PARKWAY AVENUE REDEVELOPMENT AREA TRANSPORTATION PLAN

PUBLIC MEETING WEDNESDAY, MAY 7, 2014

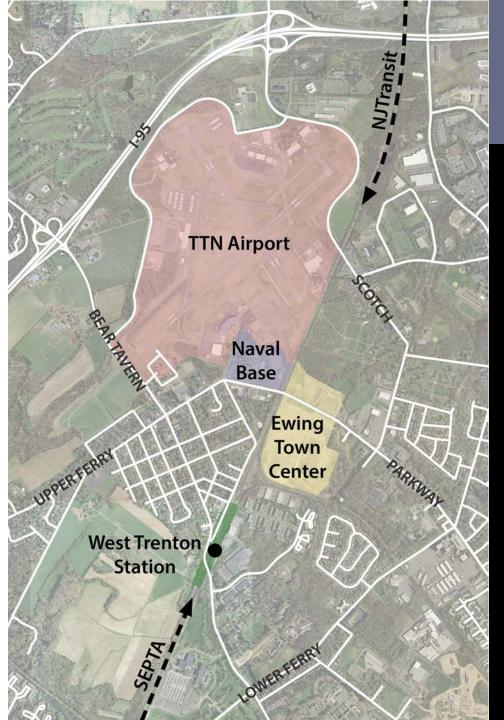
STUDY PURPOSE

- Develop a staged transportation plan that meets the existing and future mobility needs of the redevelopment area
- Initiate the project development process on priority projects



REDEVELOPMENT AREA

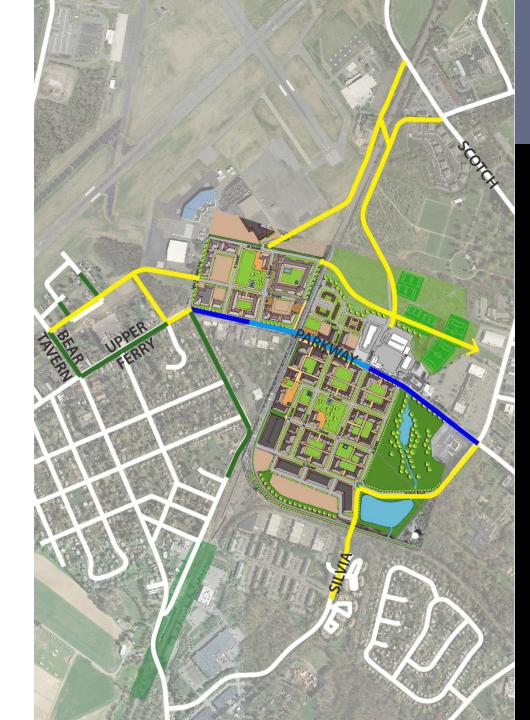
- Approx. 2.5 sq. mile study area in Ewing Township, Mercer County
- Includes the following:
 - Trenton-Mercer Airport (TTN)
 - Ewing Town Center
 - Naval Base Redevelopment
 - Potential relocation of SEPTA's West Trenton Station
 - Potential NJ Transit West Trenton Line
 - Additional Residential, Commercial, and Office development



EWING TOWN CENTER

- Parkway Avenue Redevelopment Plan
- Adopted by Ewing Township Council in January 2013





PLANNING METHODOLOGY

Assess Existing Conditions (2013)

Develop Future Growth Scenario (2025)

Evaluate No-Build Scenario (2025)

Evaluate Build Alternatives (2025)

EXISTING CONDITIONS: TRAFFIC ANALYSIS



- Performed traffic counts at eleven (11) intersections
- Travel time runs along major roads - Parkway, Upper Ferry, Lower Ferry, and Bear Tavern
- Built a traffic model in VISSIM
- Analyzed traffic conditions for existing network

EXISTING CONDITIONS: TRAFFIC ANALYSIS

Bear Tavern Rd / Upper Ferry Rd: Significant Congestion

Peak	Approach	LOS	Queue	v/c
AM	SB	С	200-800	0.8-1.4
PM	NB/WB	D	100-760	0.90

Parkway Ave / Lower Ferry Rd: Moderate Congestion

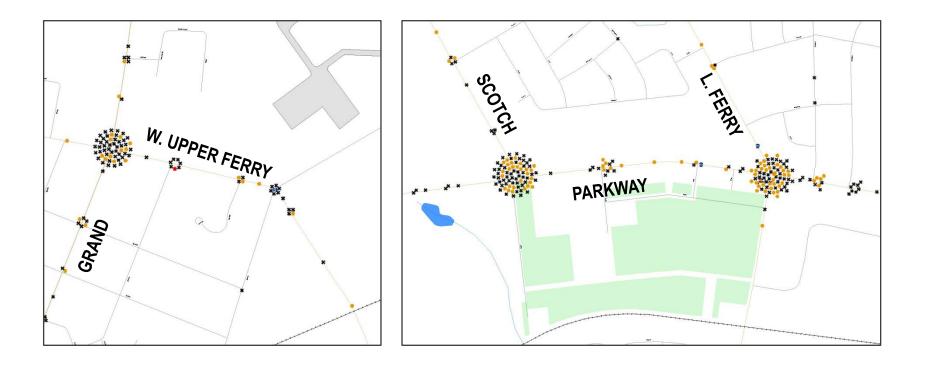
Peak	Approach	LOS	Queue	v/c
AM	SB	D	100-500	0.84
РМ	SB	D	80-450	0.94

Parkway Ave / Scotch Rd

Peak	Approach	LOS	Queue	v/c
AM	SB	С	40-235	0.56
PM	SB	С	105-445	0.82

EXISTING CONDITIONS: CRASH HISTORY

- Crash analysis using data from 2007-2011
- Crash history at multiple intersections:
 - Parkway w/ Scotch, Lower Ferry
 - Bear Tavern and W. Upper Ferry



DEVELOPMENT SCENARIOS

- Developed future growth scenario for year 2025
- Determined vehicle trips generated by new development
- Modeled traffic results to establish <u>2025 No-Build</u> <u>Scenario</u>



NO-BUILD SCENARIO: ASSESSING THE FUTURE CONDITION

2025

Land Use	Increase		Trips (AM)	Trips (PM)
Residential	1,170 DU		540	650
Retail	610,000 SF		690	1,440
Office	235,000 SF	\rightarrow	330	320
Hotel	150 rooms		70	80
Train Station	+ 50 spaces		50	50
Airport	+ 16 flights/week		160	160
			1,840	2,700

NO-BUILD SCENARIO: WHAT HAPPENS IF WE DO NOTHING?

Bear Tavern Rd / Upper Ferry Rd: Gridlock

Peak	Approach	LOS	Queue	v/c
PM	NB	F	1460	1.12
PM	ALL	F	830-1460	0.4 - 1.1

Parkway Ave / Lower Ferry Rd: Moderate Congestion

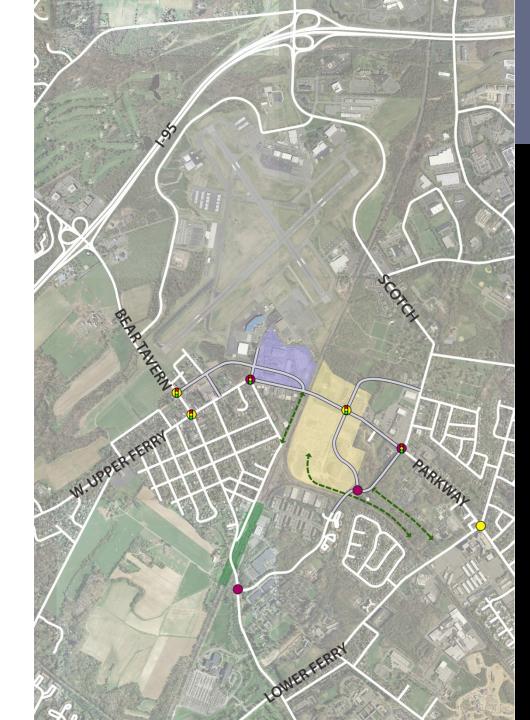
Peak	Approach	LOS	Queue	v/c
PM	NB	E	520	1.10
PM	ALL	D	70-520	0.3 – 1.2

Parkway Ave / Scotch Rd: Significant Congestion

Peak	Approach	LOS	Queue	v/c
PM	SB	F	1130	0.98
PM	ALL	D	20-1130	0.5 – 1.1

BUILD ALTERNATIVES

- 1. Silvia Street Extension
- 2. Bear Tavern/Upper Ferry Intersection
- 3. West Trenton Bypass
- 4. Parkway Avenue



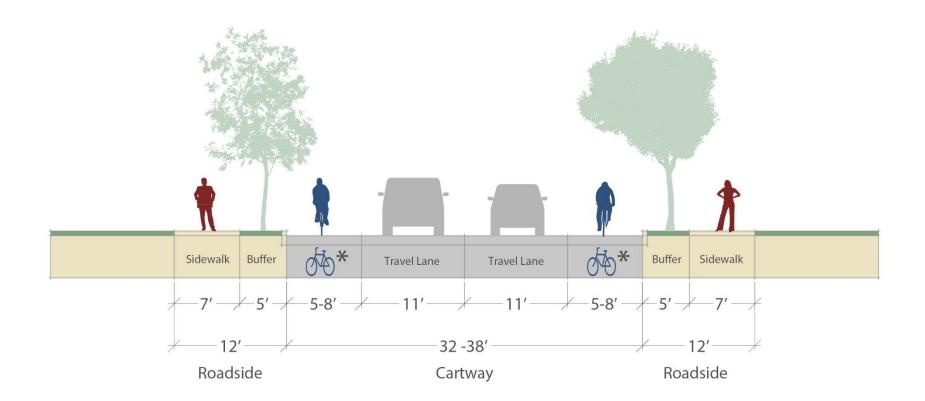
SILVIA STREET EXTENSION

- Provides access to proposed Ewing Town Center site
- Links Scotch Road to Sullivan Way
- Included in Master Plans for Ewing Twp & Mercer County

- Gold Run Crossing
- CSX Rail Crossing
- Scotch Intersection
- Sullivan Intersection



SILVIA STREET EXTENSION TYPICAL CROSS SECTION



* Buffered Bike Lane, Bike Lane, or Bicycle-Compatible Shoulder

SULLIVAN ROUNDABOUT

- Provides southern entry point to Silvia Street Extension
- Improves vehicular and pedestrian access to West Trenton Station
- Improves safety at intersection of Silvia and Sullivan

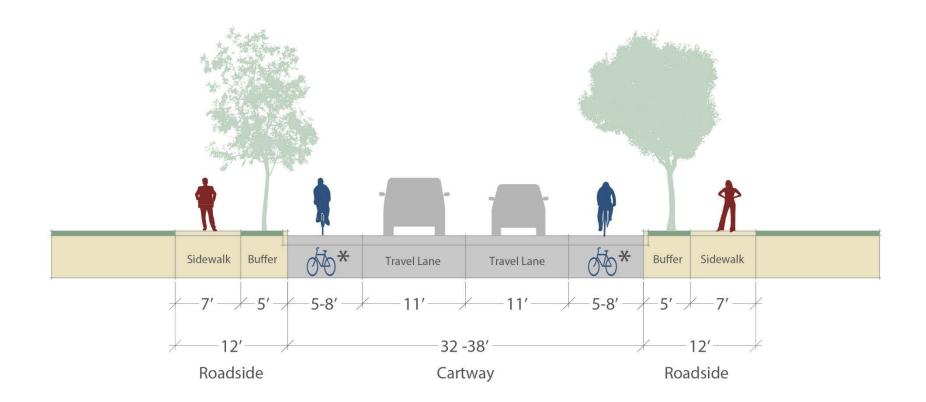


WEST TRENTON BYPASS

- Provides additional network to relieve congestion at Bear Tavern/Upper Ferry Intersection
- Reduces the need for additional lanes at the Bear Tavern/Upper Ferry intersection
- Improves access to Naval Base Redevelopment site
- Creates opportunities for redevelopment in W. Trenton
 - Right-of-way impacts
 - Wetland impacts



WEST TRENTON BYPASS TYPICAL CROSS SECTION

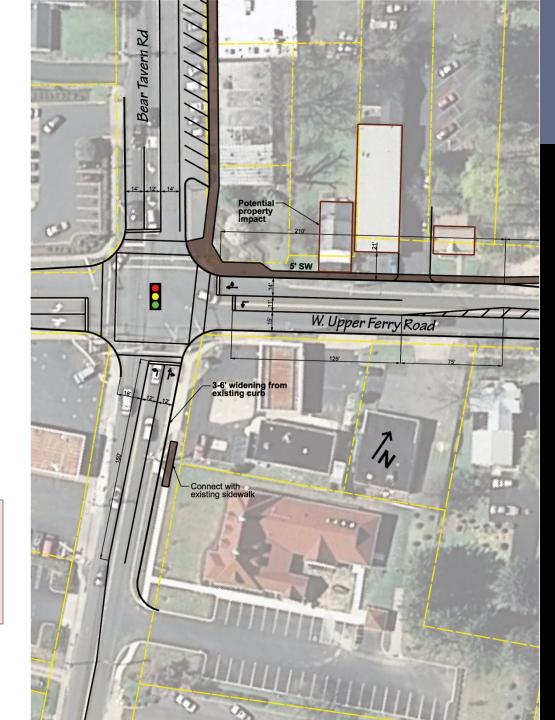


* Buffered Bike Lane, Bike Lane, or Bicycle-Compatible Shoulder

BEAR TAVERN/ W. UPPER FERRY

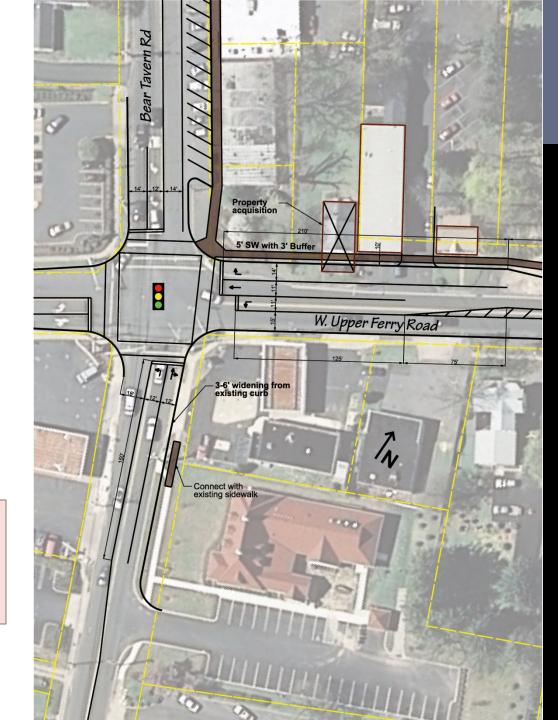
- Adds NB LT turn lane
- Overall LOS "C"
- Ave. Delay of 27 sec
- Better than Existing Condition

- Potential property impacts at NE corner
- Utility relocations



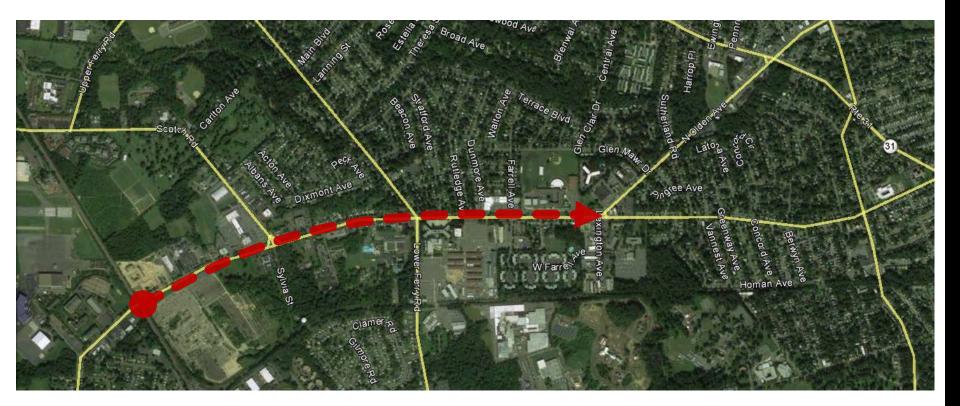
BEAR TAVERN/ W. UPPER FERRY WITHOUT BYPASS

- Adds NB LT turn lane
- Adds WB LT and RT turn lanes
- Overall LOS "D"
- Ave. Delay of 46 sec
- Close to Existing Condition
 - Property acquisition at NE corner
 - Utility relocations

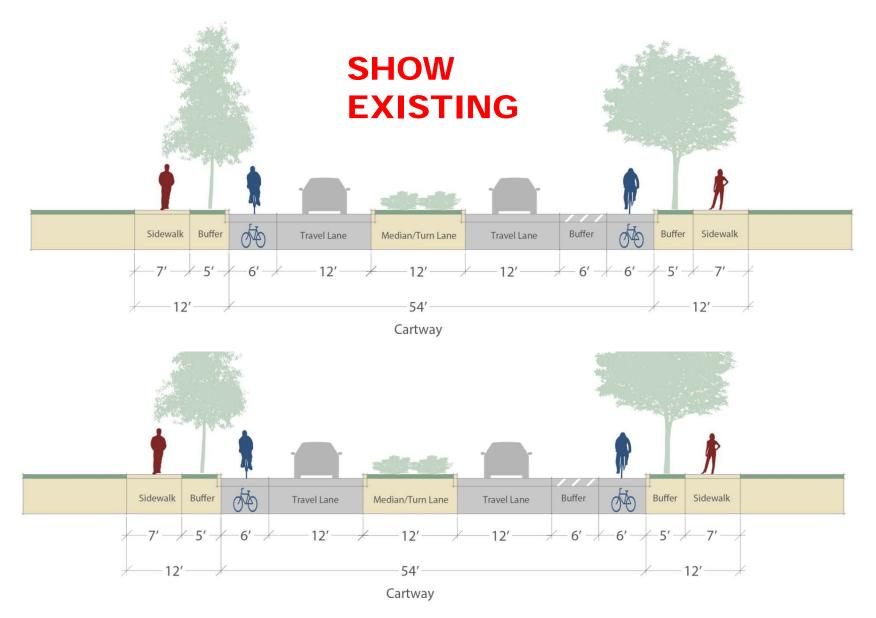


PARKWAY AVENUE – ROAD DIET

- Converts Parkway Avenue from 4-lane to 3-lane section
- CSX overpass to Olden Avenue and beyond
- Adds bike lanes, center turn lane, and pedestrian crossings



PARKWAY AVENUE – ROAD DIET

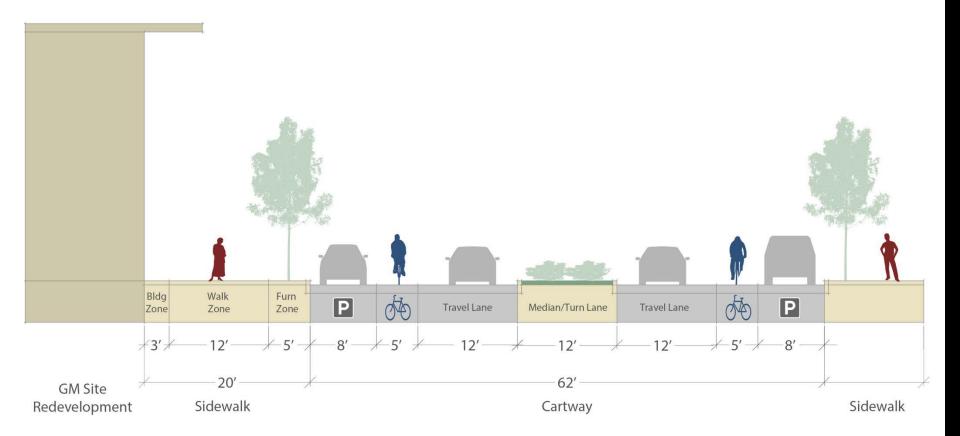


LOWER FERRY/ PARKWAY AVE

- Intersection with Lower Ferry Avenue is critical
- Adds NB LT turn lane
- Adds WB LT and RT turn lanes
- Overall LOS "D"
- Ave. Delay of 43 sec
- Minor deterioration from existing condition
 - Property impacts at NW corner
 - Utility relocations

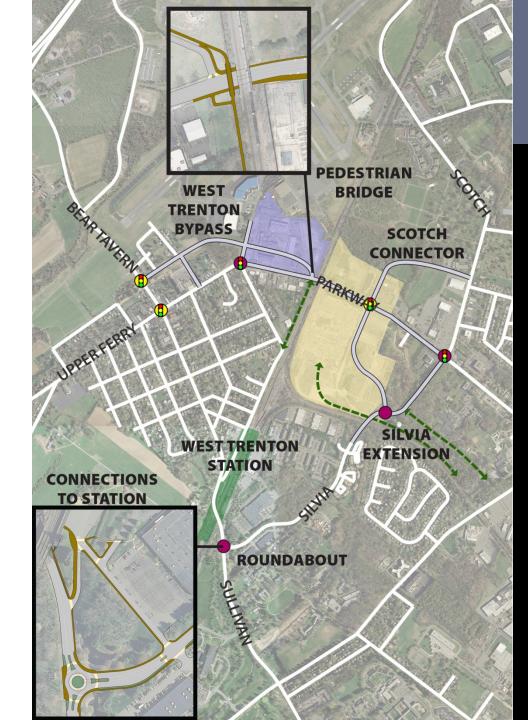


PARKWAY AVENUE 3-LANE CROSS SECTION AT E.T.C.



BICYCLE & PEDESTRIAN IMPROVEMENTS

- Sidewalks on all new road segments
- New pedestrian connection between W. Trenton Station and Parkway Avenue
- Bike lanes on Parkway Avenue connect with trail network



RECOMMENDED PROGRAM

Priority	Description	Timeframe
1	 Silvia Street Extension Ewing Township initiative linked to Ewing Town Center 	Short-Mid
2	 Bear Tavern / Upper Ferry Intersection Modifications Add NB left turn lane 	Short-Mid
3	 Upper Ferry / Parkway Intersection Modifications Add SB left turn lane 	Short-Mid
4	Parkway Avenue Road DietContingent on Priority #4	Short-Mid
5	 West Trenton Bypass Contingent on development of Naval Base site Integrated with redevelopment in W. Trenton 	Long
NA	Bicycle and Pedestrian Improvements	S, M, L

QUESTIONS?