



Bicycle and Pedestrian Priority Network

PaTHs 4 Bethlehem Committee

Planning Board Meeting -December 21, 2010



PaTHS 4 Bethlehem Committee Members
Pathways to Homes, Hamlets and Healthy Hearts

Anne Benware

Mark Lewis

Stephen Downs

Katherine McCarthy

Mark Jordan

Henry Peyrebrune

Scott Lewendon

Julie Sasso

Daniel Lewis

Caleb Wistar

Town Staff

Robert Leslie, AICP

Jason Gallo

Erik Deyoe, P.E.



Tonight's Agenda

- Background
- Bicycle and Pedestrian Priority Network
- Planning Board Role
- Evaluation Process for New Pathway Investment
- Questions/Comments

Background

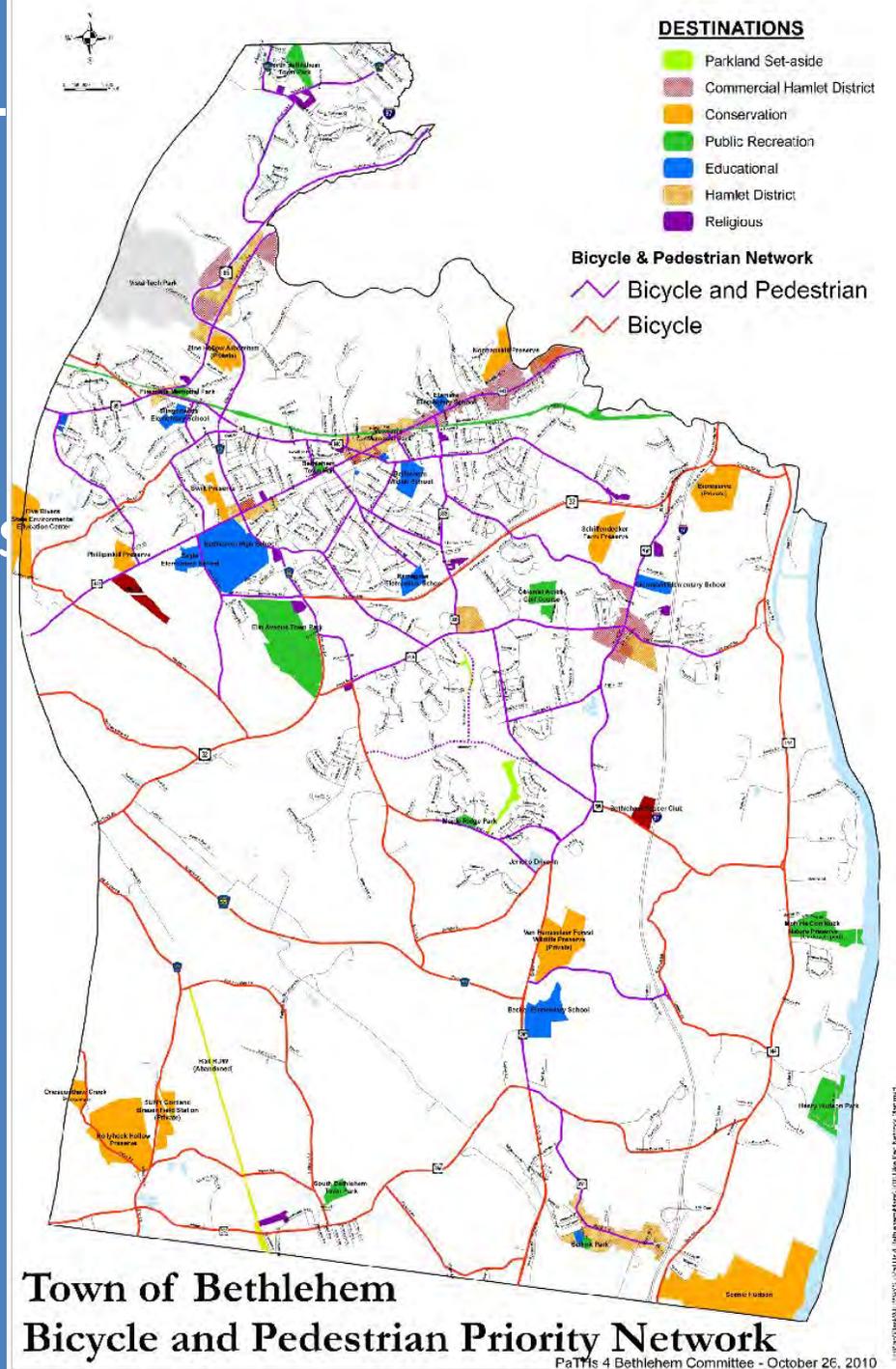
- Comprehensive Plan (2005)
 - Maintain and enhance pedestrian connections
 - Provide adequate bicycle facilities
 - Maintain and improve walkability
- PaTHs 4 Bethlehem Committee (March 2009)
(Pathways To Homes, Hamlets and Healthy Hearts)
 - Address Bicycle and Pedestrian Mobility

Bicycle and Pedestrian Priority Network

- +/- 100 mile network
- Major travel routes
- Desirable bike/ped corridors
- Connect major destinations

✓ Applications

- Grant Applications
- Evaluation Process
- **Land Use Review**



PaTHs Committee Resolution

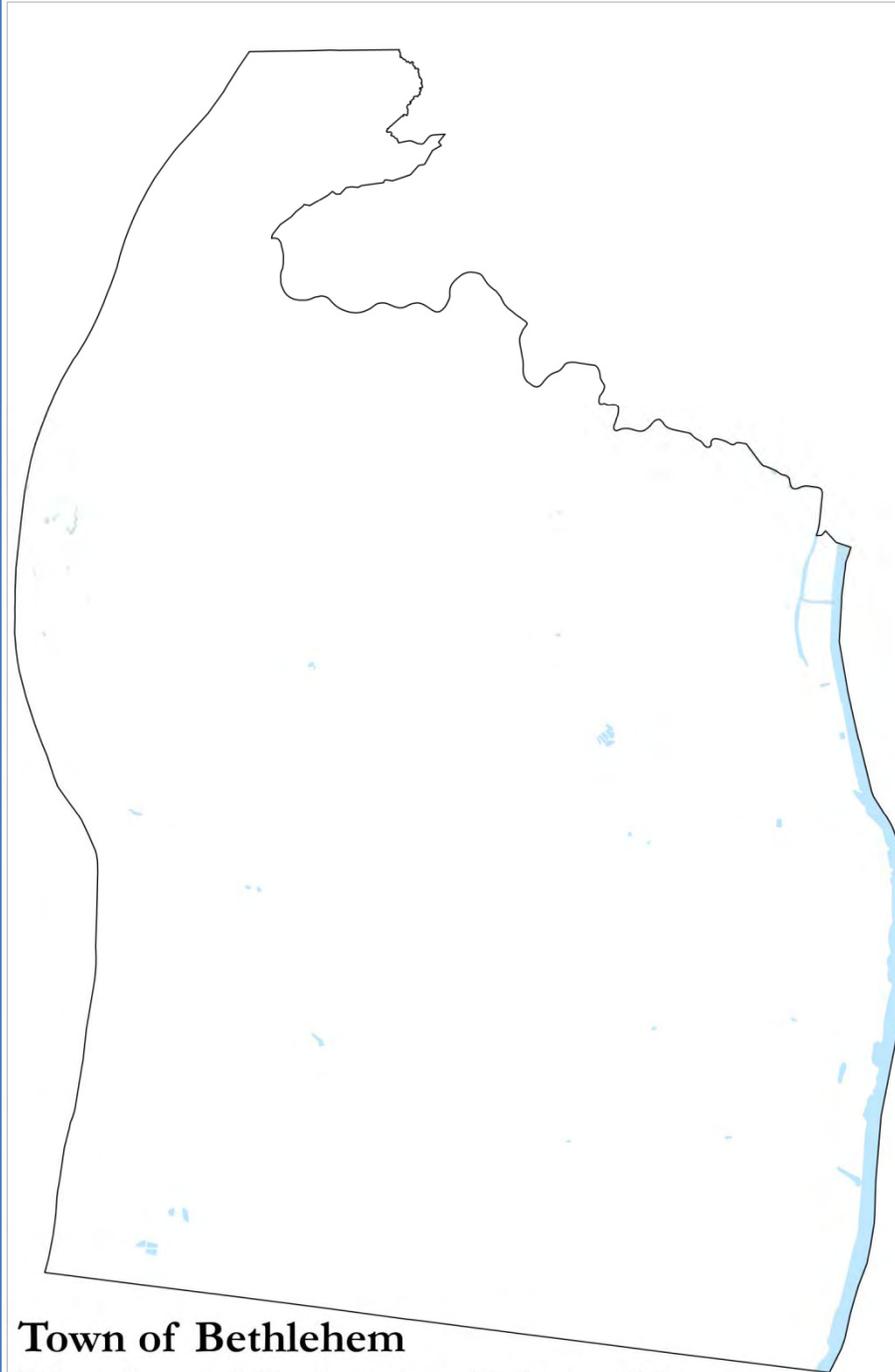


“The Town Planning Board shall refer to the Bicycle and Pedestrian Priority Network as a planning tool to assist in determining the need for bicycle and pedestrian accommodations during its review of site plan and subdivision applications, (and other applications)”

Town Board Approval Nov. 24, 2010

HOW WAS
THE NETWORK DEVELOPED?

TOWN
BOUNDARY



Town of Bethlehem
Bicycle and Pedestrian Priority Network

PaTHs 4 Bethlehem Committee - June 22, 2010

HOW WAS
THE
NETWORK
DEVELOPED?

DESTINATIONS

Parks/Recreation

Conservation

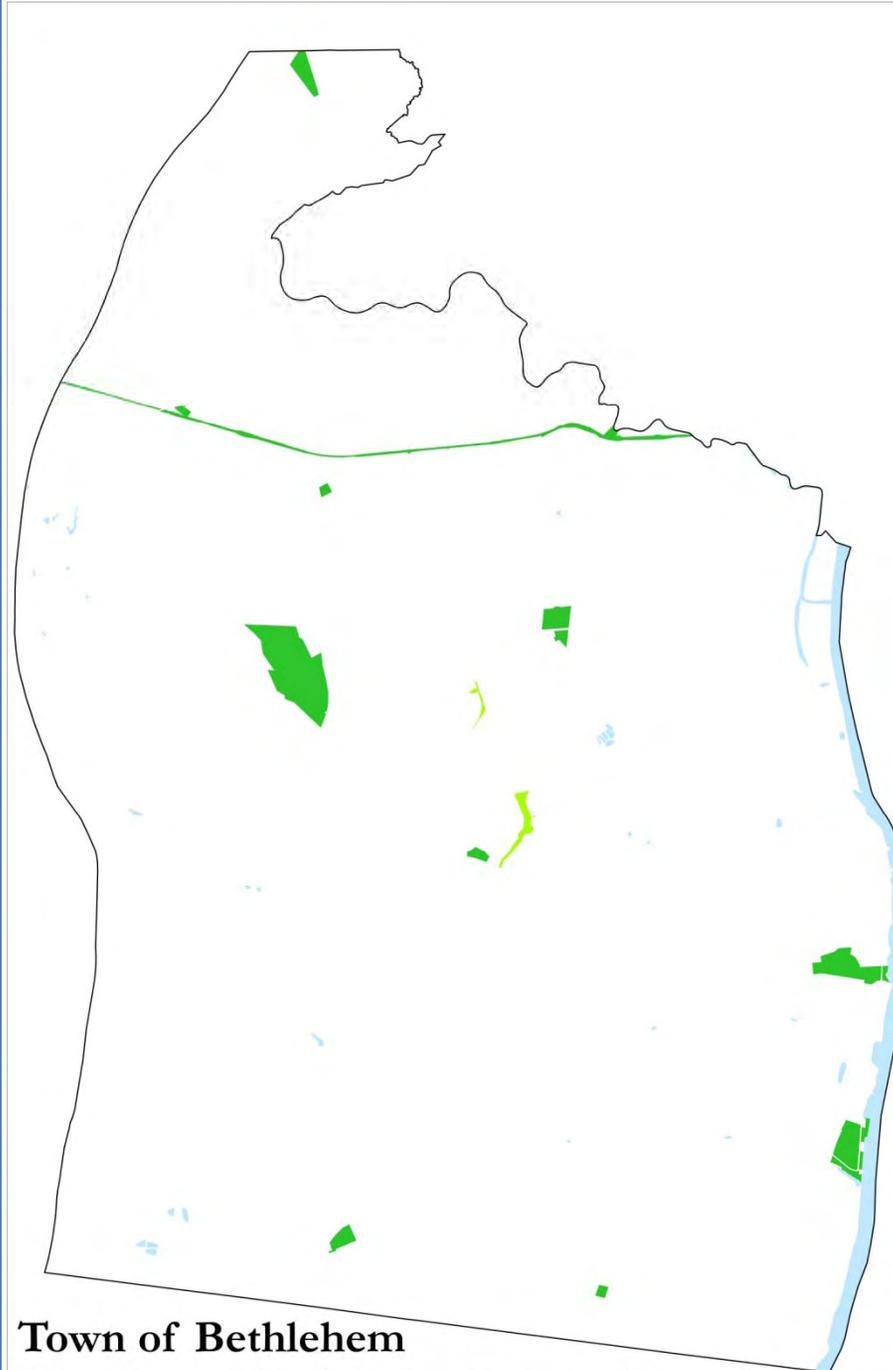
Education

Commercial Hamlet

Hamlet

Community/Religious

Adjacent Destinations



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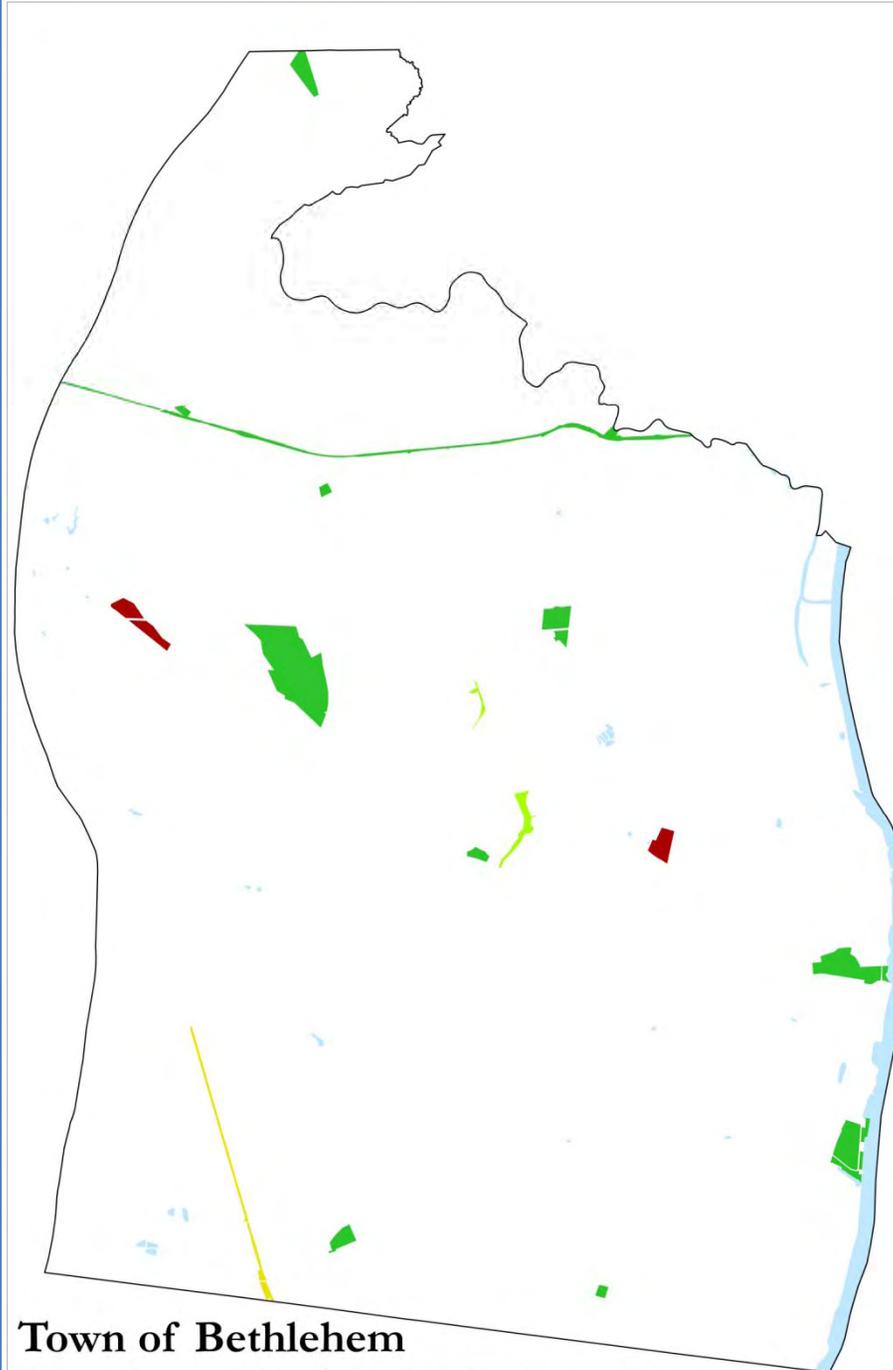
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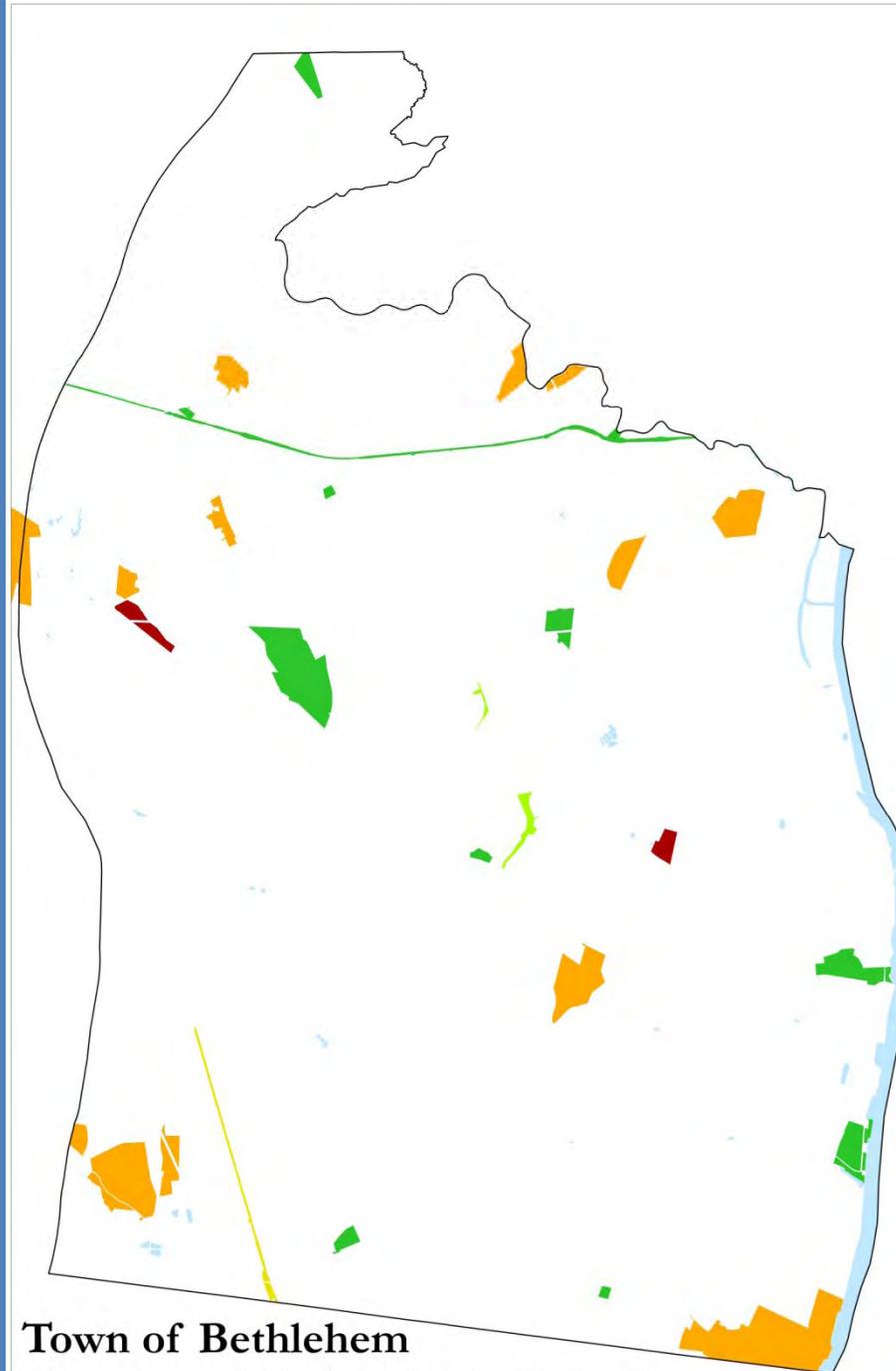
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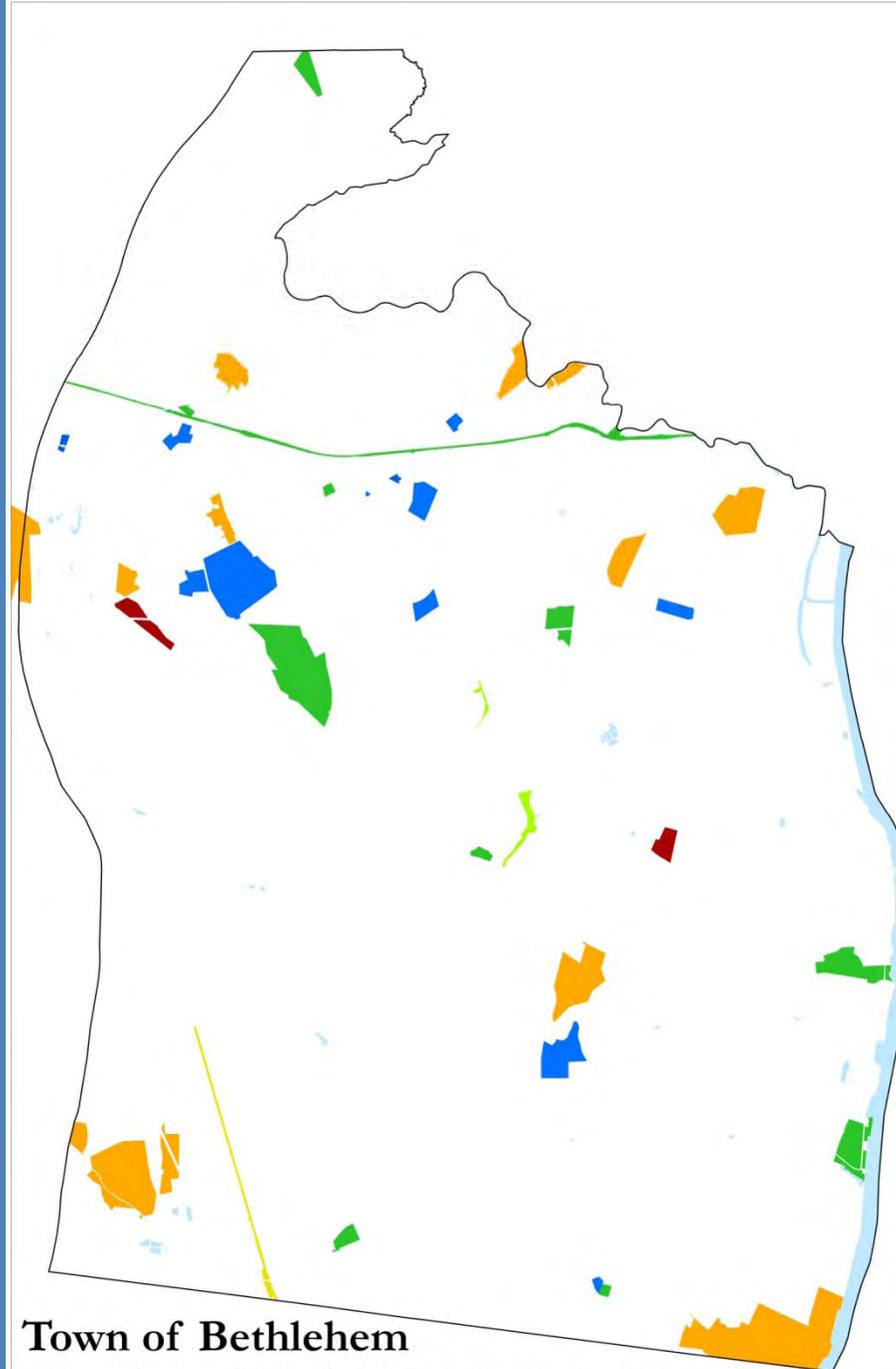
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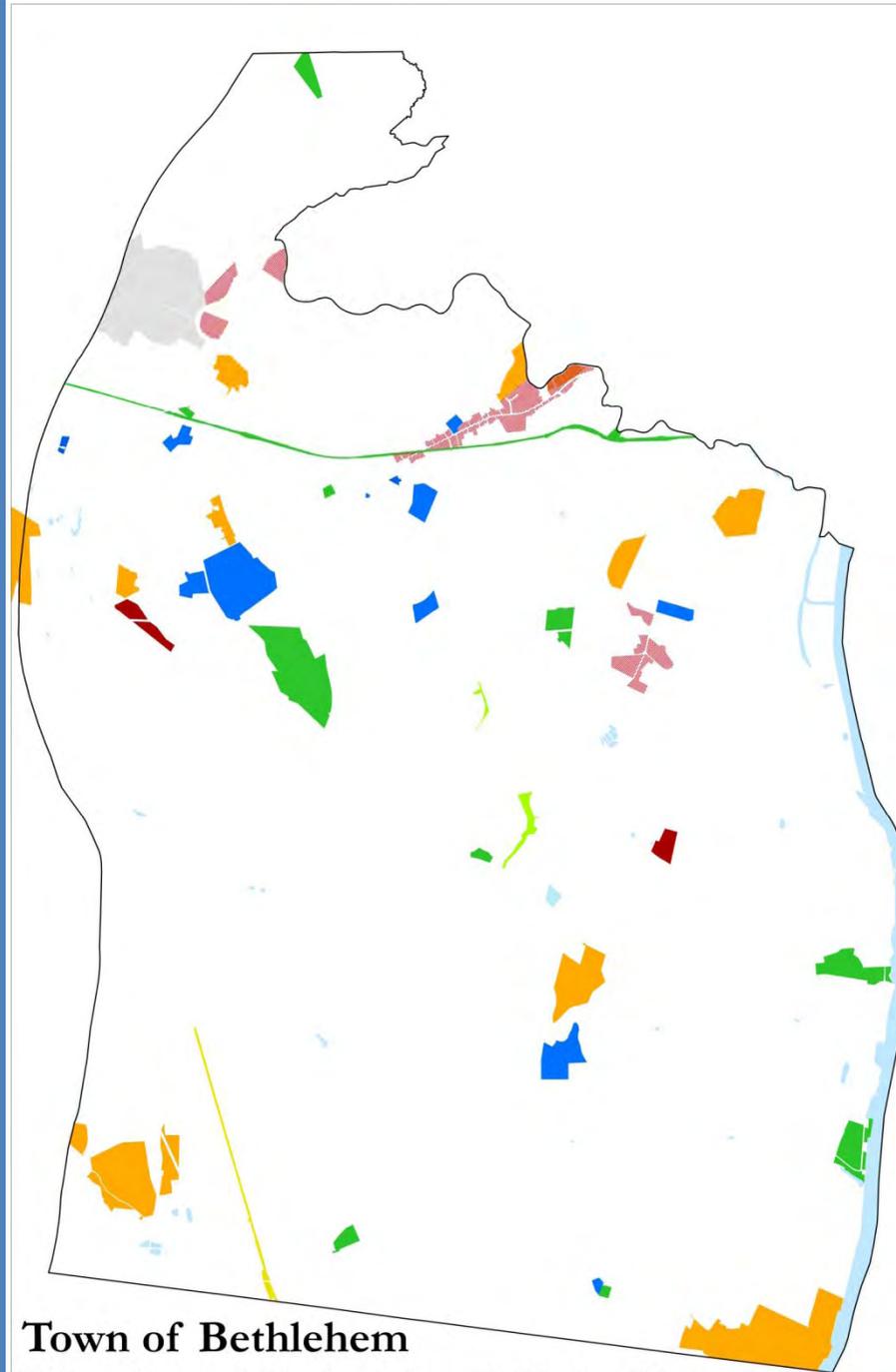
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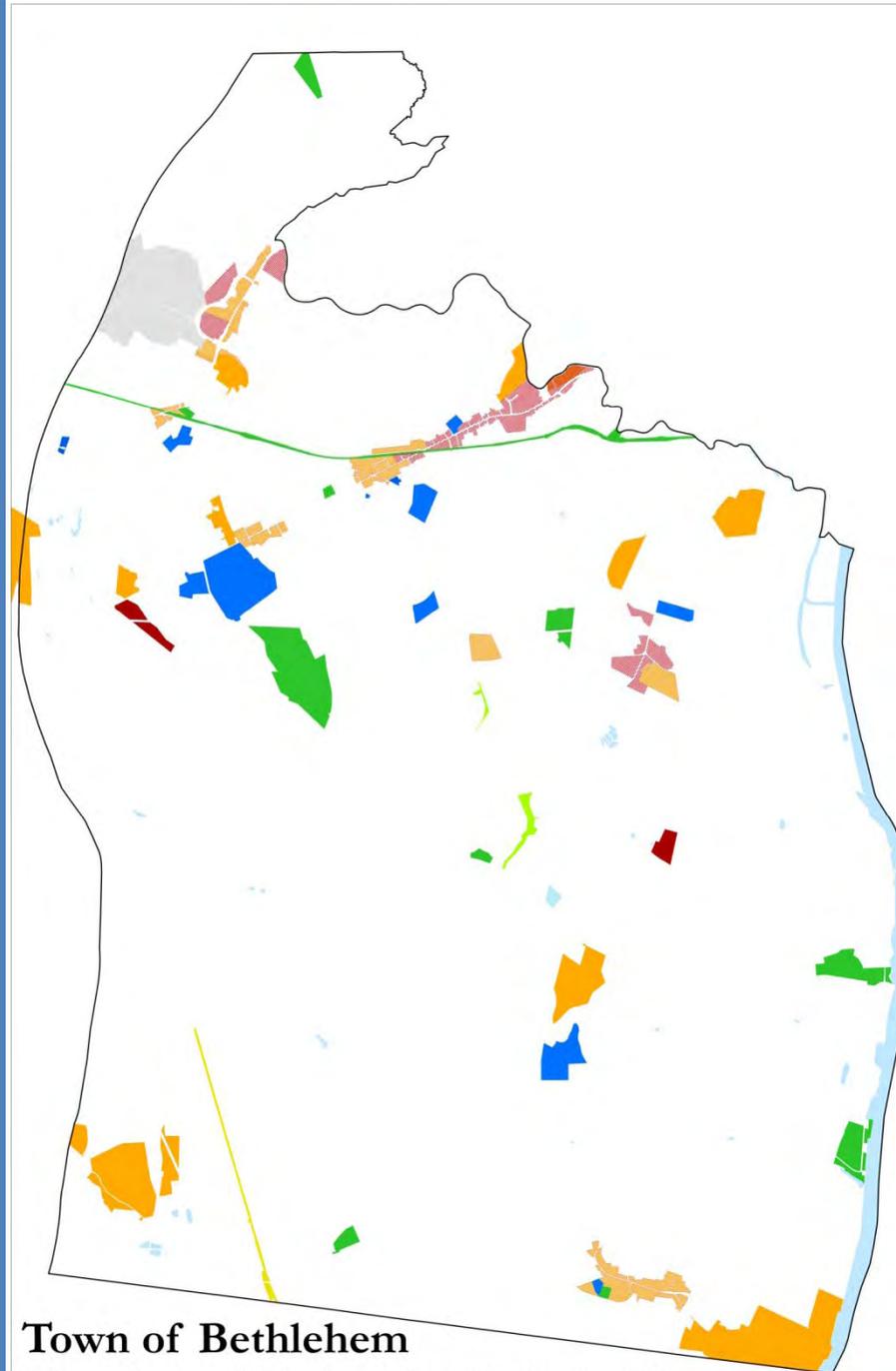
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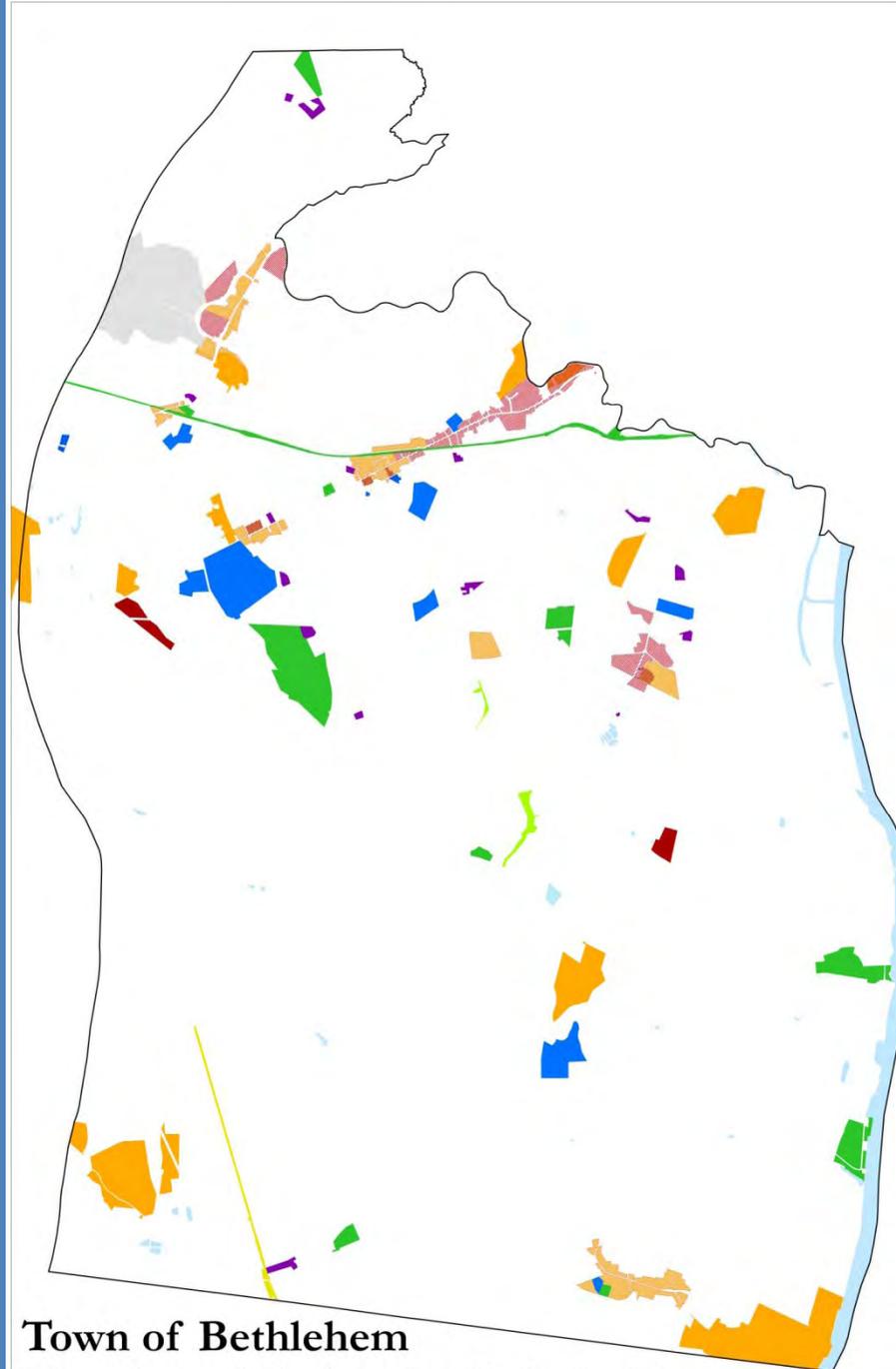
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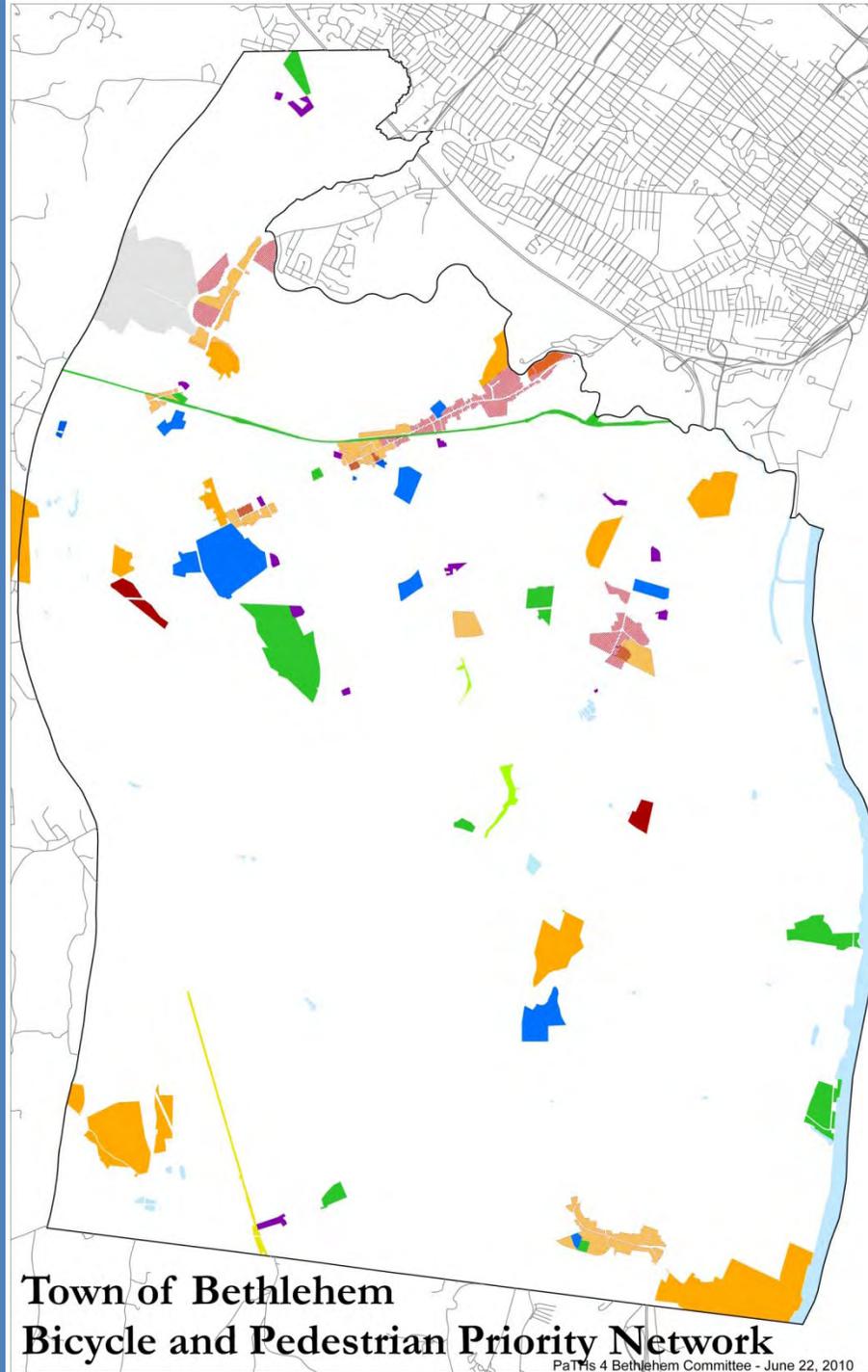
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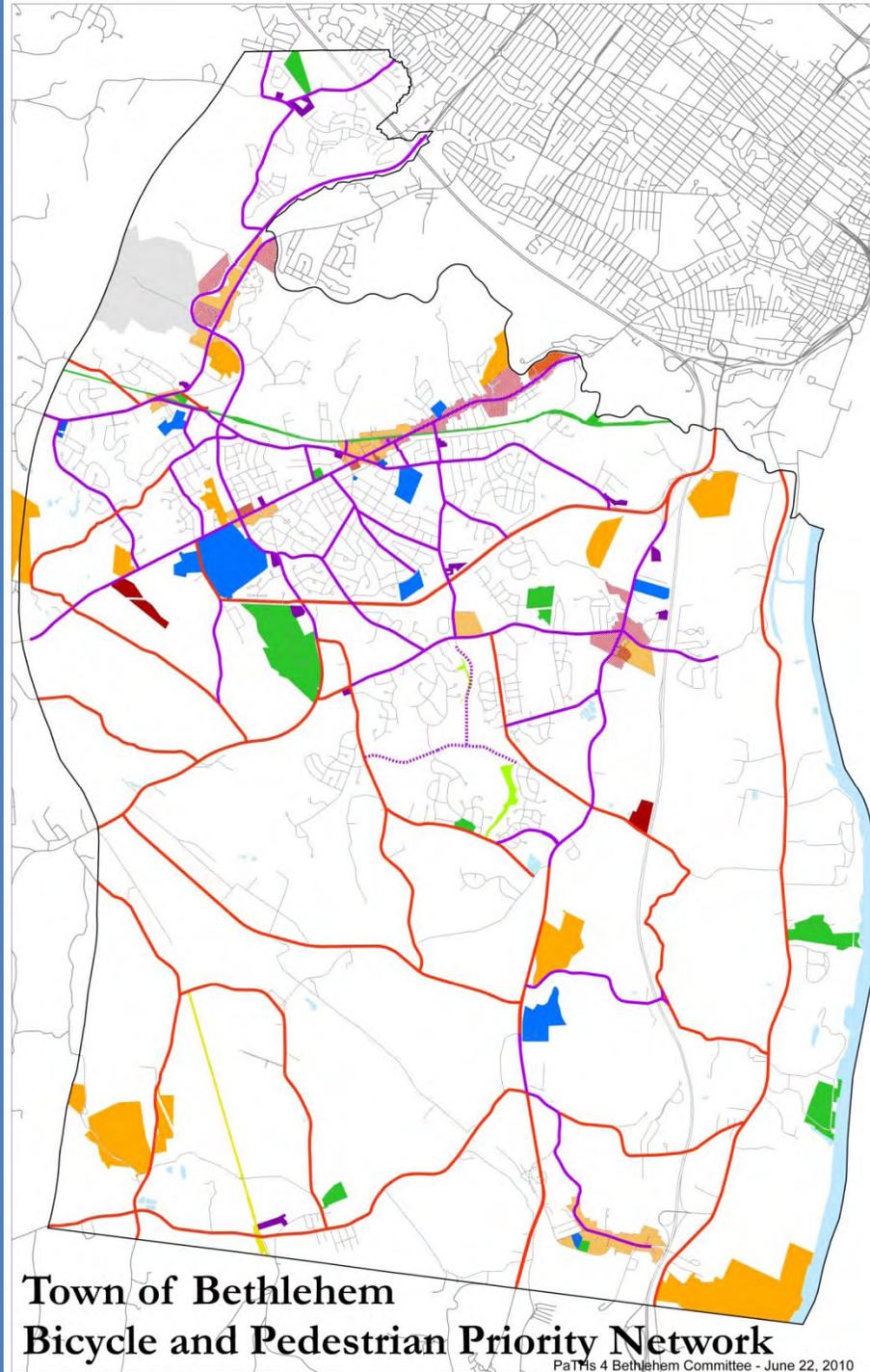
Community/Religious

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HOW WAS
THE
NETWORK
DEVELOPED?

Proposed
Bicycle and
Pedestrian
Network



HOW WAS
THE
NETWORK
DEVELOPED?



WHAT COULD THIS NETWORK LOOK LIKE?



SIDEWALKS



SIGNAGE



CROSSWALKS/PED SIGNALS



SHARED USE PATHS



YIELD TO
PEDESTRIAN SIGNS



ADA COMPLIANT FACILITIES



WHAT COULD THIS NETWORK LOOK LIKE?



WIDENED SHOULDERS



SHARE THE ROAD SIGNS



BIKE LANES



BIKE RACKS



SHARROW LANE MARKINGS

WHAT IS THE PLANNING
BOARD'S ROLE?

PLANNING BOARD'S ROLE

Subdivision Regulations §103-5

- To promote the safe and convenient circulation of vehicles and pedestrians, and to promote the efficient design, location and construction of roads, streets, sidewalks, pathways, and driveways so as to accommodate current and future needs.
- The applicant shall provide the following improvements when required by the Planning Board: Sidewalks, paved streets, storm/sanitary system

Site Plan Regulations

- Zoning District Design Guidelines: Encourage the installation of sidewalks



PLANNING BOARD'S ROLE — PEDESTRIAN



SIDEWALKS



CROSSWALKS



SHARED USE PATHS



ADA COMPLIANT FACILITIES

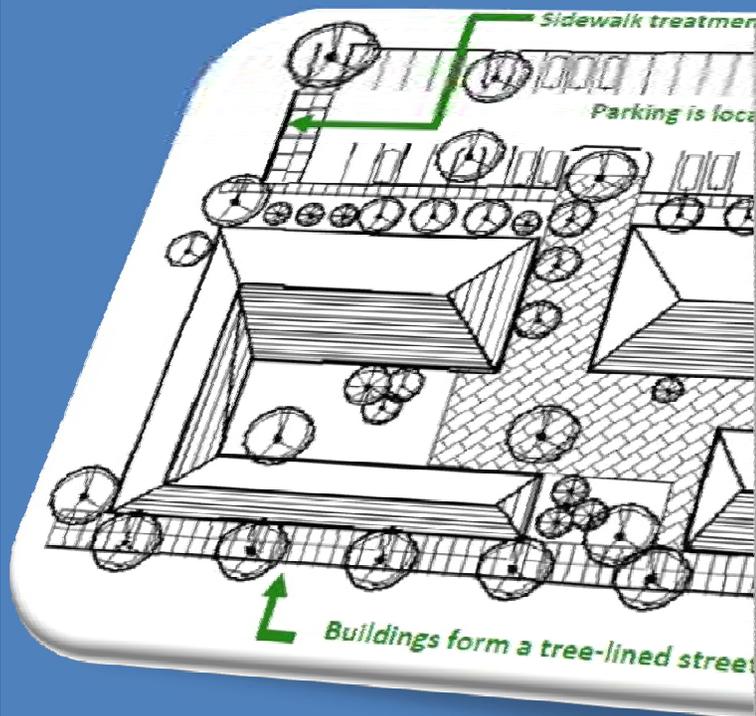


PLANNING BOARD'S ROLE — PEDESTRIAN





PLANNING BOARD'S ROLE — PEDESTRIAN



Sidewalk continued across driveway access to emphasize pedestrian use of the space.



PLANNING BOARD'S ROLE — BICYCLE



WIDENED SHOULDERS



BIKE RACKS





PLANNING BOARD'S ROLE — BICYCLE



Refer to Bicycle Parking Guidelines – Association of Pedestrian and Bicycle Professionals



BICYCLE PARKING



GUIDELINES

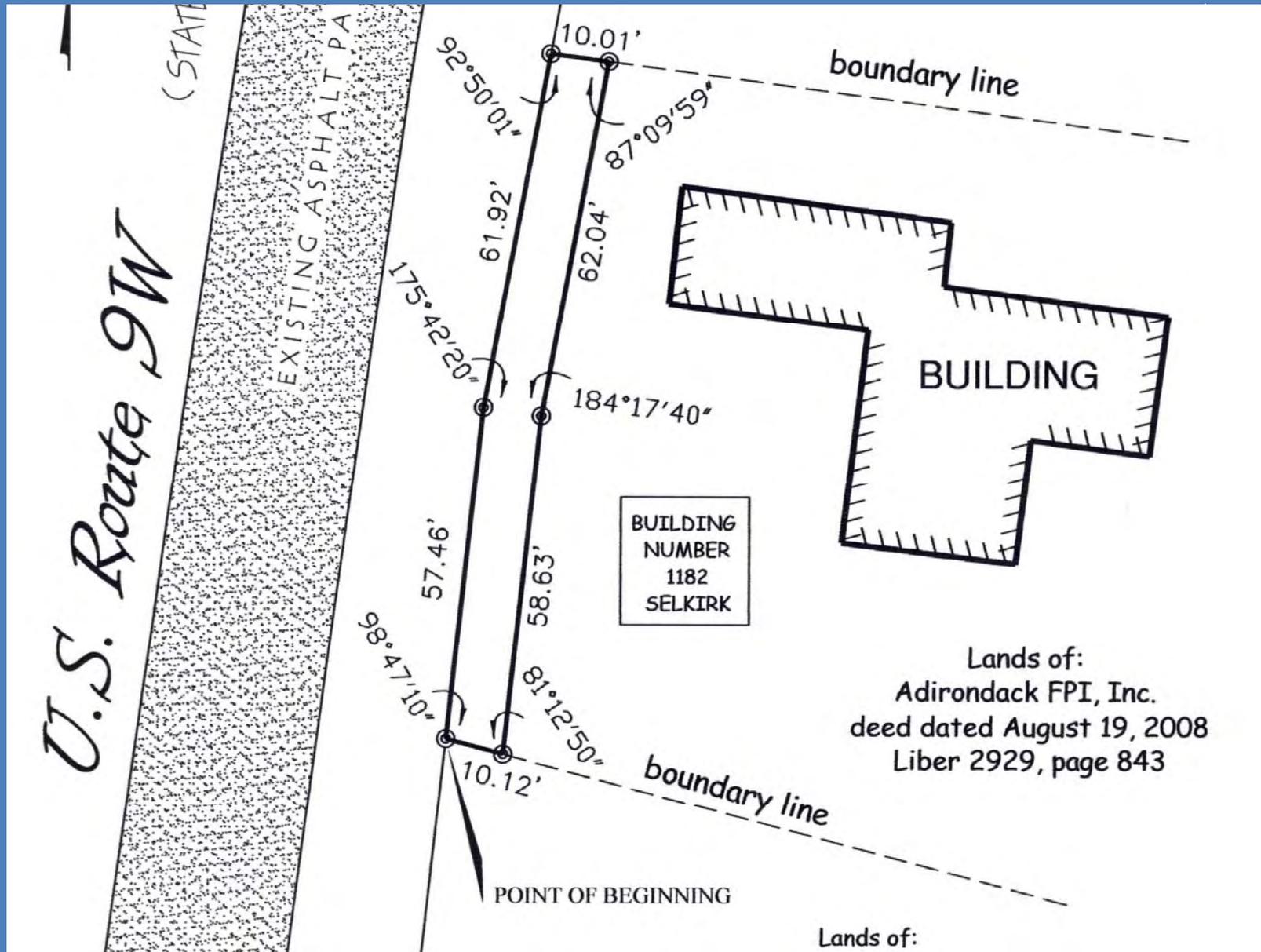
A set of recommendations from the Association of Pedestrian and Bicycle Professionals (apbp)



"I would ride to work if there was a safe place to lock my bike."



PLANNING BOARD'S ROLE — PED/BIKE



HOW WILL THE TOWN
DEVELOP AND PRIORITIZE
PATHWAY IMPROVEMENTS?



Town of Bethlehem Evaluation Process for New Pathway Investment *Procedures /Users Guide*



Evaluation Process Purpose

- Tool to assist the Town in prioritizing pathway investment projects
- Provides a formal evaluation that quantifies the merits of proposed pathway projects
- A first step...not ultimate decision maker
- Evaluation process to be used on proposed projects within public right-of-way
- Improve a roadway's safety and efficiency for pedestrian and bicycle users

Evaluation Process for New Pathway Investment

STEP 1:

SCREENING

LOCATED ON PEDESTRIAN AND BICYCLE NETWORK MAP

RECOMMENDED BY TOWN PLAN OR STUDY

STEP 2:

COST

CALCULATE ESTIMATED PROJECT COST

\$\$\$\$

STEP 3:

BENEFITS

COMPLETE BENEFITS EVALUATION

SAFETY

- VOLUME
- SPEED
- CROSSINGS & INTERSECTIONS
- ACCESS CONFLICTS
- LACK OF EXISTING FACILITIES

DESTINATIONS

POTENTIAL FOR PEDESTRIAN/BICYCLE ACTIVITY

- POPULATION DENSITY
- POTENTIAL USERS

GEOGRAPHIC DISTRIBUTION

STEP 4:

CALCULATE TOTAL
SCORE BASED ON
PATHWAY SCORING
MATRIX

STEP 5:

LEVERAGE
OPPORTUNITIES

IDENTIFY TOWN SHARE

FEDERAL/STATE GRANT PROGRAM

DEVELOPER SHARE

REVISE COST
SCORE
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STEP 3: COMPLETE BENEFITS EVALUATION TABLE

		<p>pedestrian and/or bicycle accommodations exist. Evaluator should utilize AASHTO and NYS DOT Guidelines/Standards to determine if accommodations are built to design standards.</p>	<p>Pedestrian/Bicycle Accommodations built to design standards (3 points) Full Ped/Bike Accommodations built to design standards (0 points)</p>		12 PTS
		WEIGHT: 31%	(max 12 points)		
22%	<p>Destinations The presence of destinations with a 1/2 mile of the project corridor directly influences the generation of pedestrian and bicycle trips. Typically, areas of diverse/multiple land uses will generate more pedestrian and bicycle trips than areas with single (separated) land uses.</p>	<p>Destinations include Linkages (connections between existing facilities, not extensions), Hamlet Zoning Districts, Commercial Hamlet Zoning Districts, Recreation Areas (i.e., nature preserves, parks, schools), Schools, Albany County Rail Trail, Community Facilities (e.g., Town Hall, Post Office, Library, Religious Institutions, etc.) and Transit stops. <i>The same type of destination can only be counted once.</i></p>	<p>7+ Destinations (22 points) 6 Destinations (18 points) 5 Destinations (15 points) 4 Destinations (12 points) 3 Destinations (9 points) 2 Destinations (6 points) 1 Destinations (3 Points)</p>	<p>___ Linkage ___ H District ___ CH District ___ Recreation ___ School ___ Community ___ Transit ___ Rail Trail</p>	18 PTS
			(max 22 points)		
31%	<p>Potential for Pedestrian and Bicycle Activity Potential pedestrian and bicycle activity can be estimated based upon two factors: population density and potential users.</p>	<p>Population Density The higher the density (housing units per 1/2 mile radius) the greater the likelihood a large number of pedestrians/bicyclists would be attracted to the pedestrian/bicycle facility. Review the housing density residing within 1/2 mile of the proposed project for pedestrian facility improvements.</p>	<p>>= 1750 housing units (15.5 points) 1400 - 1749 housing units (12 points) 1050 - 1399 housing units (9 points) 700 - 1049 housing units (6 points) 350 - 699 housing units (3 points) <= 349 housing units (0 points)</p>	<p>___ Housing Units</p>	12 PTS
		<p>Potential Users Identify the potential user groups of the pedestrian and bicycle facility based on destinations that are located within or accessed by the project area. (User Groups include: Students, Recreation - with park or facility, Shoppers, Transit, Community Facility) A school can also be used for recreation.</p>	<p>5 users (15.5 points) 4 users (12 points) 3 users (9 points) 2 users (6 points) 1 user (3 point)</p>	<p>___ Students ___ Shoppers ___ Transit ___ Recreation ___ Community</p>	12 PTS
			(max 15.5 points)		
			(max 15.5 points)		
8%	<p>Geographic Distribution The diversity of land uses and density of hamlets throughout the Town may place some areas of the Town at a competitive disadvantage when evaluating the merits of proposed projects.</p>	<p>Review/identify the recent history of public investment (Federal, State, County, Town) of pedestrian and/or bicycle accommodations within 1-mile radius of the proposed project area within the past 5 years. The purpose is to achieve some balance in the geographic distribution of public pedestrian and bicycle investment in the Town.</p>	<p>Project completed: 5+ years ago (8 points) 4 years ago (6 points) 3 years ago (4 points) 2 years ago (2 points) 1 year ago (0 points) (from actual completion date)</p>	<p>___ Years Ago</p>	8 PTS
			(max 8 points)		

SCORE LEGEND: =>80: A, 65-79: B, 50-64: C, 35-49: D, <35: F

TOTAL BENEFITS SCORE

75

Evaluation Process for New Pathway Investment

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STEP 2:

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CALCULATE ESTIMATED PROJECT COST

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COMPLETE BENEFITS EVALUATION

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GEOGRAPHIC DISTRIBUTION

STEP 5:

LEVERAGE OPPORTUNITIES

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STEP 4:

CALCULATE TOTAL SCORE BASED ON PATHWAY SCORING MATRIX

REVISE COST SCORE BASED ON TOWN SHARE AND REVISE TOTAL SCORE

STEP 4:

CALCULATE TOTAL SCORE BASED ON PATHWAY SCORING MATRIX

Pathway Scoring Matrix

Town Share Cost		Benefit Score				
		=> 80	65 - 79	50 - 64	35 - 49	< 35
		A	B	C	D	F
Cost < \$100k	A	A	B+	C+	D	D
\$100k <= Cost < \$400k	B	A-	B-	C+	D	F
\$400k <= Cost < \$700k	C	B+		C	D	F
\$700k <= Cost < \$1M	D	B+		D	D	F
Cost >= \$1M	F	B	C+	D	F	F

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Thank You!