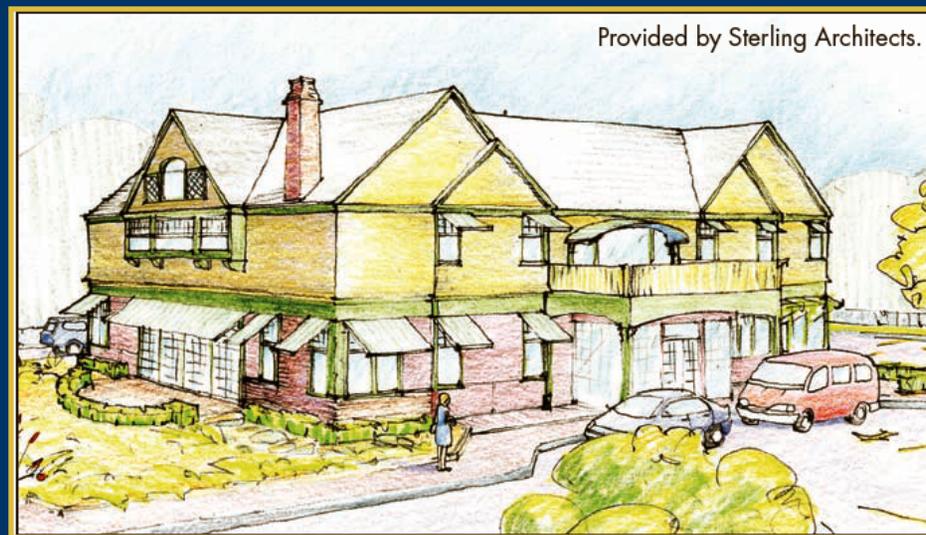




# Tolles-Parsons Senior Center

## *Traffic and Parking Evaluation*



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EFFECTIVE PARTNERING

*by*

*Elizabeth Peart, HSH Associates*

*January 4, 2010*



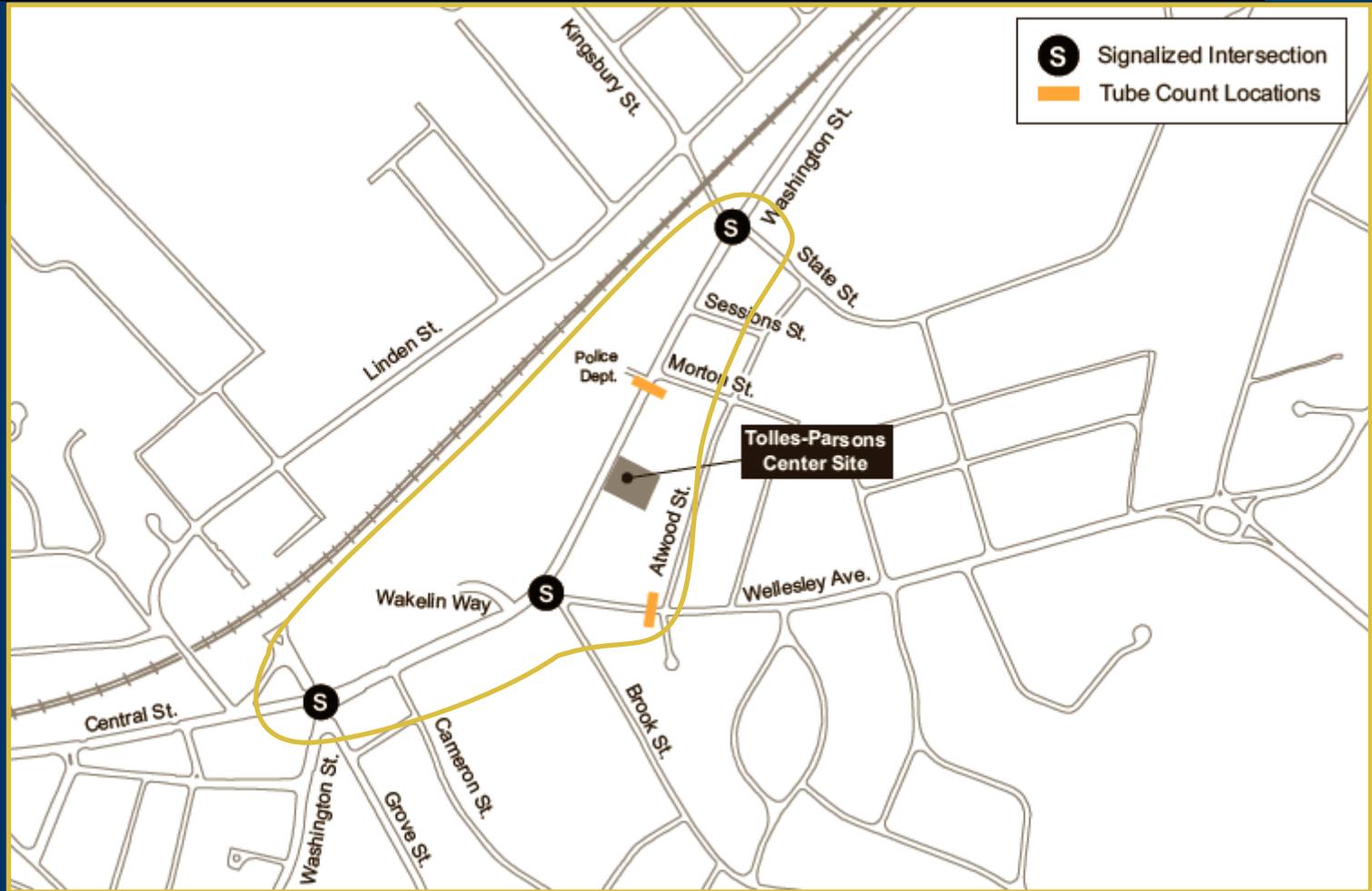
# Project Overview

- Existing COA
  - 219 Washington Street
  - Lease at Wellesley Community Center (WCC)
  - Limited space for multiple activities
  - WCC has 75 parking spaces shared by all tenants
  
- Tolles-Parsons Senior Center
  - 496 Washington Street
  - Stand alone building - 14,173 sf
  - Multiple function and activity rooms
  - 34 parking spaces





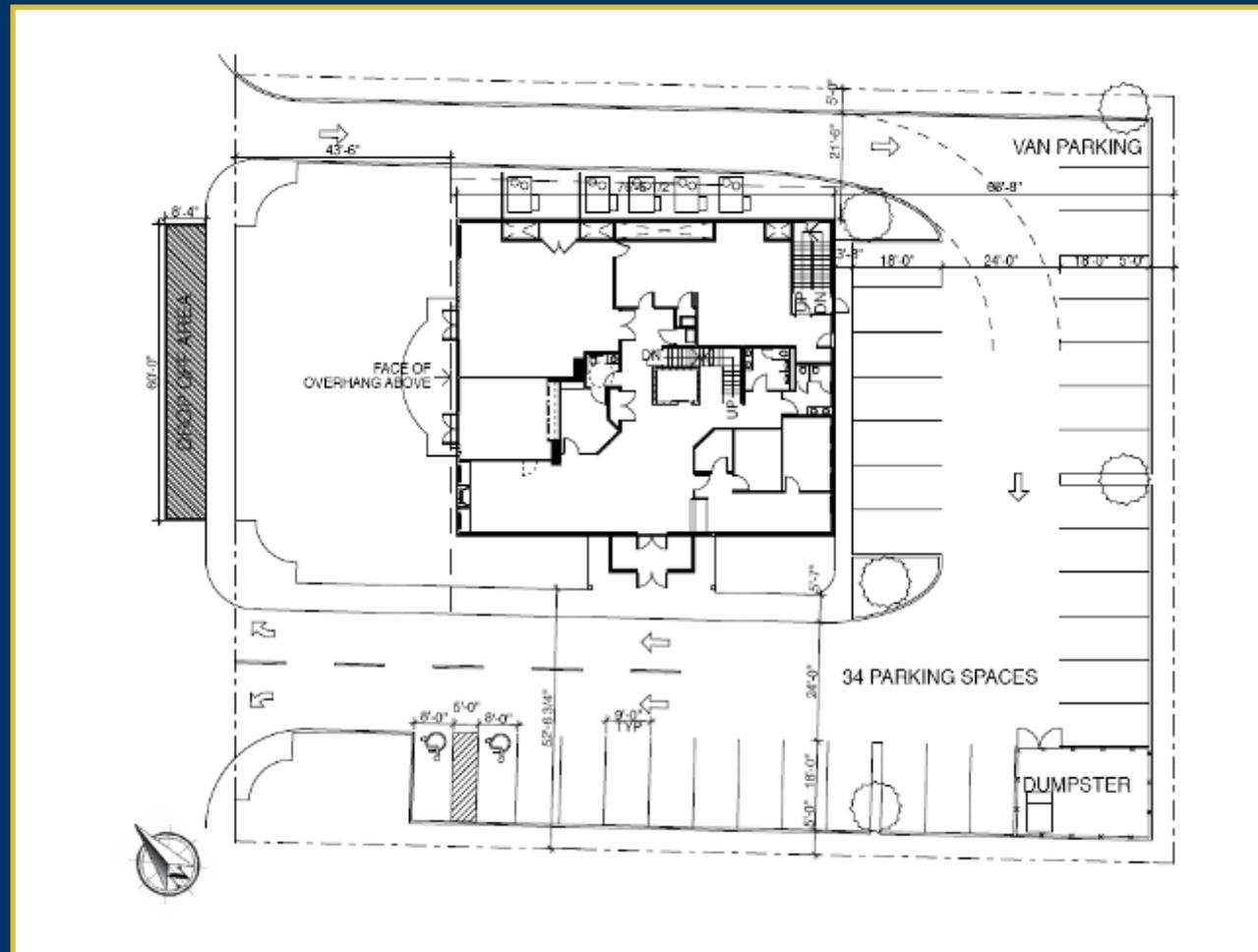
# Traffic Study Area



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# Tolles-Parsons Site Plan



Source: Sterling Architects



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# Study Process

- **Collect data**
  - **Traffic, Sidewalks, Parking**
- **Forecast future conditions**
  - **Without the Project (No-Build) – Year 2014**
  - **With the Project (Build) – Year 2014**
- **Identify traffic and parking impacts**
- **Propose Mitigation**



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# Traffic

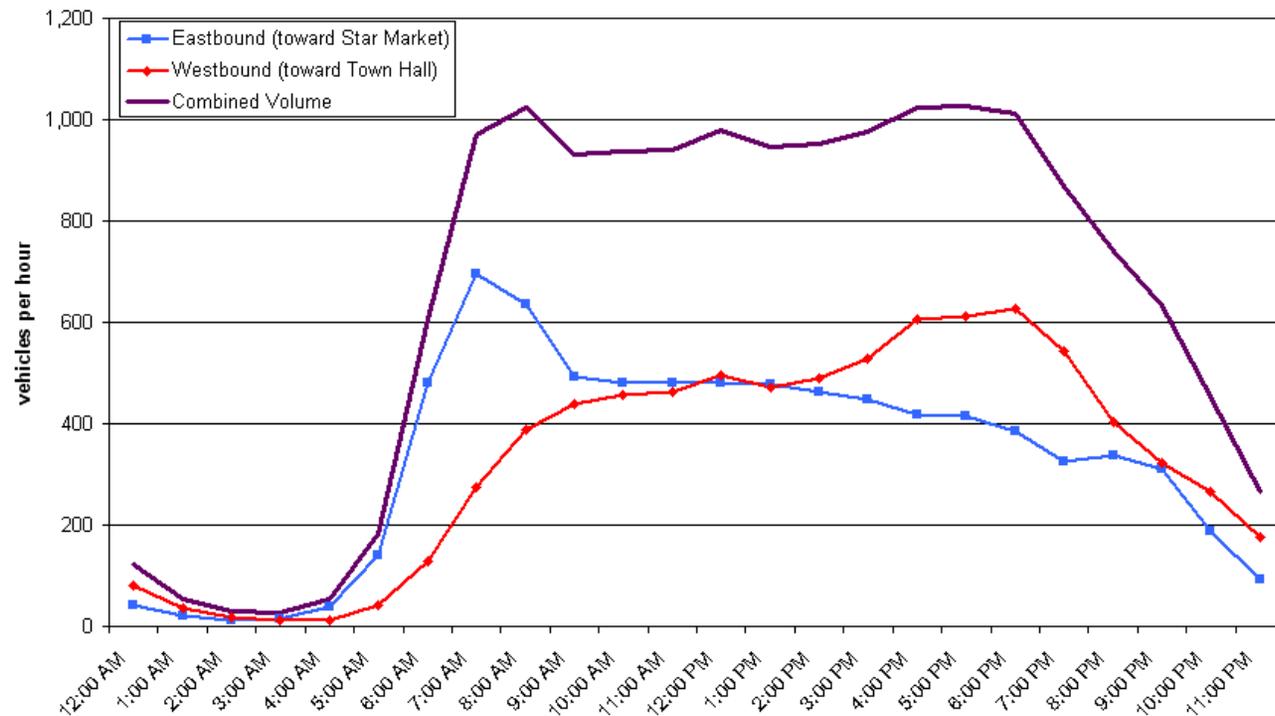


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# Daily Traffic Washington Street

Average Daily Traffic by Hour  
Washington Street, southwest of Morton Street



Average Daily Traffic = 15,760 vehicles per day

Average Travel Speed = 26 mph eastbound, 23 mph westbound



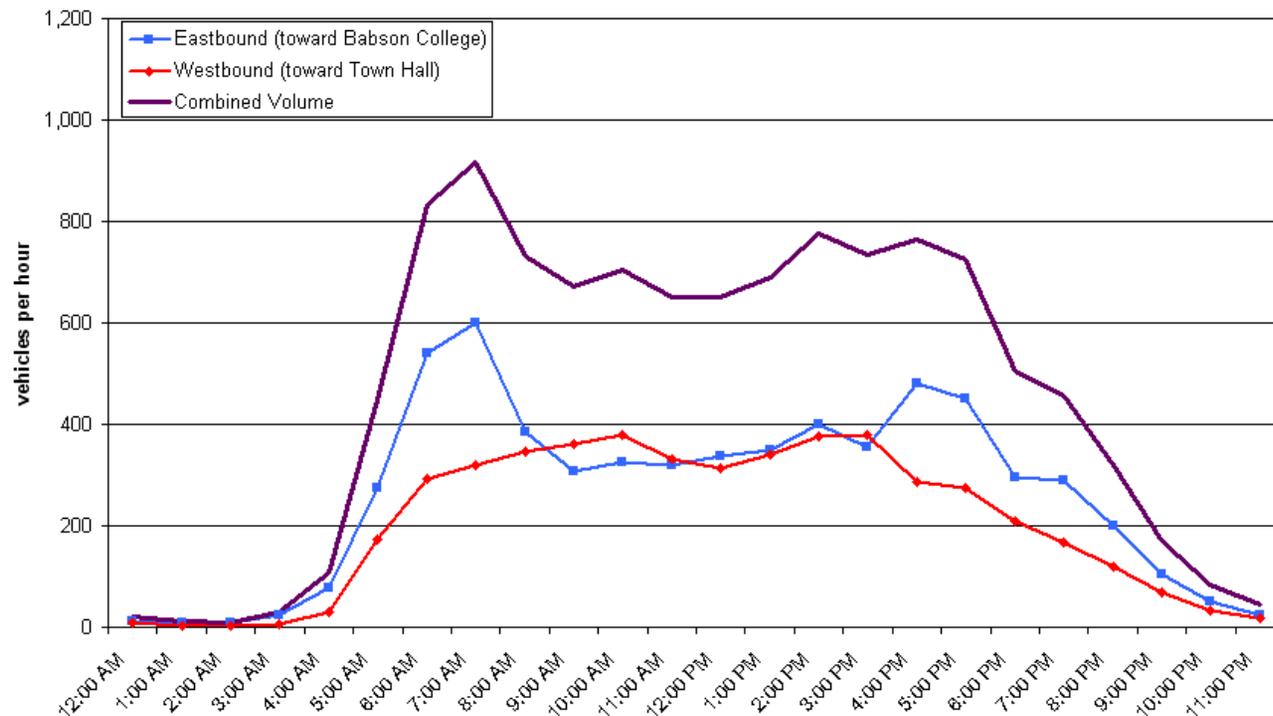
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# Daily Traffic

## Wellesley Avenue

Average Daily Traffic by Hour  
Wellesley Avenue, west of Atwood Street



Average Daily Traffic = 11,050 vehicles per day

Average Travel Speed = 22 mph eastbound, 17 mph westbound



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# Senior Center Activity

## ■ Daily Visitors

- Current Wellesley COA = 40 - 50 visitors
- Comparable centers = 100 - 150 visitors
- Tolles-Parsons Center
  - *Scenario 1A = 150 visitors (200 participants)*
  - *Scenario 1B = 130 visitors (175 participants)*
  - *For traffic impact analysis: 150 visitors*





# Tolles-Parsons Daily Schedule

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<p><b>USE THIS KEY FOR MEETING LOCATION:</b></p> <p><b>FITNESS:</b> 2ND FLOOR - "A"  <b>ART CRAFT:</b> 2ND FLOOR - "C"  <b>ACTIVITY:</b> 2ND FLOOR - "B"  <b>DINING:</b> 1ST FL. - DINING ROOM  <b>SHARED OFFICE:</b> 1ST FL. - SM. MTG RM.  <b>SM. ACTV.:</b> 2ND FL. - L.G. CONF. RM.  <b>SM. ACTV.:</b> 1ST FL. SM. ACT. ROOM  <b>SPECIAL EV.:</b> all upstairs rooms A,B, and maybe C  drop in area 1st floor / open space</p>				
<p><b>MONDAY</b>      <b>TUESDAY</b>      <b>WEDNESDAY</b>      <b>THURSDAY</b>      <b>FRIDAY</b></p>				
<p>9:30-11:00 Community Service Bears (15)      9:30-11:00 Book Discussion Group (18)      9:30-11:45 Zumba (25)      9:30-10:30 Better Bones (20)      10:00-12:00 Investment Club (10)</p>				
<p>11:00-12:00 Better Balance (25)      11:45 Lunch: Grilled Hamburger (25)      1:00-3:00 Tai Chi Classes (20)</p>				
<p>11:45 Lunch: Salmon Boat (25)      12:45-4:00 Bridge (Adv) (16)      12:45-4:00 Mah Jong (12)</p>				
<p>12:30-2:30 Bridge (Adv/Beg Play) (12)      2:00-3:30 Drama Club (15)      2:00-3:30 Poetry (15)</p>				
<p>1:30-3:00 Fine Arts (15)      3:00-4:00 Poetry (15)      3:00-4:00 SHINE by appointment (4)</p>				
<p>2:00-4:00 Podiatry Clinic (15)      1:00-4:00 SHINE by appointment (4)</p>				
<p>2:30-4:00 Chair Volleyball (20)      2:00-3:30 Genealogy (15)</p>				
<p>3:00-4:00 Cooking for One (15)      2:00-3:30 Mah Jong (16)</p>				
<p>3:00-4:00 Cooking for One (15)      2:00-3:30 Jewelry Making Class (20)</p>				
<p>TOTAL FOR DAY: 174      TOTAL FOR DAY: 174      TOTAL FOR DAY: 121</p>				
<p>JULY</p>				
<p>6      7      8      9      10</p>				
<p>9:10-30 Guest Speaker (30)      9:00-11:00 Needlepoint (15)      9:00-10:00 Monthly Men's Breakfast (25)      9:30-11:45 Poker (16)</p>				
<p>10:00-11:30 Art For Fun (12)      9:45-12:30 Yoga classes (18)      9:30-11:00 Community Service Bears (15)      9:45 Day Trip - Tall Ships (47)</p>				
<p>10:00-11:30 Creative Writing for Women (15)      10-11:15 German Class (15)      9:45-10:45 Zumba (25)      10:00-12:00 Arts &amp; Crafts (15)</p>				
<p>11:00-12:00 Better Balance (25)      11:45 Lunch: Stuffed Cabbage (25)      10:00-12:00 Spanish Classes (15)      10:00-12:00 Comp.Instr. By Appt. (4)</p>				
<p>11:45 Lunch: Salmon Boat (25)      1:00-2:00 Line Dancing (15)      11:00-12:00 Better Balance (25)      11:45 Lunch: Greek Chicken (25)</p>				
<p>12:30-2:30 Bridge (Adv/Beg Play) (12)      1:00-3:00 Quilting Group (15)      11:45 Lunch: Orange Chicken (25)      11:45 Lunch: Macaroni &amp; Cheese (25)</p>				
<p>1:30-3:00 Fine Arts (15)      1:00-4:00 Mah Jong (12)      12:00-1:00 Keep Well Clinic @ COA (12)      12:45-4:00 Bridge (Adv) (16)</p>				
<p>2:00-4:00 Podiatry Clinic (15)      2:30-4:00 Wi Fitness (20)      1:30-3:00 woodworking (15)      12:45-3:30 "John Adams" miniseries (25)</p>				
<p>2:30-4:00 Chair Volleyball (20)      3:00-4:00 Red Hat meeting (30)      2:00-3:30 Genealogy (15)      1:00-3:00 Tai Chi Classes (20)</p>				
<p>3:00-4:00 Cooking for One (15)      2:30-4:00 Current Events Discussion (18)      1:00-4:00 SHINE by appointment (4)      1:00-4:00 Mah Jong (16)</p>				
<p>3:00-4:00 Cooking for One (15)      2:30-4:00 Current Events Discussion (18)      1:00-4:00 Monthly Senior Issues Meeting (10)      2:00-3:30 Jewelry Making Class (20)</p>				
<p>TOTAL FOR DAY: 184      TOTAL FOR DAY: 219      TOTAL FOR DAY: 211      TOTAL FOR DAY: 152      TOTAL FOR DAY: 157</p>				
<p>13      14      15      16      17</p>				
<p>10-12:30 Art For Fun (12)      9:00-11:00 Needlepoint (15)      9:30-11:00 Community Service Bears (15)      9:30-10:30 Better Bones (20)      9:30-11:45 Poker (16)</p>				
<p>10-12:00 Quarterly Triad Meeting (25)      9:45-12:30 Yoga Classes (36)      9:45-10:45 Zumba (25)      9:30-11:00 Book Discussion Group (18)      10-11:30 Knitting Club (15)</p>				
<p>10:00-11:30 Creative Writing for Women (15)      10-11:15 German Class (15)      10-12:00 Spanish Classes (15)      10:00-12:00 Investment Club (10)      10:00-12:00 Arts &amp; Crafts (15)</p>				
<p>11:00-12:00 Better Balance (25)      11:45 Lunch: Veg/Cheese Omelette (25)      11-12:00 Better Balance (25)      10:00-12:00 Tai Chi Classes (20)      10:00-11:30 Guest Speaker (20)</p>				
<p>11:45 Lunch: Meatloaf (25)      1:00-2:00 Line Dancing (15)      11:45 Lunch: Orange Chicken (25)      11:45 Lunch: Baked Ziti (25)      11:45 Lunch: Breaded Fish (25)</p>				
<p>12:30-2:30 Bridge (Adv/Beg Play) (12)      1:00-2:00 Travel to Malaysia (20)      12:00-1:00 woodworking (15)      12:45-4:00 Bridge (Adv) (16)      12:45-2:45 Movie: "Stumdog Millionaire" (30)</p>				
<p>2:00-3:15 Bereavement Support Group (10)      1:00-2:30 Quilting Group (15)      12:45-1:45 Chi Gong (25)      12:45-3:30 "John Adams" miniseries (25)      2:45-3:45 Movie Discussion Group (20)</p>				
<p>2:00-3:30 Chair Volleyball (20)      1:00-4:00 Mah Jong (12)      1:00-3:00 Drama club (15)      1:00-3:00 Tai Chi Classes (20)      2:45-3:45 Movie Discussion Group (20)</p>				
<p>2:00-3:00 Fine Arts (15)      2:30-4:00 Wi Fitness (20)      3:00-4:00 Poetry (15)      1:00-4:00 Mah Jong (12)</p>				
<p>2:00-4:00 Brain Fitness/TriMa (20)      2:30-4:00 Current Events Discussion (18)      1:00-4:00 SHINE by appointment (4)</p>				
<p>TOTAL FOR DAY: 179      TOTAL FOR DAY: 173      TOTAL FOR DAY: 199      TOTAL FOR DAY: 146      TOTAL FOR DAY: 130</p>				
<p>20      21      22      23      24</p>				
<p>10-12:30 Art For Fun (12)      9:00-11:00 Needlepoint (15)      9:30-11:00 Community Service Bears (15)      9:30-10:30 Better Bones (20)      9:30-11:45 Poker (16)</p>				
<p>10:00-11:30 Creative Writing for Women (15)      9:45-11:15 Yoga Classes (36)      9:45-10:45 Zumba (25)      10:00-12:00 Investment Club (10)      10-11:30 Arts &amp; Crafts (15)</p>				
<p>11:00-12:00 Better Balance (25)      10-11:15 German Class (15)      10-12:00 Spanish 915)      10:00-12:00 Lunch: Baked Fish au Gratin (25)      10:00-12:00 Comp. Instr. By Appt (4)</p>				
<p>11:45 Lunch: Chicken Kebab (25)      11:45 Lunch: Chef Salad (25)      11-12:00 Better Balance (25)      11:45 Lunch: Baked Chicken (25)</p>				
<p>12:30-2:30 Bridge (Adv/Beg Play) (12)      1:00-2:00 Line Dancing (15)      11:45 Lunch: Beef stew (25)      12:45-4:00 Bridge (Adv) (16)</p>				
<p>2:00-4:00 Podiatry Clinic (15)      1:00-3:00 Quilting Group (15)      12:45-1:45 Chi Gong (25)      12:45-3:30 "John Adams" miniseries (25)</p>				
<p>2:00-3:30 Chair Volleyball (20)      2:00-3:30 Men's Club (20)      12:30-2:00 Keep Well Clinic @ COA (12)      1:00-3:00 Tai Chi Classes (20)</p>				
<p>2:00-3:00 Fine Arts (15)      1:00-4:00 Mah Jong (12)      1:00-3:00 woodworking (15)      1:00-4:00 Mah Jong (12)</p>				
<p>2:00-4:00 Brain Fitness/TriMa (20)      2:30-4:00 Wi Fitness (20)      2:00-3:30 Genealogy (15)</p>				
<p>3:00-4:00 Cooking for One (15)      2:30-4:00 Current Events Discussion (18)      1:00-4:00 SHINE by appointment (4)</p>				
<p>3:00-4:00 Monthly Outreach Meeting (10)      2:30-4:00 Current Events Discussion (18)      1:00-4:00 SHINE by appointment (4)</p>				
<p>TOTAL FOR DAY: 184      TOTAL FOR DAY: 197      TOTAL FOR DAY: 176      TOTAL FOR DAY: 128      TOTAL FOR DAY: 110</p>				
<p>27      28      29      30      31</p>				
<p>10-12:30 Art For Fun (12)      *****SPECIAL EVENT DAY*****      9:30-11:00 Community Service Bears (15)      9:30-10:30 Better Bones (20)      9:30-11:45 Poker (16)</p>				
<p>10:00-11:30 Creative Writing for Women (15)      11:45-2:45 Springwell Barbecue (100)      9:45-10:45 Zumba (25)      10:00-12:00 Investment Club (10)      10-11:30 Knitting Club (15)</p>				
<p>11:00-12:00 Better Balance (25)      11:45 Lunch: Chicken Marsala (25)      11:00-12:00 Better Balance (Drop in) (25)      10:00-12:00 Comp. Instr. By Appt (4)</p>				
<p>11:45 Lunch: Turkey a la King (25)      11:45 Lunch: American Chop Suey (25)      10-12:00 Spanish (15)      11:45 Lunch: Pot Roast (25)</p>				
<p>12:30 Bridge (Adv/Beg Play) (12)      12:45-1:45 Chi Gong (25)      12:45-1:45 woodworking (15)      12:45-4:00 Bridge (Adv) (16)</p>				
<p>1:30 Fine Arts (15)      1:00-3:00 Drama Club (15)      1:00-3:00 Tai Chi Classes (20)</p>				
<p>2:00-3:30 Chair Volleyball (20)      1:00-4:00 Mah Jong (12)      1:00-4:00 SHINE by appointment (4)</p>				
<p>2:00-4:00 Brain Fitness/TriMa (20)      2:30-4:00 Wi Fitness (20)      2:00-3:30 Board Games (20)</p>				
<p>2:00-4:00 Brain Fitness/TriMa (20)      2:30-4:00 Wi Fitness (20)      3:00-4:00 Poetry (15)</p>				
<p>TOTAL FOR DAY: 144      TOTAL FOR DAY: 132      TOTAL FOR DAY: 199      TOTAL FOR DAY: 103      TOTAL FOR DAY: 110</p>				



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Source: Wellesley COA



# Scenario 1A

## When and how visitors arrive

Time Period	Vehicles Entering	Vehicles Exiting
8:45–9:15 a.m.	5	0
9:15–9:45 a.m.	17	2
9:45–10:15 a.m.	29	3
10:15–10:45 a.m.	0	0
10:45–11:15 a.m.	24	20
11:15–11:45 a.m.	12	15
11:45 a.m.–12:15 p.m.	2	16
12:15–12:45 p.m.	12	1
12:45–1:15 p.m.	12	15
1:15–1:45 p.m.	2	14
1:45–2:15 p.m.	17	2
2:15–2:45 p.m.	0	0
2:45–3:15 p.m.	15	16
3:15–3:45 p.m.	3	29
3:45–4:15 p.m.	2	20
<b>Totals</b>	<b>153</b>	<b>153</b>

← Peak one hour of travel activity

	Vehicle Share			Transit Share	Walk Share	Average Vehicle Occupancy (AVO) <sup>1)</sup>
	Drive Alone	Carpool	Drop Off			
Existing Center	66%	22%	4%	6%	2%	1.14
Tolles-Parsons Center	61%	25%	4%	6%	4%	1.17

<sup>1)</sup> AVO is based on vehicle occupancy of 1.0 for drive alone and 2.0 persons for carpools.





# Intersection Level of Service

	Existing	No-Build	Build
<b>Washington/State/Kingsbury</b>			
<i>a.m.</i>	E	F	F
<i>p.m.</i>	C	C	C
<b>Washington/Wellesley</b>			
<i>a.m.</i>	D	E	E
<i>p.m.</i>	C	D	D
<b>Washington/Central/Grove</b>			
<i>a.m.</i>	E	F	F
<i>p.m.</i>	F	F	F



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# PSI Guidelines

- Impacted Locations?
  - Signalized
    - Generally, an increase of 20 or more vehicles and 5% increase on a single approach.
    - **NONE**
  - Unsignalized
    - Generally, an increase of 20 or more vehicles on a single approach.
    - **NONE**
  - Overall “Level of service” change to below LOS C.
    - **NONE**





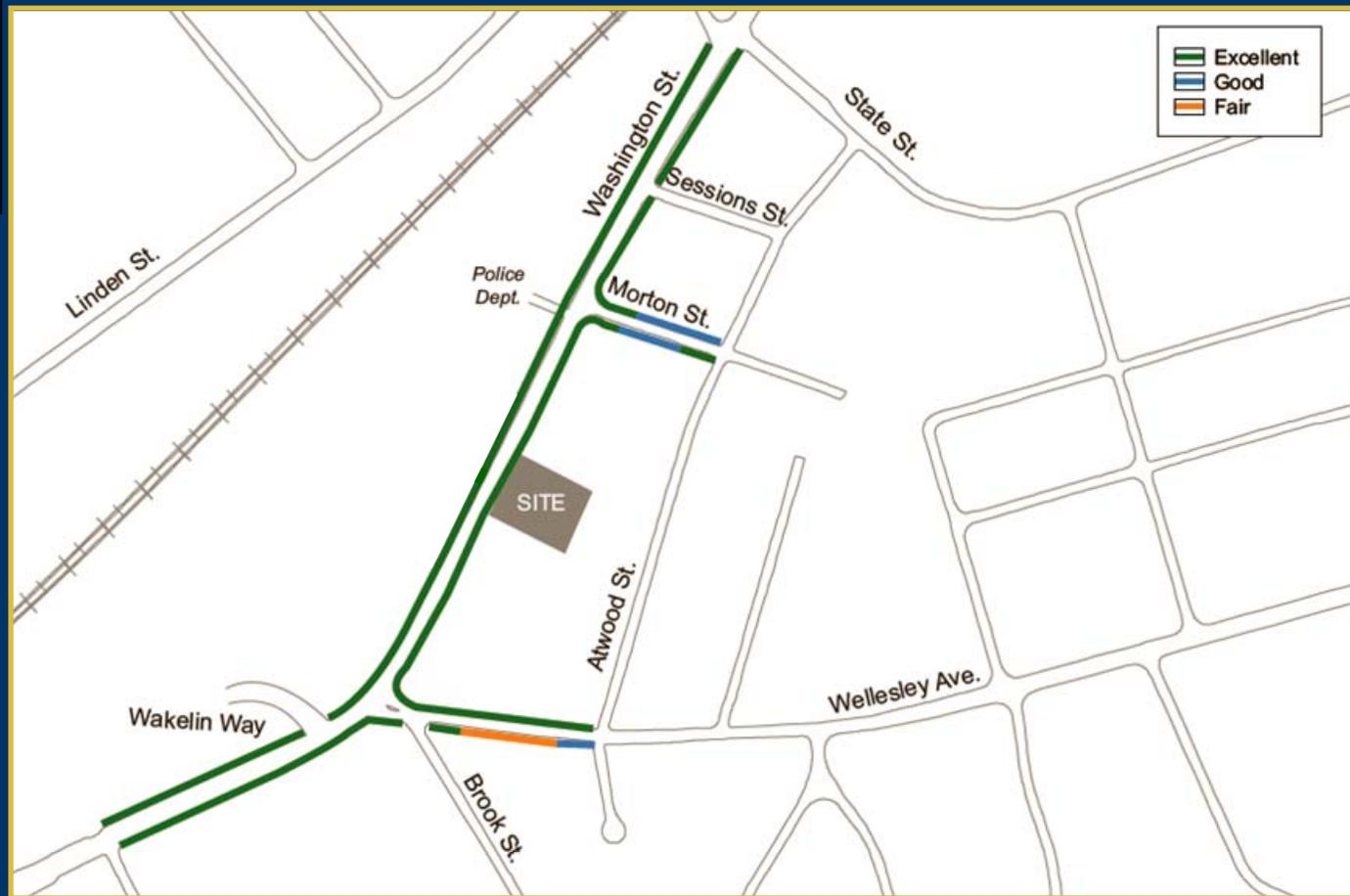
# Sidewalks



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# Sidewalk Conditions



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# Current Parking Supply and Demand

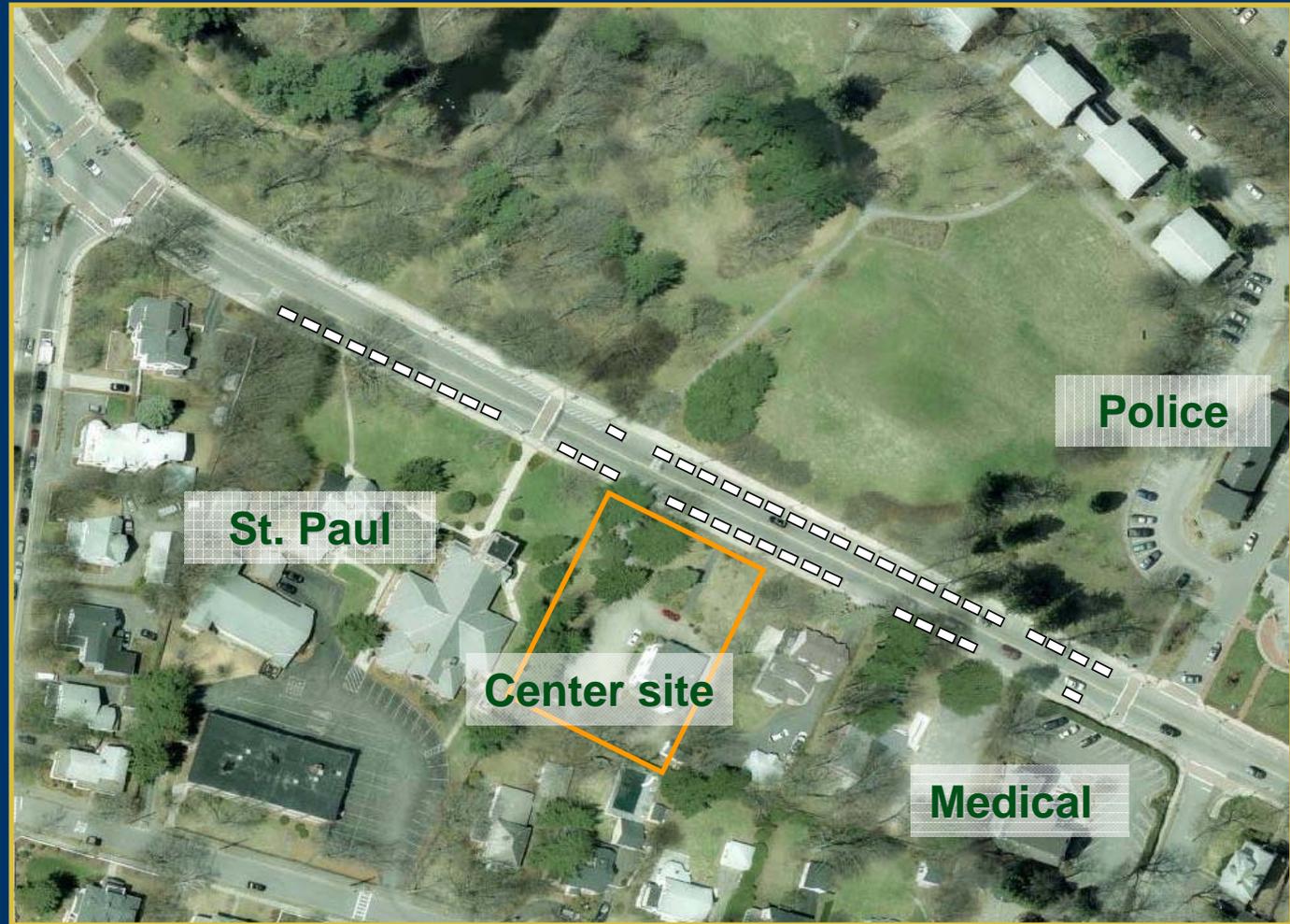


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# Washington Street Parking Supply

*Currently 47 spaces*



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Aerial Source: Wellesley GIS



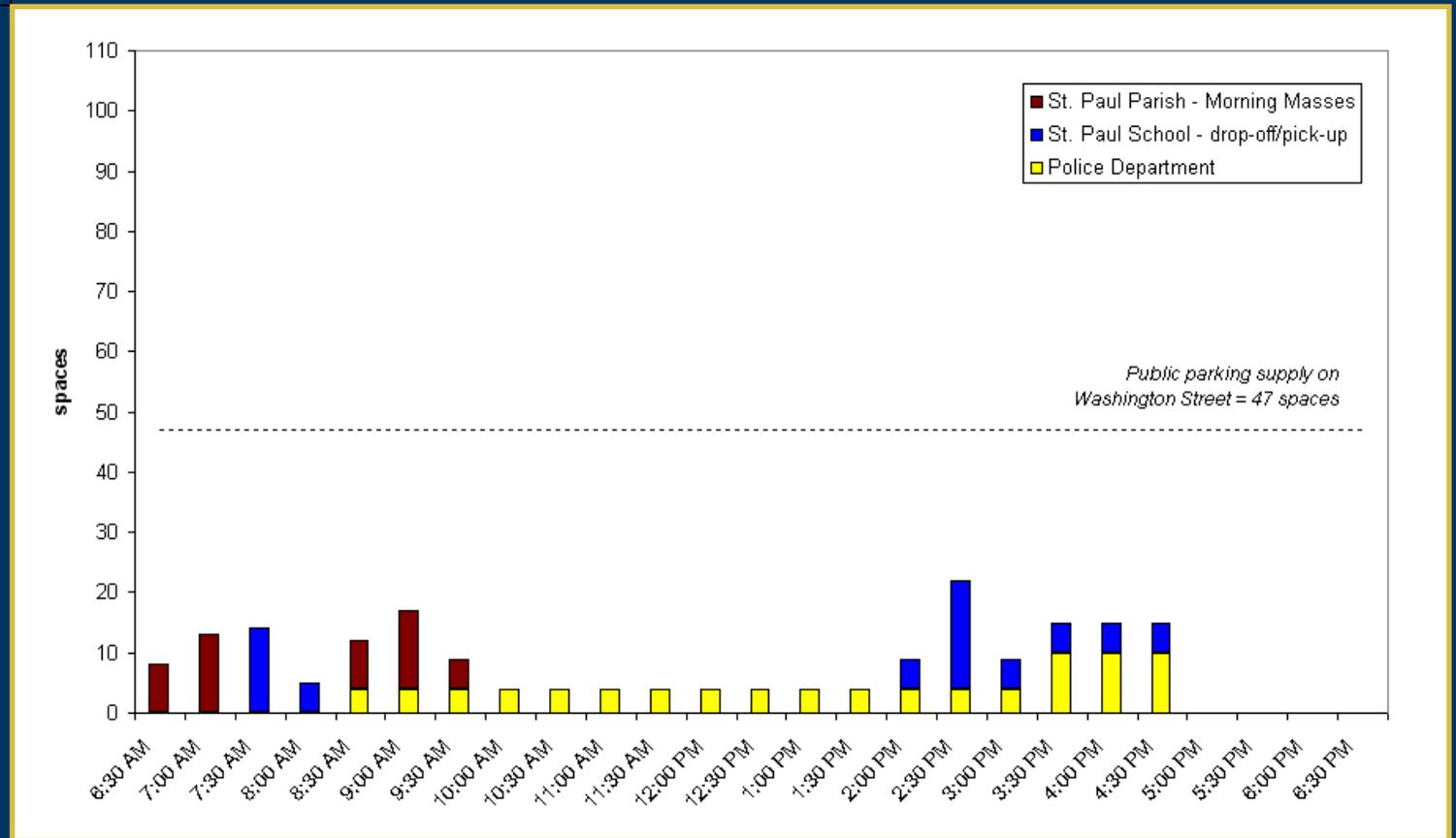
# Washington Street Parking Supply



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# Washington Street Parking Demand Current (without Center)



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# Future Parking Supply and Demand



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# Future Parking Supply

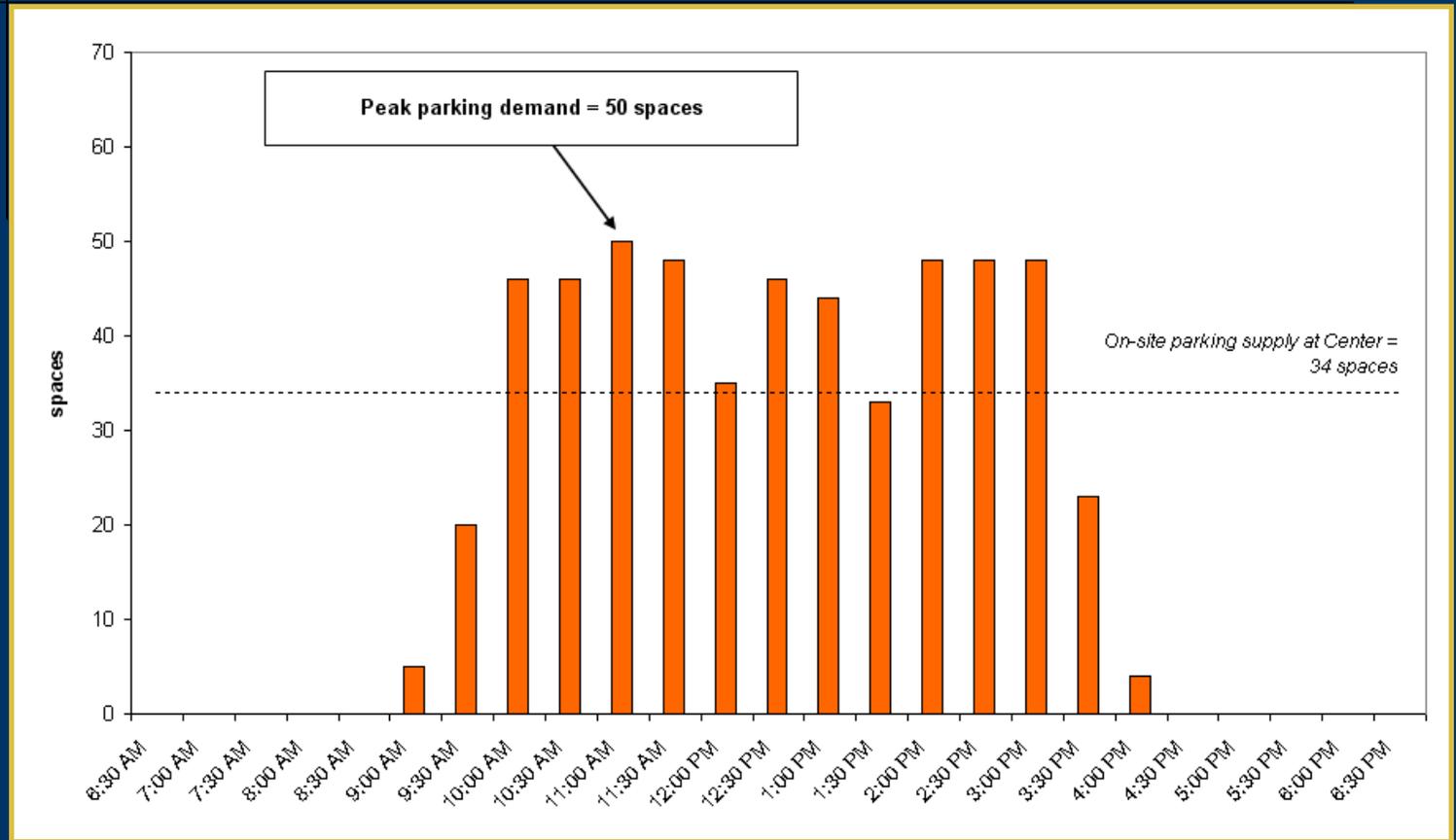


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Aerial Source: Wellesley GIS



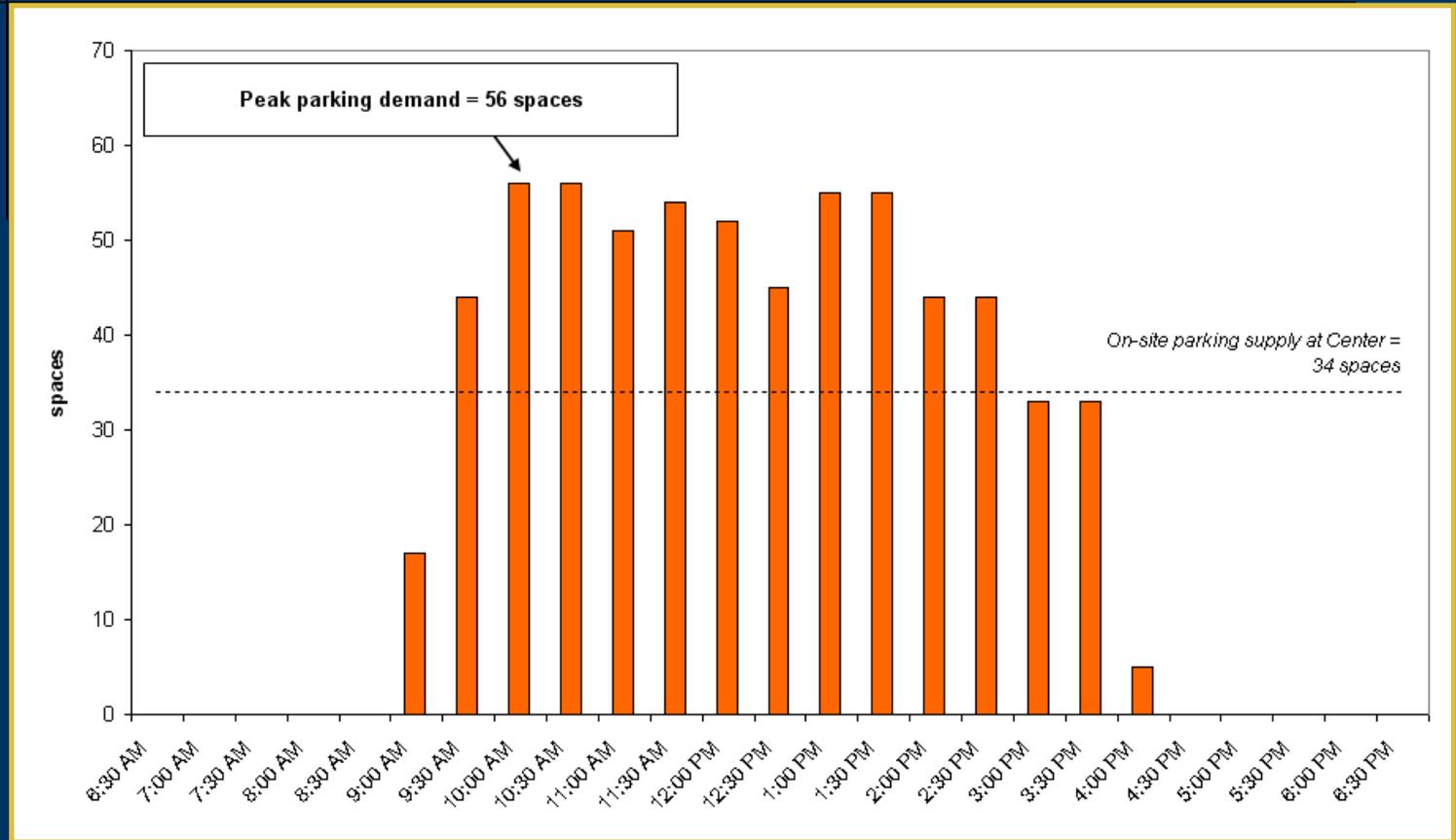
# Tolles-Parsons Parking Demand Scenario 1A – 150 visitors



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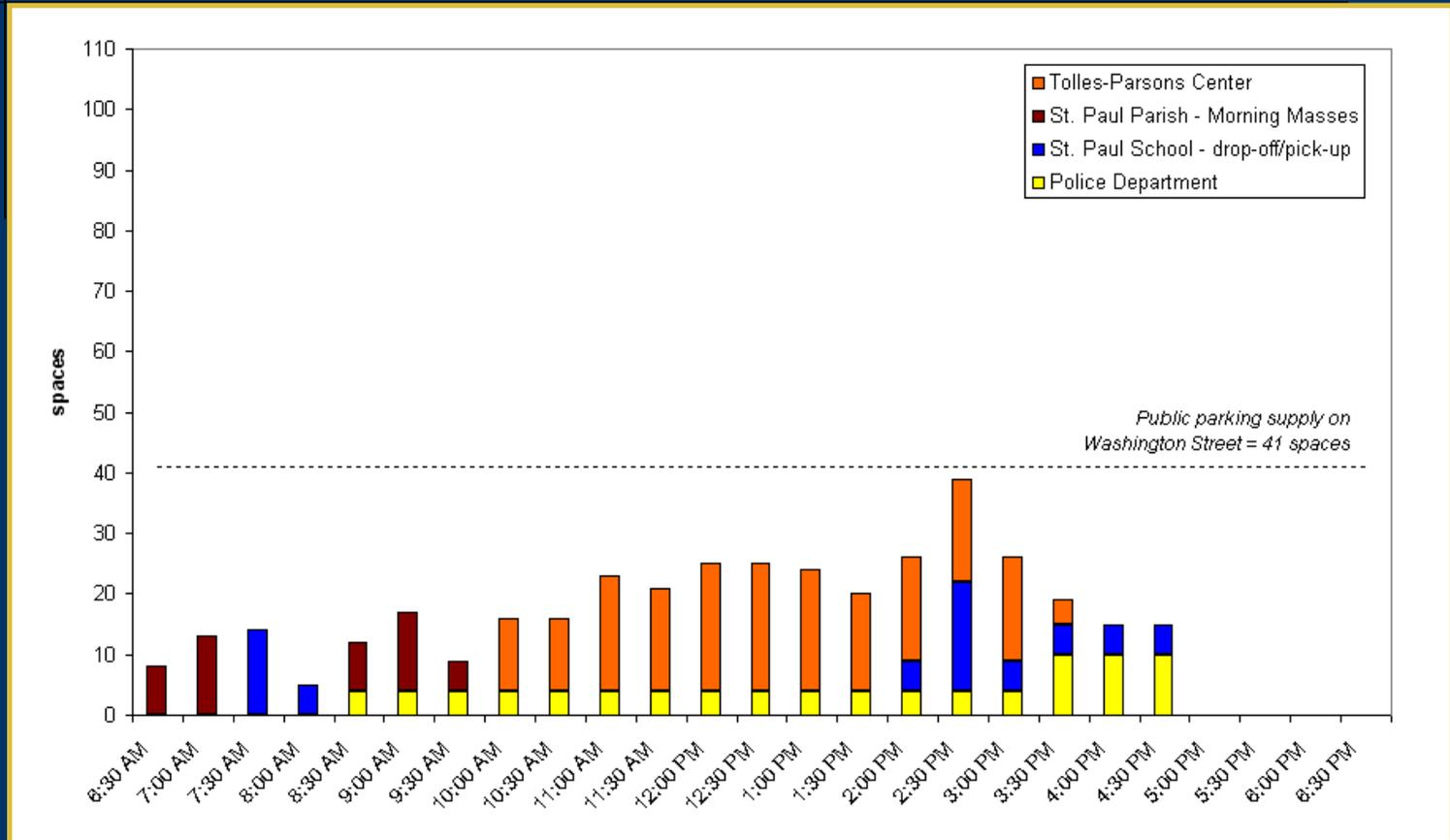
# Tolles-Parsons Parking Demand Scenario 1B – 130 visitors



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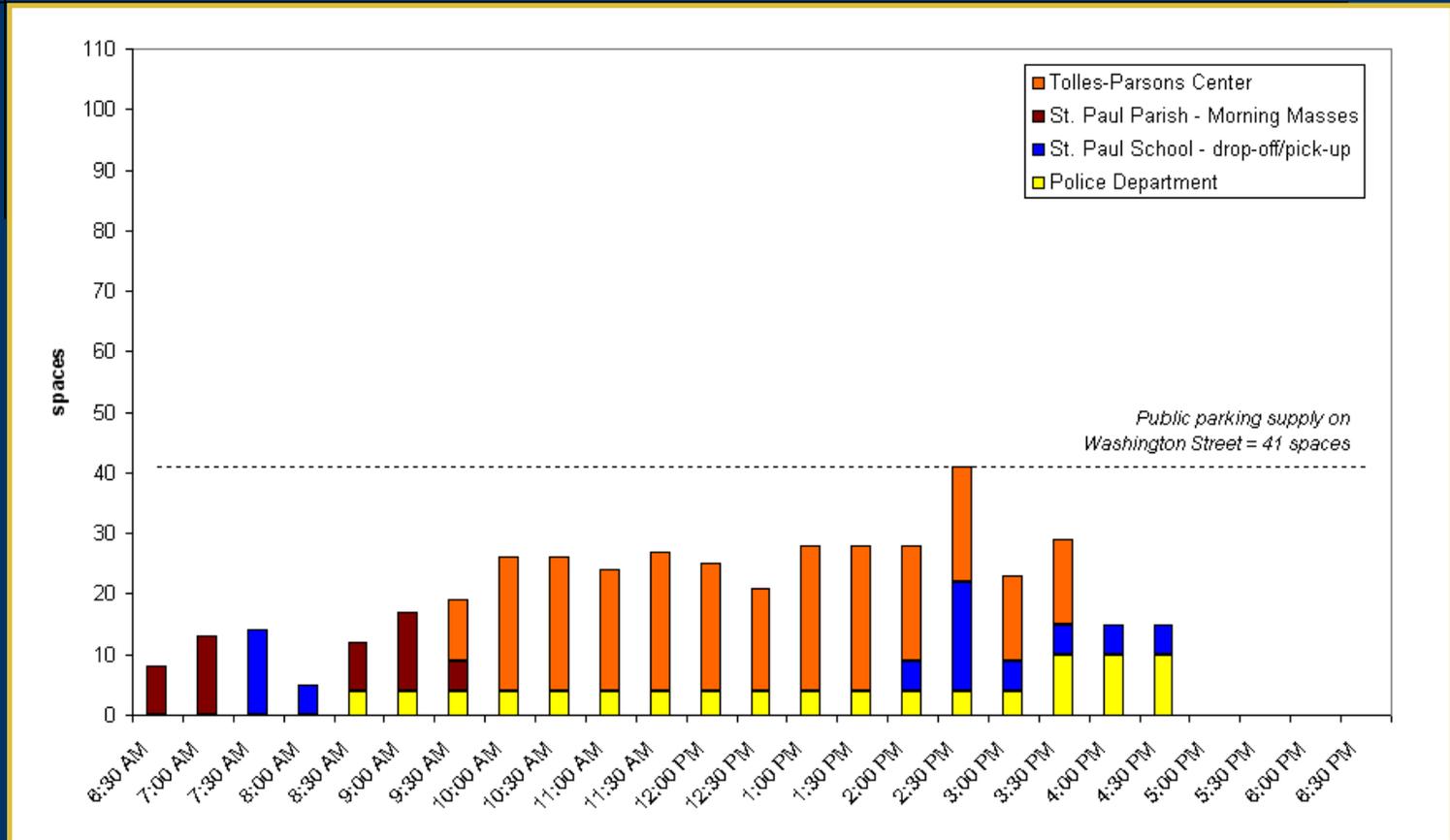
# Washington Street Parking Demand Scenario 1A – 150 visitors



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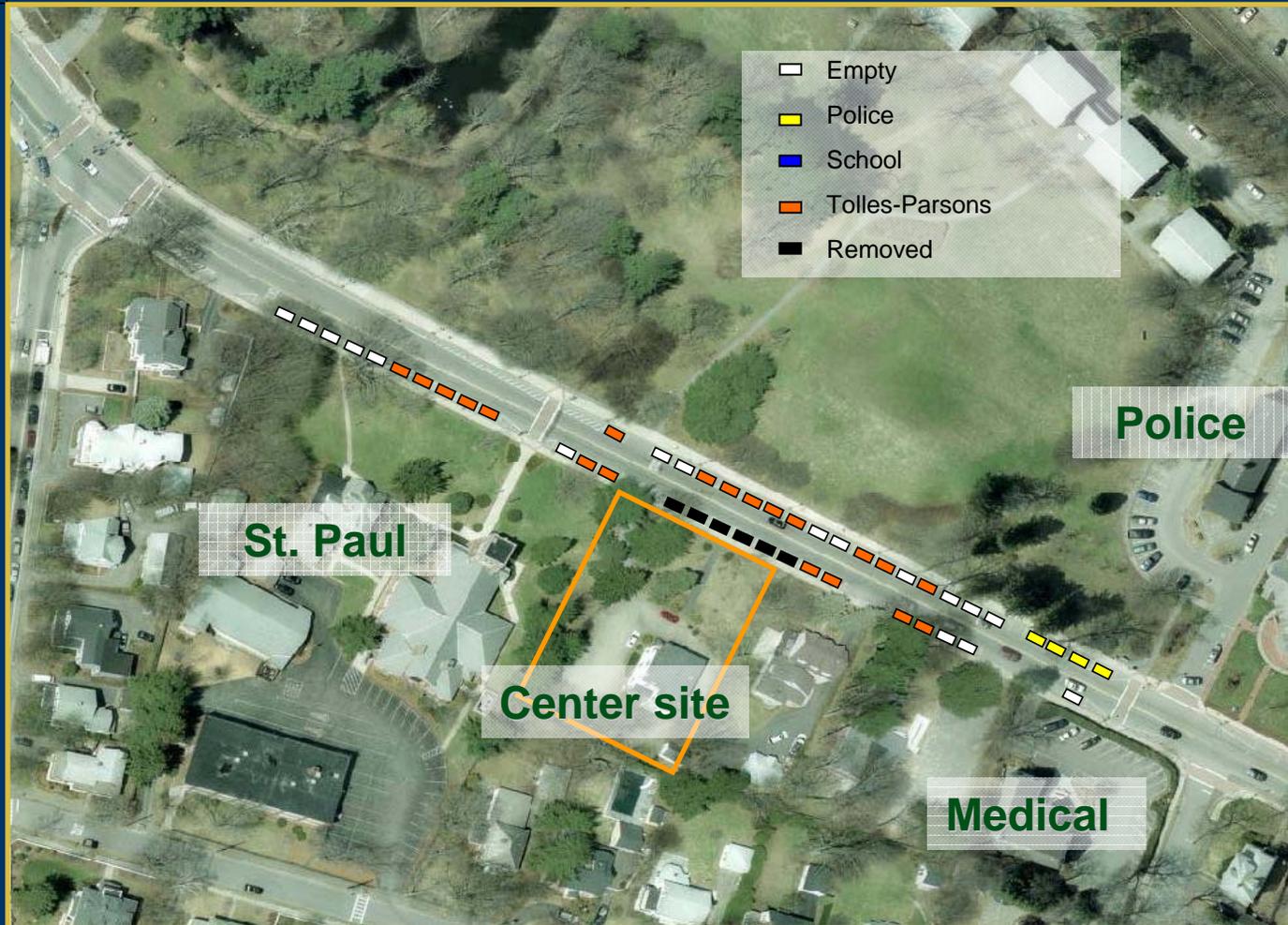
# Washington Street Parking Demand Scenario 1B – 130 visitors



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# Washington Street Parking Demand Scenario 1A - 12:30 p.m.

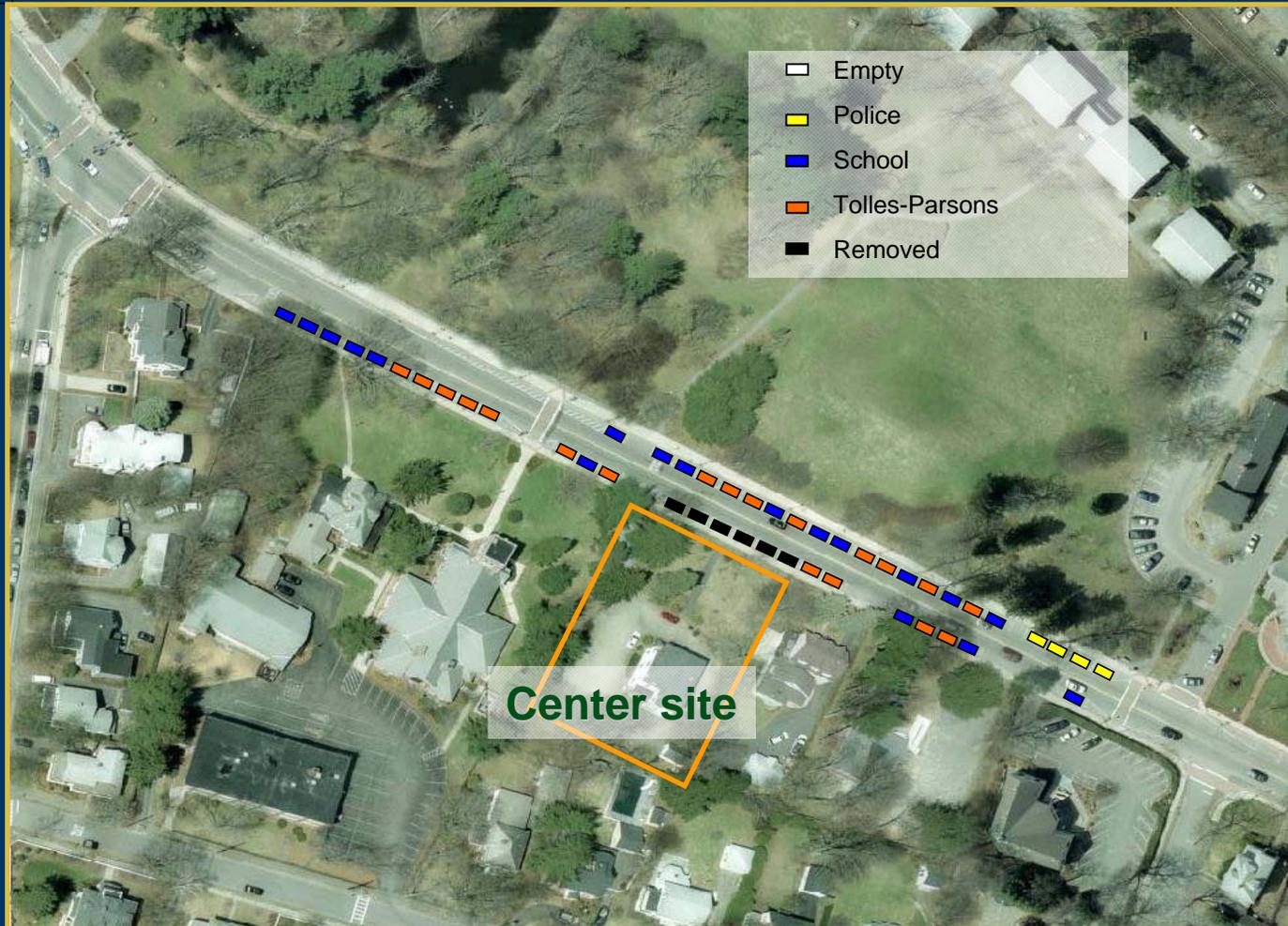


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Aerial Source: Wellesley GIS



# Washington Street Parking Demand Scenario 1A – 2:30 p.m.



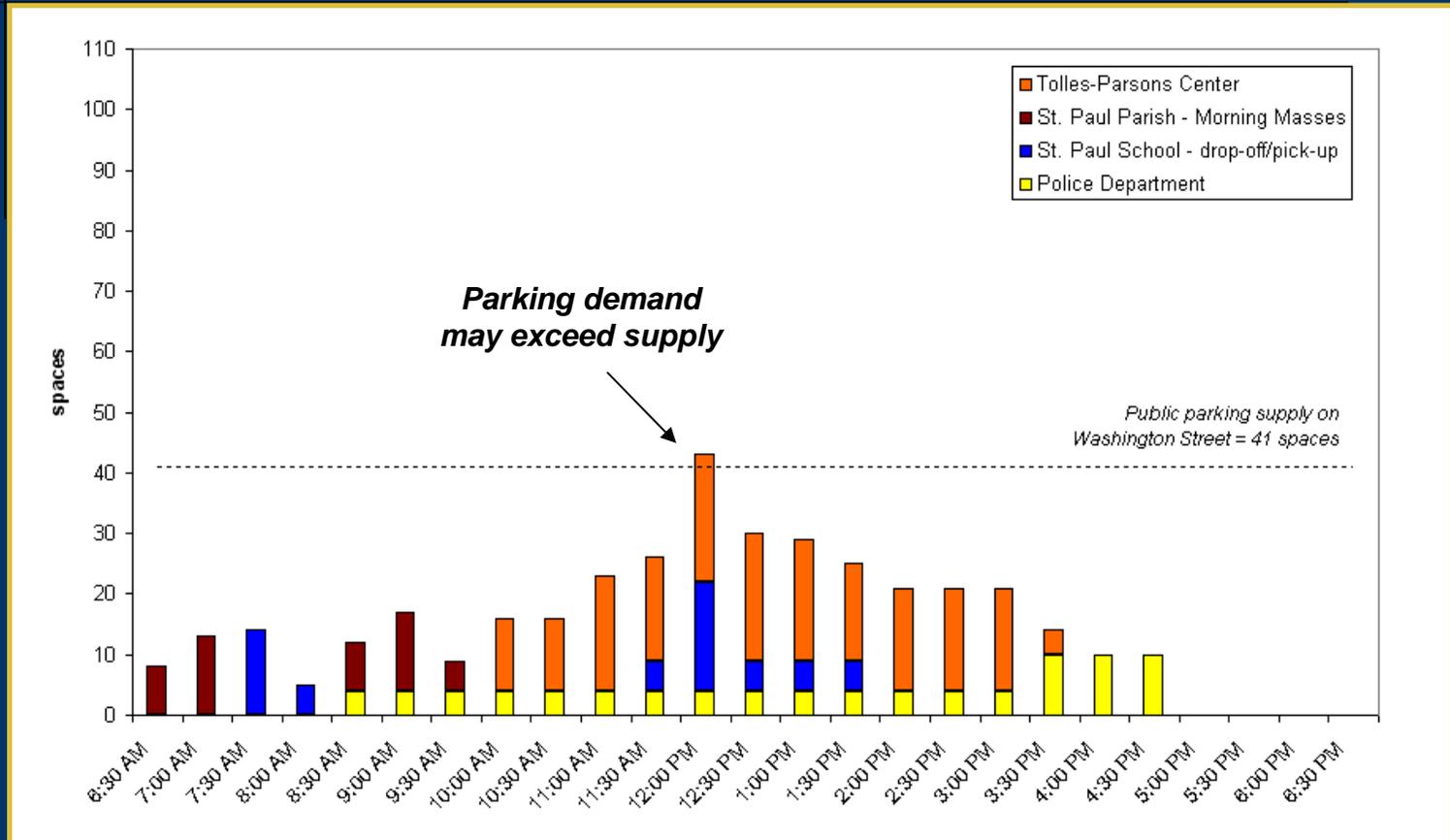
Aerial Source: Wellesley GIS



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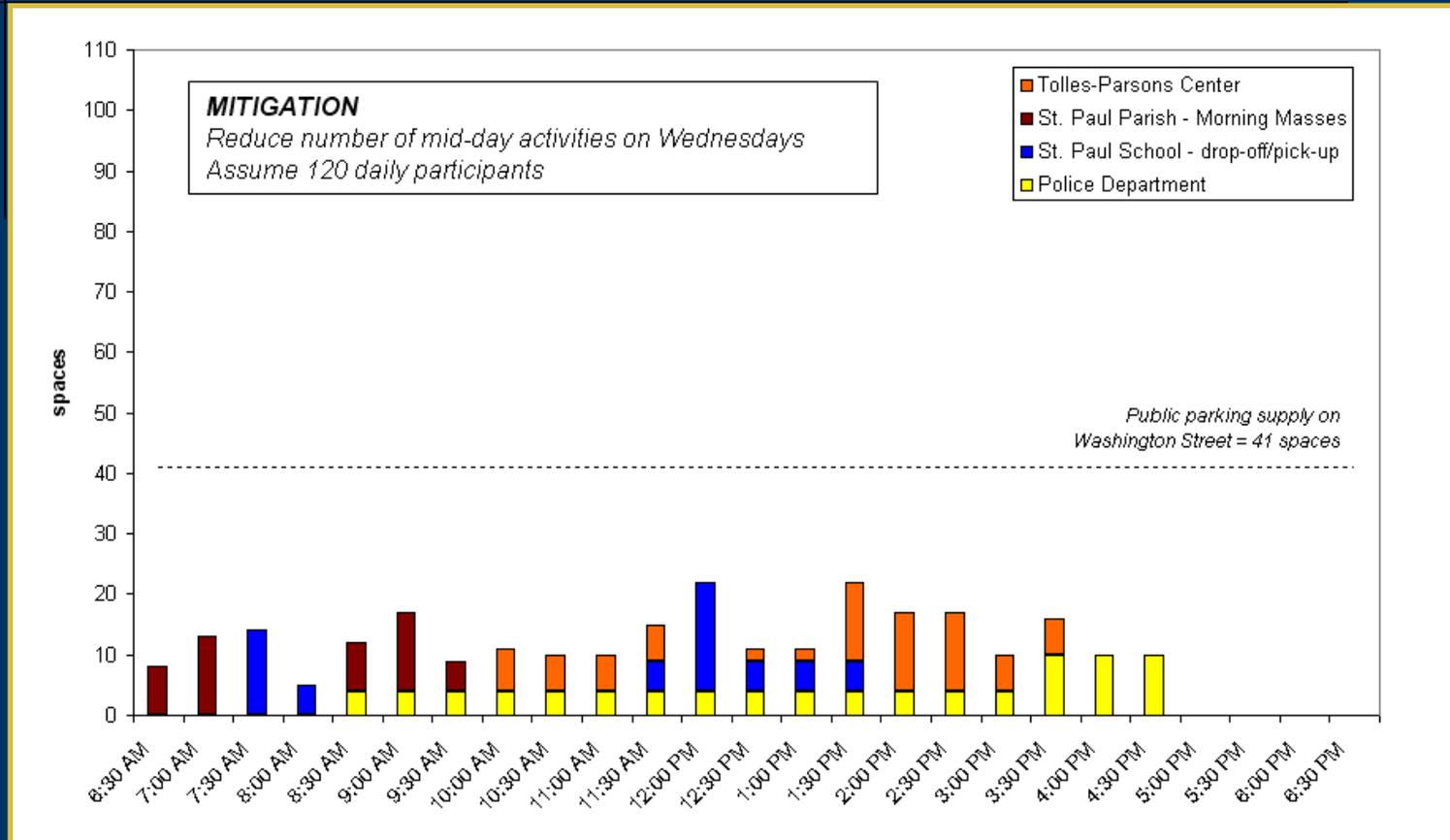
# Washington Street Parking Demand Scenario 2 – Wednesday during school year



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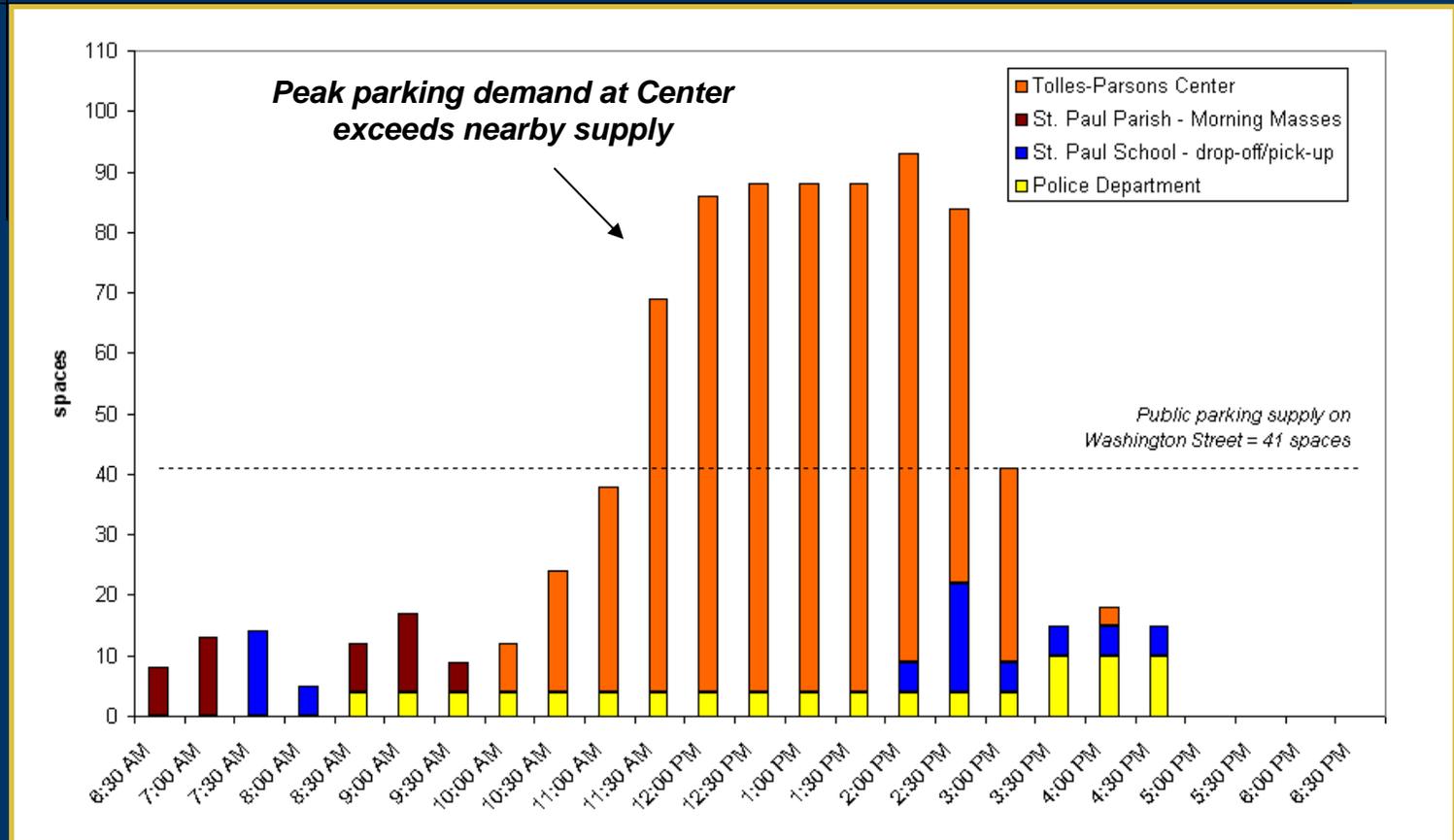
# Washington Street Parking Demand Scenario 2 – Wednesday with mitigation



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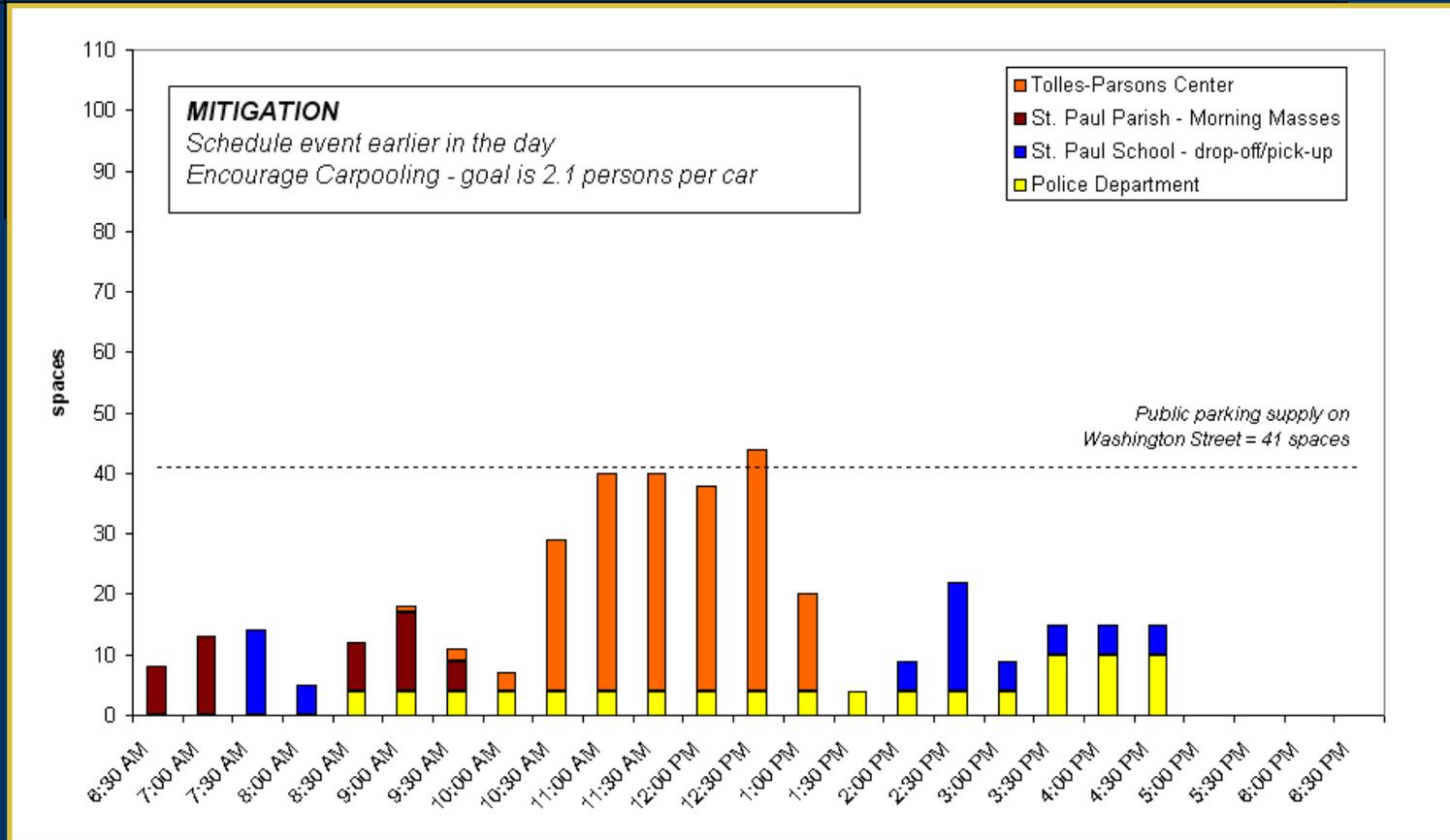


# Washington Street Parking Demand Scenario 3 – Midday Event at Center (150 visitors)





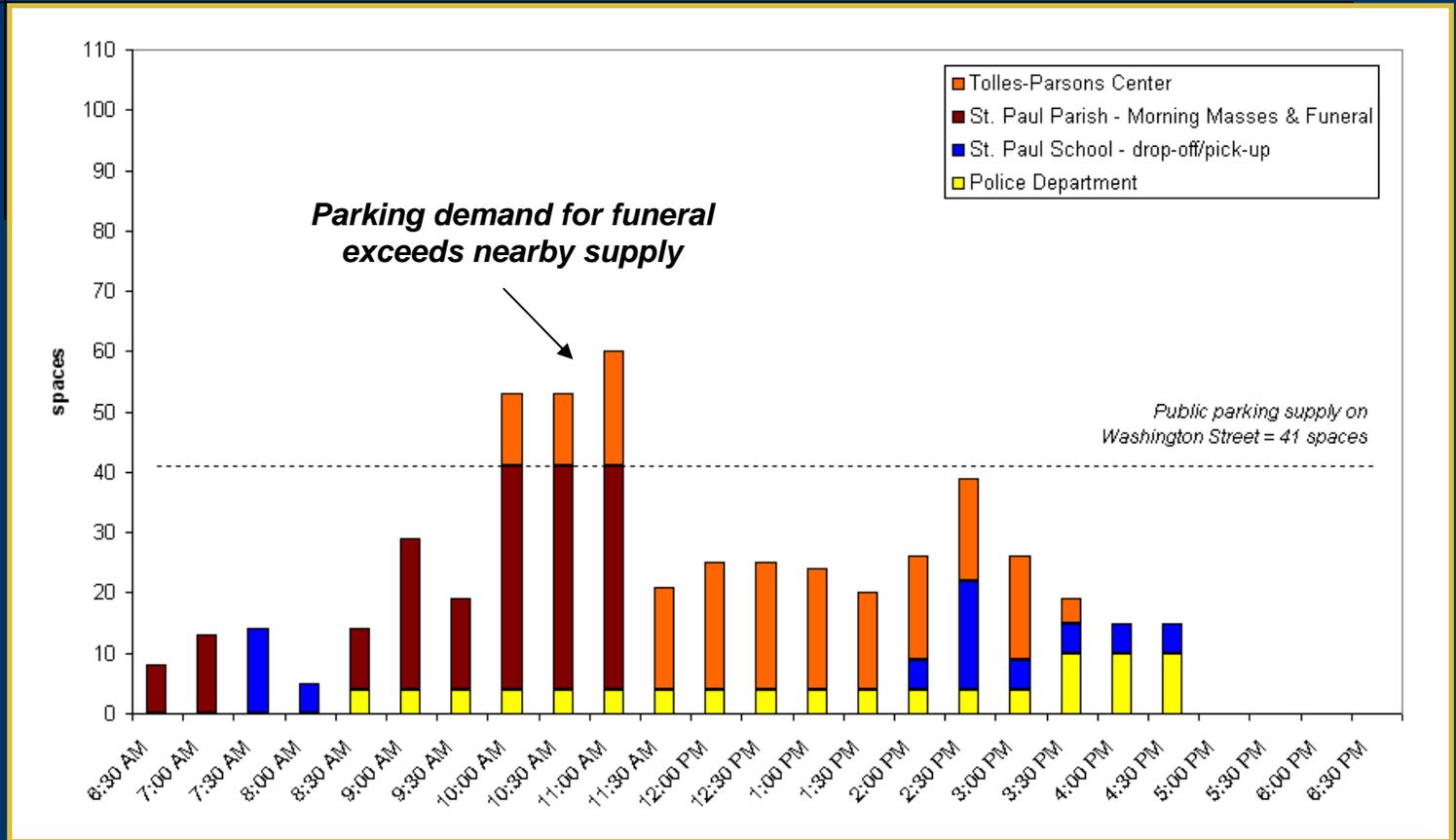
# Washington Street Parking Demand Scenario 3 – Midday Event at Center (150 visitors)



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# Washington Street Parking Demand Scenario 4 – Weekday Funeral at St. Paul Parish



CREATIVE SOLUTIONS  
EFFECTIVE PARTNERING



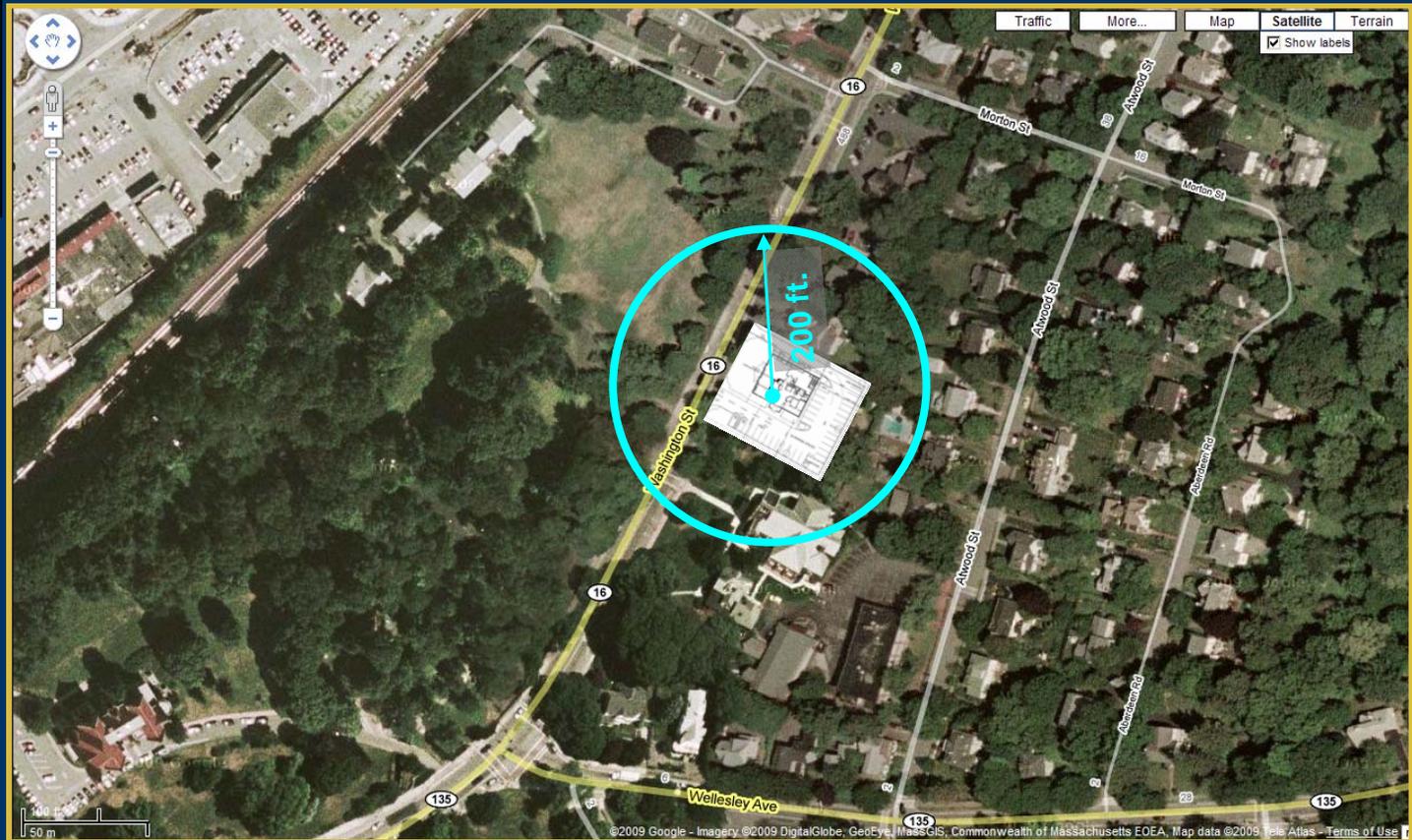
# Parking – Walking Distances



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# Distance to Parking Wellesley



Slower pace walking speed = 2.9 ft/sec.

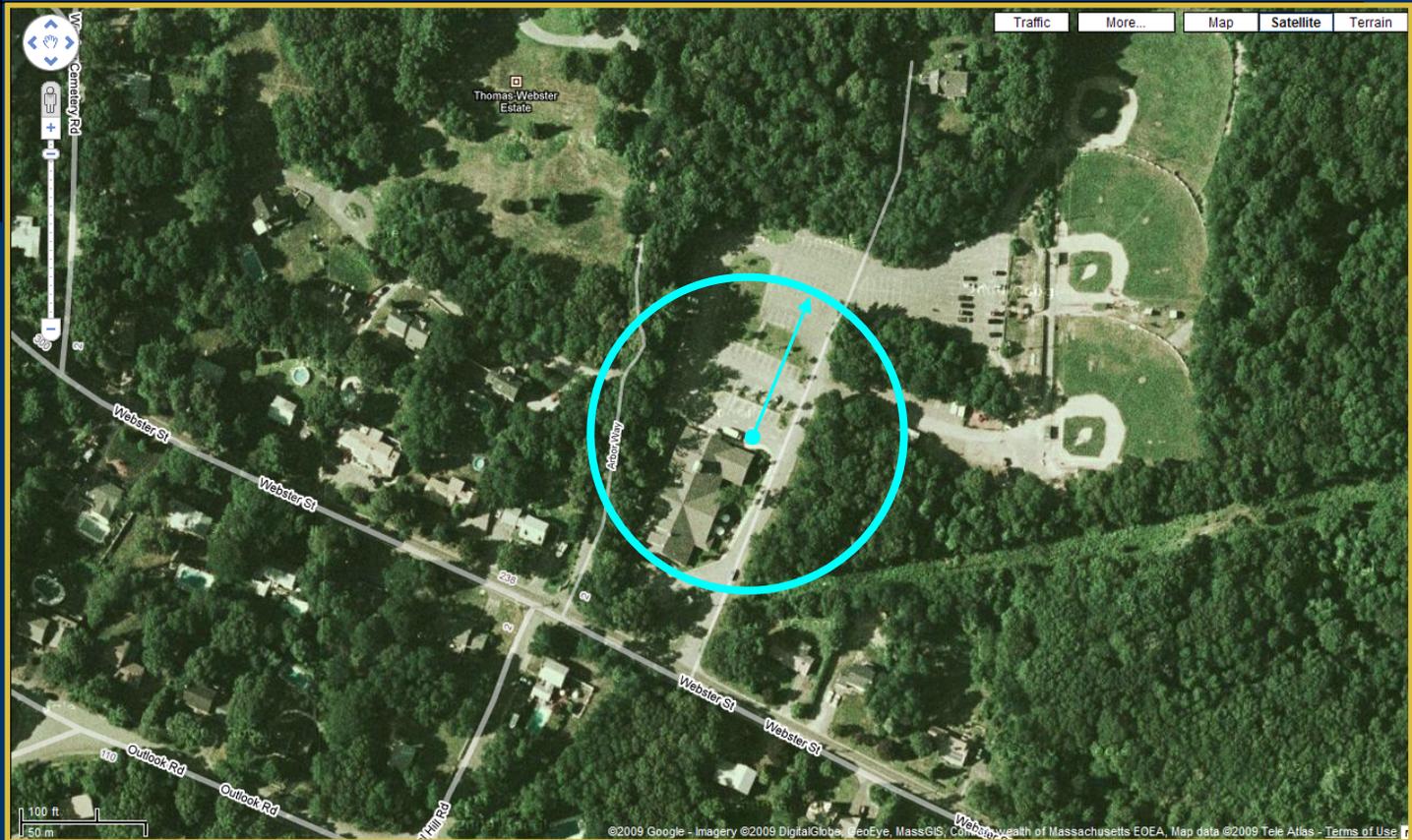
200 ft at 2.9 ft/sec = about 70 seconds



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EFFECTIVE PARTNERING



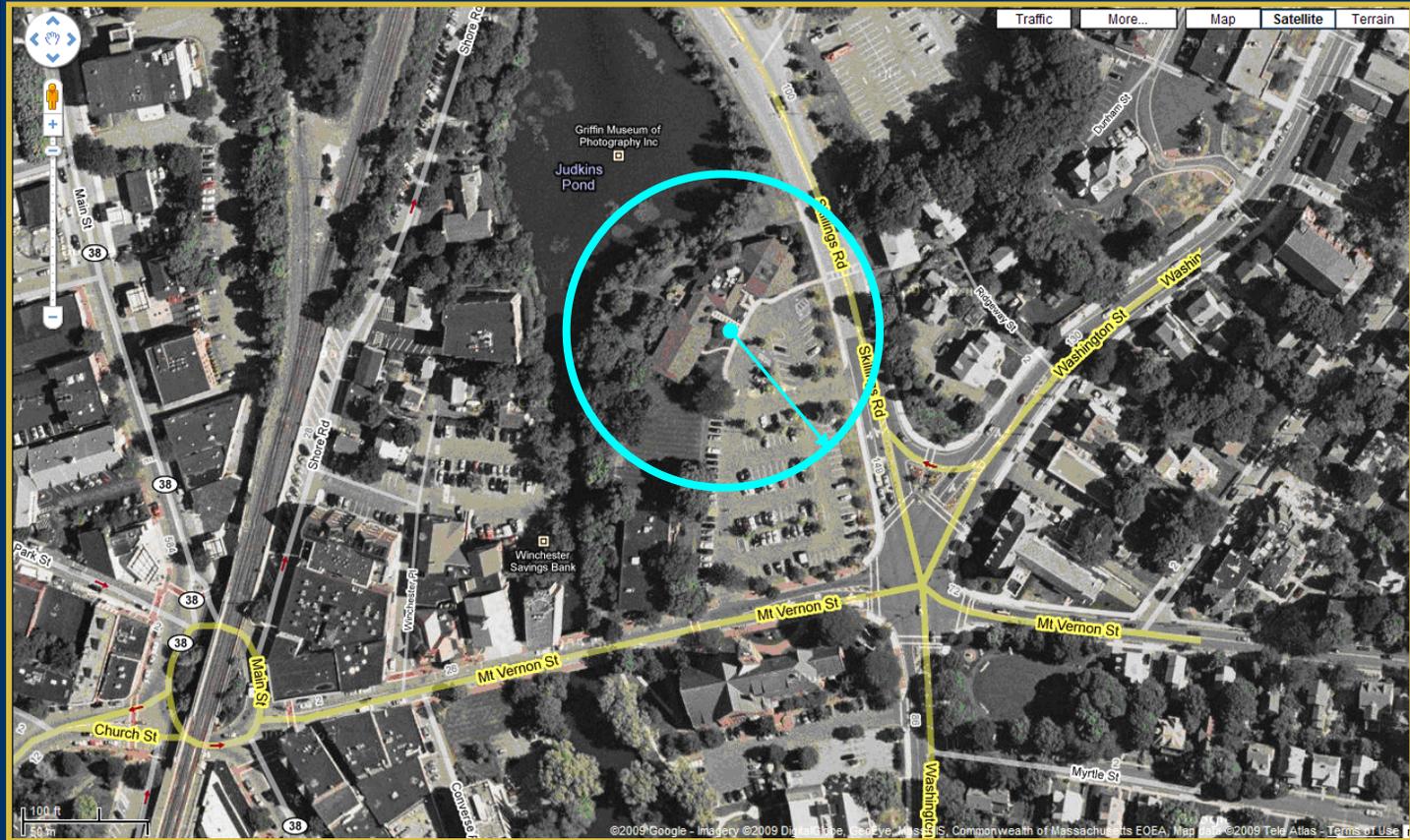
# Distance to Parking Marshfield Senior Center



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# Distance to Parking *Winchester Senior Center*



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# Distance to Parking *Hopkinton Senior Center*



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# Possible Crosswalk Relocation



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# Existing Pedestrian Signal and Crosswalk



Aerial Source: Wellesley GIS



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# Crosswalk Relocation



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Aerial Source: Wellesley GIS



# Discussion



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