Route 7 Bus Rapid Transit Plan Amendment

May 11, 2023

Project Manager: Sean Schweitzer



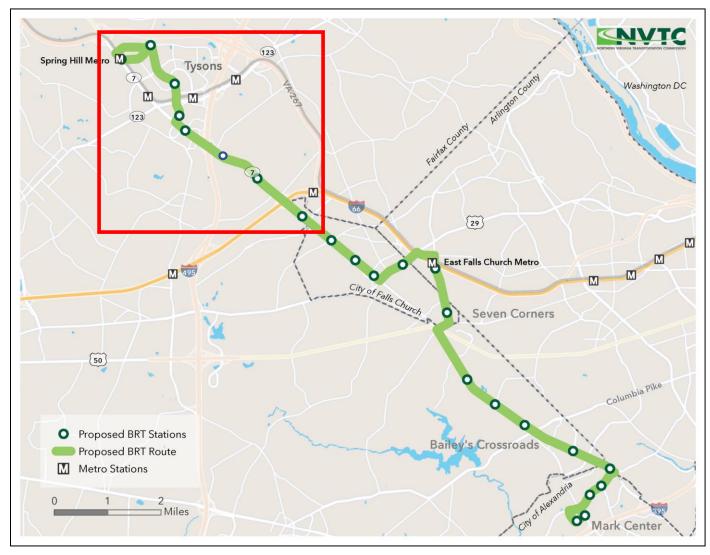
- Background of Route 7 BRT Project
- Route 7 BRT Plan Amendment
- Next Steps
- Questions



Background

NVTC – Envision Route 7 Study

- Project partners include Arlington County, Fairfax County, City of Alexandria, City of Falls, NVTC, DRPT, WMATA, and VDOT
- Identified BRT as preferred alternative from Mark Center in Alexandria to Tysons
- Recommended dedicated bus lanes within Tysons and between Seven Corners and Baileys Crossroads and provide multimodal solution
- Next phase will look at transportation analysis for entire Route 7 Corridor





Background

Three alternatives were selected to be evaluated:

- Alternative 1 International Drive was selected as the preferred alternative
- Alternative 1 was approved by the Board on July 27, 2021

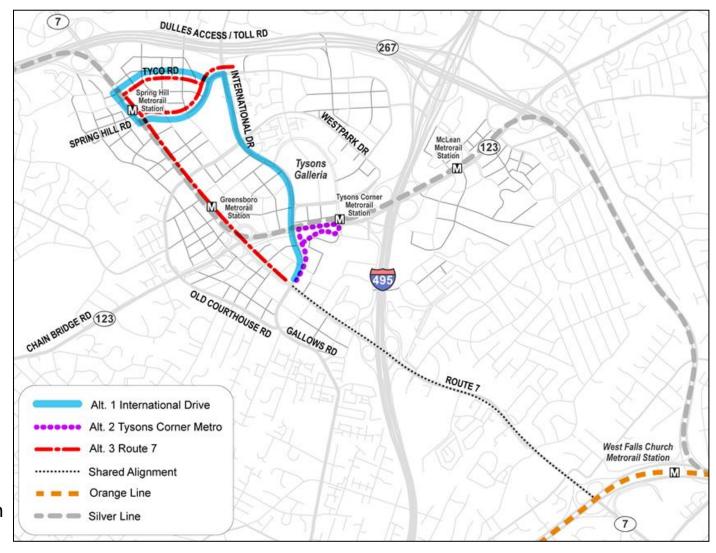
• Alternative 1: International Drive to Spring Hill

Metrorail Station

Alternative 2: International Drive to Tysons Corner

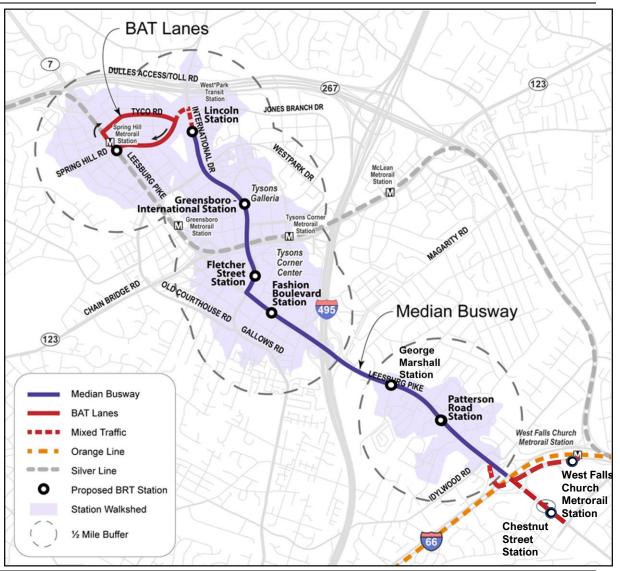
Metrorail Station

• Alternative 3: Route 7 to West*Park Transit Station





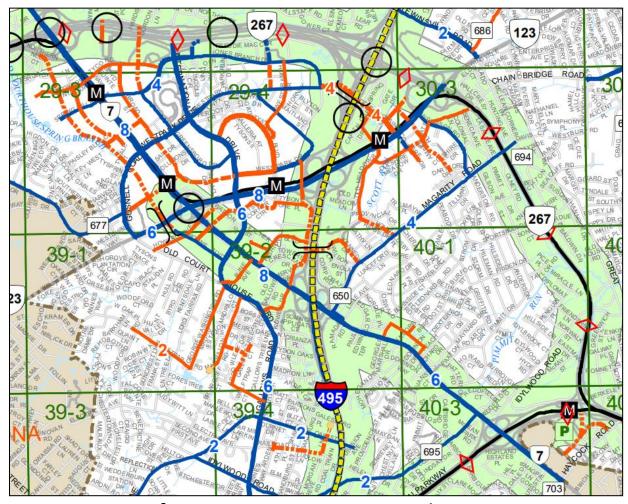
- Median runningway on Route 7 and International Drive
- "Business Access and Transit" BAT Lanes on Spring Hill Road and Tyco Road couplet
- Mixed traffic south of I-66 interchange to West Falls Church Metrorail Station and/or to points south







- Route 7 (Haycock Road to I-495)
 - Widen from 4 to 6 lanes (currently 4)
 - Two new lanes for BRT
- Route 7 (I-495 to International Drive)
 - Widen from 6 to 8 lanes
 - Two new lanes for BRT
- International Drive (Route 7 to Lincoln Circle)
 - Repurpose two existing lanes to BRT
- Spring Hill Road and Tyco Road
 - BAT lanes on northern side of Spring Hill Road (westbound) and on southern side of Tyco Road (eastbound)

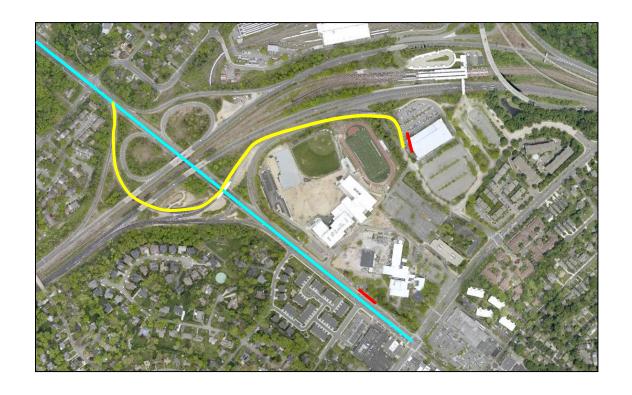


Fairfax County Transportation Plan Map



Route 7 and West Falls Church (WFC) Metrorail Station location and Station configuration

- Located next to new WFC development site and WFC Metrorail Station
- BRT would operate in mixed traffic
- Stations located on Route 7 and Chestnut Street (WB) and WFC Metrorail





Route 7 and Patterson Drive Station location and Station configuration

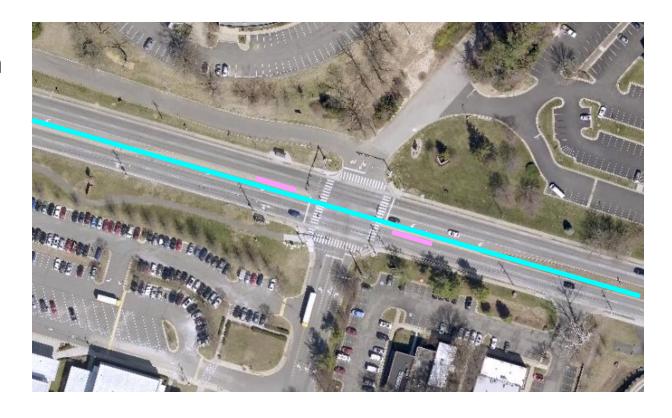
- Located next to Trader Joes and Idylwood shopping center
- BRT would operate in median runningway
- East and west stations staggered to reduce Right-of-Way needs





Route 7 and George C Marshall Drive Station location and Station configuration

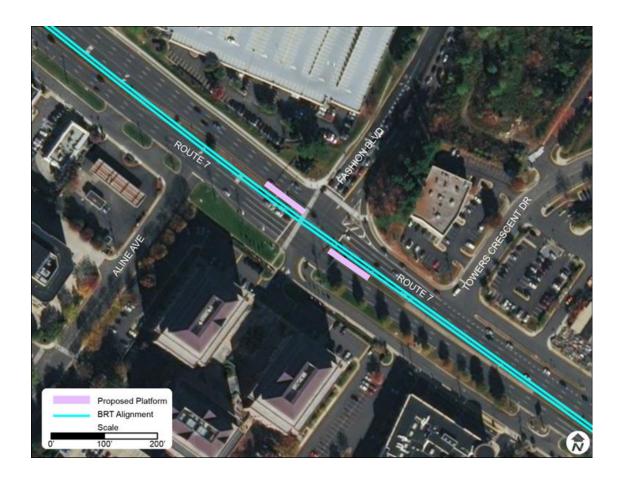
- Located next to new townhouse development and George C Marshall High School
- BRT would operate in median runningway
- East and west stations staggered to reduce Right-of-Way needs





Route 7 and Fashion Boulevard Station location and Station configuration

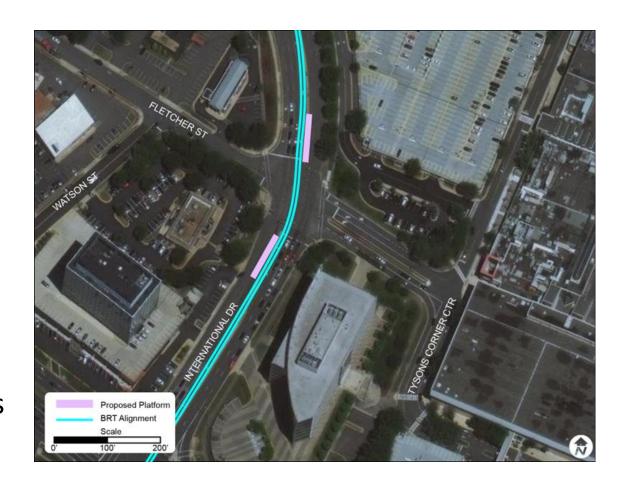
- Located next to Tysons Corner Mall
- BRT would operate in median runningway
- East and west stations staggered to reduce Right-of-Way needs





International Drive and Fletcher Street Station location and Station configuration

- Located next to Tysons Corner Mall
- BRT would operate in median runningway
- North and south stations staggered to reduce Right-of-Way needs
- Possible future transfer point for Gallows Road enhanced transit system





International Drive and Greensboro Drive Station location and Station configuration

- Located next to Tysons Galleria
- BRT would operate in median runningway
- North and south stations staggered to reduce Right-of-Way needs





International Drive and Lincoln Drive Station location and Station configuration

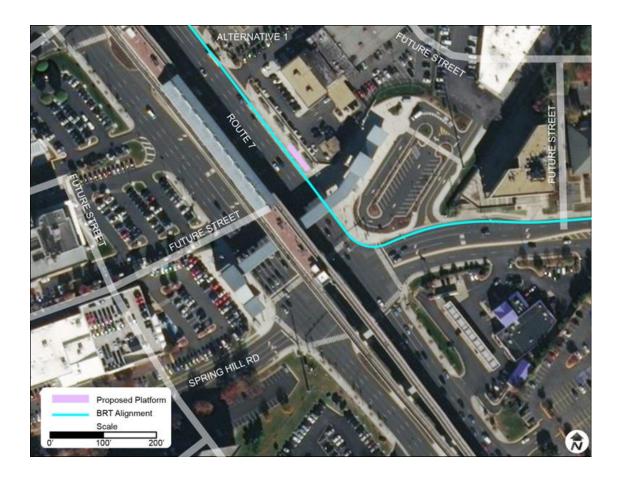
- Located next to Rotunda condominiums
- BRT would operate in median runningway to this point then transition to mixed traffic
- North and south stations staggered to reduce Right-of-Way needs





Route 7 at Spring Hill Metrorail Station and Station configuration

- Located at Spring Hill Metrorail station and bus station
- BRT would operate in mixed traffic
- Station would use existing bus infrastructure





Route 7 BRT Plan Amendment Proposed Changes

- Segments of the route 2 exclusive lanes for BRT
 - Route 7 Convert 2 planned lanes from general-purpose to BRT
 - International Convert 2 existing general-purpose lanes to BRT
- All other segments BAT lanes or mixed traffic
- Defining the BRT route from West Falls Church Station to Tysons along Route 7
- Potential station locations along this segment of the BRT route



Community Engagement

March 11, 2020

 Held a public meeting at George C Marshall High School to provide information about the Route 7 BRT study and gather feedback on possible alternatives

March 19, 2021, and March 24, 2021

 Held two virtual meetings to present the three alternatives to the public and gather input on preferred route and proposed station locations

June 7, 2023, and June 8, 2023

Holding two virtual public meetings to discuss the Route 7 BRT Plan
 Amendment and the proposed changes to the Comprehensive Plan



Next Steps

- FCDOT currently working on the next phase of the Route 7 BRT project to understand Right-of-Way needs along the corridor as well as at proposed station locations and intersections
- Transportation PC meeting scheduled on May 11, 2023
- Planning Commission meeting scheduled on June 21, 2023
- Board of Supervisors meeting scheduled on July 25, 2023



Questions and Comments

Sean Schweitzer

Sean.Schweitzer@Fairfaxcounty.gov

Phone: 703-877-5842



APPENDIX





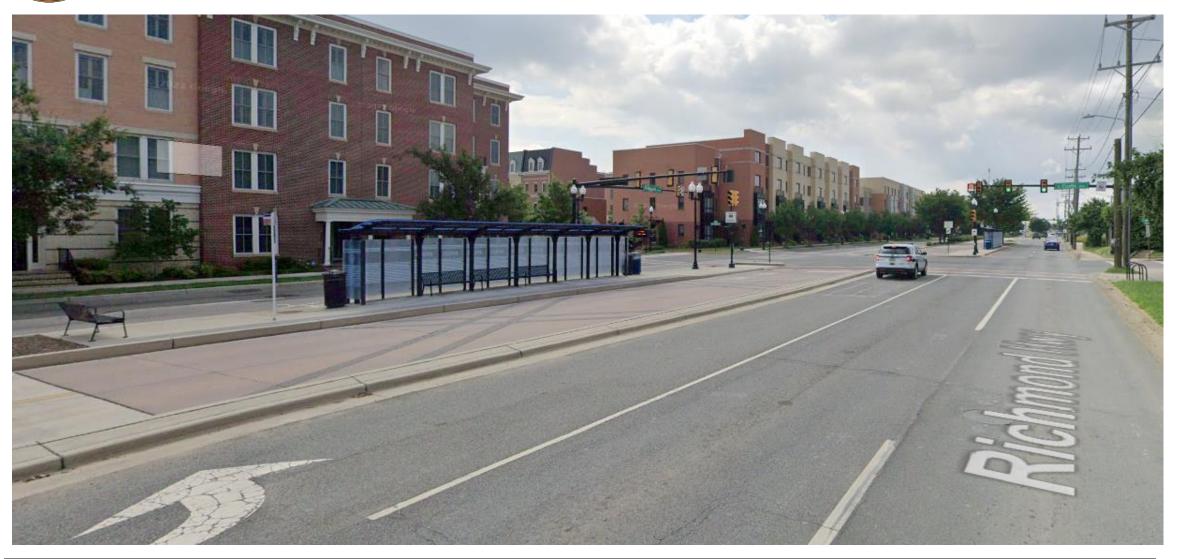








POTOMAC TRANSITWAY





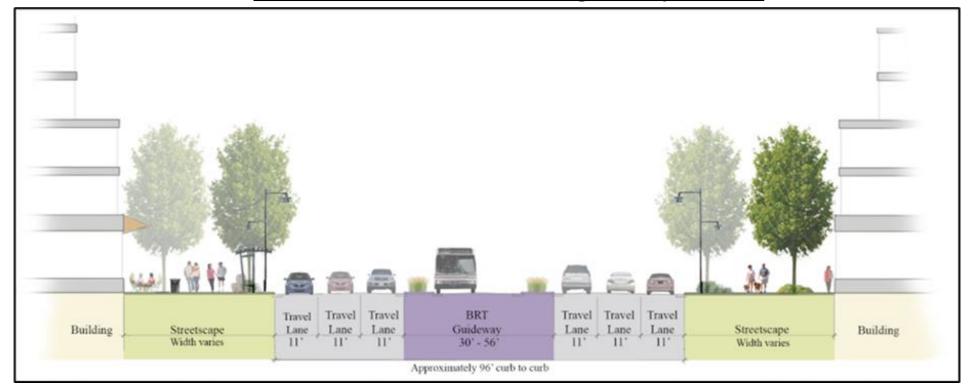


POTOMAC TRANSITWAY



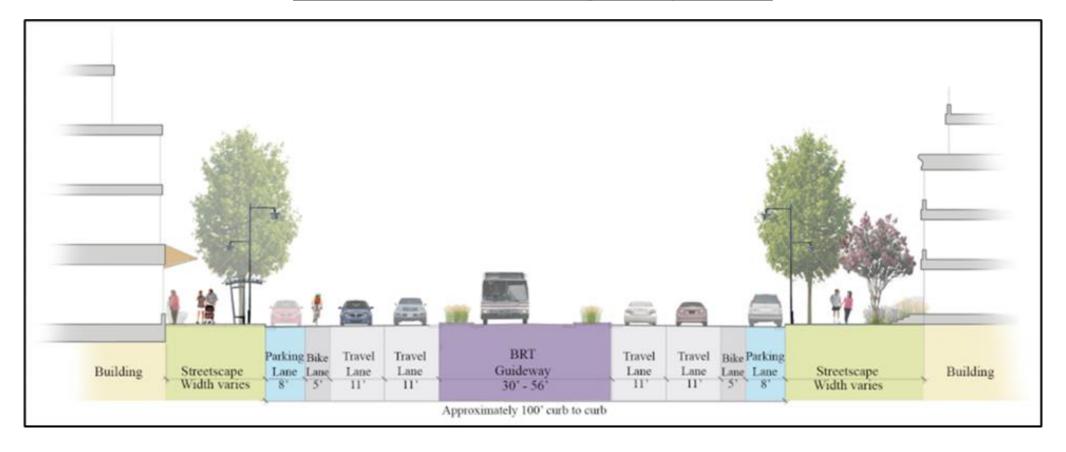


Boulevard section with median guideway for BRT





Avenue section with median guideway for BRT





ALTERNATIVE 1

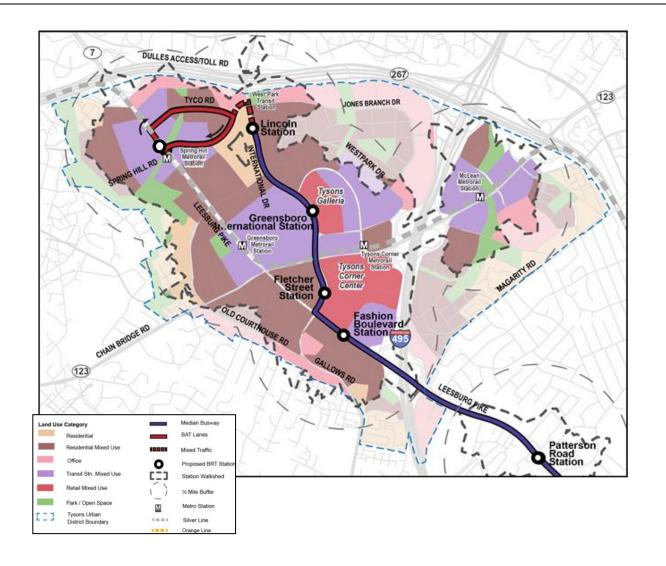
International Drive

- Terminal Station: Spring Hill Metro
- Six BRT stations
- 3.7-mile route length
- Demographics within ½ mile
 Walkshed in 2045

Households: 8,250Population: 16,650

• Employment: 68,250

- Estimated Daily BRT Ridership: 6,700
- Serves mixed use land uses including Residential, Retail, and Transit Oriented along International Drive





TRAFFIC CONDITIONS – ALTERNATIVE 1

2045 Conditions without mitigation

Automobile Intersection LOS

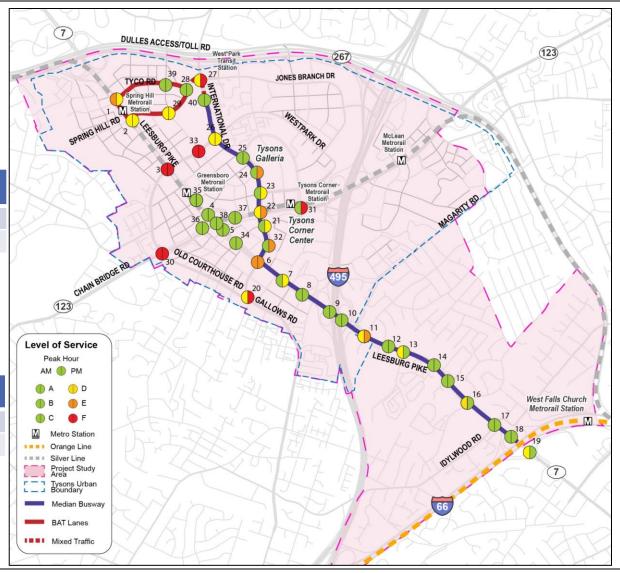
Number of Failing Intersections

	No Build	Alt 1	Alt 2	Alt 3
AM	5	3	6	6
PM	8	6	6	9

Automobile Intersection Delay

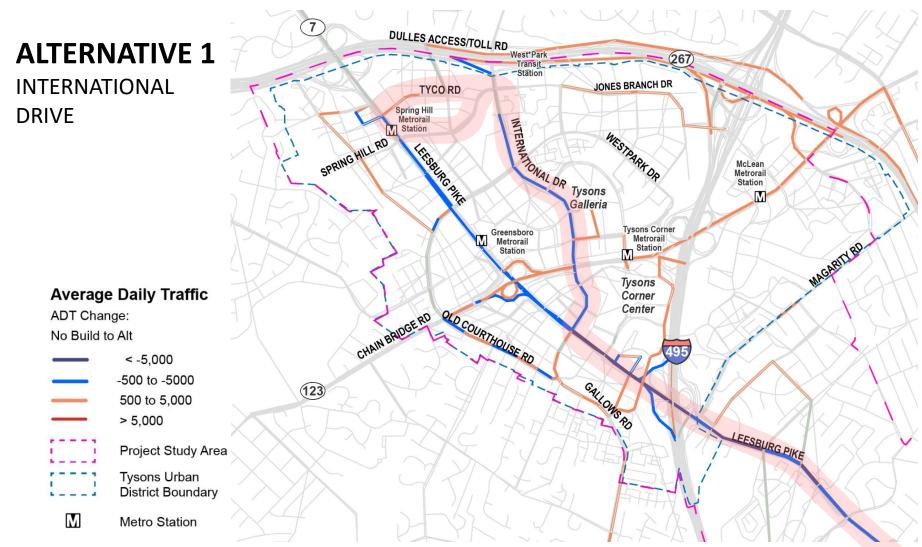
- Average (in seconds)

	No Build	Alt 1	Alt 2	Alt 3
AM	41.0	35.6	39.7	46.2
PM	43.7	39.9	42.6	51.5





TRAFFIC VOLUME CHANGES





EVALUATION SUMMARY

Undesirable Performance Desirable Performance

	Alternatives				
Measure of Effectiveness	Alternative 1 – International Drive	Alternative 2 – Tysons Corner Metro	Alternative 3 – Route 7		
Goal: Access and Mobility – Provide choices through accessible transit service					
Objective: Serve population, employment, and activ	ity centers with BRT				
Demographics (HH, Pop, Emp)					
Goal: Transportation Network Performance - Ensure efficient movement of people and goods					
Objective: Improve Transit Operations in Corridor					
BRT Ridership					
Local Bus Travel Speed in Study Area					
BRT Reliability 95th Percentile Travel Times					
Average Automobile Travel Speed					
Automobile Intersection Delay					
Pedestrian Crossing Times					

