASIBILITY STUDY ELSMERE AVENUE TO NORMANSKILL BRIDGE

issued by

Capital District Transportation Committee
Albany, N.Y.

April 7, 2016

Introduction

The Capital District Transportation Committee (CDTC) is the designated Metropolitan Planning Organization (MPO) carrying out federal requirements for cooperative transportation planning and programming within the metropolitan area surrounding the Albany-Schenectady-Troy and Saratoga Springs urbanized areas. The Delaware Avenue Complete Streets Feasibility Study was proposed by the Town of Bethlehem to encourage a transportation system along Delaware Avenue that is designed and operated to enable safe access for all users, including pedestrians, bicyclists, transit users and motor vehicle drivers, otherwise known as Complete Streets. This study is funded through CDTC's 2015-16 Community and Transportation Linkage Planning Program with matching funds from the Town of Bethlehem. The study has a fixed budget of \$60,000 for consultant services. CDTC, on behalf of the Town of Bethlehem, will administer the consultant contract and will jointly manage the study with the Town. CDTC is issuing this Request for Expressions of Interest (REI) to qualified firms or individuals to carryout and complete the Delaware Avenue Complete Streets Feasibility Study.

Study Area and Purpose

The study will identify and analyze the feasibility of a full range of appropriate complete streets elements, for the section of Delaware Avenue in the Town of Bethlehem, NY that extends from Elsmere Avenue to the Normanskill Bridge. The Town's continued focus on fostering a walkable, bikeable and transit friendly community along with the current and evolving land use context and access management along the corridor provides the opportunity to rethink the physical layout of the roadway in a manner that strives to result in a better balance in serving all user's needs.

This linkage study is an important step toward the implementation of a number of goals and recommendations expressed in the Town of Bethlehem's adopted plans, resolutions, and initiatives including the [Comprehensive Plan](#), the [Complete Streets Resolution](#) and the [Delaware Avenue Hamlet Enhancement Plan](#), among others.

The potentially feasible future street designs and complete streets features to be identified through this study will balance the needs of all roadway users in a manner that enhances community quality of life, the local economy, and safety for all roadway users along this multi-modal and increasingly mixed use corridor and its adjacent neighborhoods.

This study will include corridor specific traffic operations and crash analyses, development of feasible alternatives based on a complete streets framework, and strong stakeholder and community based outreach, education and input.

Background: Community and Corridor Context

Delaware Avenue is one of Bethlehem's primary main streets, connecting the town to the City of Albany to the east and the more rural parts of Albany County to the west. Delaware Avenue is the main street of the neighborhood hamlet areas of Delmar and Elsmere. The section of Delaware Avenue, which is the subject of this study, extends approximately 1.3 miles from the intersection of Delaware Avenue and Elsmere Avenue to the Normanskill Bridge.

Land uses along Delaware Avenue are primarily lower intensity commercial businesses (restaurants, shops, offices, neighborhood services) serving the local Bethlehem community; many were formerly single or two family homes converted to commercial use. Lot sizes along the corridor are small and depth is approximately 100-200ft, which does not provide future opportunity for high trip generation type developments such as big-box stores or office parks. Several recent parcel redevelopments along the roadway consist of mixed commercial/multi-family residential buildings (ranging in size from 1,200 sq.ft. to 5,000 sq.ft.) A new two-story 48,000 sq.ft. medical building replaced two one-story 24,000 sq.ft. buildings (medical building and former pharmacy) on the same parcel.

Elsmere Elementary School is located within the study area, near the Elsmere Avenue/Delaware Avenue intersection. The largest concentration of retail is located within the Delaware Plaza shopping center, near the study area's eastern end. Side streets connecting to Delaware Avenue are lined primarily with single-family residential homes in what is considered the Elsmere neighborhood within the Town. These homes are located within the Core Residential zoning district of the Town, and are immediately adjacent to the corridor's commercial parcels (Commercial Hamlet zoning district).

Delaware Avenue from Elsmere Avenue to the Normanskill Bridge predominantly consists of a four-lane roadway (two lanes in each direction) with a 40 mph posted speed limit and with traffic volumes ranging between 15,000 to 17,000 vehicles per day. A review of AADT over the past 10-15 years indicates AADT has remained flat. At either end of the study area Delaware Avenue transitions to a two-lane roadway.

CDTA's Bus Route 18 runs along Delaware Avenue providing transit service connecting the City of Albany with Slingerlands. There are approximately ten CDTA transit stops within the study area.

The corridor is characterized by more than 70 commercial driveways, with some parcels having multiple curb cuts. In recent years some access points have been consolidated (shared driveways or curb cuts limited to side street access only) as properties have redeveloped.

There are two signalized intersections within the study area, located at Elsmere Avenue and Delaware Plaza. These signals are over ½ mile apart and provide the only protected pedestrian crossings. There are no midblock pedestrian crosswalks within the study area.

Bicyclists traveling along the corridor either ride in the outside travel lanes (14-ft. wide), which have a minimal striped shoulder (less than one foot), or on the sidewalks that run the length of the corridor within the study area. The Albany County Rail Trail runs somewhat parallel to and south of the Delaware Avenue corridor within the study area.

There is a documented crash history along the corridor including not only motor vehicle to vehicle crashes, but crashes involving bicycles and pedestrians as well. The current roadway characteristics create an uninviting pedestrian, bicycle, transit user and motor vehicle environment for commuters and shoppers traveling the roadway, as well as for corridor businesses and residents located directly on Delaware Avenue and living in adjacent local, neighborhood streets.

Through this study various alternatives that incorporate complete streets features will be analyzed and explored with town and neighborhood residents, businesses, travelers, public agencies and officials and other stakeholders.

The current four lane configuration of Delaware Avenue within the study area, existing traffic volumes and documented crash history make this corridor a candidate for exploration of a complete streets treatment termed a road diet. Road diets come in various forms, with the most common being a reduction in the number of travel lanes to one in each direction and a center turn lane with remaining space used for a bicycle lane or bus transit area. Because of their documented safety benefits, as well as the ability to convert a roadway during repaving projects through restriping of lanes, the FHWA and [NYS DOT](#) have identified road diets as both a [Proven Safety Countermeasure](#) and an [Everyday Counts initiative](#).

Through this study process an assessment of the feasibility, benefits, and impacts of various street design concepts along the Delaware Avenue corridor will be completed using a context sensitive, complete streets framework. This framework will consider bicycles, pedestrians, transit, safety, and motor vehicle operations. Alternatives developed should strive to maintain the existing curb lines and current signalized intersection configurations.

This study will assist in determining the most effective set of features to improve the corridor for travelers of all modes (pedestrian, bicycling, transit, motor vehicle) both along and across the corridor to corridor businesses and residences and connecting neighborhoods.

Because of the limited budget this study will focus on feasible alternatives for incorporation of complete streets features primarily within the existing curb to curb portion of Delaware Avenue. Associated needed improvement alternatives related to adjacent sidewalks and ADA compliant curb ramps will also be important to include. Concepts to improve access management opportunities along both sides of the corridor between parcels will also be identified. The study seeks to improve the movement of traffic while enhancing the safe and efficient access to and from abutting properties. The study will evaluate roadway design and access characteristics and propose changes that maintain reasonable access to property, while improving the safety and operation of the highway for all users.

The study seeks to improve bicycle and pedestrian accommodations within the study area. The project is located on the Town of Bethlehem Bicycle and Pedestrian Priority Network, which establishes a priority network of roadways that should be given additional consideration for accommodating safe and efficient bicycle and pedestrian travel. The goal of the priority network is to provide a continuous system of usable accommodations focusing on bicycle and pedestrian infrastructure investments to roadways located on the network. This section of Delaware Avenue is also listed on CDTC's Bicycle and Pedestrian Priority Network, and this task will address the network's goals for bicycle and pedestrian improvements.

Delaware Avenue is also listed on CDTA's Transit Priority Network which is a system of corridors that produce sufficient ridership to warrant increased service and enhanced infrastructure. Transit specific improvements will be identified through this study with the assistance of CDTA staff. Improvements may include transit signal priority (TSP). It is important that this study help identify bus stops within the study area where more conventional infrastructure, such as shelters, benches, pedestrian connections to buildings, and safer crossings are warranted.

Because this study will bring together town staff, volunteer town committees (bike/ped committee, Delaware Avenue Improvement group, Street Tree subcommittee), corridor businesses, neighborhood residents, the Study Advisory Committee and others to develop ideas on how to improve the Delaware Avenue Corridor from Elsmere Avenue to the Normanskill Bridge, innovative ideas related to the following will be sought:

- Improving the aesthetics, landscaping, lighting;
- Gateway enhancements at the Normanskill Bridge;
- Redevelopment options of vacant parcels along the Corridor (i.e. former Albany Medical site and former dry cleaners site);
- Storm water management/green infrastructure;
- Connections to other important off-corridor destinations, including the Helderberg Hudson/Albany County Rail Trail.
- An analysis of the park and ride market on the corridor, led by CDTA staff, and identification of enhancements to the park and ride lot necessary to accommodate future demand.

Idea development will be accomplished through both in kind work from Town staff, CDTC and CDTA staff, and Town committees and group discussions coordinated with specific tasks outlined in the scope of work for this study.

The study will focus on identifying appropriate complete streets treatments for two future scenarios including:

- Complete street alternatives achieved through a repaving project: new striping, signage and ADA compliant curb ramps and other treatments (e.g. protected midblock crossings) that could be coordinated with a repaving project.
- Complete streets alternatives focused on roadway changes that could be achieved through a "Beyond Pavement Preservation" type project in the future.

Scope of Work

Consultants will be required to complete the scope of work as outlined below. **If, based on consultants' knowledge or experience, the consultant believes the required scope of work should be changed in any way the suggested changes should be outlined in the letter of interest (as described in the Submission Instructions section of this REI).** Consultants will not be required to reproduce or recreate this scope of work in their letters of interest. Only modifications to what is requested will be required and considered in consultant evaluations.

Please note that traffic counts, land use/existing access arrangement data and traffic forecasts, as well as crash data, will be provided by CDTC and Town staff. The selected consultant will be expected to:

- carry out operational analyses using HCM methods and CDTC Congestion Management Process Excess Delay Thresholds (see attached). A micro-simulation model, such as Synchro or Vissim, is desirable but not required. If, however, a consultant determines development and use of a

micro-simulation model for the study area is possible within the study budget this should be specified in the submitted letter of interest.

- conduct safety analyses using NYSDOT methods, and Highway Safety Manual (HSM) crash prediction procedures (CDTC staff will assist with this effort)
- use the NYSDOT/CDTC collaboratively developed Road Diet evaluation process identified for a previous Linkage Study, Routes 9/20 in Schodack, as a guide for analyzing road diet alternatives (see attached).

The technical staff from the Town, NYSDOT, CDTC, CDTA, and the selected consultant will meet periodically throughout the study as needed to ensure consistency with data requirements, etc. This group will meet initially to discuss additional data collection needs and responsibilities as well as the framework and methods to be used for the technical assessments, including the operational and safety analyses.

Involvement of the public in this planning effort is critical to its success. The consultant will participate in two (2) public workshops to receive input as well as to inform citizens, staff, stakeholders, and other agencies about the study. It will be critical to provide ample and easily understood information regarding what complete streets are and are not, and the potential array of benefits as well as impacts.

The Consultant will conduct an initial Town Board presentation, two public workshops that will involve residents, targeted stakeholders and business/property owners within the study area, and a final presentation at a Town Board meeting.

Educational and outreach materials for use at the public workshops, stakeholder outreach and the SAC will be developed cooperatively with the consultant taking the lead and with assistance from CDTC and Town staff. Numerous national and state resources exist from which to pull from.

The consultant will be required to develop a project website where study materials will be posted.

Of note is that Federal policies require documentation of certain subjects within Linkage study plans including Environmental Justice, Title VI of Civil Rights Act of 1964, the Americans with Disabilities Act and environmental considerations (environmental mitigation requirements) during the planning process at a scan-level, not engineering-level of detail. These elements must be addressed in the study. CDTC staff will work with the Town and the selected consultant to ensure that these factors are integrated appropriately into the study and final report.

Task 1.0: Study Initiation and Initial Data Gathering/Synthesis

A) Review Previous and Ongoing Efforts

The consultant will review the prior Delaware Avenue Hamlet Enhancement Study final report and the current information on the Delaware Avenue Enhancement Streetscape Project to familiarize themselves with the Town's vision for the study area.

B) Study Area Site Visit

The consultant along with staff from the Town and CDTC will walk through the study area to become familiar with its existing physical attributes and potential constraints that must be considered in developing feasible alternatives.

C) Data

CDTC and Town staff will provide data and information on:

- Weekday AM and PM peak hour manual turn counts of motor vehicles (including trucks and busses), bicyclists and pedestrians at the two signalized intersections. A more limited set of traffic counts will be collected for minor intersections/driveways
- As part of the signalized intersection count task, lane configurations and field collected signal timing and phasing information, including pedestrian heads/timing and phases, will be collected
- Corridor Land Use and Access: property name, type, access arrangements, curb cut density, and estimates of trip generation. For trip generation, CDTC staff will use both ITE trip generation estimates and CDTC collected trip generation data.
- NYSDOT ALIS crash data will be used to summarize crash history for the most recently available five year period, HALs and PILs will be included.

The consultant will be expected to collect some data including:

- ATR traffic count: a count is needed between Elsmere Avenue and Delaware Plaza (NYSDOT Traffic Data Viewer count is taken just west of the Normanskill Bridge)
- Speed: two spot speed study locations. One in the school zone near the Elsmere Elementary School and one in another location between Elsmere Avenue and Normanskill Blvd; speed data east of Delaware Plaza is available through the NYSDOT Traffic Data Viewer
- Signal timing plans and data on roadway geometry, ROW limits, sidewalks, ADA curb ramps, drainage features, pavement condition, and other roadway profile information will be obtained from NYSDOT
- Data on Bus Route 18 frequency, headways, bus stop locations and features, ridership and bikes on busses from CDTA. CDTA can supply maps and GIS files as necessary.

D) Study Advisory Committee (SAC) Meeting #1

SAC Meeting #1 will serve as the study kick-off meeting and will be led by the consultant team. The consultant should be prepared to

- explain context sensitive complete streets
- review and confirm the scope of work and study area boundaries with the group
- present a preliminary draft of study principles and objectives for review
- facilitate a discussion of expected outcomes and measures of effectiveness
- review the overall study process including the roles and responsibilities of the study partners

A draft public education and outreach approach and stakeholder involvement process will be reviewed, including educational materials to be used and potential timing of the first of the two planned public workshops. Use of the Town's newsletter, social media, or other formal outreach techniques will be discussed. The Town's web site will be utilized for input on the project and its draft products. See the Study Advisory Committee section of this REI (Page 13) for additional detail on the study advisory committee roles and responsibilities.

E) Initial Presentation to Town Board

The selected consultant will give a brief presentation at a Town Board meeting to introduce the study and summarize information presented at the first SAC meeting.

Deliverables:

- *Technical staffs/consultant data discussion notes*
- *draft study principles and objectives*

- *draft MOEs*
- *draft public education and outreach approach/stakeholder involvement process*
- SAC Meeting 1 summary

Task 2.0: Existing Conditions Multi-modal Operational and Safety Analyses/Corridor Profile/Establishment of Project Objectives and Expected Outcomes

A) Operational and Safety Analyses/Existing Conditions Corridor Profile

The consultant will be required to create an existing conditions corridor profile based on synthesis of data above and results of baseline operational and safety analyses for all modes. The purpose of this task is to produce the information needed for all directly involved with the study, as well as the public and other stakeholders, to understand how the current corridor functions for all roadway users. Results and deliverables from this task will serve as the basis upon which complete streets concepts can then be evaluated in subsequent tasks. Deliverables must be of a quality to clearly convey information to a variety of audiences.

This baseline corridor profile will document in narrative, tabular and graphic formats current roadway mainline and intersection geometry (including: number of travel lanes, turn lanes, lane widths, shoulders, current pavement striping plan, and pedestrian features including sidewalks, sidewalk buffer areas and crosswalks, etc.) as well as current multi-modal level of service, access management, safety and other operational aspects of Delaware Avenue, such as operating speeds and overall corridor travel time. Land uses, community context and the corridor environment (e.g. description of Delaware Avenue appearance as one enters the Town) will also be documented. Pedestrian delay at signalized and non-signalized intersections and alternative pedestrian travel paths to protected crossings should be evaluated in terms of distance and travel time.

Using accepted procedures from the Highway Capacity Manual, existing operating conditions at the two signalized intersections and a select set of unsignalized intersections (LOS) and along the mainline will be analyzed.

Through this task a target or desired design and operating speed will be established for the corridor. Design and operating speed are considered to be critical factors in influencing complete street design parameters such as lane width, traffic control, crossing design, bike and pedestrian treatments, etc. The success of any complete street concept is largely dependent on achieving slower speeds through the corridor. According to the *TRB Special Report 254, Managing Speed*, target speed for an urban main street should be established based on context and other factors, not solely on the basis of the 85th percentile speed.

The safety analysis will be conducted consistent with federal Highway Safety Manual (HSM) procedures to allow use of the HSM crash prediction methodology to evaluate alternatives to be developed in a subsequent task. Crashes by type and pattern will be tallied with CDTC's assistance. Crash types that have been proven to be mitigated by various measures will be noted.

B) Study Advisory Committee (SAC) Meeting #2

This SAC meeting will take place after the completion of the operational and safety analysis in Task 2 A) for review/discussion of the products developed. Based on the initial discussion at the first SAC meeting, the project objectives, expected outcomes and measures of effectiveness for the roadway, centered on

identified community goals and actions and existing conditions assessment of roadway operations and safety for all modes will be confirmed.

The first public meeting will be scheduled at this meeting. Educational and outreach materials for use at the first public meeting and stakeholder outreach will be developed cooperatively with the consultant taking the lead and with assistance from CDTC and Town staff. These draft education and outreach materials will be reviewed by the SAC at meeting 2. At a minimum information on complete streets, the study background, and the corridor profile/existing conditions will be provided. NYSDOT and national guidance on complete streets from sources such as [FHWA](#), the [National Complete Streets Coalition](#), [AASHTO](#) and [NACTO](#) should be used and cited as appropriate.

Deliverables:

- *Existing Conditions Multi-modal Operational and Safety Analyses results*
- *Corridor Profile report including narrative, maps and other graphics, integrating these analyses and other information as required in the task description*
- *Draft Education and Outreach materials on complete streets elements*
- *SAC Meeting 2 summary - After SAC review, deliverables will be posted to the project website*

Task 3.0: Public Workshop #1

The first public meeting will be an opportunity for citizens to learn about complete streets and to share their residential, business, walking, bicycling, transit riding and driving experiences, opinions and advice and also have a chance to learn about the study process, including the results of the Operational and Safety Analyses/Corridor Profile tasks.

It is anticipated that this meeting will be an interactive workshop in which participants can mark-up maps and provide input on draft elements to be considered in the subsequent alternatives' concepts to be developed and evaluated in later tasks.

Advertising for the public workshop and securing appropriate meeting space will be the responsibility of the Town. The consultant will be responsible for presenting the educational materials, leading facilitation of the discussion and engaging the public at the workshop and will prepare necessary meeting materials such as poster size visuals of the study area, maps and associated pertinent data/material. CDTC staff can assist with workshop facilitation.

Deliverables:

- *The consultant will develop a one-page flier to advertise the meeting with a link to the project website*
- *Workshop materials, handouts and presentations*
- *Workshop notes/summary of public comments*
After SAC review at Meeting #3 deliverables will be posted to the project website

Task 4.0: Development of Draft Conceptual Complete Streets Design Alternatives/SAC Meeting #3

A) SAC Meeting #3 to Review Public Workshop Results/Draft Complete Streets Alternatives

The SAC will review and approve for web posting the public workshop #1 notes and summary of comments at this meeting.

This meeting will also include a consultant facilitated “brain-storming” session to help develop desirable and practical draft complete streets concept(s) based on previous study tasks, including discussions with the technical staffs, SAC and information learned at the public workshop.

B) Identification of Complete Streets Treatment Alternatives

The selected consultant will develop options for context sensitive complete streets based redesign of Delaware Avenue. Potential roadway and corridor concepts will include alternative cross sections and lane configurations/reconfigurations, access management treatments, traffic control devices (striping, signage, protected pedestrian crossings, etc.), and other complete streets elements identified through the study process. Alternatives are to be tested for feasibility based on agreed upon expected outcomes/measures of effectiveness to balance the needs of all roadway users and the surrounding community and its existing and planned future context.

Feasible alternatives for several future scenarios should be developed including but not necessarily limited to:

- Complete street alternatives achieved through a repaving project: new striping, signage and ADA compliant curb ramps and other treatments (e.g. protected midblock crossings, etc.) that could be coordinated with a repaving project.
- An alternative(s) focused on roadway changes that could be achieved through a “Beyond Pavement Preservation” type project in the future

Based on input from and information provided by town staff and volunteer town committees, concepts for “outside the curb” treatments related to streetscaping and green infrastructure should be integrated into alternatives where appropriate.

NYS DOT and national guidance on road diets and complete streets from sources such as [FHWA](#), the [National Complete Streets Coalition](#), [AASHTO](#) and [NACTO](#) should be used to assist in alternatives development.

C) Gateway Improvements and Connections to the Albany County Rail Trail

The selected consultant will develop graphics and other concept materials for gateway improvements in the vicinity of the Normanskill Bridge, which could be integrated into the alternatives where appropriate. Through discussions with the SAC, volunteer town committees and other stakeholders, as mentioned above, ideas for gateway improvements will be identified; the consultant will be responsible for developing graphics illustrating several concepts. Also, feasible connections from the corridor to the Albany County Rail Trail, such as at Delaware Plaza, Rockefeller Road, and along Ellsworth Avenue, will be evaluated and concept designs prepared. The Town has geographic information systems (GIS) data on topography and other information to assist in identifying feasible connection locations.

Deliverables:

- *SAC Meeting 3 summary*
- *Materials needed to explain in various formats (narrative, maps and other graphics) each draft context sensitive complete street alternative overall and proposed elements they contain*
- *Materials needed to explain in various formats (narrative, maps and other graphics) gateway enhancements and connections to the Albany County Rail Trail*

Task 5.0: Evaluation of Identified Complete Streets Treatment Alternatives/SAC Meeting #4

A) Evaluation Process

The consultant will conduct an evaluation of the alternatives. The evaluation will be based on the same operational and safety analyses methods used to create the existing conditions corridor profile and the agreed upon study objectives, planned outcomes/measures of effectiveness developed at the beginning of the study.

Evaluation methodology should be documented and results for each alternative presented in narrative, tabular and graphic formats to provide easily identifiable proposed locations for various complete streets elements and to allow easily understood comparisons to existing conditions and other alternatives. . The potential safety, multimodal level of service/operations, access management, traffic calming and other impacts, including relative cost ranges (i.e. lower cost, moderate or higher cost), of each alternative are to be described.

A corridor micro-simulation tool could be helpful in evaluating options.

B) SAC Meeting #4 to Review Evaluation Results of Complete Streets Alternatives

The SAC will meet to review and discuss products resulting from completion of the evaluation and technical assessments in Task 5 A).

The second public meeting will be scheduled at this meeting. Based on the SAC meeting, materials produced as part of this task will be revised in preparation for the public meeting. Educational and outreach materials needed to clearly convey the impacts of the proposed alternatives against the safety and operational assessments for all modes and other measures of effectiveness, especially any potential trade-offs that will be required, will be discussed. Materials, which could include a multi-page booklet, will be used at the second public meeting and for stakeholder outreach; these will be developed cooperatively with the consultant taking the lead and with assistance from CDTC and Town staff.

Deliverables:

- *Draft Alternatives and Multi-modal Operational and Safety Analyses results*
- *Draft Alternatives report including narrative, maps and other graphics*
- *Education and Outreach materials to clearly convey results of the Draft Alternatives evaluations*
- *SAC Meeting 4 summary*

After SAC review, deliverables will be posted to the project website prior to Public Meeting #2.

Task 6.0: Public Meeting #2

The consultant will conduct a second public meeting using a workshop format to review the material in the draft complete streets alternatives and evaluation results with the community. The consultant will facilitate the workshop in a way to maximize public interaction and comment for use in finalizing the alternative concepts. CDTC staff can assist with facilitation.

The consultant will develop a one-page flier to advertise the meeting with a link to the project website. Advertising for the public workshop and securing appropriate meeting space will be the responsibility of the Town. The consultant will be responsible for facilitating the discussion and engaging the public at the workshop and will prepare poster size visuals of the corridor study area, graphics illustrating the

alternatives and their various complete streets elements, maps and associated pertinent data/material related to the evaluation and multi-modal performance results, highlighting any needed trade-offs.

SAC meeting #5 will be scheduled after the second Public Meeting for review/discussion of the results.

Deliverables:

- *Workshop materials, handouts and presentations*
- *One-page flier to advertise the meeting*
- *Public Workshop notes/summary of public comments*
- *All materials will be placed on the project website for public review after SAC Meeting #5.*
- *SAC meeting 5 summary.*

Task 7.0: Development of Final Report on Feasible Complete Streets Alternatives and Features including an Implementation Strategy

The Final Report will incorporate revisions to the materials presented at the public meeting based on public input, stakeholder input, and SAC and Inter-Agency committee review and discussion. The Final Report will present concepts in narrative form, photos, maps, renderings, and detail graphics to clearly and logically present the alternatives and a plan for implementation. The implementation component of the report will develop general order of magnitude costs, and outline an implementation plan that includes ways to finance the recommended action. Recommendations for lower cost improvements that can be implemented during maintenance projects or other town or state activities will also be described. A phased approach to modifications to Delaware Avenue may be necessary, and should be discussed. A speed management protocol acceptable to NYSDOT and the Town will be outlined.

Recommendations for potential adjustments to the Town Zoning Law to address any identified conflicts or disconnects between existing zoning requirements (including site plan design guidelines) and the proposed complete streets alternatives and features are to be described.

The consultant will complete any necessary revisions to drafts and a final report in a timely manner and in the format requested by the Study Advisory Committee.

Deliverables:

- *Two (2) digital copies and four (4) color hardcopies of the final documents with all the necessary figures, photos and sketches. Digital copies of any and all PowerPoint presentations, and any and all hand drawn original renderings and maps are also required. Any GIS mapping that is developed by the consultant will be given to the Town of Bethlehem and CDTC in ArcView 10.x format for future use. Materials will be placed on the project website.*

Task 8: Final Presentation to the Bethlehem Town Board

The consultant will present the final document to the Bethlehem Town Board. This formal presentation will inform the public as to how a final report was formulated based on the findings throughout the study. This report and presentation are to include any recommendations that the consultant has formed as a result of the study.

Administrative Aspects

The Town of Bethlehem and CDTC will be jointly responsible for study oversight. A Study Advisory Committee (SAC) with representatives from Bethlehem, CDTC, CDTA, Albany County, CDRPC, NYSDOT, and other stakeholders selected by Bethlehem, will guide the study and meet with the consultant on a regular basis—five SAC meetings are planned as noted in individual tasks above.

Materials to be reviewed and discussed at SAC meetings will be available at least one (1) week prior to the scheduled meeting to allow adequate review time by members. Materials will be distributed to SAC members via email.

Regular correspondence between the consultant and the SAC via email and/or phone will be included. The public workshops are in addition to the SAC meetings and the consultant is expected to attend all meetings. Interim documents will be provided to Bethlehem and CDTC in MS Word or Adobe Acrobat (.pdf) format to enable Bethlehem and CDTC to place them on their web sites.

The final report will be provided in electronic and hardcopy formats. CDTC will receive two (2) color copies of the final report and Bethlehem will receive four (4) color copies of the final report. CDTC and Bethlehem will each receive two (2) copies of the final report on CD in MS Word (.doc/docx) and Adobe Acrobat (.pdf) format. The final report will also be posted on the project website, the Town of Bethlehem and CDTC's web site. **CDTC and the Town of Bethlehem will assume ownership of all materials, studies, and graphics etc., which are part of the document and/or planning process.** The consultant contract will be administered by CDTC on behalf of Bethlehem. Anne Benware from the CDTC staff will serve as the contact for expressions of interest and administrative questions. Her telephone number is 518-458-2161. Bethlehem and CDTC will be jointly responsible for study oversight.

Submission Instructions:

Offerors may be firms or qualified individuals. Responses to this REI must include all of the following elements (the letter of interest is supplemented by the additional material). Please note that materials submitted to CDTC are subject to the Freedom of Information Law (FOIL). If respondent provides material(s) of a confidential nature for disclosure to third parties, the respondent should clearly indicate the specific material(s) it considers confidential. Subject to the provisions of FOIL and any other applicable laws, CDTC may agree to maintain confidentiality of such material(s) if requested. CDTC assumes no responsibility for any loss or damage resulting out of any determination requiring disclosure of information pursuant to FOIL.

1. **A letter of interest** (no more than two pages) that demonstrates the offeror has a clear understanding of the issues associated with this study and communicates the offeror's ability to complete the scope of work as required. The offeror may propose adjustments to the required scope of work in this letter if the offeror believes that those adjustments would add value to the study or would be more appropriate for the allotted budget. Inclusion of a project schedule is essential and should be included as a one-page addendum to this letter of interest. There is no need to repeat the required scope of work in the letter of interest. Attached is a proposed contract form for this agreement, containing standard CDTA language for a federally assisted contract. Any exceptions to this agreement must be clearly identified in the offeror's letter of interest.

2. **Examples of relevant previous work** that demonstrate the offeror has the technical capabilities, experience, and inter-personal skills to perform the required tasks. Demonstrated experience of the

personnel assigned to the study with multimodal operations and safety analysis, innovative and creative roadway, bicycle and pedestrian network and facility planning and design should also be included.

3. A **management plan identifying the contractor's personnel** who will be working on the study **including resumes**. The project manager should be clearly identified and reflect a professional experienced in conducting challenging community conversations. If a team of firms is responding to this REI, please include the resumes of the personnel working on the study for the lead firm as well as all sub-consultant firms. Please ensure that the titles of the identified personnel match those on the resumes and in the price proposal described below in number 4. Failure to properly identify personnel significantly reduces the credibility of the proposal. A project schedule should also be provided that demonstrates how the team will complete the work on time.

4. A **price proposal including all costs anticipated**. Hours and hourly wages by task and by personnel should be included. This should be completed for both the lead consultant and any sub-consultants, if they are utilized for the study. In addition, a timeline for the study by task should be included.

CDTC and Bethlehem would like to have this study conducted in an expeditious manner. The time frame for the study is expected to run for **no greater than 12** calendar months from the date of contract execution. **CDTC has budgeted \$60,000 for consultant services. This figure should be considered the upset amount of the contract.**

Submission Deadline:

Letters of interest will be due at **5:00 PM on Friday, May 20, 2016** at the Capital District Transportation Committee offices (Attn: Anne Benware), One Park Place, Main Floor, Albany, NY 12205. **Six (6) hard copies of the submission and one (1) electronic copy on a CD are required.**

Steering Committee and Study Advisory Committee (SAC)

CDTC and the Town of Bethlehem will jointly manage the project. Final decision making authority rests with the Town in consultation with NYSDOT. A study advisory committee will be created with numerous representatives from the Town of Bethlehem and representatives from CDTC, CDRPC, NYSDOT, CDTA and Albany County (all as needed) to guide the study and meet with the consultant on, at minimum, five occasions as described in the scope of work.

All deliverables to be reviewed at study advisory committee meetings and public meetings must be received by committee members at least two weeks prior to the meeting. The consultant will be responsible for distributing deliverables to the study advisory committee via email or printed copy.

Deliverables –

The consultant will be responsible for providing the following deliverables:

Task 1.0

- *Technical staffs/consultant data discussion notes*
- *SAC Meeting 1 summary*
- *draft study principles and objectives*
- *draft MOEs*

Task 2.0

- *Existing Conditions Multi-modal Operational and Safety Analyses results*
- *Corridor Profile report including narrative, maps and other graphics, integrating these analyses and other information as required in the task description*
- *Draft Education and Outreach materials on complete streets elements*

- SAC Meeting 2 summary

Task 3.0

- *The consultant will develop a one-page flier to advertise the meeting with a link to the project website*
- *Workshop materials, handouts and presentations*
- *Workshop notes/summary of public comments*

Task 4.0

- *SAC Meeting 3 summary*
- *Materials needed to explain in various formats (narrative, maps and other graphics) each draft alternative overall and proposed elements they contain*

Task 5.0

- *Draft Alternatives and Multi-modal Operational and Safety Analyses results*
- *Draft Alternatives report including narrative, maps and other graphics*
- *Education and Outreach materials to clearly convey results of the Draft Alternatives evaluations*
- *SAC Meeting 4 summary*

Task 6.0

- *Workshop materials, handouts and presentations*
- *One-page flier to advertise the meeting*
- *Public Workshop notes/summary of public comments*
- *All materials will be placed on the project website for public review after SAC Meeting #5.*
- *SAC meeting 5 summary.*

Task 7.0

- *Two (2) digital copies and four (4) color hardcopies of the final documents with all the necessary figures, photos and sketches. Digital copies of any and all PowerPoint presentations, and any and all hand drawn original renderings and maps are also required.*

Submission Evaluation:

CDTC reserves the right to reject any or all submissions associated with this work. Based on the mix of qualified offerors responding to this REI, CDTC may request qualified offerors to consider contracting for only certain elements of the study or to consider partnering with other qualified offerors. CDTC may also require offerors to clarify aspects of their understanding of and approach to the study in person, in writing, or by telephone.

A qualified offeror will be selected based on the following criteria:

- 1. Relevant experience and the success of similar studies (in terms of scope and product) completed by the personnel assigned to the study. Extensive experience with multi-modal operations and safety analysis, pedestrian, bicycle and complete streets planning and design is required. Understanding of transit needs is also required.*
- 2. Qualified personnel assigned to the study. The experience of the project manager will be heavily weighted in evaluation.*
- 3. Responsiveness to the REI and understanding of the scope of products.*
- 4. Ability to meet the desired schedule and willingness to be flexible if faced with unexpected delays.*
- 5. Past performance of the offeror on Linkage Program studies or other relevant planning work.*
- 6. Amount of work indicated to be accomplished within the budgeted amount for the study (if the offeror proposes adjustments to the scope of work outlined in this REI).*
- 7. Demonstrated understanding of the context of the study area (knowledge of the Capital Region may be a plus).*

8. CDTC considers Disadvantaged Business Enterprise (DBE). DBE offerors are strongly encouraged.

Federal Requirements and Compensation:

This study will be financed through the United States Department of Transportation. Federal contracting requirements will govern the solicitation. The contract will be executed by the Capital District Transportation Authority on behalf of CDTC.

CDTC will pay the Contractor on a reimbursement basis using invoices. Invoices shall document the number of hours worked, salary rate, and expenses by individual summarized by project task (tasks one to eight in this REI). Any other direct expenses should also be identified. With each invoice, the Contractor must submit a brief progress report describing the progress on each task. The progress report will serve as the basis for payment.

TAC MEETING #2

DATE: September 15, 2016
PROJECT: Delaware Ave Complete Streets Feasibility Study
PLACE: CDRPC
TIME: 11:30 a.m.
SUBJECT: Early coordination

1. Review Task 1 –
 - a. Review Previous–Anything in particular that the Town or Technical Committee wants to point out?
 - b. Field walk - When – After SAC meeting?
 - c. Quick status of data collection
 - Are there additional locations where data is needed?
 - Spot speed locations
 - d. SAC
 - i. Establish Advisory Committee
 - ii. Draft Material for Advisory Committee –
 1. Materials to include: draft ppt, preliminary draft of study principles and objectives, draft public education and outreach approach/stakeholder involvement, draft MOEs.
 2. Discuss MOEs to help with the specific tasks/operational analyses for Task 2.
2. Begin Task 2?
3. Schedule
 - SAC / TB / Field Walk / Public Meeting



Delaware Avenue Complete Streets FEASIBILITY STUDY

What are Complete Streets?



National Complete Streets Coalition

What are Complete Streets?



National Complete Streets Coalition

What are Complete Streets ?



Complete Streets Overview

- National and local efforts support Complete Streets

- NYS Law “...shall consider the safe travel on the road network by all users of all ages, including motorists, pedestrians, bicyclists, and public transportation users...”

- Bethlehem Resolution “...shall consider the safe and efficient accommodation of bicyclists and pedestrians in all new street construction and reconstruction...”

Complete Streets Fundamentals

“There is no one design prescription for complete streets. Ingredients that may be found on a complete street include: sidewalks, bike lanes (or wide paved shoulders), special bus lanes, comfortable and accessible public transportation stops, frequent crossing opportunities, median islands, accessible pedestrian signals, curb extensions, and more. A complete street in a rural area will look quite different from a complete street in a highly urban area. But both are designed to balance safety and convenience for everyone using the road.”

- National Complete Streets Coalition



National Complete Streets Coalition

What are they?

- Not just bike lanes and sidewalks
- Network based
- Context Sensitive



What are they?



What are they?



What are they?





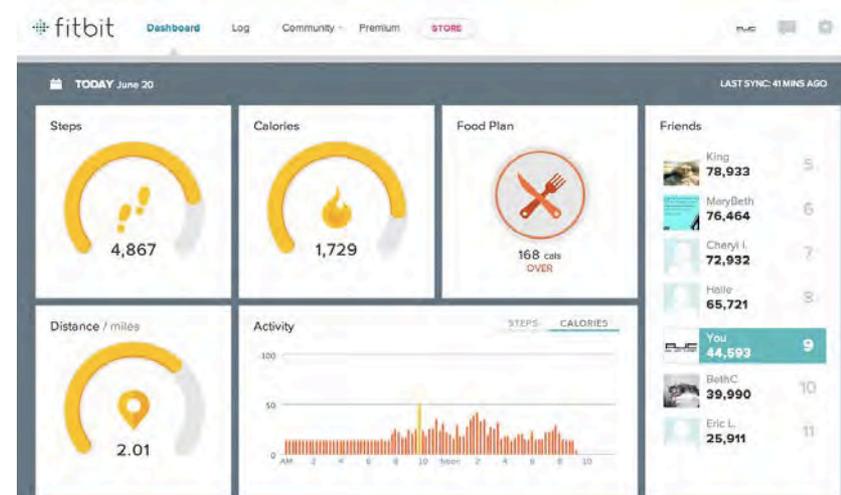
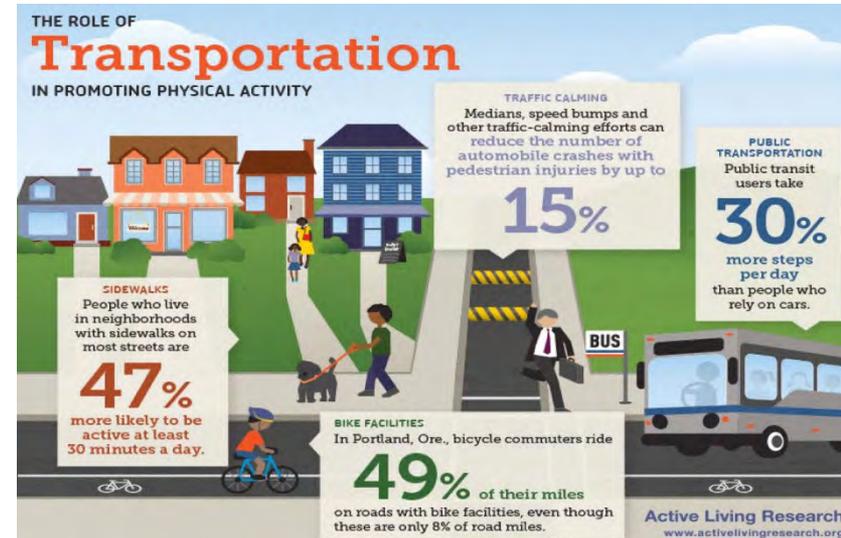
MADISON

PERFORMING ARTS CENTER

8/27 MAD LAUGHS			
9/10 WHISKEY TREATY			
LAST UNICORN	1	5	7
SCARLET STREET	2		8
MULHOLLAND DRIVE		5	8
SHAKESPEARE LIVE	2	7	

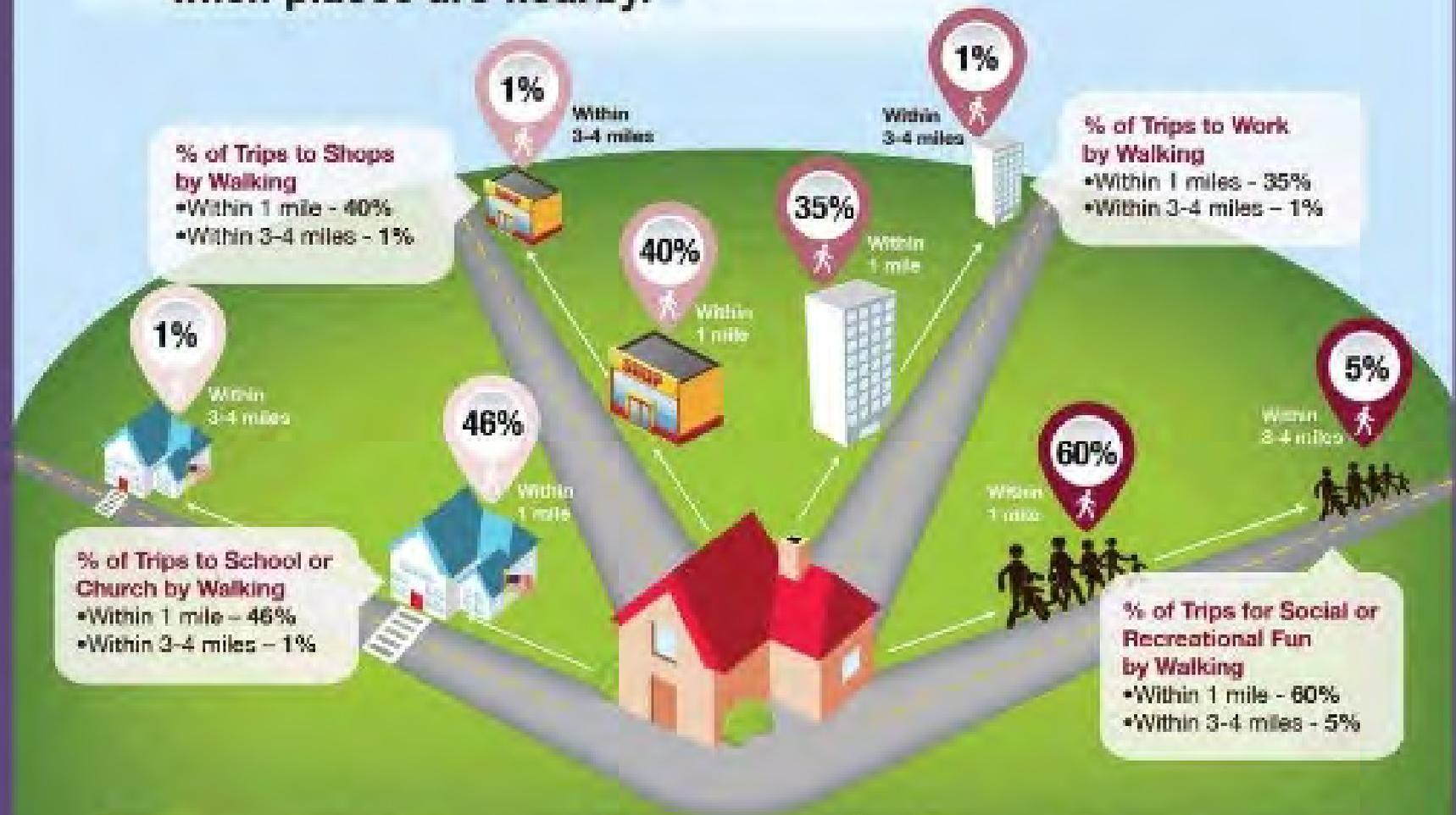
Why Complete Streets - Health

- Promotes Physical Activity and Healthy Lifestyle.
- 31% of Americans are obese. 65 % are overweight or obese.
- Obesity results in \$117 billion of direct health related costs each year.
- People who live in neighborhoods with sidewalks on most street are 47% more likely to be active at least 30 minutes per day.



People walk

to get to places they want to go
when places are nearby.



Why Complete Streets - Economy

- Promotes Community Interaction
- Less \$ on transportation = more spending money
- Increased private investment in community
- Increased home values: 15 real estate markets; one-point increase in the walkability scores; \$700 to \$3,000 increase



Why Complete Streets - Mobility

- Equity
- By 2045 the number of Americans over age 65 will increase by 77 percent
- About one-third of people over 65 have a disability
- Millennials are driving less and looking for other transportation options



Older Americans — Redefining Longevity

By 2045, the number of Americans over age 65 will increase by



77%

About **one-third** of people over 65 have a disability that limits mobility. Their access to critical services will be more important than ever.

Millennials — Shaped by Technology

There are **73 million Millennials** aged 18 to 34. They are the first to have access to the internet during their formative years and will be an important engine of our future economy.

Millennials are driving less. By the end of the 2000s, they drove over **20% fewer** miles than at the start of the decade.



Income Inequality

10% of the population takes home **one-third** of our national income.

Transportation is the **second-largest** expense for U.S. households.



Why Complete Streets - Safety

- Safer streets = less costly streets
- Recent Madison Avenue Road Diet in the City of Albany showed a 4:1 cost benefit ratio
- Road diets are one of FHWA's proven safety counter measures
- Reduce crashes by 19 to 47percent
- Speeds likely to be reduced by 3 to 5 mph



Road Diet Guidance vs Area Roads

Up to 25,000 Vehicles Per Day – Seattle DOT

24,200

Route 7

Brunswick

21,200

Altamont Ave

Rotterdam

21,100

Route 32 (Broadway)

Menands

≤ 20,000 Vehicles Per Day “ May be a good candidate” - FHWA

19,800

Route 9W

Glenmont

18,900

Route 5

Schenectady

15,500

Madison Avenue

Albany

15,500

Delaware Ave (City Line)

Bethlehem

Complete Streets Resources

- Capital District Transportation Committee
- Smart Growth America
- National Complete Streets Coalition
- FHWA Road Diet Guide
- NYSDOT Complete Streets Report and Checklist
- NACTO Urban Street, Bicycle and Transit Guides
- ITE Walkable Communities
- AASHTO Bicycle Guides

Thank you



TAC MEETING #3

Delaware Ave Complete Street Feasibility Linkage Study

Technical Advisory Committee Meeting #3 – 12/5/16

1 – 3 pm at CDTC

Agenda

1. Existing and Future null conditions
 - a. Micro-simulation model development – CME SYNCHRO
 - b. Forecast of future traffic conditions – CDTC STEP Model
 - c. Technical Analyses (refer to the attached draft document as a guide)
 - Overview
 - Safety
 - Operations
 - Geometry
2. Preliminary discussion of Gateway concepts
3. Information dissemination format & protocols
4. Web site
5. SAC Meeting
6. Public Meeting
7. Other

TAC MEETING #4

Delaware Ave Complete Street Feasibility Linkage Study

Technical Advisory Committee Meeting #4 – 1/25/17

12 – 1 pm at CDTC

Agenda

1. Performance Measures
2. Public Meeting
 - Pre-meeting logistics
 - Announcements / flier
 - Web site
 - Existing Conditions Report
 - Key Findings
 - Other
3. Public Meeting
 - Overview / Flow
 - PowerPoint
 - Other Material
 - Activities
4. Other / Recap schedule

TAC MEETING #5

Delaware Ave Complete Street Feasibility Linkage Study

Technical Advisory Committee Meeting #5 – 4/17/17

11:00 a.m. – 12:30 p.m. at CDTC

Agenda

Meeting Purpose: Task 4 – Development of Draft Complete Streets Design Alternatives

1. Enhanced Crossings
 - Discussion and potential locations
2. Initial Alternatives
 1. Null
 2. Enhancements
 3. Full Road Diet
 4. Partial Road Diet

Not included

 - Widening to five lanes
3. Initial Results
 - Review PowerPoint
 - Alternatives Matrix (Performance Measures)
4. Enhancements and Other Alternatives
 - Discuss Public Comments and Review Public Comments Map
5. Next Steps
 - SAC Meeting
 -
6. Other / Recap schedule

This meeting summary represents the writer's understanding of the major issues discussed. If you wish to suggest edits or additions, please contact the undersigned.

DATE: April 17, 2017

PROJECT: Delaware Avenue Complete Streets Feasibility Study

PLACE: CDTC

TIME: 11:00 am

PURPOSE: **The purpose of this meeting was to discuss progress on Task 4 (Alternatives) and plan for the next Study Advisory Committee (SAC) meeting.**

ATTENDEES:

<u>Name</u>	<u>Title/Representing</u>
Rob Leslie	Town of Bethlehem
Ken Kovalchik	Town of Bethlehem
Anne Benware	CDTC
Chris O'Neil	CDTC
Dave Jukins	CDTC
Rob Cherry	NYSDOT
Audrey Burneson	NYSDOT
Brian Kirch	NYSDOT
Sam Wells	CDTA
Mark Sargent	Project Manager/CM
Kristie Di Cocco	Project Engineer/CM

SUMMARY:

1. Initial Results – CM covered the initial results of the road diet analysis. The following are changes or points of discussion that were mentioned at the meeting.
 - a. CDTC asked CM to refresh the SAC on how the data was gathered and how the traffic model works with specific discussion around trip diversions.
 - b. CM to show/discuss how the data being shown for side street delay compares to what was measured in the field.
 - c. CDTC suggested exploring shorter cycle lengths (90-100 sec.) to see if the system would work better.
 - d. CM to remove all other measures (emissions, Performance index, Vehicle Hours of Delay, etc.) that Delaware Ave. is measured on besides the westbound travel time. The eastbound travel times and a cost benefit assessment be added to as a way to further evaluate the road diet alternative.
 - e. CDTC suggested that the trade-offs for the various alternatives should be presented in a more well-rounded way than using the current Alternatives Matrix.
2. Enhanced Crossings – CM presented several locations where enhanced pedestrian crossings could be considered in combination with existing or relocated bus stops. It was noted that without the road diet alternative being implemented, the majority of the crosswalk locations are not considered feasible. Treatments such as median refuge islands with marked crosswalks are

more easily incorporated into the road diet alternative. Other treatments such as the pedestrian hybrid beacon (formerly known as the HAWK) have pedestrian crossing volume warrants which are not likely met. Rectangular Rapid Flashing Beacons (RRFB) may be used to supplement marked crosswalks where justified. CDTA noted that it is possible that 1 to 2 bus stops may be consolidated pending further review.

3. Initial Alternatives – CM presented the null, enhancements, a full road diet (Elsmere to the Normanskill), and a partial road diet (Delaware Plaza to the Normanskill).
 - a. The TAC requested the evaluation of a 1-1-2 road diet alternative (This will be evaluated with two lanes in the eastbound direction to logically tie into the existing conditions at Elsmere Ave.)
 - b. An alternative that widens the road to 5-lanes should not be looked at, as this is outside the intent and scope of the study.
 - c. Average queuing for the various alternatives should be presented as a way of comparison.
4. Trail Connections – All comments from the public that were location specific were discussed. A variety of trail connections were suggested. CM to prepare a figure showing the various trail connections to be considered. Conceptual pocket park to be moved to the Elsmere area.
5. Other / Close
 - a. A Study Advisory Committee (TAC) meeting will be held in May to present the results of the public information meeting, the data from the traffic model, and the alternatives.

Summary of Actions:

Creighton Manning

- 1. Revise initial results document with the various changes listed above**
- 2. Model the 1-1-2 road diet alternative**
- 3. Prepare the trail access map**
- 4. Prepare the road diet plan view concept**
- 5. Schedule SAC meeting for May**
- 6. Identify areas for access management**

The meeting concluded at 1:00 p.m.

Kristie Di Cocco, PE
Project Engineer / Planner

cc: Attendees
File

File



Delaware Avenue Complete Streets FEASIBILITY STUDY

Traffic Forecasts – Vehicles per hour

Existing	2030 No Road Diet	2030 with Road Diet
1,688	1,791	1,731

Two way traffic volume - PM peak hour west of Delaware Plaza⁰²

Average Delay From Side Streets and Driveways

Existing

**2030
No
Road Diet**

**2030
with
Road Diet**

24.0

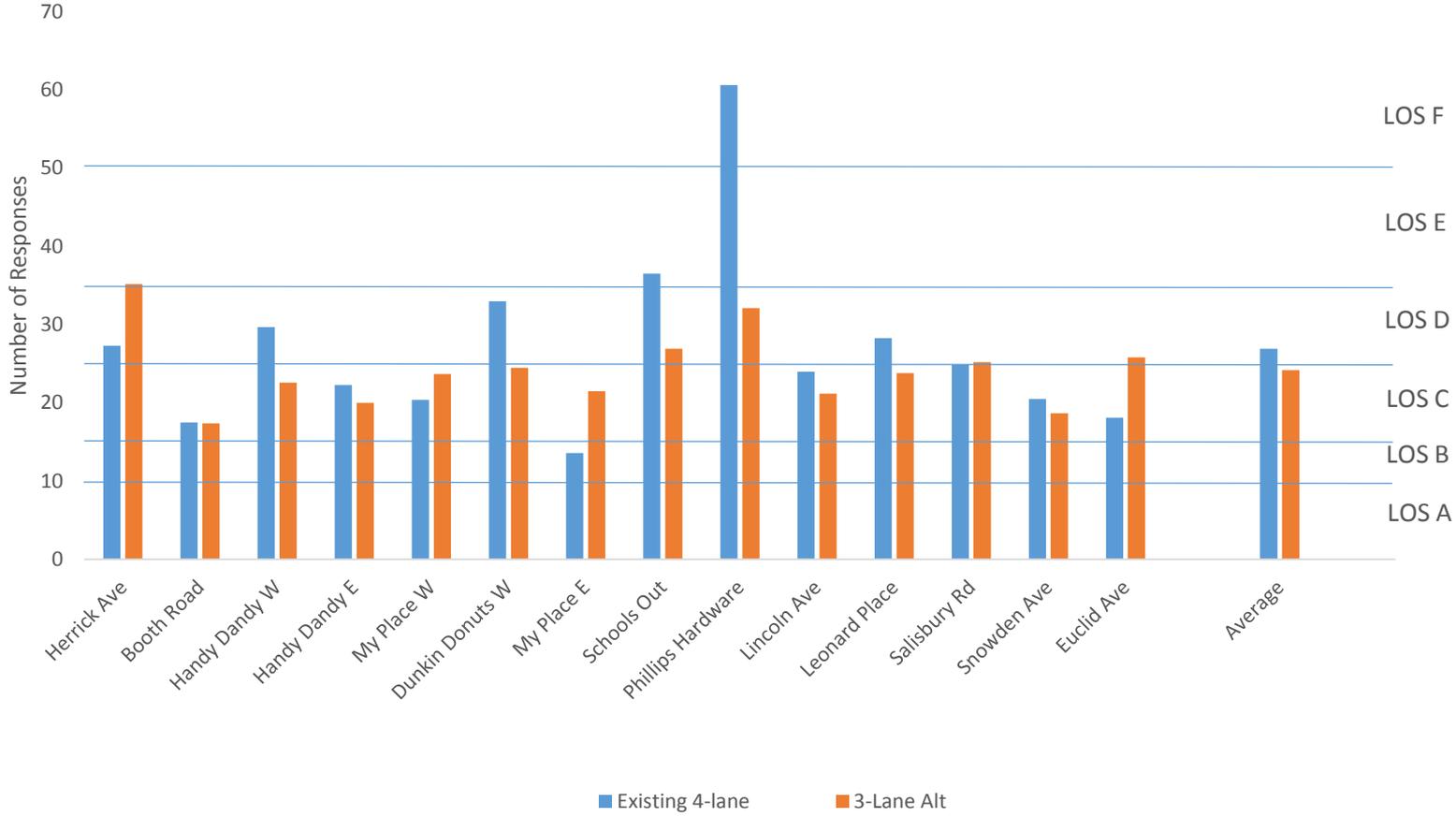
26.9

24.2

Seconds of delay

Delay From Side Streets and Driveways

Delaware Avenue Complete Streets Feasibility Study
 Delay from Side Streets and Driveways



Average Delay to Side Streets and Driveways

Existing

**2030
No
Road Diet**

**2030
with
Road Diet**

10.5

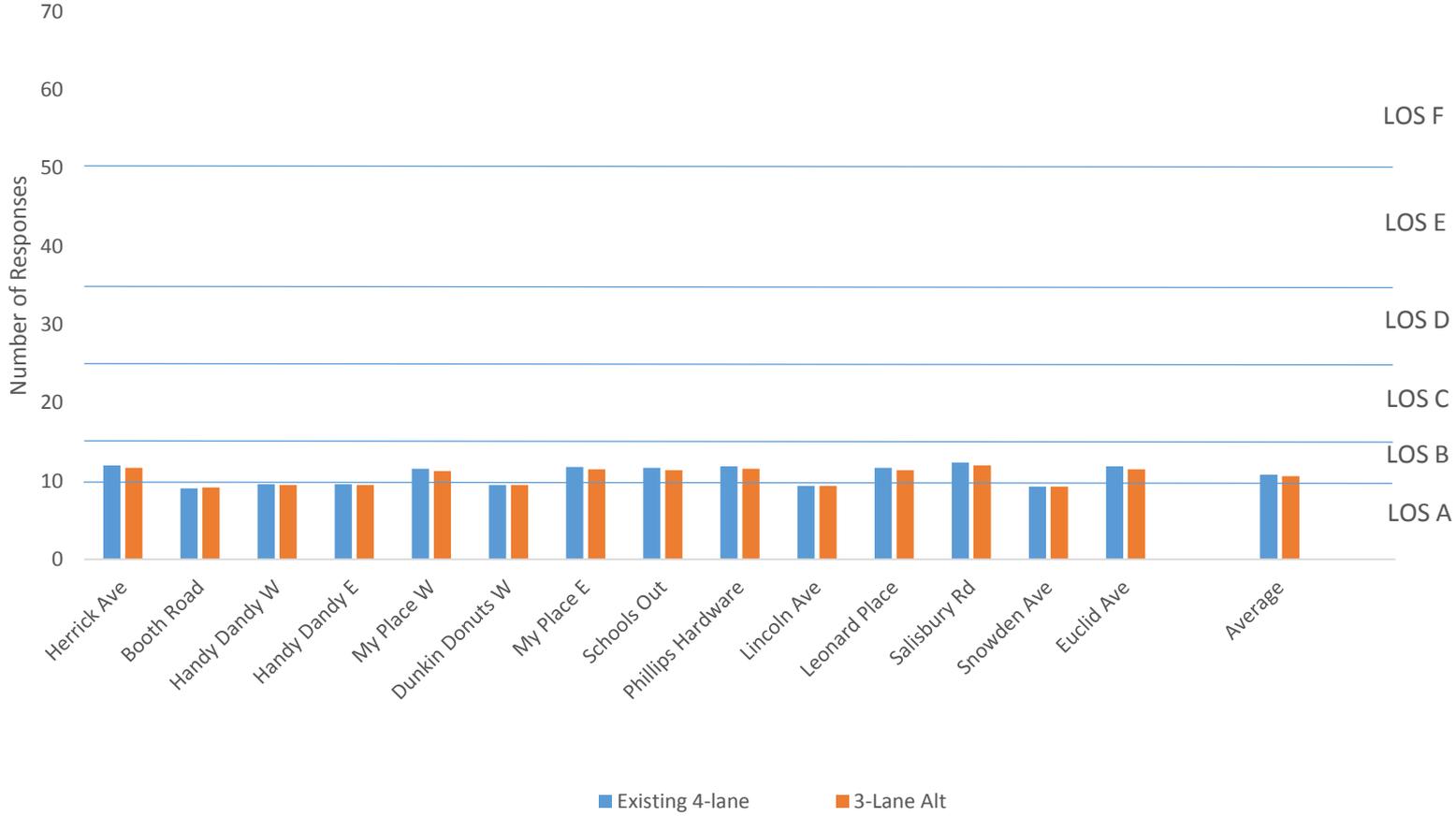
10.8

10.6

Seconds of delay

Delay to Side Streets and Driveways

Delaware Avenue Complete Streets Feasibility Study
 Delay to Side Streets and Driveways



Signals – Delaware / Elsmere

Approach	AM Peak Hour			PM Peak Hour		
	Existing	2030 No	2030 with	Existing	2030 No	2030 with
		Road Diet	Road Diet		Road Diet	Road Diet
Delaware						
EB L	B(15.8)	B(17.2)	B(16.5)	B(17.2)	B(19.6)	C(22.3)
EB T, TR	C(21.3)	C(23.8)	--	C(20.1)	C(21.1)	--
EB TR	--	--	E(74.9)	--	--	D(47.6)
WB L	A(9.5)	B(11.4)	B(14.9)	D(40.6)	D(53.5)	D(42.2)
WB TR	B(10.4)	B(12.6)	B(10.5)	B(18.6)	C(22.0)	B(17.3)
Elsmere						
NB LT	D(46.2)	D(37.3)	D(45.0)	D(37.2)	D(36.7)	D(47.9)
NB R	D(49.9)	D(48.2)	E(77.6)	B(18.8)	B(18.3)	B(18.4)
Groesbeck						
SB LTR	C(34.5)	C(32.7)	D(40.1)	C(28.6)	D(36.7)	D(36.8)
Overall	C(26.4)	C(27.1)	D(53.2)	C(25.5)	C(31.1)	C ⁴⁰⁷ (32.6)

Signals – Delaware / Delaware Plaza

Approach	AM Peak Hour			PM Peak Hour		
		2030 No	2030 with	2030 No	2030 with	
	Existing	Road Diet	Road Diet	Existing	Road Diet	Road Diet
Delaware						
EB L				D(35.6)	D(37.4)	C(25.5)
EB TR				C(29.1)	C(30.6)	C(24.3)
WB L				B(19.7)	B(19.6)	B(15.1)
WB TR				C(25.8)	C(27.9)	D(48.2)
Plaza						
NB L				C(25.9)	C(29.0)	E(65.7)
NB TR				B(19.8)	C(20.8)	C(34.0)
Normanskill Blvd						
SB L				C(20.4)	C(21.8)	D(35.7)
SB TR				C(20.4)	C(22.0)	D(36.1)
Overall				C(26.1)	C(28.0)	D(41.0)

Other Measures

Measure	Existing	2030 No Road Diet	2030 with Road Diet
Total Delay (hours)	21	24	29
Fuel Consumed (gal)	115	123	126
CO Emissions (kg)	8.05	8.61	8.79
Performance Index	27.4	31.4	36.0
Travel Time (WB)	2:29	2:33	3:16

HDM Exhibit 18-19 – Recommendations for installing Marked Crosswalks...

No. of Lanes and Median Type	Vehicle AADT < 9,000			Vehicle AADT > 9,000 to 12,000			Vehicle AADT > 12,000 to 15,000			Vehicle AADT > 15,000		
	Speed Limit**											
	<50 km/h	57 km/h	65 km/h	<50 km/h	57 km/h	65 km/h	<50 km/h	57 km/h	65 km/h	<50 km/h	57 km/h	65 km/h
2 Lanes	C	C	P	C	C	P	C	C	N	C	P	N
3 Lanes	C	C	P	C	P	P	P	P	N	P	N	N
4 or more Lanes With Raised Median	C	C	P	C	P	N	P	P	N	N	N	N
4 or More Lanes Without Raised Median	C	P	N	P	P	N	N	N	N	N	N	N

C = Candidate sites for marked crosswalks alone (≥ 20 peds/hour)

P = Possible increase in pedestrian crash risk without adequate design

N = Marked crosswalks alone are insufficient

Working Draft



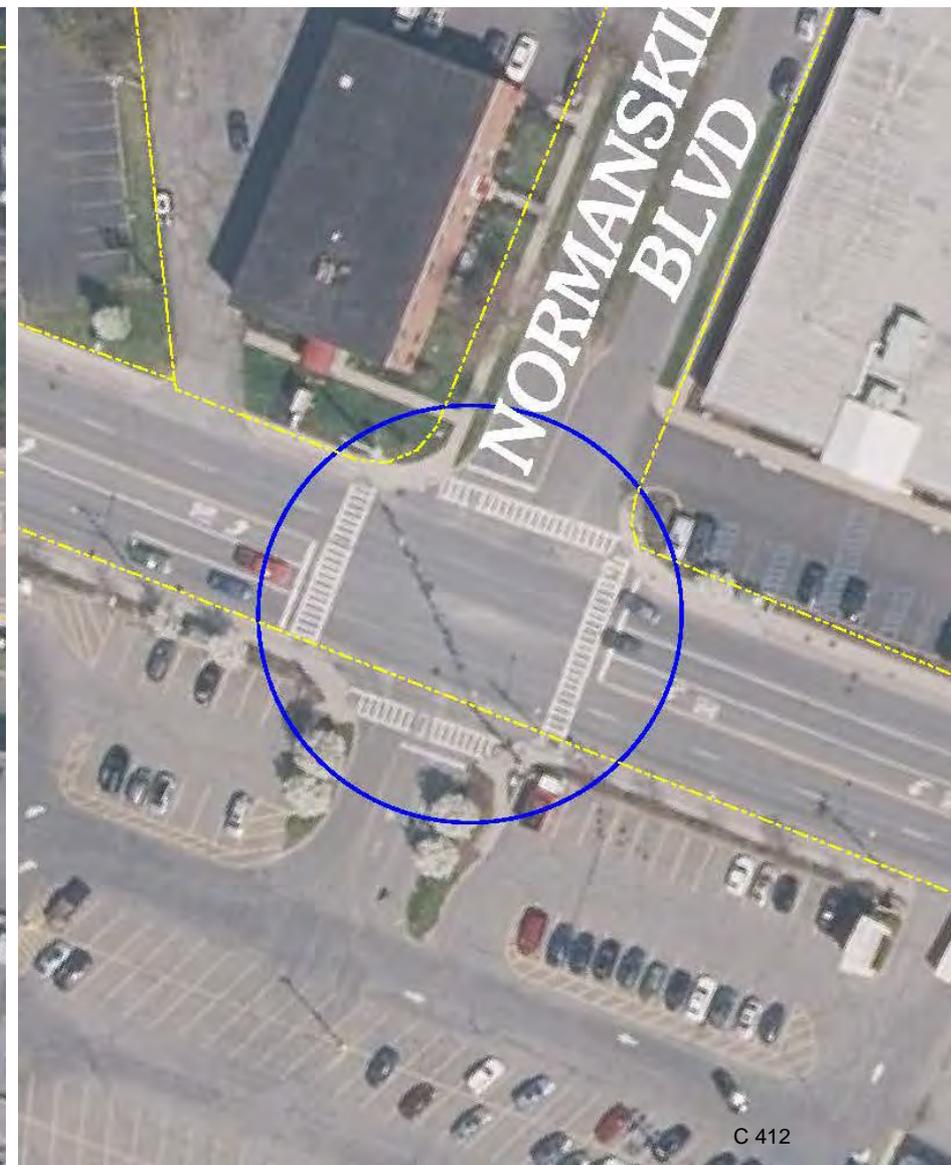
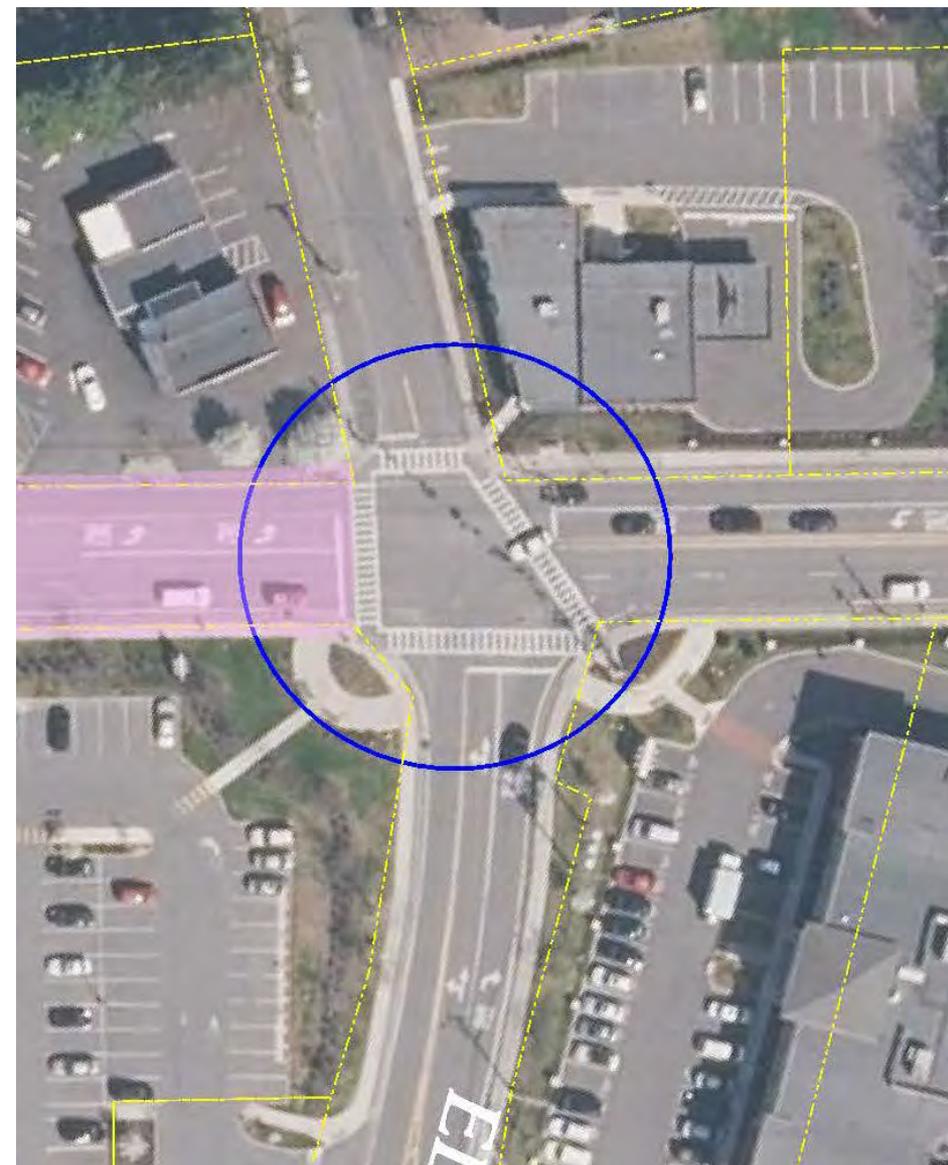
Delaware Avenue Complete Streets Feasibility Study Evaluation Matrix

		Alternatives										Ratings Explanation	
		Alternative		Null		Enhancements		Full Road Diet		Partial Road Diet			
Rating Criteria	Performance Measure	0	Rating*	A	Rating*	B	Rating*	C	Rating*	D	Rating*	Higher Value Given To...	
		Addresses Project Goals	No	3	Yes	4	Yes	5		4			All improvement options
		Safety											
		<i>Reduced Crash Rates</i>	NA	3		4		5		4			Alts that correlate to crash rate reductions
		<i>Improved accommodations</i>	NA	3		4		3		4			Qualitative
		<i>Street lighting</i>	Same	3		5		5		5			Y/N
		<i>Slows travel speeds</i>	No	3		3		5		4			Geometric or speed limit changes
		Access											
		<i>Closes gaps</i>	No	3		4		5		4			closes a gap
		<i>Bike Accommodation</i>	Same	3		3		5		4			Improved Y/N
<i>Ped crossing accommodation</i>		Same	3		4		5		4			Improved Y/N	
<i>Bus accommodations</i>		Same	3		4		4		4			Improved Y/N	
<i>Motor vehicle accommodation</i>	Same	3		2		1		2			Lower overall Synchro Performance Index		
	Economy												
	<i>Changes in side street motor veh delay</i>	Same	3		3		3		3			less Synchro delays	
	<i>End to end travel time change</i>	Same	3		3		1		3			Quicker end to end travel times	
	<i>Cost of Alternative</i>	None	3		2		2		2			Lower cost alternatives	
	Place												
	<i>Quality of features / streetscape</i>	Same	3		3		4		4			Qualitative	
	<i>Emissions / Fuel Consumption</i>	Same	3		2		1		2			Lower values from Synchro Model / qualitative	
	<i>Public Art / parks / cultural improvements</i>	None	3		4		4		4			If present	
Total Rating		48		54		58		57		0			

*The ratings are based on a 1 to 5 scale with 1 rated as least desired, 5 as most desired

- 5 - Noticeably Improved
- 4 - Somewhat Improved
- 3 - Comparable to Existing
- 2 - Somewhat Degraded
- 1 - Noticeably Degraded

Roundabouts

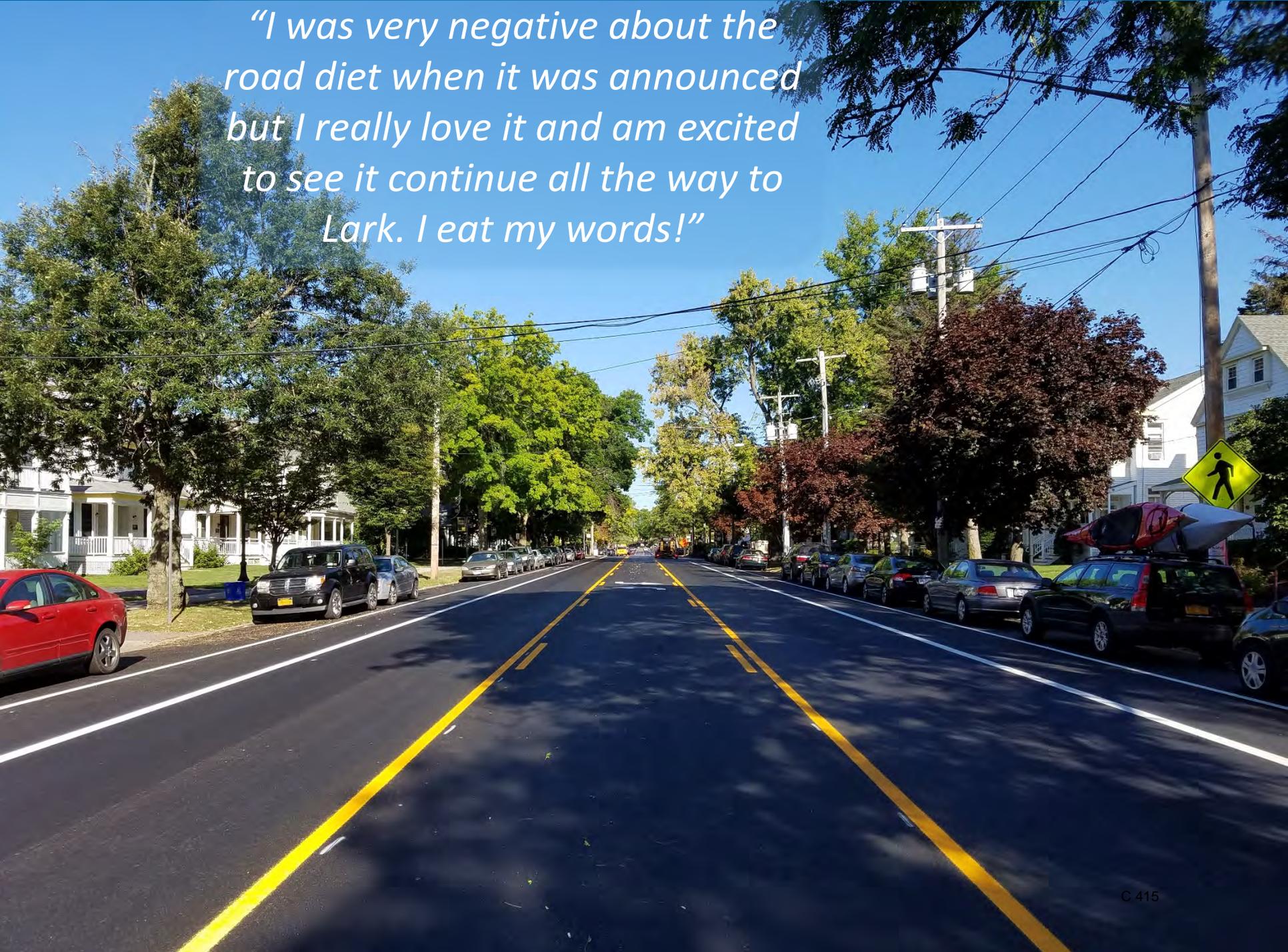


TAC MEETING #6



Delaware Avenue Complete Streets FEASIBILITY STUDY

“I was very negative about the road diet when it was announced but I really love it and am excited to see it continue all the way to Lark. I eat my words!”

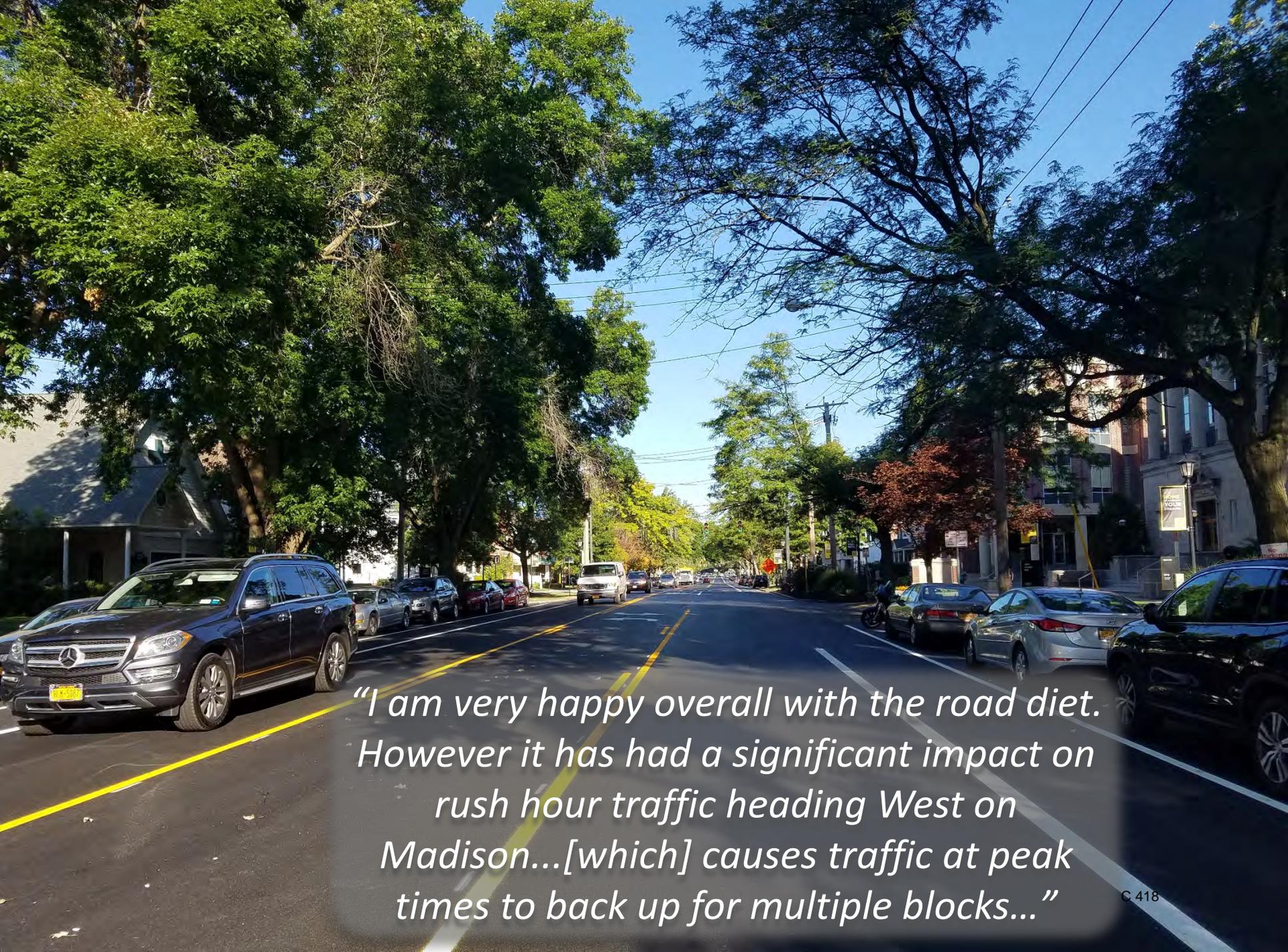




“As a multi-modal user of this corridor, I think this has been a very positive change, with benefits to all, especially those who bike or walk (which I primarily do).”

"I've been a big fan of the changes so far. The congestion along the busy restaurant section is seemingly much more organized and, well, calm."





“I am very happy overall with the road diet. However it has had a significant impact on rush hour traffic heading West on Madison...[which] causes traffic at peak times to back up for multiple blocks...”

Existing – Null Alternative

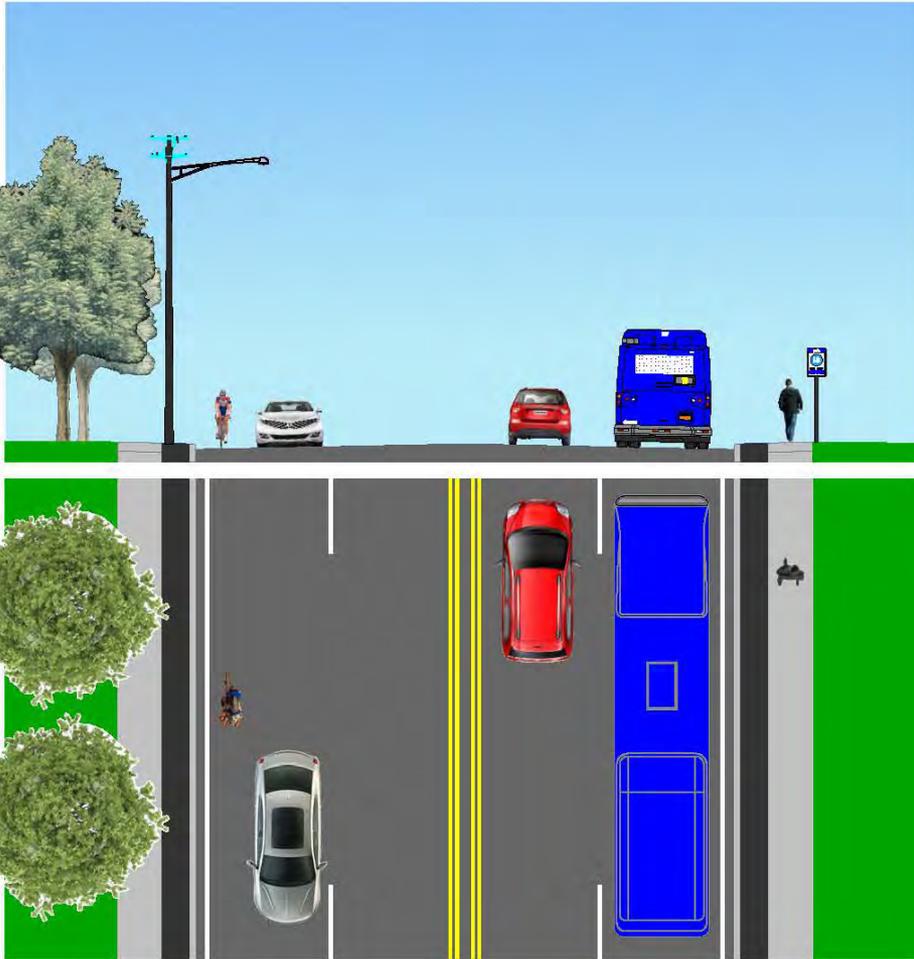


- Pros

- Maintains current traffic operations
- No cost

- Cons

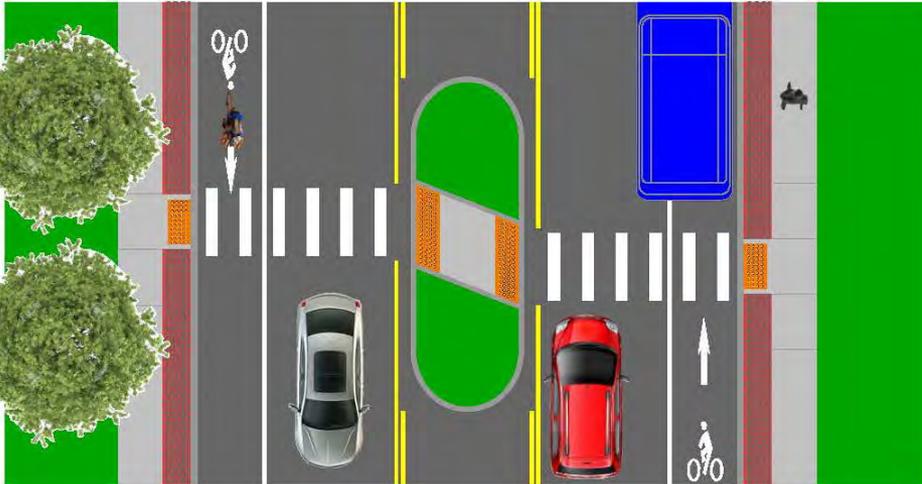
- High crash rate
- Difficult crossing for pedestrians
- Poor bike accommodation



Full Road Diet Alternative



Draft



• Pros

- Traffic calming
- Improved safety
- Improved bike accommodation
- Improved pedestrian crossing accommodation
- Improved access to/from unsignalized side streets and businesses

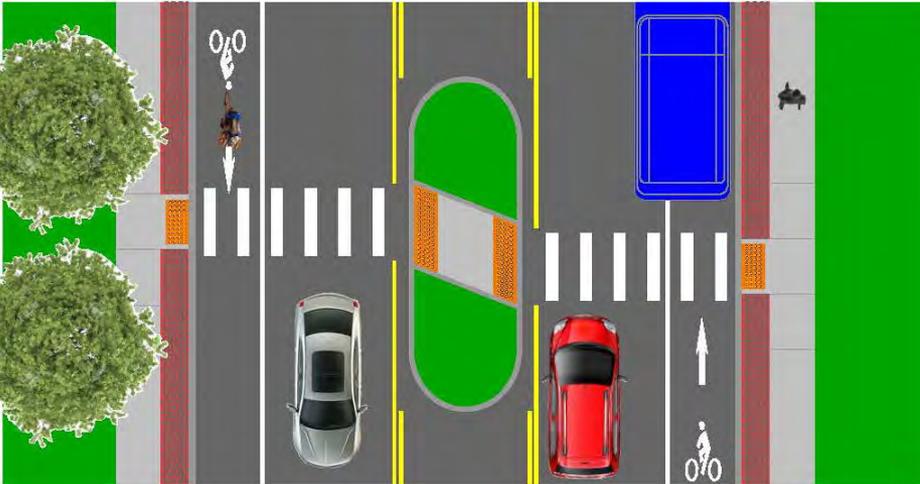
• Cons

- Some traffic diversions (3 to 4 %)
- Increased peak hour signal delay
 - » +15 to 50 seconds
- Increased corridor travel times
 - » + 45 sec WB, + 12 sec EB

Partial Road Diet (Plaza to Normanskill)



Draft



• Pros

- Maintains traffic operations - Elsmere to Plaza.
- Improved safety, bike accommodation and pedestrian crossing accommodation in road dieted section
- Improved access to/from unsignalized side streets and businesses – road dieted section

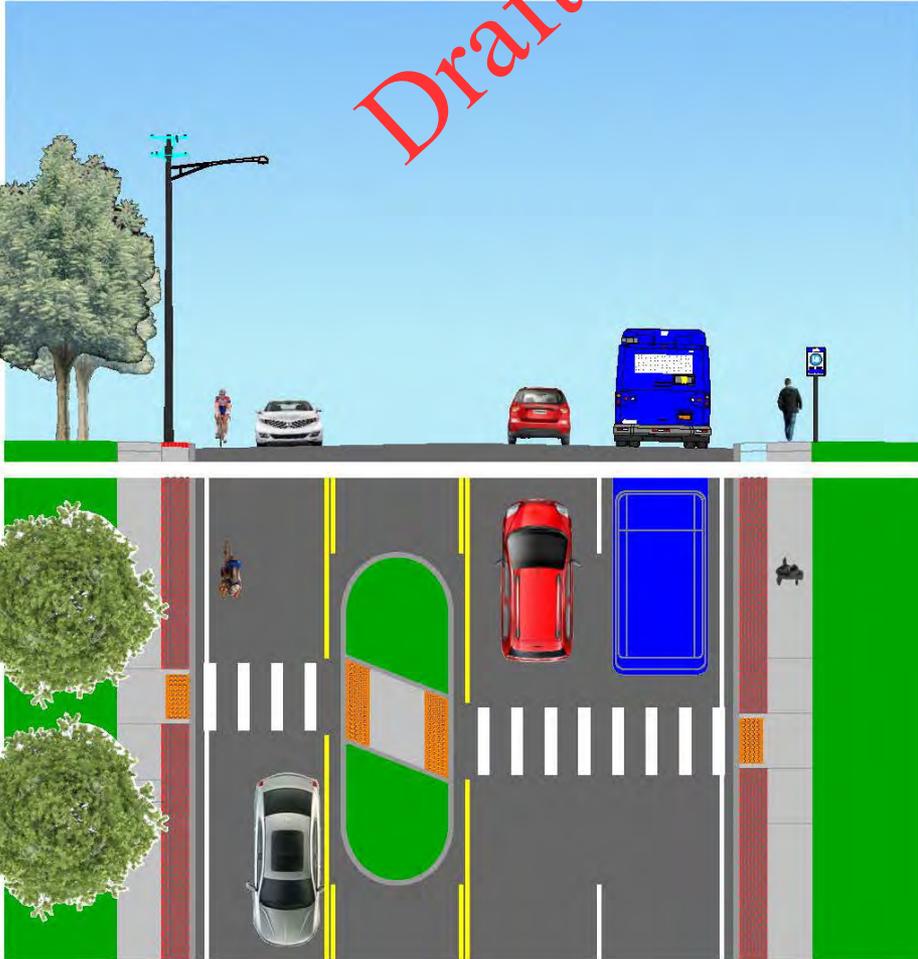
• Cons

- High crash rate Elsmere to Plaza
- Lack of bike accommodation and ped crossing accommodation Elsmere to Plaza

1-1-2 Eastbound



Draft



• Pros

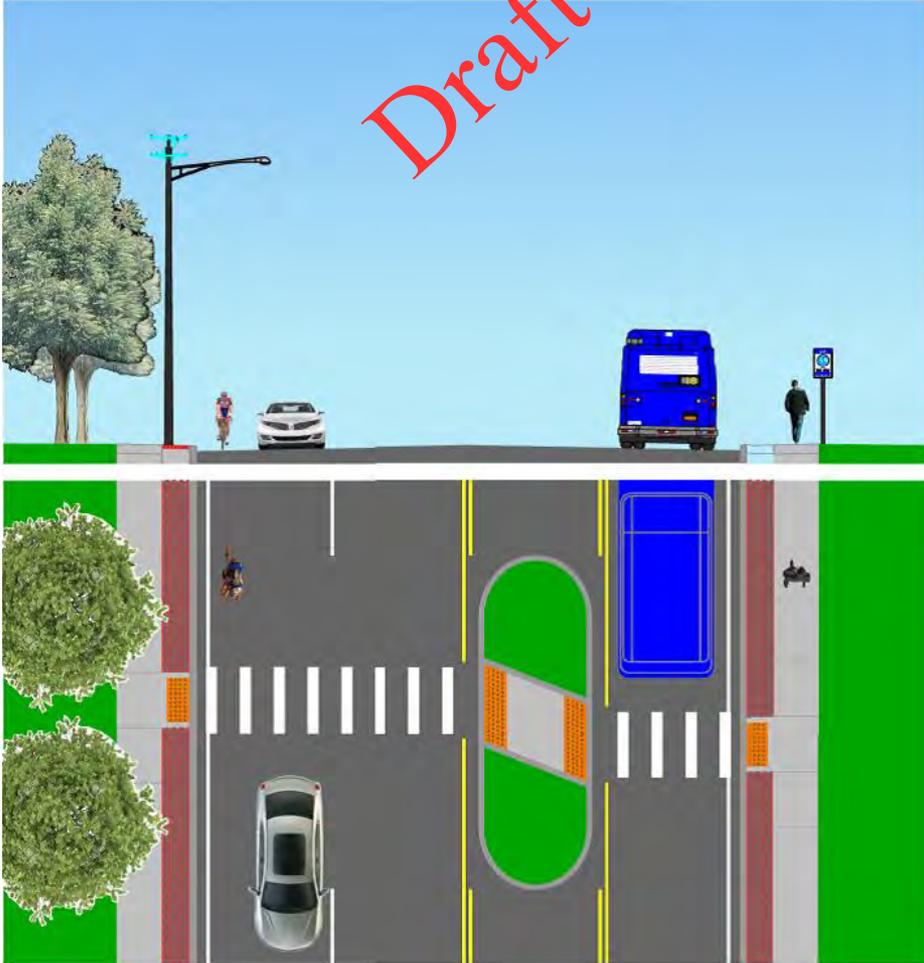
- Ties into Enhancements project at Elsmere
- Some safety and traffic calming benefits
- Improved ped crossing opportunities

• Cons

- Lack of bike accommodation



Draft



• Pros

- Good PM peak hour traffic operations
- Some safety and traffic calming benefits
- Improved ped crossing opportunities

• Cons

- Lack of bike accommodation



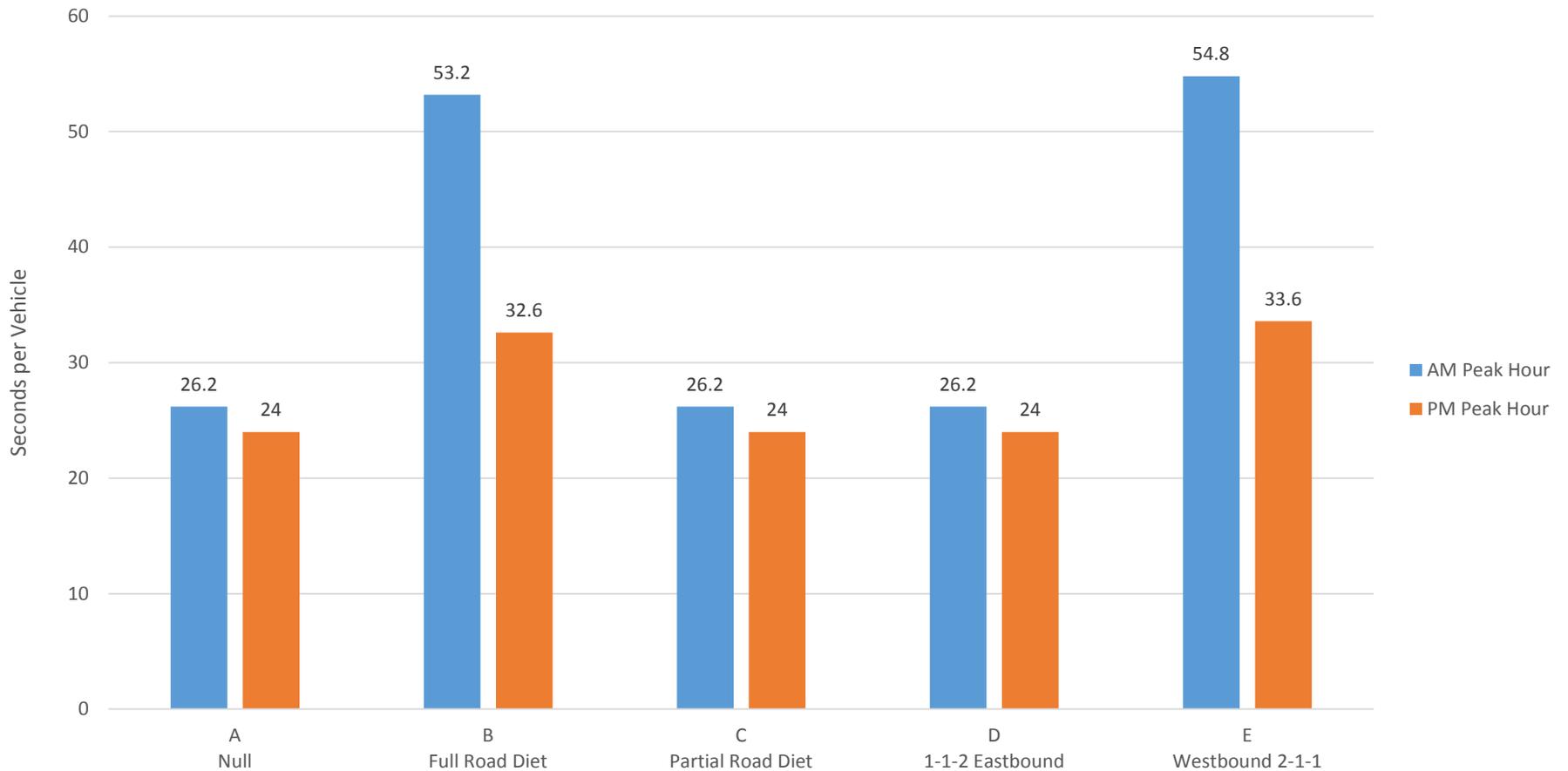
Safety



Access

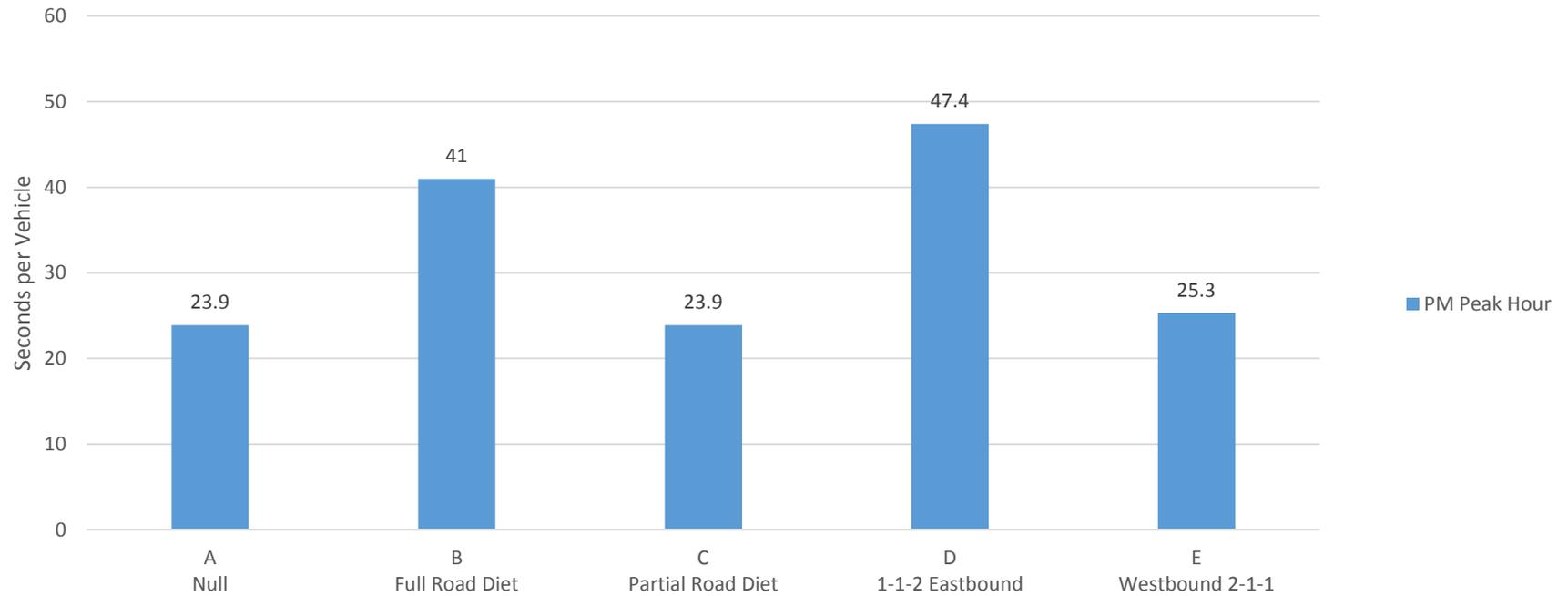
Signal Delay – Delaware / Elsmere

Comparison of Alternatives
Signal Delay
(Delaware Avenue/Elsmere Avenue/Groesbeck Place)

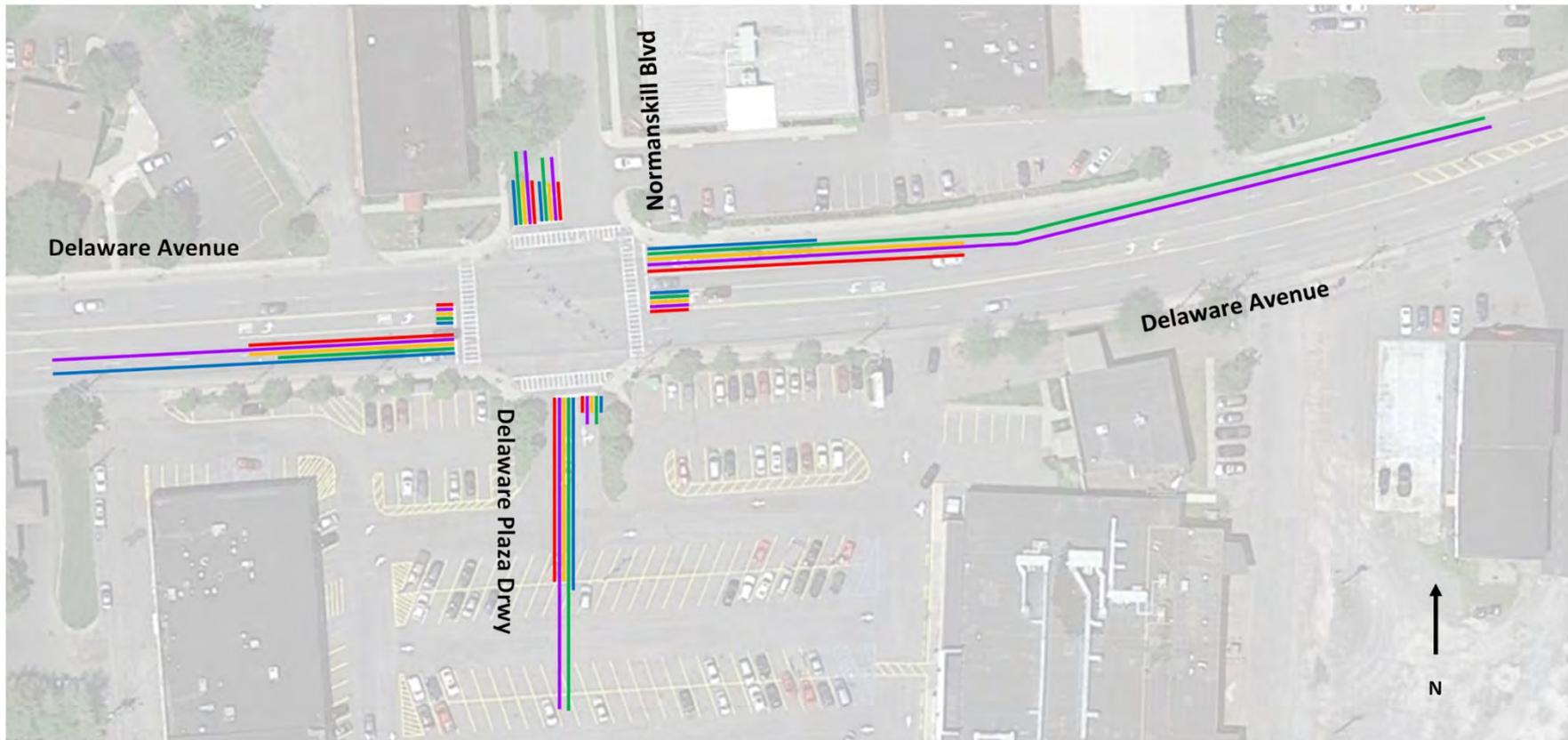


Signal Delay – Delaware / Delaware Plaza

Comparison of Alternatives
Signal Delay
(Delaware Avenue/Leonard Place)



Average Queuing PM Peak Hour Delaware Avenue/Delaware Plaza Drwy/Normanskill Blvd



A Null

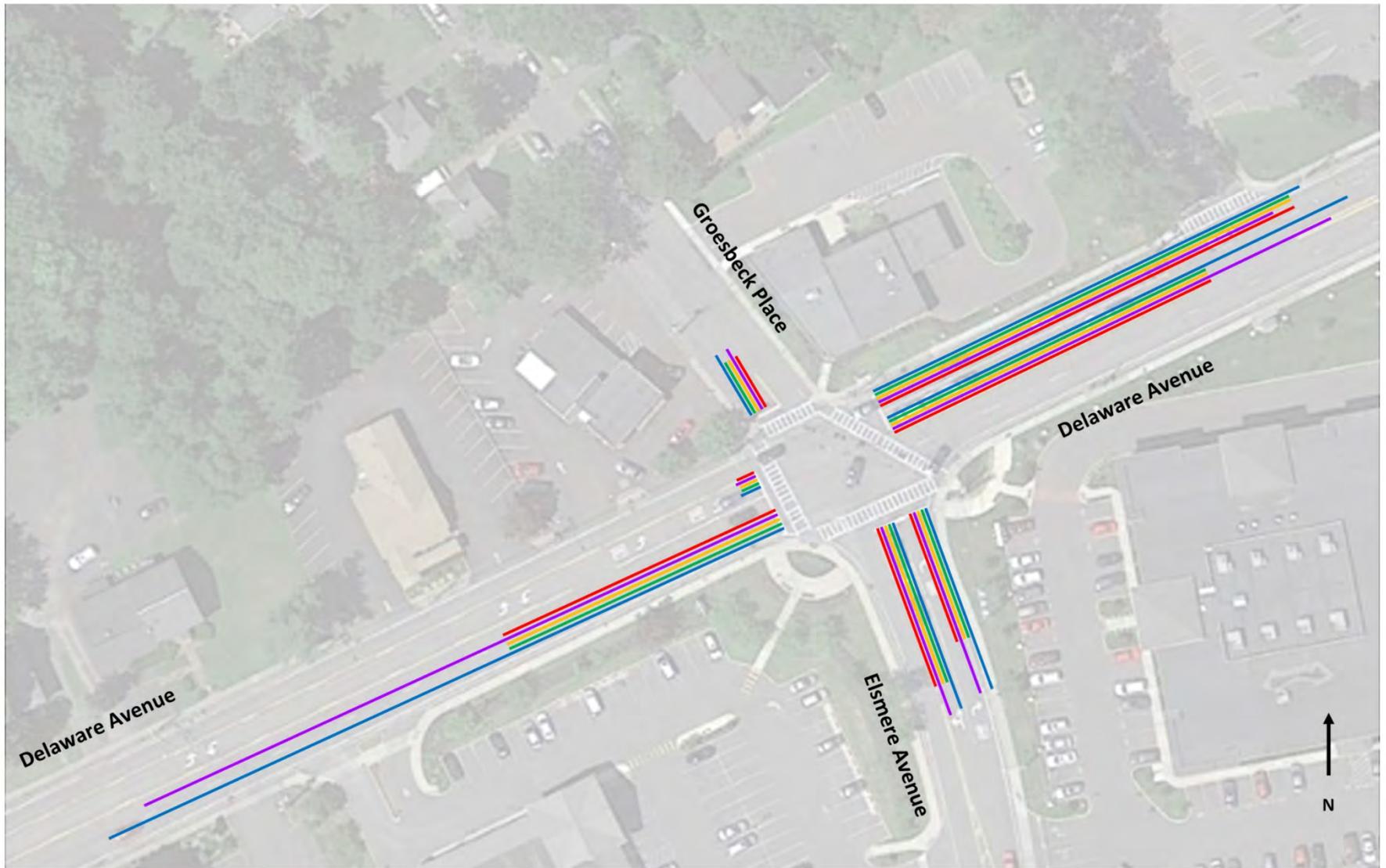
B Full Road Diet

C Partial Road Diet

D 1-1-2 Eastbound

E Westbound 2-1-1

Average Queuing PM Peak Hour Delaware Avenue/Elsmere Avenue/Groesbeck Place



- A Null
- B Full Road Diet
- C Partial Road Diet
- D 1-1-2 Eastbound
- E Westbound 2-1-1

Average Queuing AM Peak Hour Delaware Avenue/Elsmere Avenue/Groesbeck Place



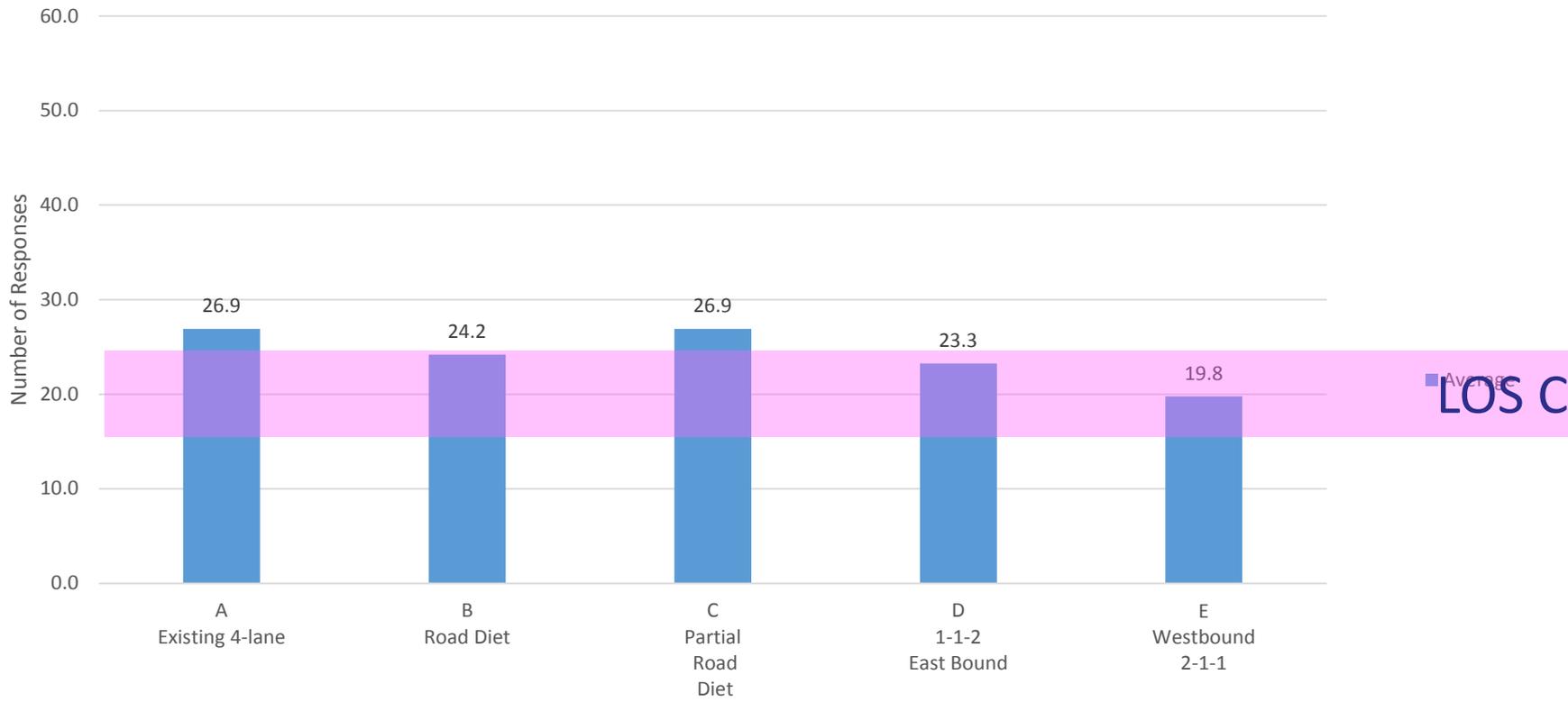
- A Null
- B Full Road Diet
- C Partial Road Diet
- D 1-1-2 Eastbound
- E C 431 Westbound 2-1-1



Economy

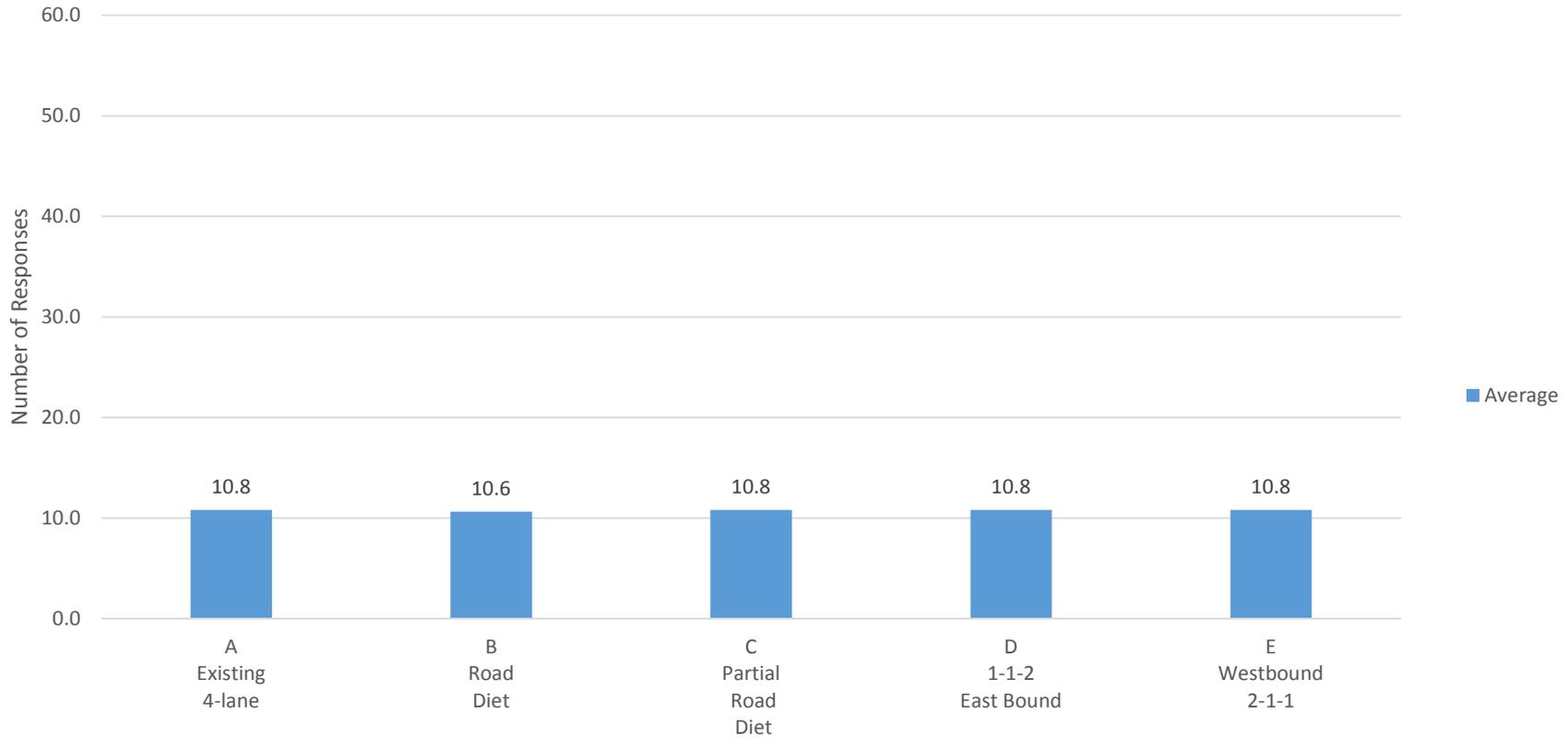
Delay from side streets and driveways

Delaware Avenue Complete Streets Feasibility Study
Delay from Side Streets and Driveways



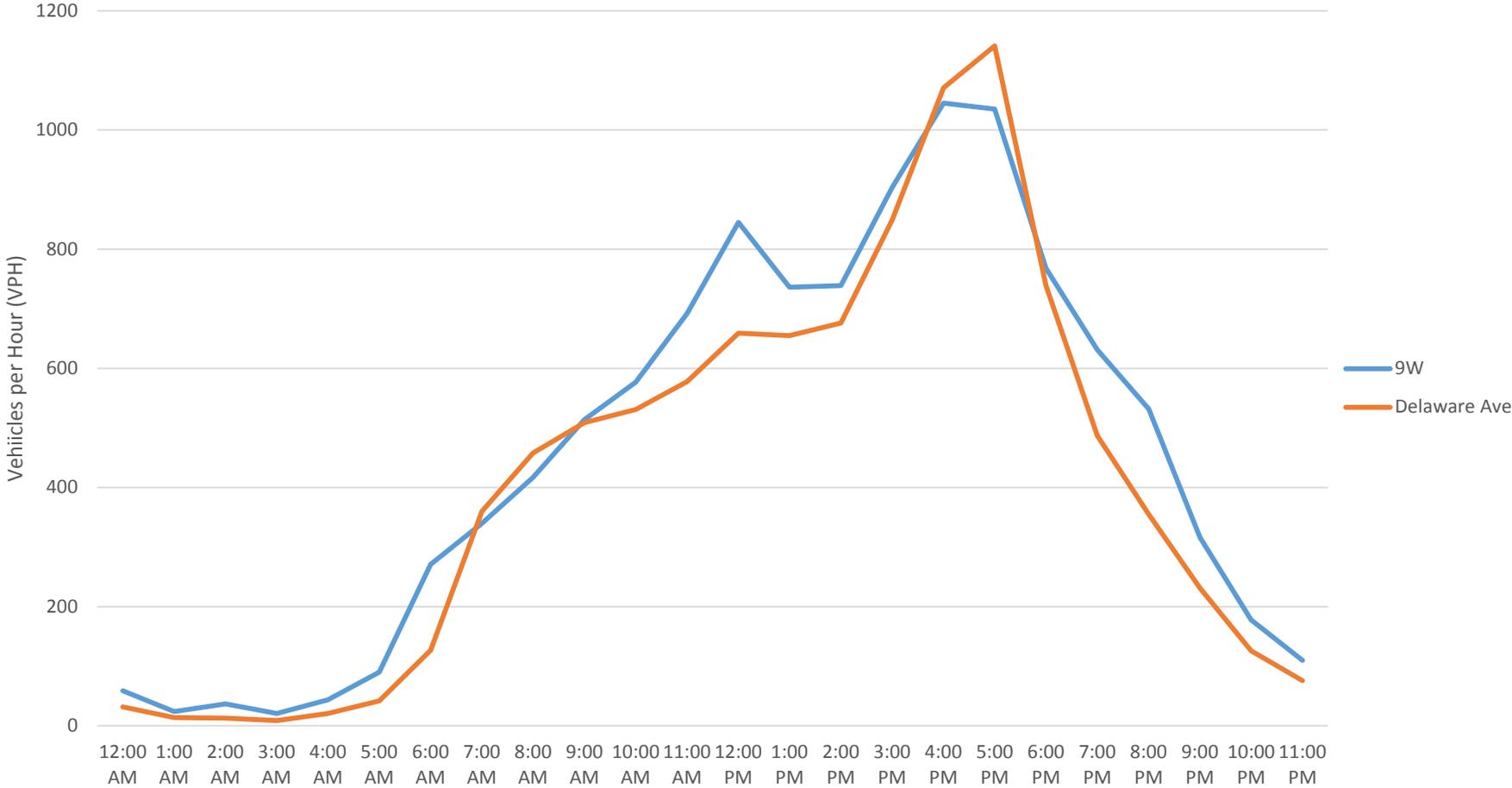
Delay to side streets and driveways

Delaware Avenue Complete Streets Feasibility Study
Delay to Side Streets and Driveways



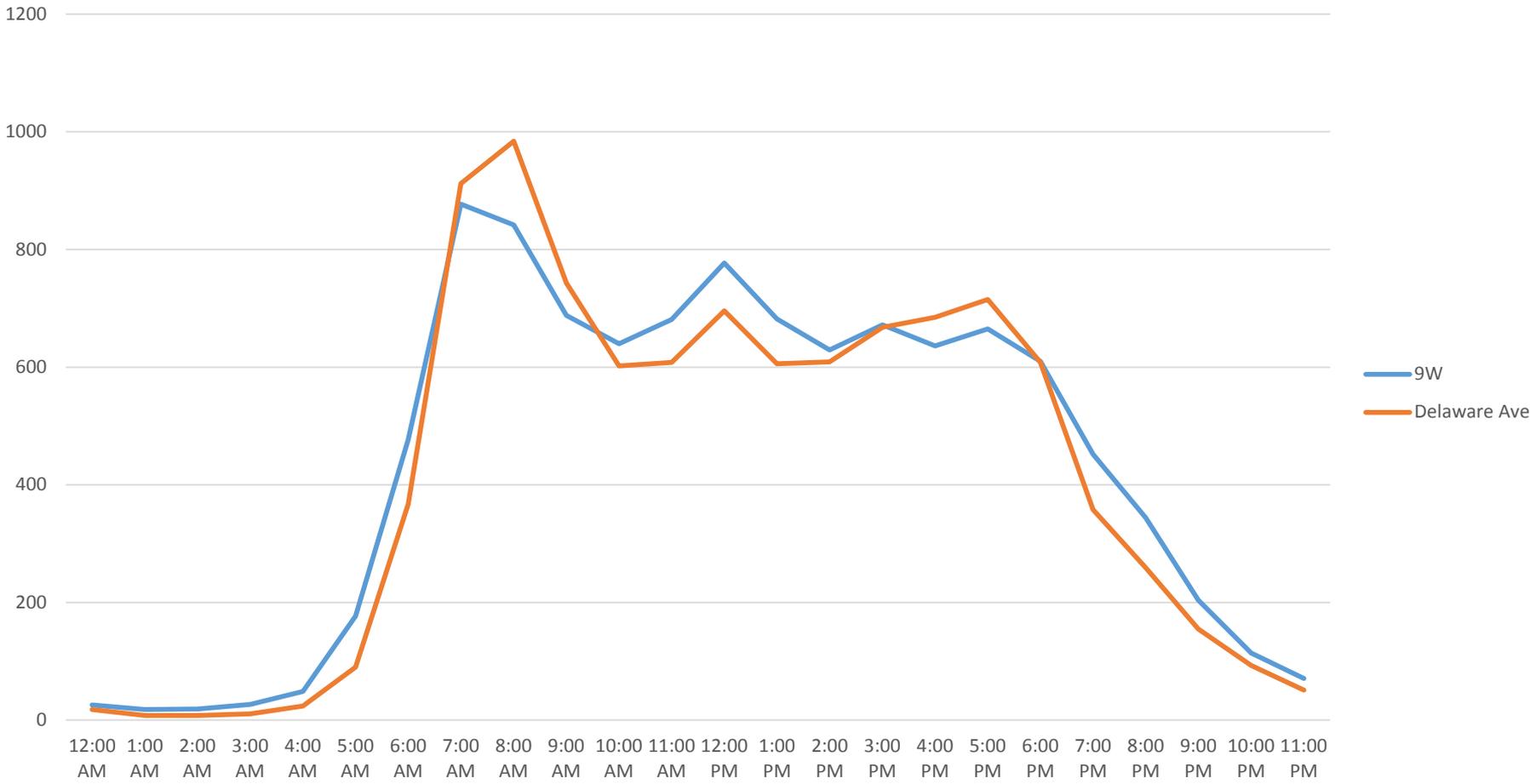
Delaware Ave WB (4 lanes) vs 9W SB (3 lanes)

Hourly Traffic Variations (Typical Weekday)
Delaware Ave WB (4 Lanes) vs. 9W SB (3 Lanes)



Delaware Ave EB (4 lanes) vs Route 9W NB (3 lanes)

Hourly Traffic Variations (Typical Weekday)
Delaware Ave EB (4 Lanes) vs. 9W NB (3 Lanes)



Case Studies

\$300M new development

Doubling in retail sales

\$43M increase in non-residential tax value

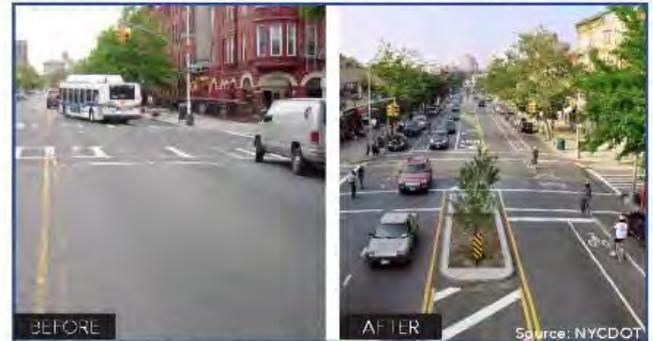
Indianapolis' Cultural Trail

In 2008, the City of Indianapolis, IN, used Road Diets to complete the 8-mile long Indianapolis Cultural Trail that encourages biking and walking along the cultural districts, neighborhoods, and the city's greenway system. The redesign brought more people on foot and vitalized the area. Over \$300 million of new development was constructed along the route between 2008 and 2012.²



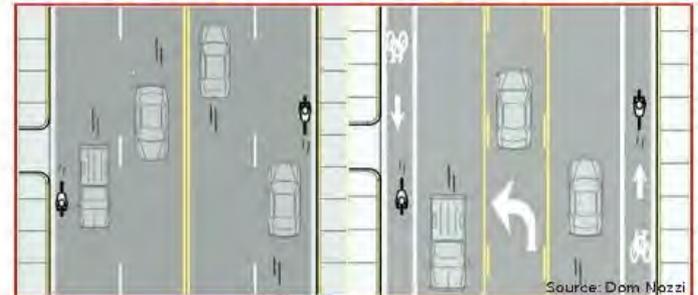
Brooklyn's Vanderbilt Avenue

In New York City, Brooklyn's Vanderbilt Avenue saw a doubling in retail sales in the 3 years following installation of bicycle lanes and a tree-lined median, significantly outperforming borough-wide and city-wide trends.³



Charlotte, NC

The before and after study of a Road Diet implementation in Charlotte, NC, indicated a \$43 million increase in the non-residential tax value of properties fronting the East Boulevard Road Diet.⁴





Place

Enhancements

DELAWARE AVENUE COMPLETE STREETS CORRIDOR ENHANCEMENT MAP

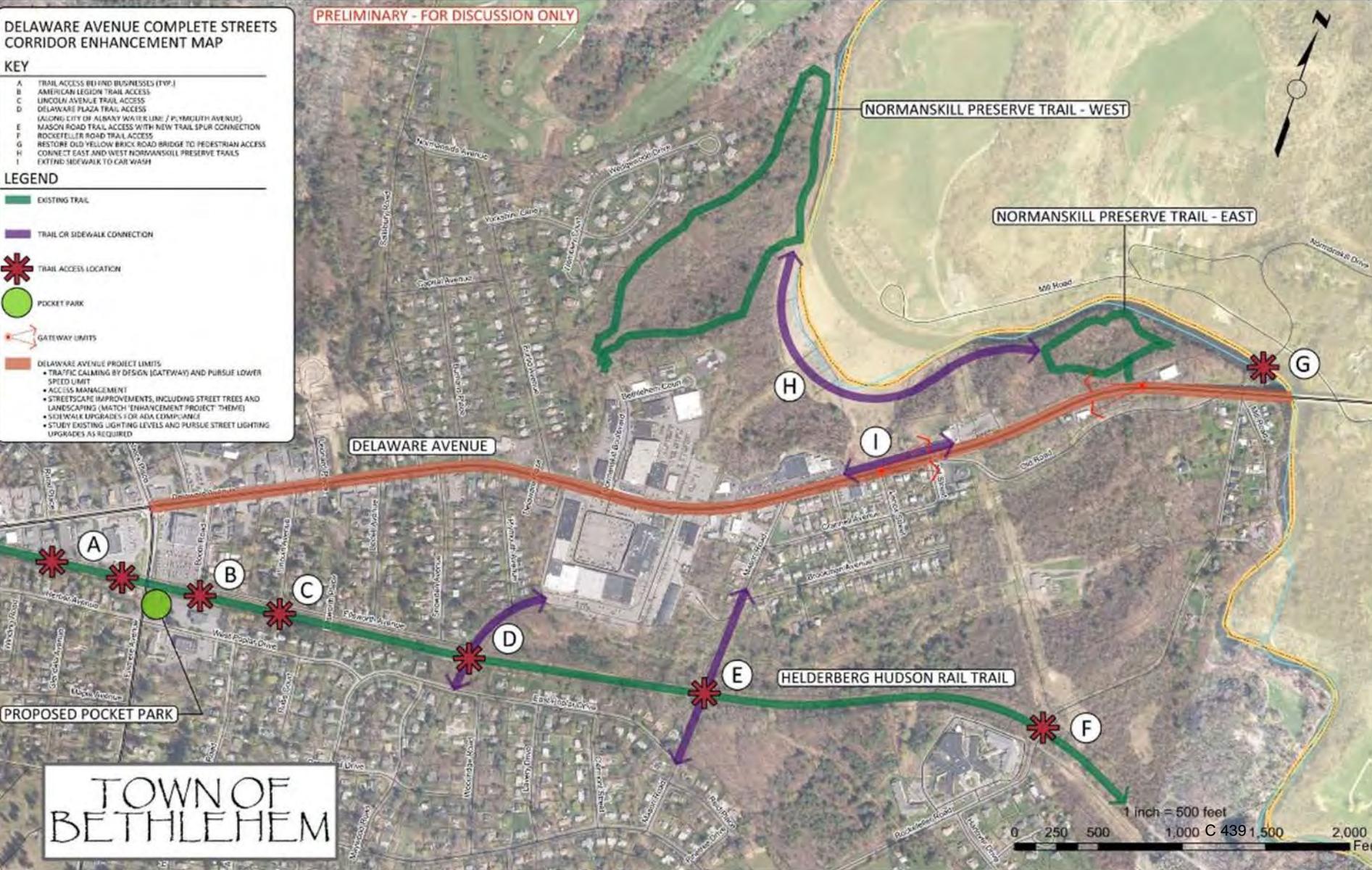
KEY

- A TRAIL ACCESS BEHIND BUSINESSES (FPV)
- B AMERICAN LEGION TRAIL ACCESS
- C LINCOLN AVENUE TRAIL ACCESS
- D DELAWARE PLAZA TRAIL ACCESS
- E ALONG CITY OF ALBANY WATER LINE / PLYMOUTH AVENUE
- F MASON ROAD TRAIL ACCESS WITH NEW TRAIL SPUR CONNECTION
- G ROCKEFELLER ROAD TRAIL ACCESS
- H RESTORE OLD YELLOW BRICK ROAD BRIDGE TO PEDESTRIAN ACCESS
- I CONNECT EAST AND WEST NORMANSKILL PRESERVE TRAILS
- J EXTEND SIDEWALK TO CAR WASH

LEGEND

- EXISTING TRAIL
- TRAIL OR SIDEWALK CONNECTION
- TRAIL ACCESS LOCATION
- POCKET PARK
- GATEWAY LIMITS
- DELAWARE AVENUE PROJECT LIMITS
 - TRAFFIC CALMING BY DESIGN (GATEWAY) AND PURSUE LOWER SPEED LIMIT
 - ACCESS MANAGEMENT
 - STREETSCAPE IMPROVEMENTS, INCLUDING STREET TREES AND LANDSCAPING (MATCH ENHANCEMENT PROJECT THEME)
 - SIDEWALK UPGRADES FOR ADA COMPLIANCE
 - STUDY EXISTING LIGHTING LEVELS AND PURSUE STREET LIGHTING UPGRADES AS REQUIRED

PRELIMINARY - FOR DISCUSSION ONLY



TOWN OF BETHLEHEM

1 inch = 500 feet
 0 250 500 1,000 C 439 1,500 2,000 Feet



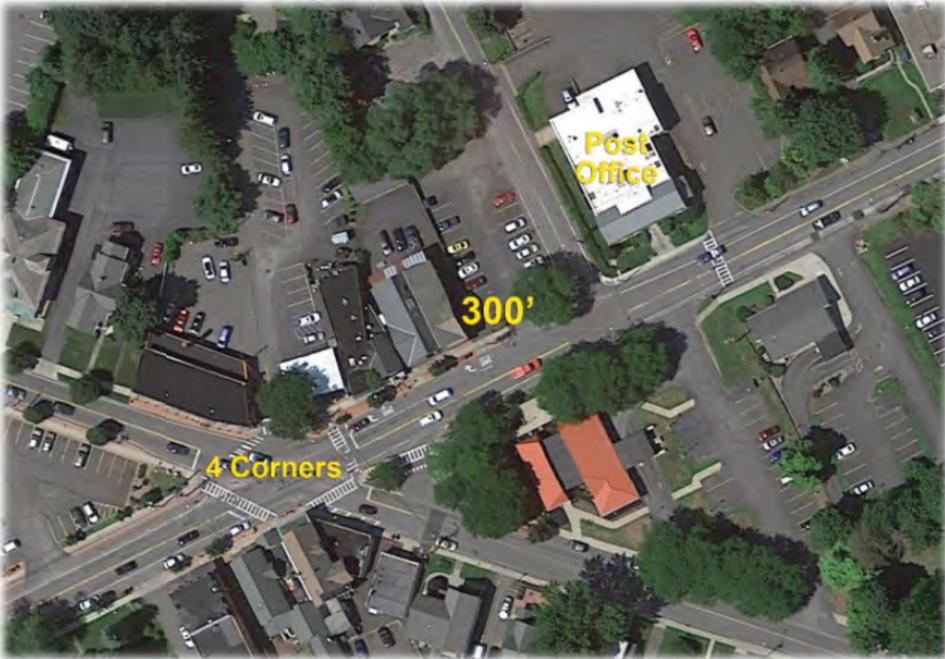
Evaluation of Alternatives

	A	Null	B	Full Road Diet	C	Partial Road Diet	D	1-1-2 Eastbound	E	Westbound 2-1-1					
Typical Section			 <small>Elsmere Ave to Albany City Line</small>		 <small>Elsmere Ave to Delaware Plaza</small>										
	Safety														
Crashes	●	○	○	○	○	●	●	●	●	○	●	●	●	○	○
Traffic Calming	●	○	○	○	○	●	●	●	●	○	●	●	●	○	○
Benefit of Enhancements	○	○	○	○	○	●	●	●	○	○	●	○	○	○	○
	Access														
Travel Time	●	●	●	●	●	●	●	○	○	○	●	●	●	○	○
Signal LOS/Queuing	●	●	●	●	●	●	●	○	○	○	●	●	●	○	○
Bike LOS	●	○	○	○	○	●	●	○	○	○	●	●	○	○	○
Ped Access to Transit	●	○	○	○	○	●	●	○	○	○	●	●	○	○	○
	Economy														
2030 Volume Delta	●	●	●	●	●	●	●	●	●	●	●	●	●	○	○
Side St/ Driveway Delay	●	●	●	○	○	●	●	○	○	○	●	●	○	○	○
Cost of Alt	●	●	●	●	●	●	●	○	○	○	●	●	○	○	○
	Place														
Pedestrian Friendliness	●	○	○	○	○	●	●	○	○	○	●	●	○	○	○
Streetscape	●	○	○	○	○	●	●	○	○	○	●	●	○	○	○
Community Character/QOL	●	●	○	○	○	●	●	○	○	○	●	●	○	○	○

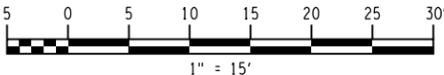
DELAWARE AVENUE STUDY AREA



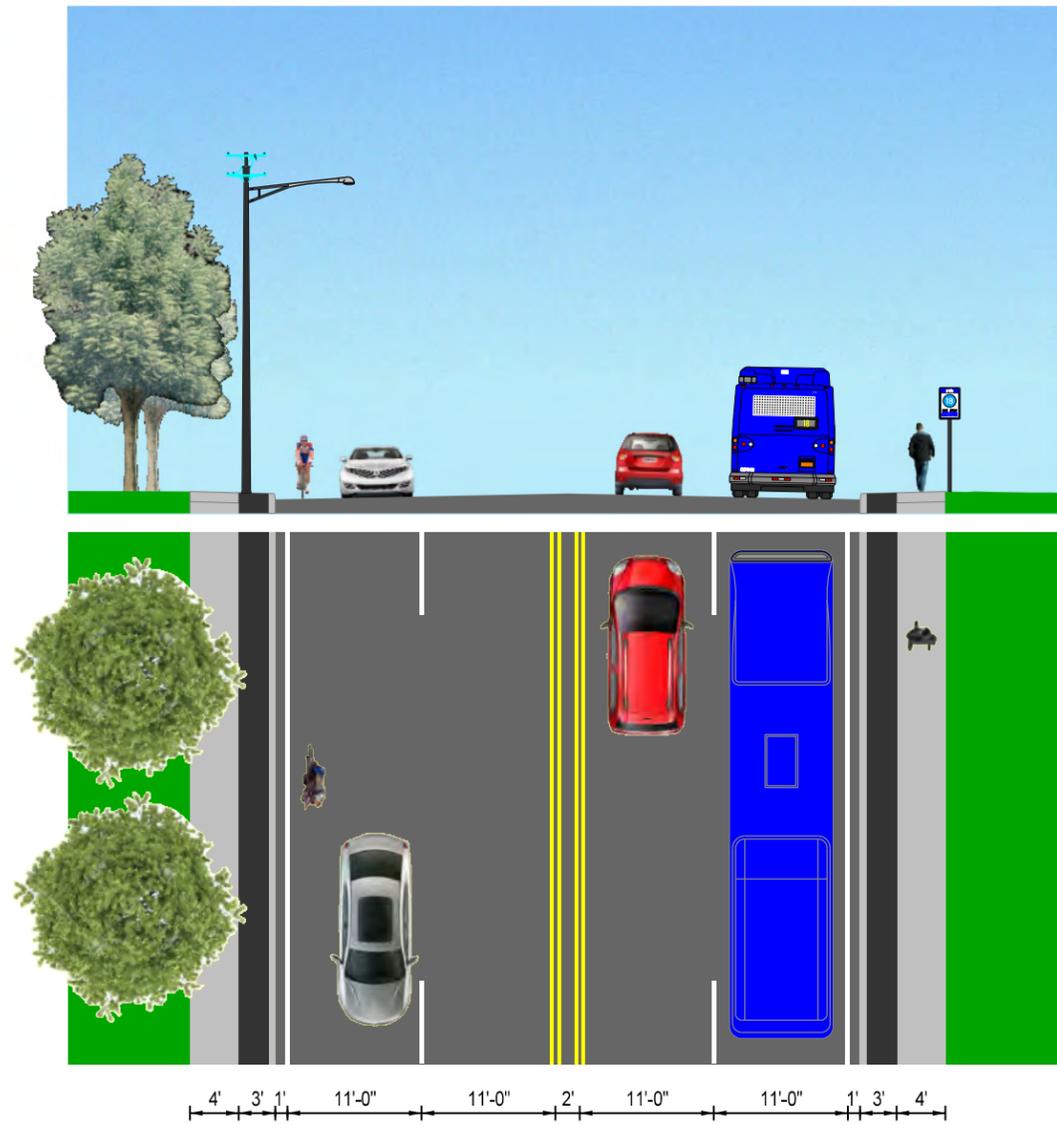
4 CORNERS EXAMPLE



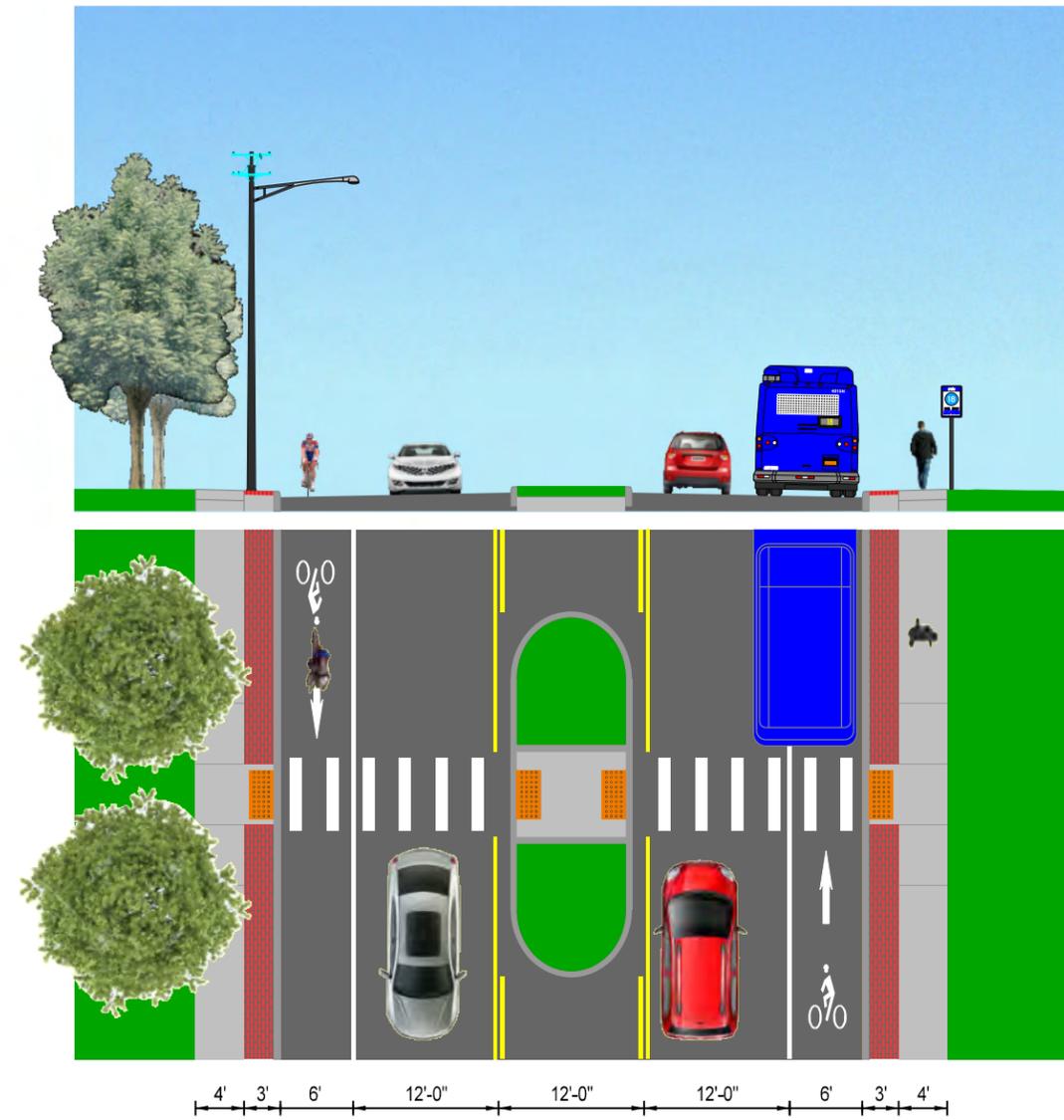
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EXISTING TYPICAL SECTION
DELAWARE AVENUE



THREE-LANE CONCEPT
W/ ENHANCED PEDESTRIAN CROSSING



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GRID NORTH

RURAL PL

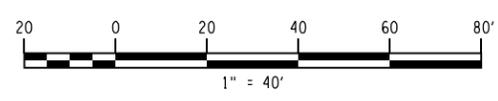
HUDSON AVE

DELAWARE AVE

MATCH LINE A-A, SEE DWG. P-2

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PROJECT: 116-149 DATE: 3/2017

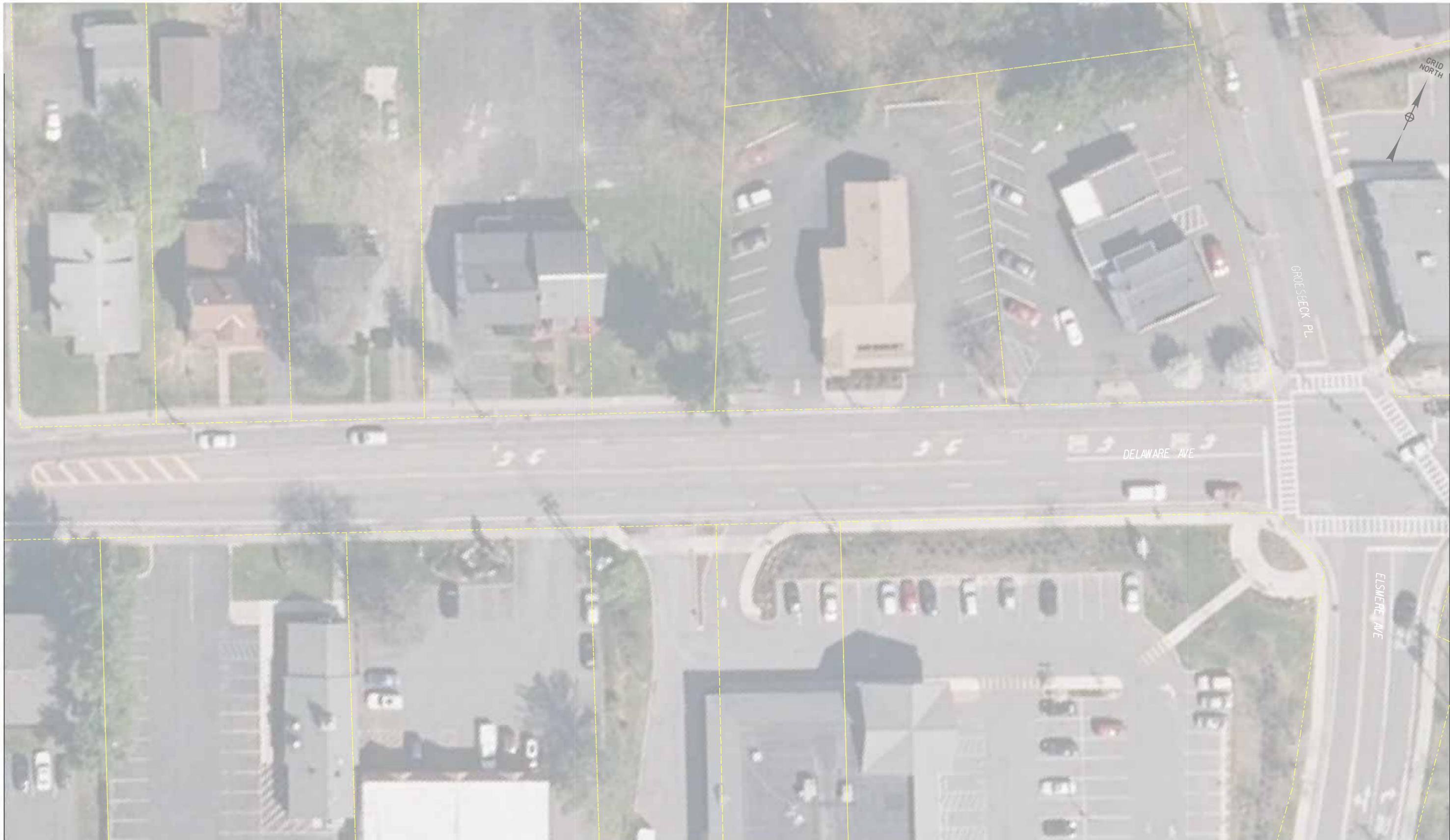


Delaware Ave. Complete Streets Feasibility Study

PRELIMINARY CONCEPT
C 444
The LA Group Creighton Manning

FILE: N:\Projects\2016\116-149 Bethlehem - Delaware Ave CS Feasibility Study\cadd\ dgn\116-149_cph_gnp_01.dgn

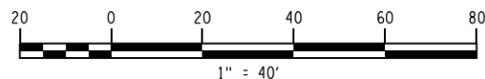
MATCH LINE A-A, SEE DWG. P-1



MATCH LINE B-B, SEE DWG. P-3

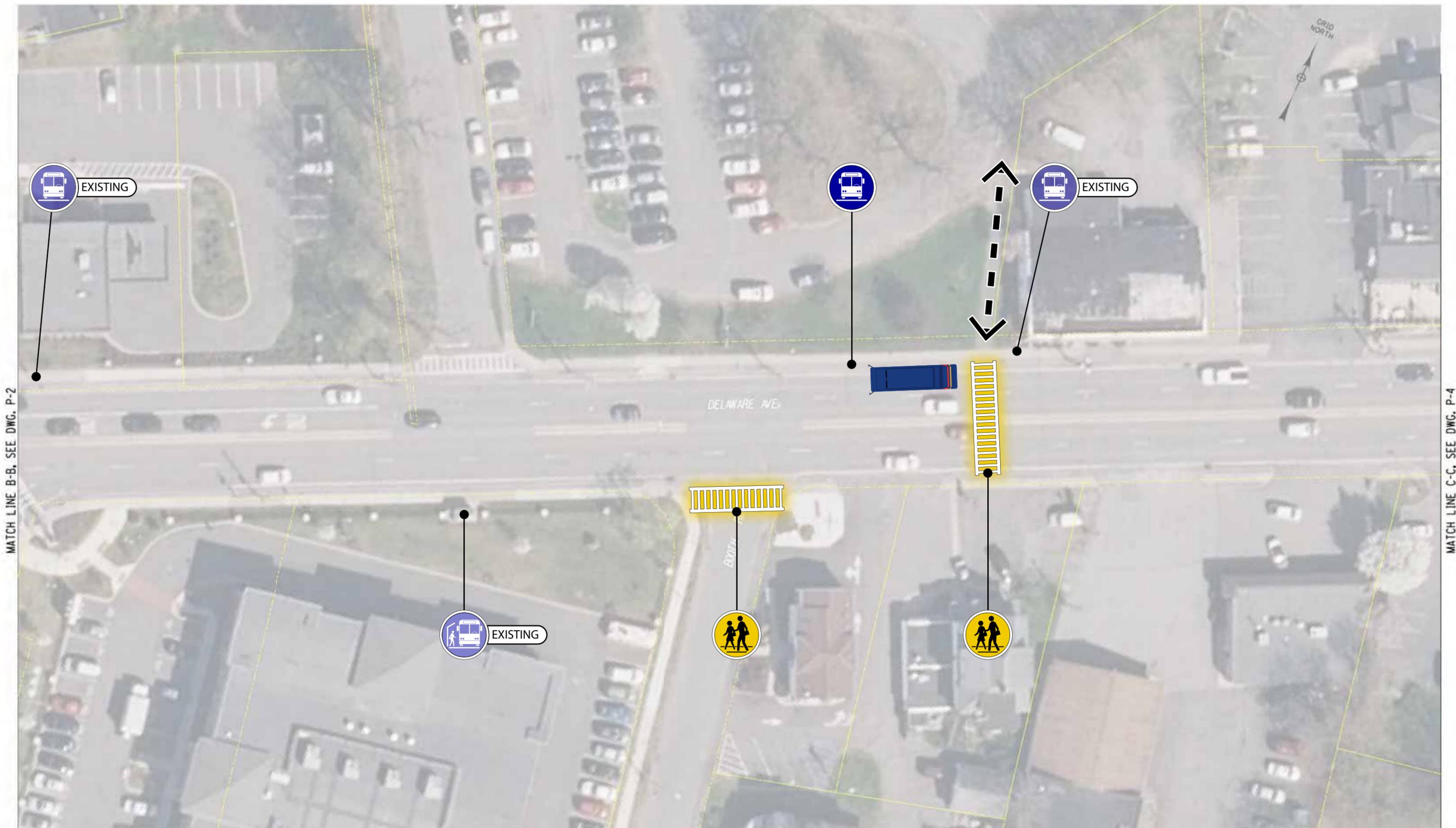
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PROJECT: 116-149 DATE: 3/2017

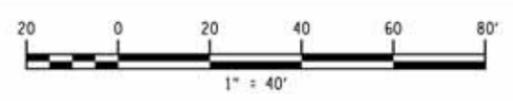


Delaware Ave. Complete Streets Feasibility Study

PRELIMINARY CONCEPT
 C-445
 The L.A. Group Creighton Manning

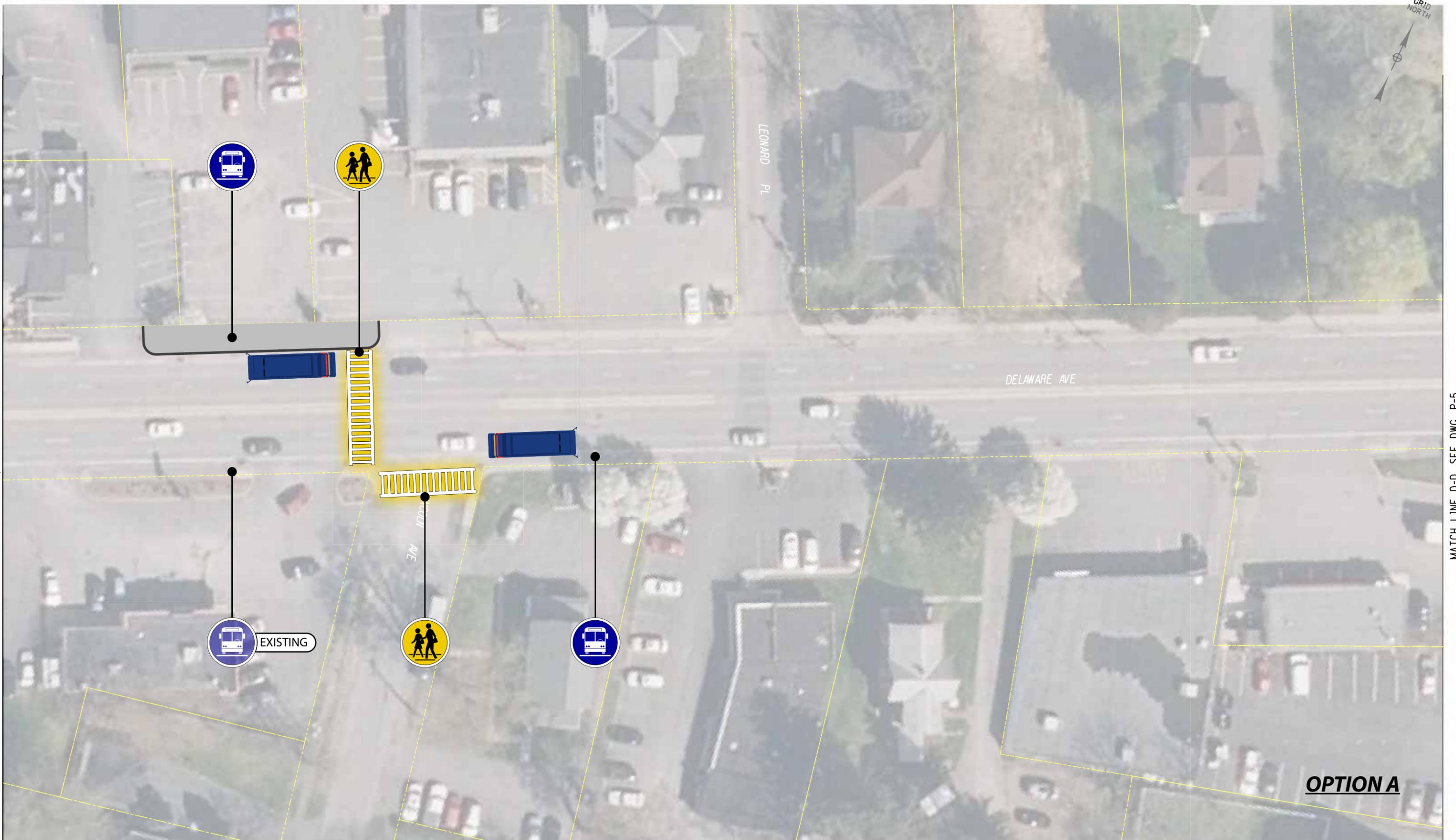


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MATCH LINE C-C, SEE DWG. P-3

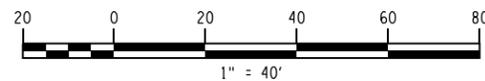
MATCH LINE D-D, SEE DWG. P-5



OPTION A

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PROJECT: 116-149 DATE: 3/2017

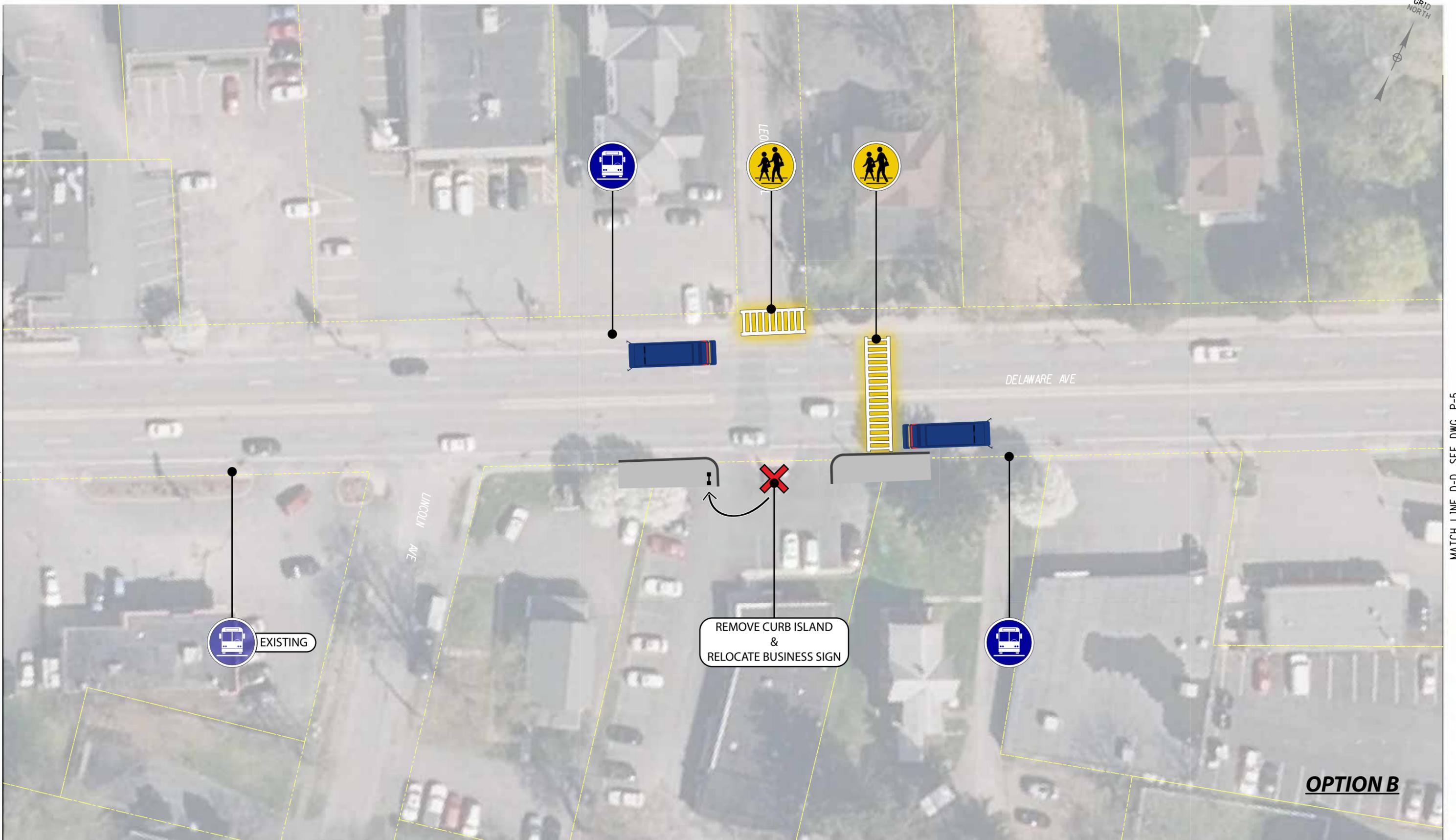


Delaware Ave. Complete Streets Feasibility Study

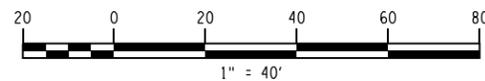
PRELIMINARY CONCEPT
 C-447

MATCH LINE C-C, SEE DWG. P-3

MATCH LINE D-D, SEE DWG. P-5

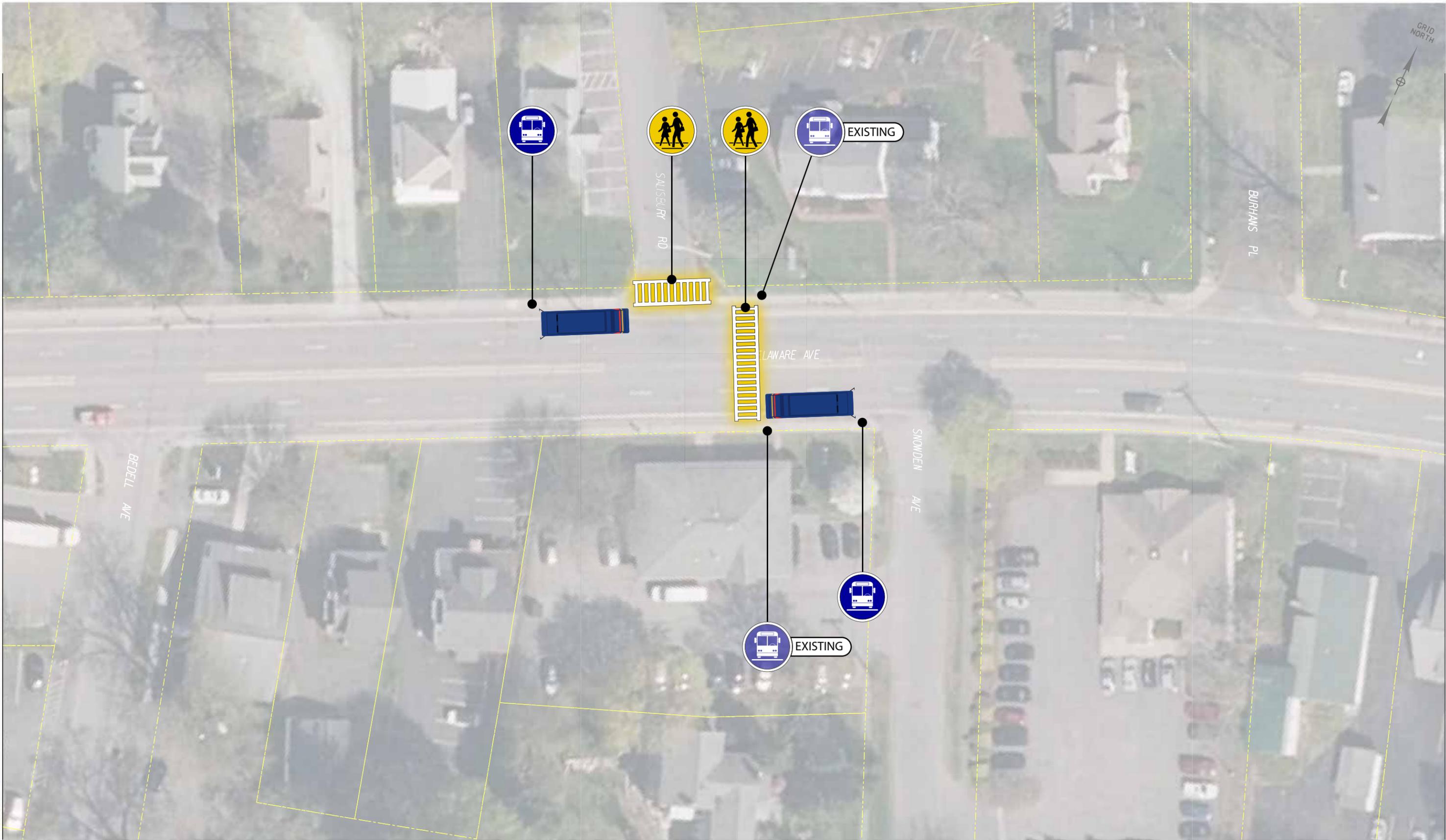


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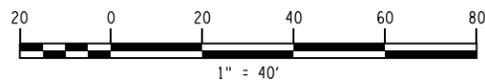


MATCH LINE D-D, SEE DWG. P-4

MATCH LINE E-E, SEE DWG. P-6



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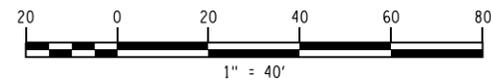




MATCH LINE E-E, SEE DWG. P-5

MATCH LINE F-F, SEE DWG. P-7

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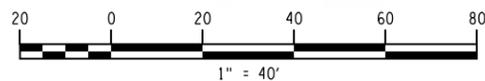


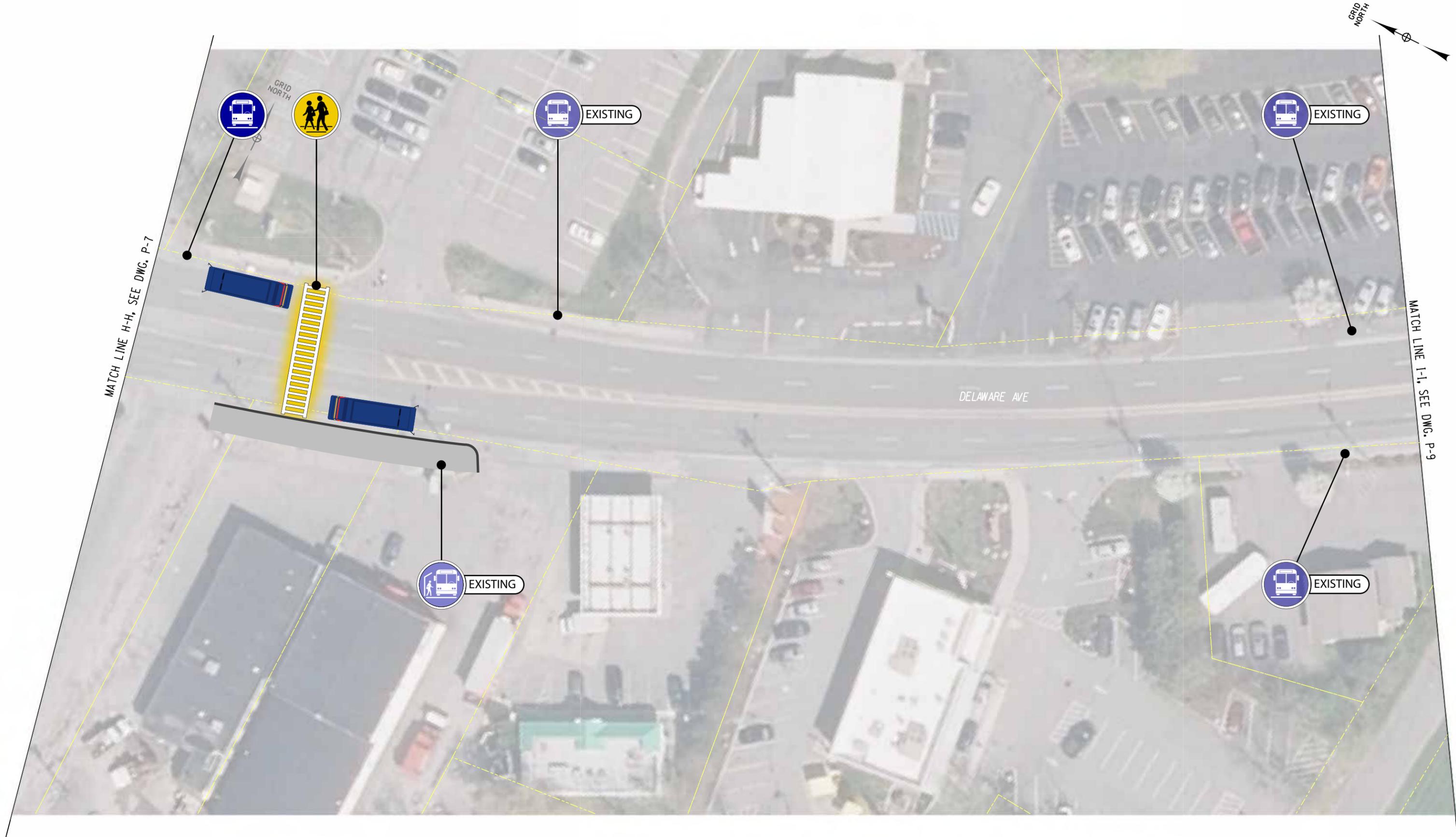
MATCH LINE G-G, SEE DWG. P-6



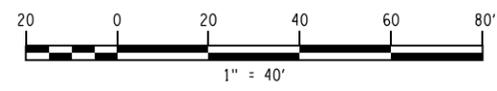
MATCH LINE H-H, SEE DWG. P-8

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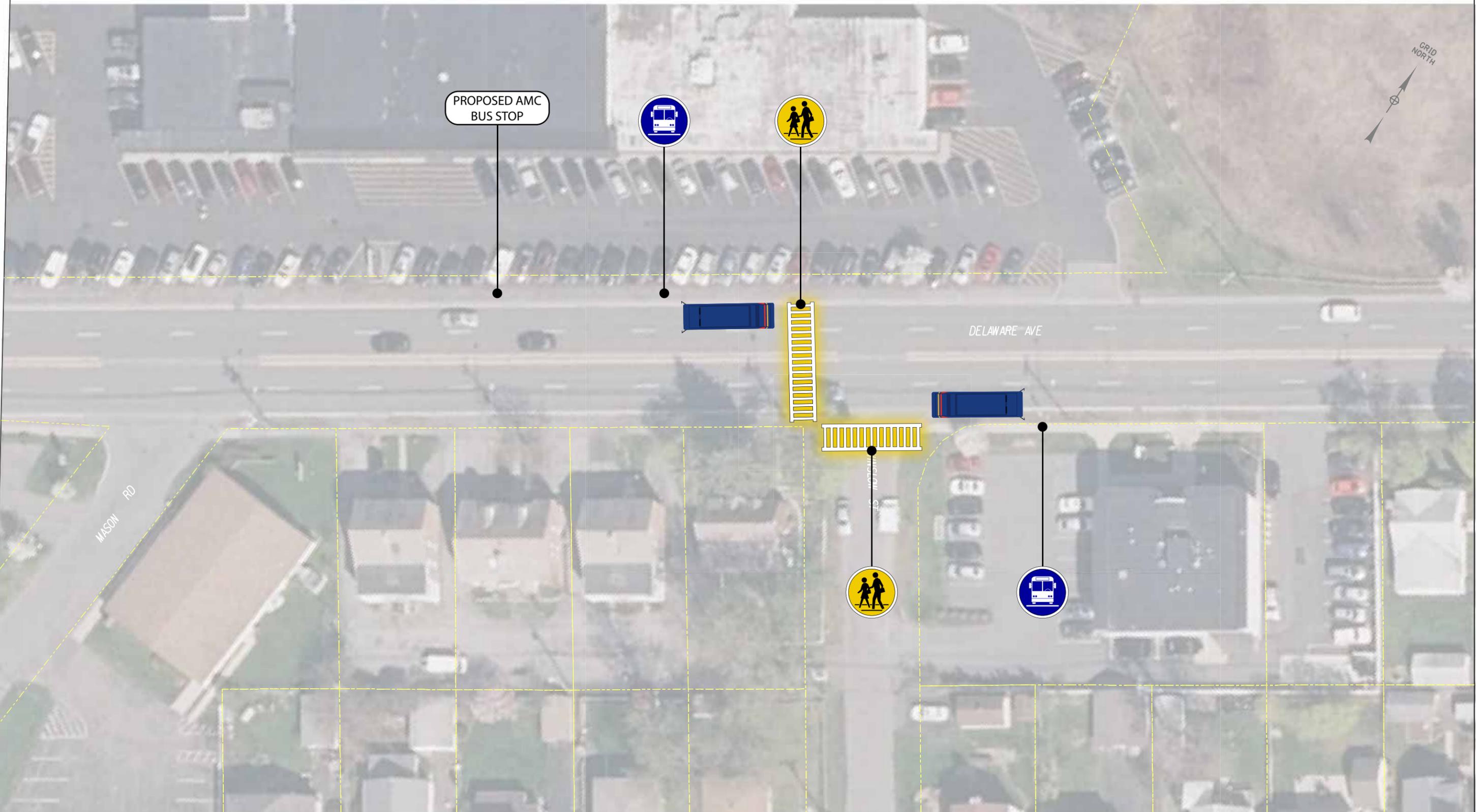


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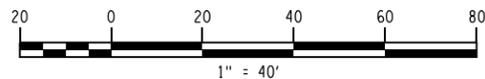


MATCH LINE I-I, SEE DWG. P-8

MATCH LINE J-J, SEE DWG. P-10

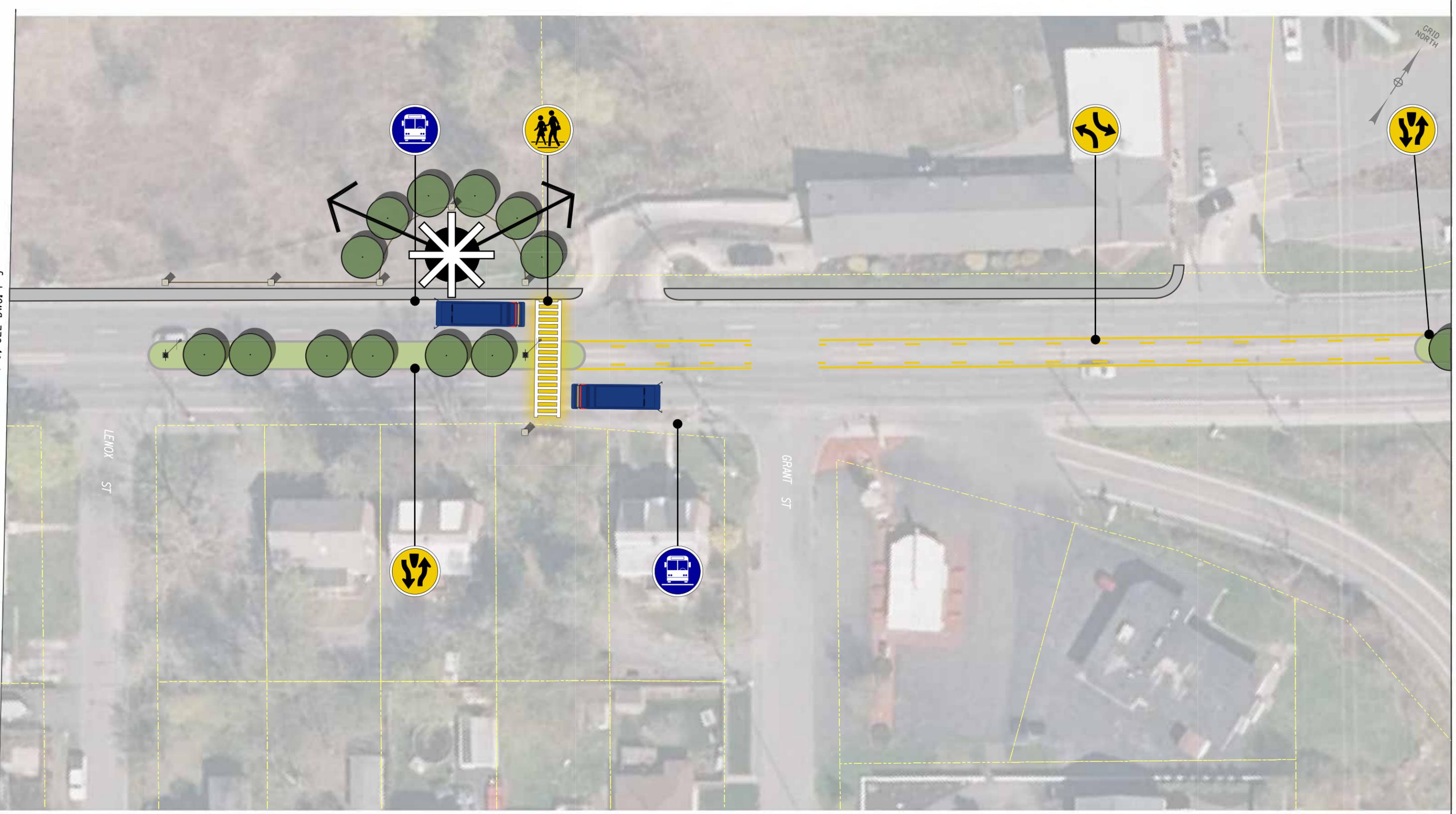


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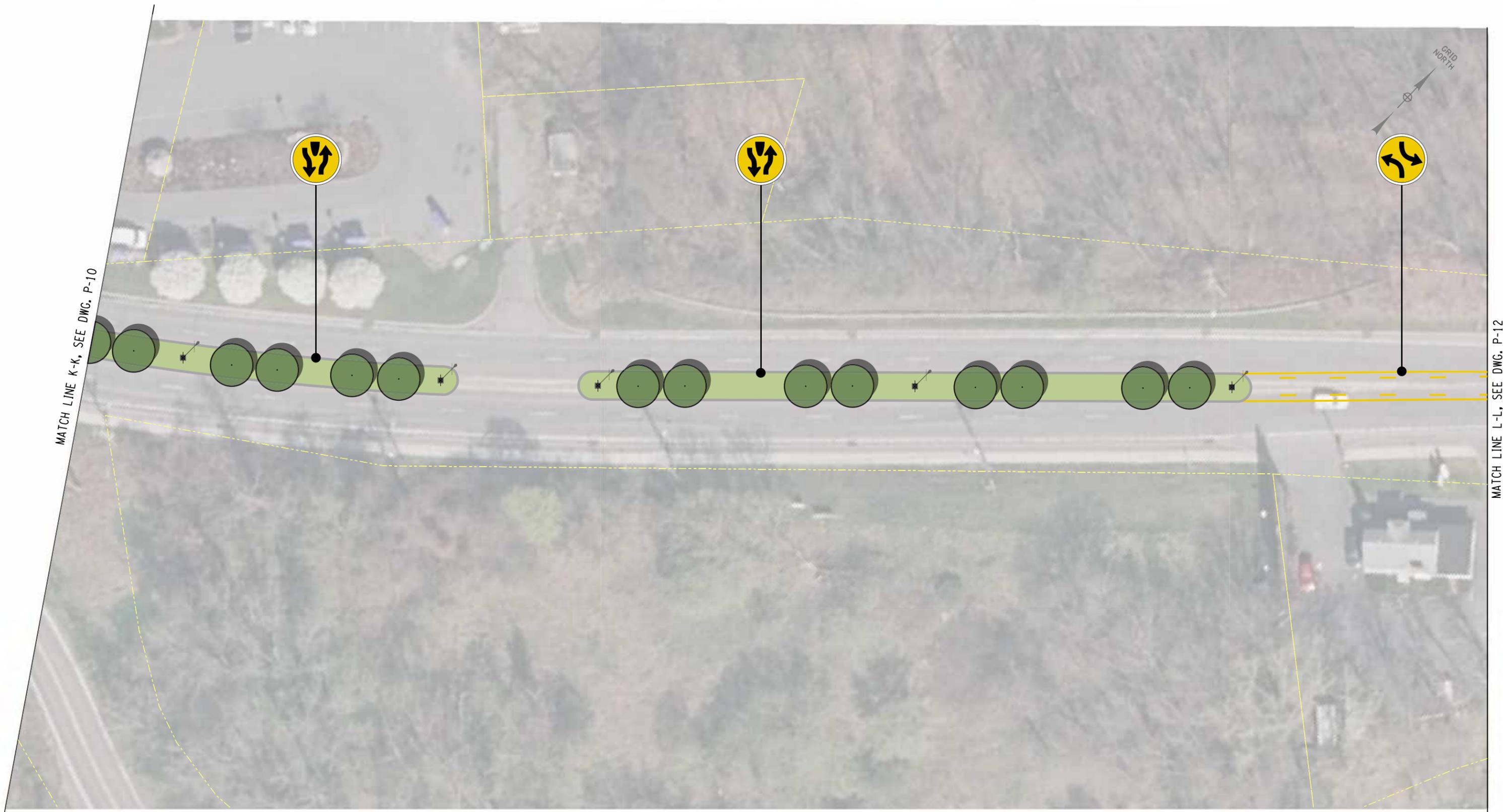
MATCH LINE J-J, SEE DWG. P-9

MATCH LINE K-K, SEE DWG. P-11

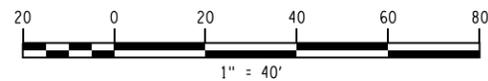


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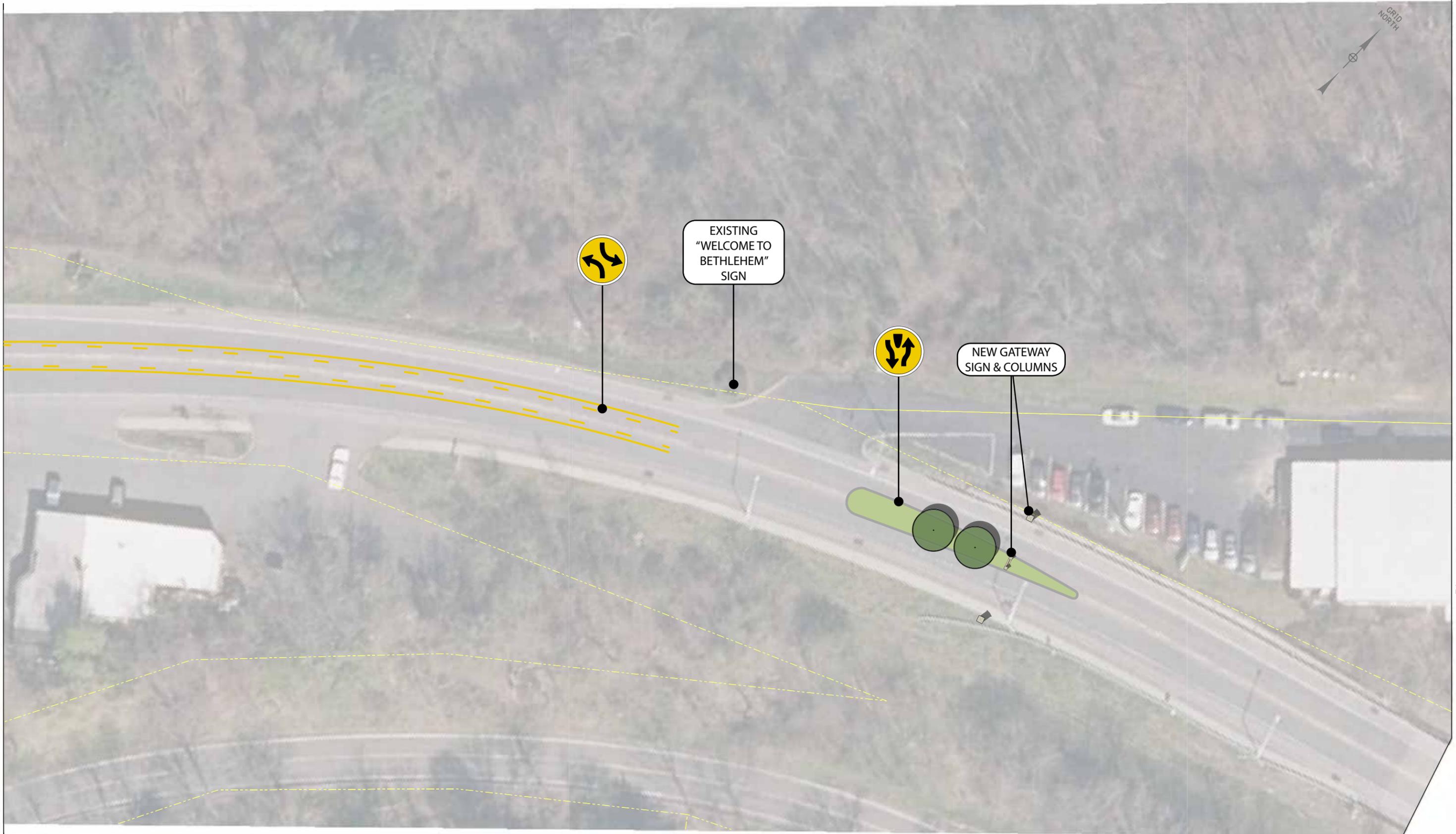


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MATCH LINE L-L, SEE DWG. P-11

MATCH LINE M-M, SEE DWG. P-13

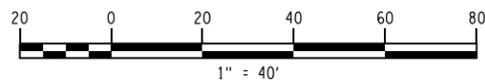


EXISTING
"WELCOME TO
BETHLEHEM"
SIGN



NEW GATEWAY
SIGN & COLUMNS

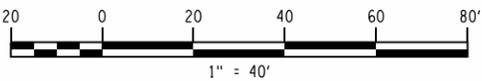
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MATCH LINE M-M, SEE DWG. P-12

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Field Walk 10/18/2016

This summary represents the writer’s understanding of the major issues discussed. If you wish to suggest edits or additions, please contact the undersigned.

- DATE:** October 18, 2016
- PROJECT:** Delaware Avenue Complete Streets Feasibility Study
- PLACE:** Delaware Avenue – Elsmere to beyond Old Delaware
- TIME:** 2:45 pm
- PURPOSE:** **The purpose of the walk was to become familiar with the corridor and to identify initial issues and ideas to be addressed as part of the study.**

ATTENDEES:

<u>Name</u>	<u>Title/Representing</u>	<u>Telephone Number</u>
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Representatives from the Town, NYSDOT, CDTC, CDTA, and the Advisory Committee attended.

SUMMARY:

Attendees met at Delaware Plaza, walked to Elsmere, then turned east and walked almost to the City line, before turning back and ending at Delaware Plaza. The following comments and suggestions were noted:

1. There have been some complaints about the speed of cars entering Delaware Plaza.
2. Suggestion to extend the lengths of the driveway throat to improve on-site circulation. Consider a landscaped island.
3. The frontage is a good example of nice landscaping
4. Bruegger’s façade is planned to be upgraded
5. Consider access management at 163 Delaware. There are some short cuts here.
6. Sidewalk concrete should be extended through driveways and remain level if possible.
7. Former Murnane building is now nice looking building with apartments in back. It shares a driveway with Keystone and is a good example of access management.
8. Question about where crosswalks across Delaware might make the most sense.
9. Snowden area has a former driveway curb drop; same at Valvoline / Dominos area.
10. 210, 212, 214 Delaware is a possible access management opportunity area.
11. Consider reducing the radius of side streets to reduce turning speeds and shorten crossing distances.
12. Possible access management near Valvoline/Dominos
13. 15 apartment units proposed at 224 Delaware (6 in front, 10 in back). 16 units proposed opposite also. Could this be an area for a cross walk / relocated bus stops?
14. Dunkin Donuts is pursuing a drive-thru and has purchased the house behind.
15. The sidewalk is narrow. Can it be widened? Can it accommodate bikes? How wide would it need to be?



16. Trees on south side of Delaware are small ornamental. There are no overhead utilities. There is an opportunity for larger shade trees this side. Google Cornell Structural Soils which might be appropriate to support new trees in this area.

17. Consider access management near Handy Dandy / Delmar Beverage Ctr.

18. Want more green space and less pavement on south side of Delaware Ave, particularly Booth to Lincoln area.

19. Question why no speed limit sign on school zone flashing beacon assembly.

20. Consider median on east gateway

21. School bus circulates through Ace Hardware to serve School's Out stop.

22. Consider a pocket park / scenic overlook east of Albany Med bldg. Include gazebo or something similar and a few benches.

23. Consider better bus stop spacing particularly west end of corridor where there are some closely spaced stops near My Place & Co.

24. Consider crosswalk near Ace Hardware / Snowden

25. Residential uses on north side of street and services on south side of street creates need to cross.

26. Condition and appearance of maintenance strips is a concern. Stamped concrete is durable. Consider extending theme developed as part of the Enhancements project.

27. Consider pocket park at 163 Delaware.

28. Pedestrian push buttons at Delaware Plaza – NW audible, NE not audible, chirp when walk.

29. Concern about pedestrian crossings to/from bus stop at Park and Ride

30. Overhead utilities are on the south side of Delaware Ave, generally east of Hannaford.

31. Consider gateway on level area west of Old Delaware.

32. Need trees in front of Albany Med building – consider bump-out into the parking lot to accomplish this. May result in a few lost parking spaces.

33. Consider trail connection behind Mason, along Town sewer maintenance easement. There is already an informal path here. Elevation change is an issue.

34. There was a former proposed for about a 10KSF building east of Old Delaware.

35. Nice landscaping and trees at car wash. A good example.

36. There are higher traffic speeds on the east end of the corridor. This could be an enforcement area.

37. Comment that speed limits are inconsistent.

38. Some sign clutter noted on east end of corridor

39. Consider long median gateway on east end of corridor, like Saratoga Springs.

40. The wide grass maintenance strip near Lenox provides a better buffer. Can the maintenance strip be wider in other areas also?

41. The minimum setback in the commercial district is 35 feet

42. There is a commercial building and three apartments proposed above Healthy Pet Ctr.

43. The City of Albany Water Board owns the drive aisle behind Hannaford. Delaware Ave Plaza has an easement for traffic access.



The walk concluded around 4:45 p.m.

Mark Sargent, PE
Project Manager

cc: File

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