

Transportation Planning Study

Draft Recommendations



February 2, 2012

Meeting with Passaic County

- They are adding left turn lanes to Paterson-Hamburg Turnpike by College Drive – this will alleviate potential capacity issues at this location
- They will be implementing a “Road Diet” on Valley Road adjacent to 1,600 Valley Road (this is a narrowing of four lanes to two lanes)
- The County is open to a new traffic signal on Pompton Road, but require that a left turn lane be added

Existing Level of Service

Intersection	Approach	8:30-9:30 am		4:30-5:30 pm	
		Delay	LOS	Delay	LOS
Paterson Hamburg Tpke & Ratzer Rd/Pompton Rd (signalized)	NB Left	47.8	D	56.0	E
	NB Through-Right	19.2	B	21.3	C
	SB Left	43.6	D	50.3	D
	SB Through-Right	15.5	B	25.6	C
	EB Approach	38.7	D	45.2	D
	WB Left-Through	25.0	C	46.1	D
	WB Right	5.0	A	4.9	A
	Overall	26.0	C	33.9	C
Paterson Hamburg Tpke & College Rd (signalized)	NB Approach	18.9	B	7.2	A
	SB Approach	5.3	A	29.6	C
	EB Approach	33.5	C	23.5	C
	WB Left-Through	49.5	D	66.8	E
	WB Right	12.8	B	7.4	A
	Overall	13.2	B	24.0	C
Belmont Av & Overlook Av (signalized)	NB Approach	12.2	B	10.8	B
	SB Approach	15.2	B	13.9	B
	EB Left	32.7	C	38.0	D
	EB Through-Right	22.1	C	29.3	C
	WB Left	23.4	C	31.5	C
	WB Through-Right	29.3	C	24.7	C
	Overall	19.7	B	22.1	C
Pompton Rd & West Rd (Entry 4)	EB Approach	11.6	B	9.1	A
	SB Left	1145.2	F	9999	F
	SB Right	15.1	C	29.5	D

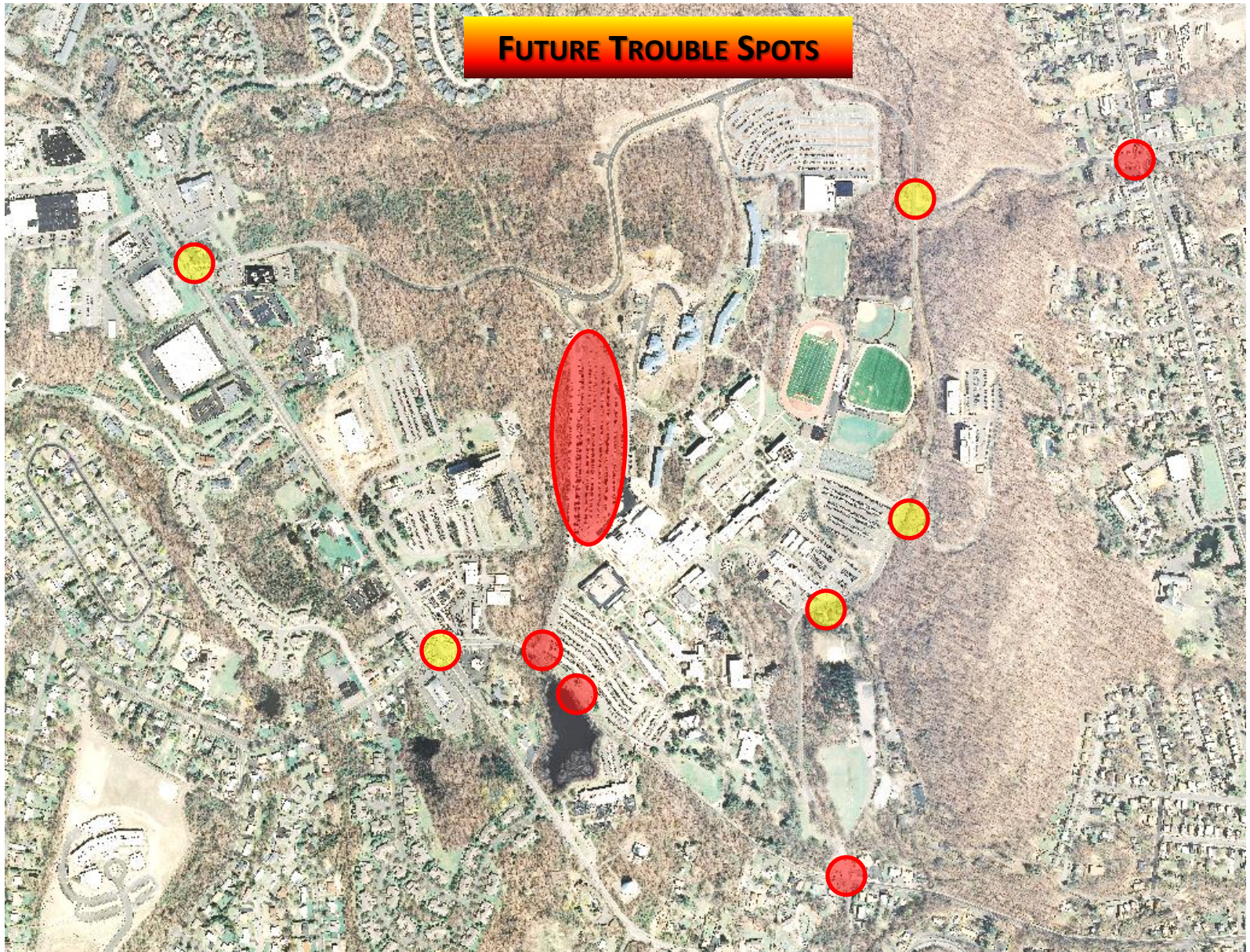
Intersection	Approach	8:30-9:30 am		4:30-5:30 pm	
		Delay	LOS	Delay	LOS
Pompton Rd & East Rd (Entry 1) / Allsa Av	EB Approach	4.2	A	2.4	A
	WB Approach	1.3	A	0.8	A
	NB Approach	443.3	F	158.4	F
	SB Left-Through	316.6	F	782.1	F
	SB Right	16.3	C	17.1	C
Pompton Rd & Lot 3 Exit	SB Left	27.3	D	107.8	F
	SB Right	14.7	B	18.3	C
Valley Rd & 1600 Valley Rd Dwy	EB Approach	0.8	A	0.4	A
	SB Left	37.0	E	72.0	F
	SB Right	16.0	C	11.2	B
College Rd & West Rd (all way stop)	EB Through	10.7	B	16.5	C
	EB Right	8.8	A	8.4	A
	WB Left	10.6	B	10.3	B
	WB Through	13.4	B	14.0	B
	NB Left	10.4	B	12.3	B
	NB Right	9.4	A	10.2	B
W Overlook Av & East Rd (all way stop)	WB Approach	18.7	C	14.9	B
	NB Approach	9.8	A	10.7	B
	SB Approach	12.4	B	26.4	D
College Rd & Lot 6 Entrance (all way stop)	EB Approach	10.4	B	14.8	B
	WB Left	7.7	A	7.5	A
	WB Through	14.8	B	12.2	B
College Rd & Lot 6 Exit (all way stop)	EB Approach	9.3	A	15.6	C
	WB Approach	14.7	B	12.6	B
	NB Left	8.8	A	10.1	B
	NB Right	7.4	A	8.2	A
East Rd & Lot 1	EB Approach	2.0	A	0.7	A
	SB Approach	11.5	B	10.4	B
East Rd & Lot 2	NB Approach	3.7	A	1.8	A
	EB Approach	10.6	B	10.4	B
East Rd & Access Rd	NB Approach	1.1	A	0.3	A
	EB Approach	9.9	A	10.1	B

Future Level of Service

Intersection	Approach	8:30-9:30 am		4:30-5:30 pm	
		Delay	LOS	Delay	LOS
Paterson Hamburg Tpke & Ratzer Rd/Pompton Rd (signalized)	NB Left	48.9	D	57.8	E
	NB Through-Right	20.4	C	22.1	C
	SB Left	45.0	D	53.4	D
	SB Through-Right	16.3	B	27.1	C
	EB Approach	40.2	D	48.9	D
	WB Left-Through	25.0	C	50.0	D
	WB Right	4.9	A	4.8	A
	Overall	27.0	C	36.3	D
Paterson Hamburg Tpke & College Rd (signalized)	NB Left	13.0	B	13.5	B
	NB Through-Right	18.9	B	17.2	B
	SB Left	19.8	B	18.3	B
	SB Through-Right	4.2	A	10.7	B
	EB Approach	32.0	C	23.5	C
	WB Left-Through	49.0	D	70.1	E
	WB Right	12.2	B	10.6	B
	Overall	15.4	B	19.2	B
Belmont Av & Overlook Av (signalized)	NB Approach	12.7	B	10.9	B
	SB Approach	17.2	B	14.2	B
	EB Left	80.5	F	43.7	D
	EB Through-Right	22.8	C	30.4	C
	WB Left	23.9	C	34.1	C
	WB Through-Right	35.9	D	25.2	C
	Overall	25.7	C	23.5	C
Pompton Rd & West Rd (Entry 4)	EB Approach	13.8	B	9.9	A
	SB Left	9999	F	9999	F
	SB Right	15.7	C	30.9	D

Intersection	Approach	8:30-9:30 am		4:30-5:30 pm	
		Delay	LOS	Delay	LOS
Pompton Rd & East Rd (Entry 1) / Allsa Av	EB Approach	6.4	A	3.6	A
	WB Approach	1.3	A	0.8	A
	NB Approach	9999	F	399.0	F
	SB Left-Through	9999	F	9999	F
	SB Right	17.6	C	20.7	C
Pompton Rd & Lot 3 Exit	SB Left	34.2	D	108.4	F
	SB Right	15.1	C	16.7	C
Valley Rd & 1600 Valley Rd Dwy	EB Approach	1.9	A	0.7	A
	SB Left	53.9	F	263.5	F
	SB Right	18.2	C	14.2	B
College Rd & West Rd (all way stop)	EB Through	12.0	B	18.4	C
	EB Right	8.7	A	8.3	A
	WB Left	10.6	B	10.0	B
	WB Through	14.3	B	16.0	C
	NB Left	10.5	B	12.2	B
	NB Right	9.7	A	10.5	B
W Overlook Av & East Rd (all way stop)	WB Approach	31.7	D	18.4	C
	NB Approach	10.9	B	13.7	B
	SB Approach	17.5	C	36.7	E
College Rd & Lot 6 Entrance (all way stop)	EB Approach	11.9	B	16.2	C
	WB Left	7.4	A	7.4	A
	WB Through	16.3	C	13.2	B
College Rd & Lot 6 Exit (all way stop)	EB Approach	10.7	B	16.7	C
	WB Approach	14.4	B	13.3	B
	NB Left	8.9	A	10.0	B
	NB Right	7.6	A	8.2	A
East Rd & Lot 1	EB Approach	0.4	A	0.2	A
	SB Approach	12.0	B	11.7	B
East Rd & Access Rd	NB Approach	7.0	A	4.2	A
	EB Approach	17.1	C	26.9	D

FUTURE TROUBLE SPOTS



Transit Issues

- **Circulation Issues through campus, especially in Lot 5 and Entry 4**
- **Need for a transit terminal with capacity for 4-5 buses**
- **High potential for increased service, which could reduce future traffic and parking needs**

Bicycle and Pedestrian Issues

- **Need for bicycle storage in dorms**
- **Need for sidewalk connection to Pompton Road**
- **Lot 6 stairs**
- **Lot 5 pedestrian accommodation**
- **No sidewalks on College Drive or W Overlook,
but need is not significant**

Entry 4 / Lot 3 Exit

ISSUE:

- **Capacity problems**
- **Need sidewalk to Pompton Rd**
- **Need bus terminal**

SOLUTION:

- **Add traffic signal at Lot 3 Exit**
- **Create new roadway and bus terminal**
- **Add sidewalk to Pompton Road**
- **Cost of signal - \$470,000**
- **Cost of other improvements - \$360,000**
- **Loss of approx. 110 parking spaces**



SEE SHEET 3

SEE SHEET 1

50' 25' 0' 50' 100'
SCALE IN FEET

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Revisions		
NO.	DATE	BY

Designed By	Drawn By
GEM	TJK
Checked By	Approved By
GEM	

William Paterson University

CONCEPTUAL IMPROVEMENTS
WILLIAM PATERSON UNIVERSITY
LOCAL ROADS AND PARKING LOTS
TOWNSHIP OF WAYNE
PASSAIC COUNTY, NEW JERSEY

CONCEPT PLAN

SCALE: 1"=50'
SHEET: 2 of 4
DATE: JANUARY 2012

C-2
C-4

Lot 5

ISSUE:

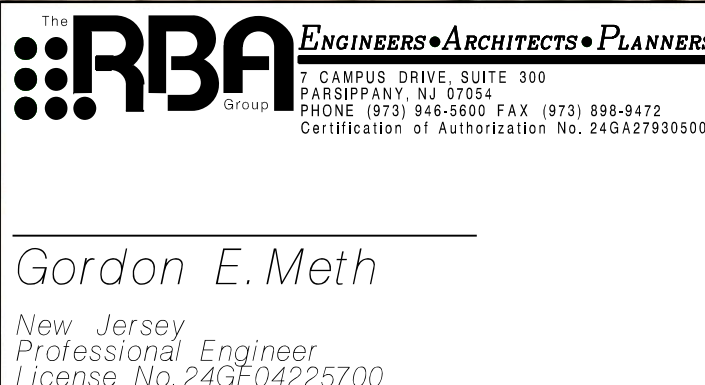
- **Conflicts between through traffic, parking maneuvers, pedestrians, and transit**
- **High degree of cruising for parking (due to proximity to campus)**
- **High number of crashes (158 in nearly 6 years – 46% of crashes on campus)**

SOLUTION:

- **Move bus stop to Lot 3**
- **Meter parking in this lot – reduces cruising and adds revenue**
- **Create “through” street and sidewalk**
- **Cost - \$430,000; Loss of approx. 140 spaces**

SEE SHEET 4

SEE SHEET 2



Revisions		
NO.	DATE	BY
Designed By	Drawn By	
GEM		ANK
Checked By	Approved By	
GEM		

William Paterson University

CONCEPTUAL IMPROVEMENTS
WILLIAM PATERSON UNIVERSITY
LOCAL ROADS AND PARKING LOTS
TOWNSHIP OF WAYNE
PASSAIC COUNTY, NEW JERSEY

CONCEPT PLAN

SCALE: 1"=50'
SHEET: 3 of 4
DATE: JANUARY 2012

Entry 1

ISSUE:

- Capacity problems
- Sight distance issues
- Conflicts with Alisa Dr
- Parking lot next to driveway
- Existing case – approx. 80 left/through out/hr
- Future case – approx. 100 left/through out/hr

SOLUTION:

- Re-route left turns and through traffic to other driveways (Belmont Av or Exit from Lot 3)
- Use islands to separate parking / separate from Alisa Dr
- Cost = \$30,000



SEE SHEET 2

C-1
C-4



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Certification of Authorization No. 240A2780000

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gpm	gjk
Checked By	Approved By
GEM	

William Paterson University

CONCEPTUAL IMPROVEMENTS
WILLIAM PATERSON UNIVERSITY
LOCAL ROADS AND PARKING LOTS
TOWNSHIP OF WAYNE
PASSAIC COUNTY, NEW JERSEY

CONCEPT PLAN

SCALE: 1"=50'
SHEET: 1 of 4
DATE: JANUARY 2012

W. Overlook & East Dr

ISSUE:

- **Capacity problems in peaks**

SOLUTION:

- **Add channelized right turn lane**
- **Cost - \$60,000**



SEE SHEET 3



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William Paterson University

CONCEPTUAL IMPROVEMENTS
WILLIAM PATERSON UNIVERSITY
LOCAL ROADS AND PARKING LOTS
TOWNSHIP OF WAYNE
PASSAIC COUNTY, NEW JERSEY

CONCEPT PLAN

SCALE: 1"=50'
SHEET: 4 of 4
DATE: JANUARY 2012

C-4
C-4

Existing Passaic County Signals

ISSUE:

- **Some capacity problems in peaks**

SOLUTION:

- **Add eastbound left turn arrow at Belmont and West Overlook**
- **Cost - \$30,000 (worst case – assumes new pole needed)**
- **Timing changes at Paterson-Hamburg Turnpike intersections (negligible costs)**

1600 Valley Rd

ISSUE:

- **Capacity problems in peaks, particularly afternoon**
- **Exacerbated by narrowing of Valley Rd**
- **35 crashes in nearly 6 years (10% of total)**

SOLUTION:

- **Signalize Driveway**
- **Cost - \$300,000**
- **Alternatively – provide traffic control during peak departure times**

Other

ISSUE:

- **Minor access issues**
- **Pedestrian path / stairs through Lot 6**

SOLUTIONS:

- **Modify entrance to Lot 1 with Parking Deck**
- **Modify main entrance to Lot 2 with Parking Deck**
- **All way stop at Parking Deck access and East Dr**
- **All way stop by Police HQ**
- **Eliminate stops by Lot 6 Entrance**
- **Repair stairs in Lot 6**

Total Program

<u>Location</u>	<u>Cost</u>	<u>Priority</u>
Entry 1	\$ 30,000	Medium
Pompton Rd Signal	\$ 470,000	High
Entry 4/Lot 3 Exit	\$ 360,000	High
Lot 5	\$ 430,000	Medium
W Overlook & East Dr	\$ 60,000	Low
Passaic County Signals	\$ 30,000	Medium
1600 Valley Rd	\$ 300,000	Medium
<u>Other</u>	<u>\$ 5,000</u>	<u>Low</u>
TOTAL	\$1,685,000	