



June 5<sup>th</sup> City Commission Meeting

# Traffic Management System

## *The Next Phase*



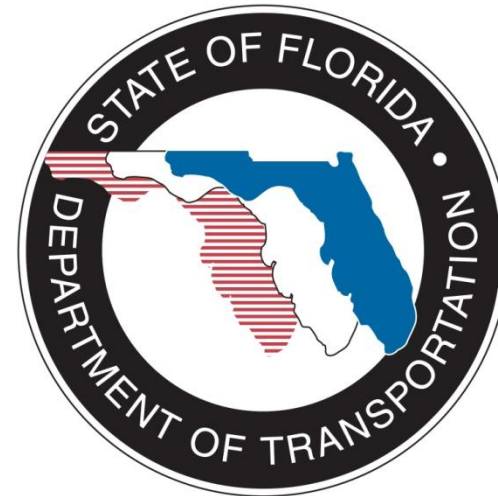
*Gainesville/Alachua County*

# **SMARTTRAFFIC**

Advanced Traffic Management System

# Recap - TMS

## 4 Agency Partnership



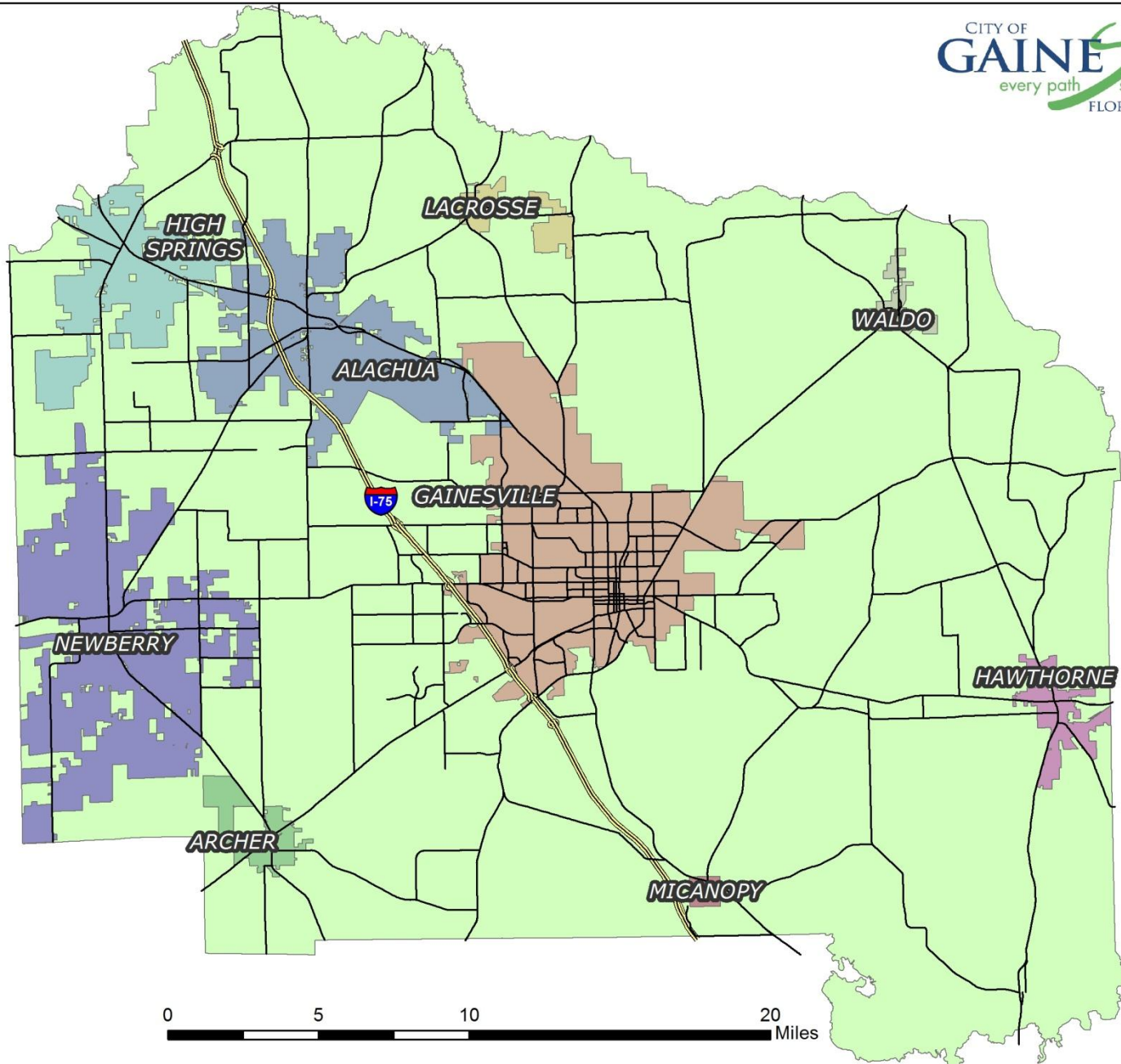
# Recap - TMS



*Gainesville/Alachua County*

**SMARTTRAFFIC**

**Advanced Traffic Management System**



# Recap - TMS

- **New cabinets and controllers at every intersection**
- **Communications backbone**
- **PTZ Cameras**
- **Construction (installing cabinets etc...)**
- **Consulting services**
- **Software (signal system, cameras, signal timing...)**
- **TMC Building**
- **Equipment for the TMC**
- **Emergency vehicle preemption/priority**

# Cabinets & Controllers

- Cabinet and controller change-out:
  - In-house technicians swapped out cabinets



# Communications

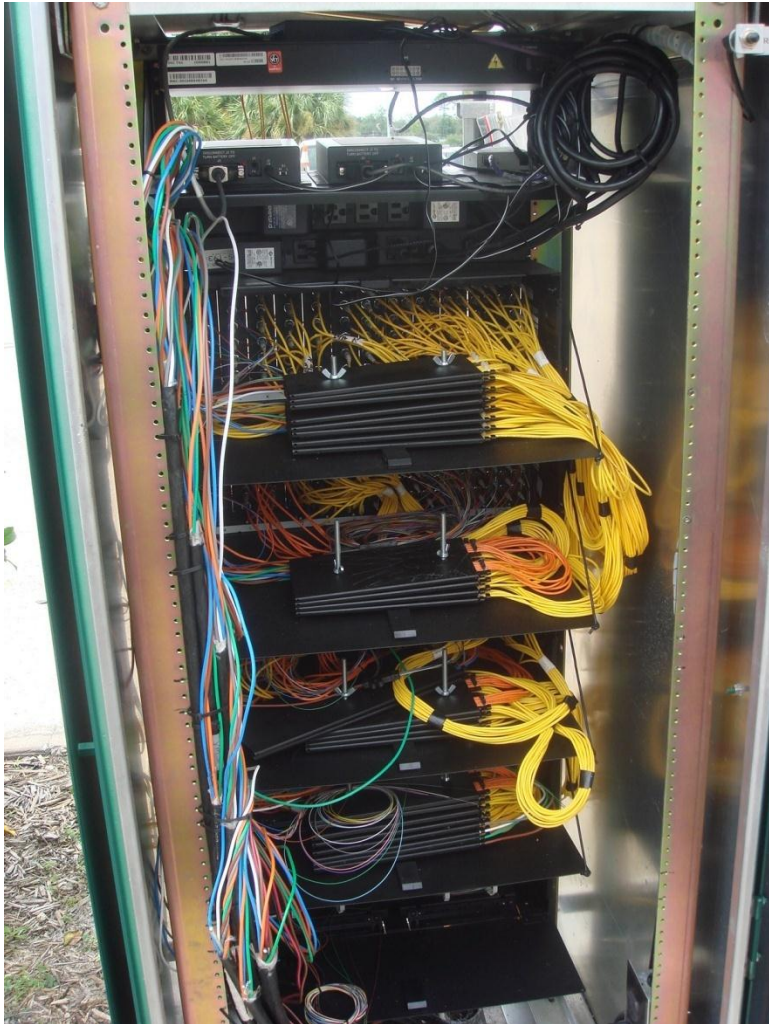


# Communications





# Communications



# Traffic Cameras



## Traffic Cameras (They Don't Record)

- 200 Traffic Cameras
- 125+ in HD
- 33 Public Access



# Traffic Management Center

- Opened in October, 2010;
- Also serves as the City's EOC;
- Built to withstand a Category 5 Hurricane and has a generator to run for 72 Hours;



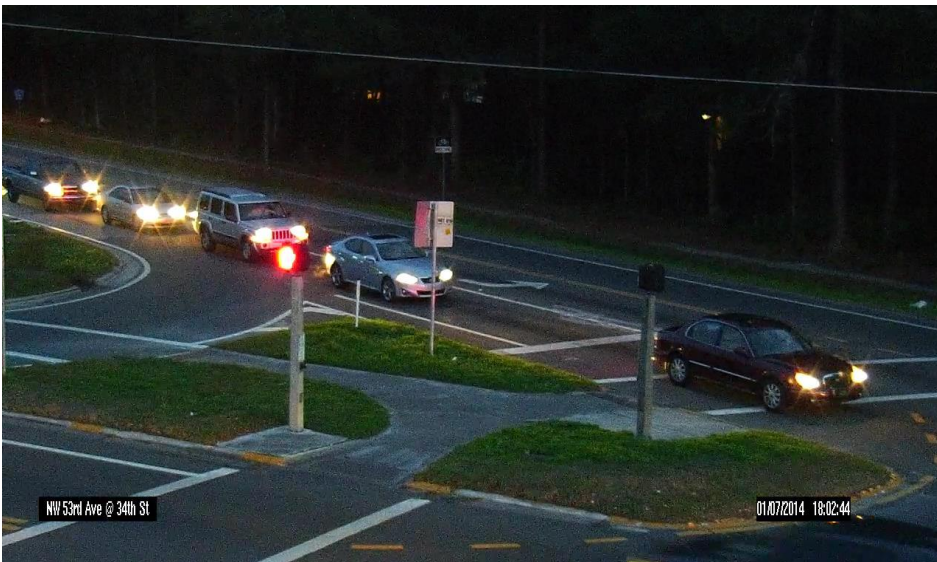
- Remote TMC:
  - Gainesville Police Department;
  - University of Florida Police Department;
  - Ben Hill Griffin Stadium (U of F);
  - Combined Communications Center / ACSO



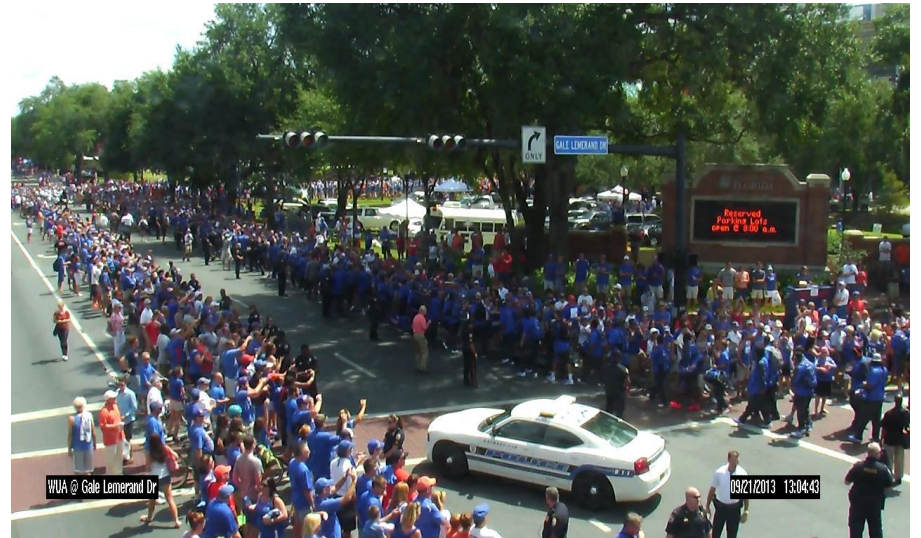
# Traffic Management

## Saves Time and Money

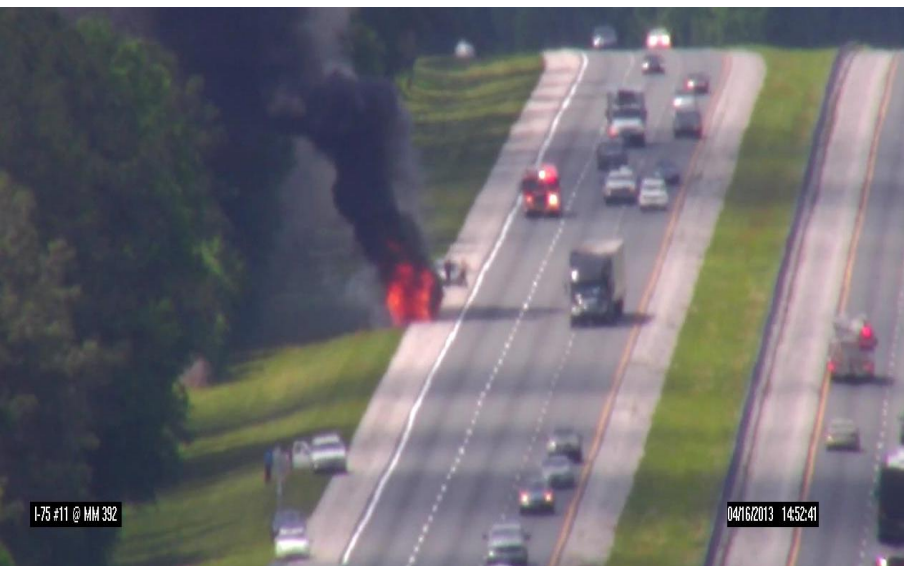
We are able to diagnose and resolve issues without having to send a technician to the field



# Traffic Management



# Incident Management





# Special Events

- Parades
- Funeral processions
- Police/Emergency Escorts



# Recent Additions



# Flashing Yellow Arrow

- City-wide Flashing Yellow Arrow Deployment



## Gainesville/Alachua County SmartTraffic

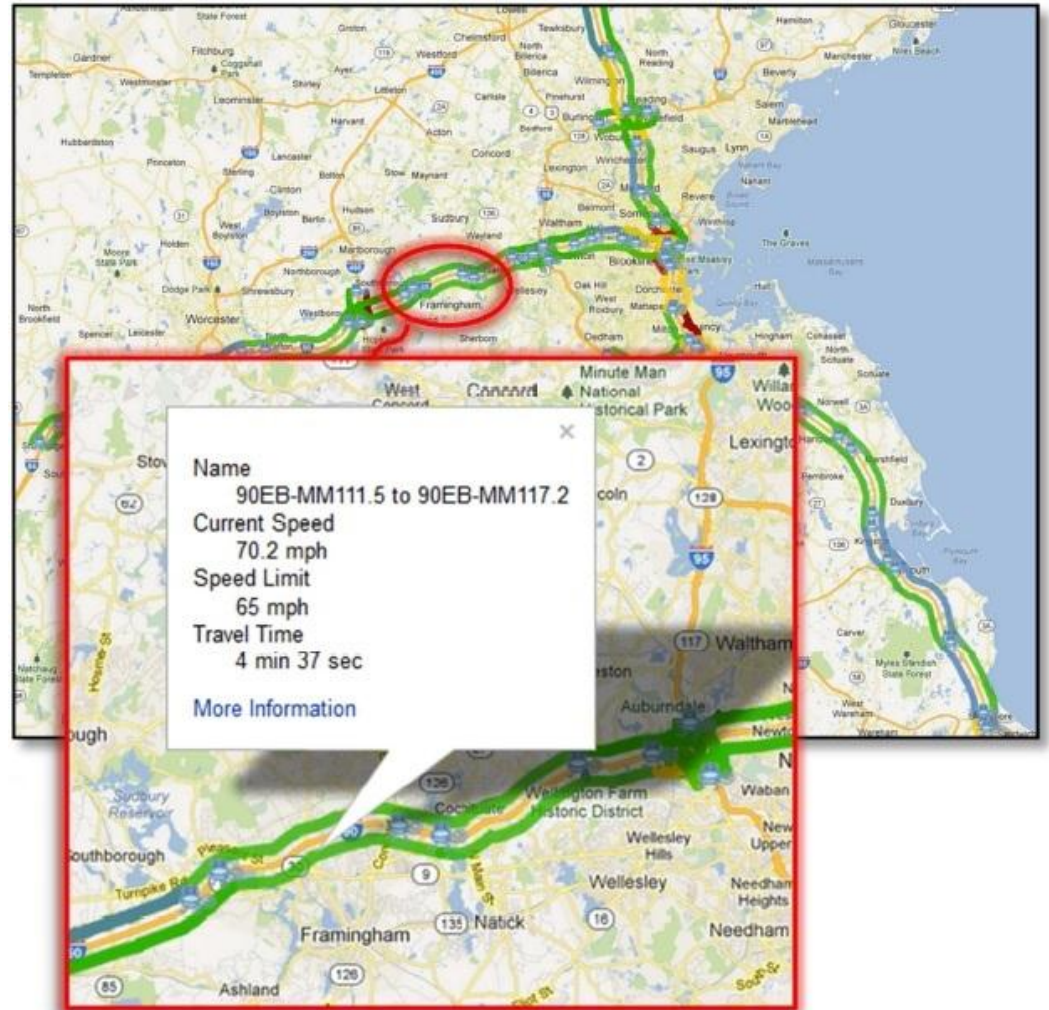
- Live Traffic Alerts and Updates
- Up to the Minute Traffic Cameras
- Facebook
- Twitter @GACsmartraffic
- Mobile Friendly Site
- Make Smart Traffic Decisions



# Bus wrap



# Travel Time



# Travel Time

## --LOS Thresholds--

Road Class	A	B	C	D	E	F
FL_Arterial_I	42.0 mph	34.0 mph	21.0 mph	21.0 mph	16.0 mph	0.0 mph

## --Data--

Day of week	Date	Time	Travel time (s)	Speed (mph)	LOS
Monday	2012-05-21	15:00	298.1	36.23	B
Monday	2012-05-21	15:15	310.4	34.80	B
Monday	2012-05-21	15:30	329.1	32.82	C
Monday	2012-05-21	15:45	367.3	29.40	C
Monday	2012-05-21	16:00	380.5	28.38	C
Monday	2012-05-21	16:15	374.5	28.84	C
Monday	2012-05-21	16:30	374.8	28.81	C
Monday	2012-05-21	16:45	365.1	29.58	C
Monday	2012-05-21	17:00	365.0	29.59	C
Monday	2012-05-21	17:15	364.3	29.65	C
Monday	2012-05-21	17:30	366.2	29.49	C
Monday	2012-05-21	17:45	372.0	29.04	C

# Travel Time

The image illustrates various ways to monitor travel time. It includes a desktop map with traffic color-coding, a physical road sign displaying '13 MI' and '12 MIN', and two screenshots of the RideWise mobile application. The desktop map shows a legend for 'Real Time Traffic' with categories: under 25 mph (red), 25 - 50 mph (yellow), and over 50 mph (green). The mobile app screenshots show a list of favorite routes with travel times and a detailed view of a specific route (I-93 SB: I-495 Jct Andover to I-95 Jct Woburn) showing a current travel time of 17 minutes and a current speed of 35 mph.

**Road Work and Incidents | Real Time Traffic**

Legend: ■ under 25 mph, ■ 25 - 50 mph, ■ over 50 mph

**RideWise Mobile App Data:**

Route	Travel Time
I-93 SB: I-495 Jct Andover to I-95 Jct Woburn	17 minutes
I-495 NB: I-93 Jct Andover to I-95 Jct Woburn	20 minutes
I-93 SB: Rt 16 Medford to Exit 26 Somerville	20+ minutes
I-93 SB: Methuen to I-95 Jct Woburn	14 minutes

**Physical Road Sign:** 13 MI, 12 MIN

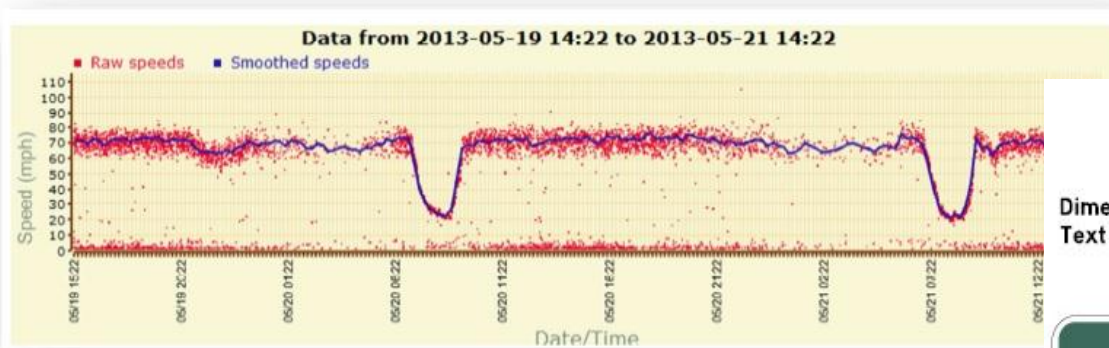
**RideWise Mobile App (Detailed View):**

- Route: I-93 SB: I-495 Jct Andover to I-95 Jct Woburn
- Current Travel Time: 17 minutes
- Current Speed: 35 mph

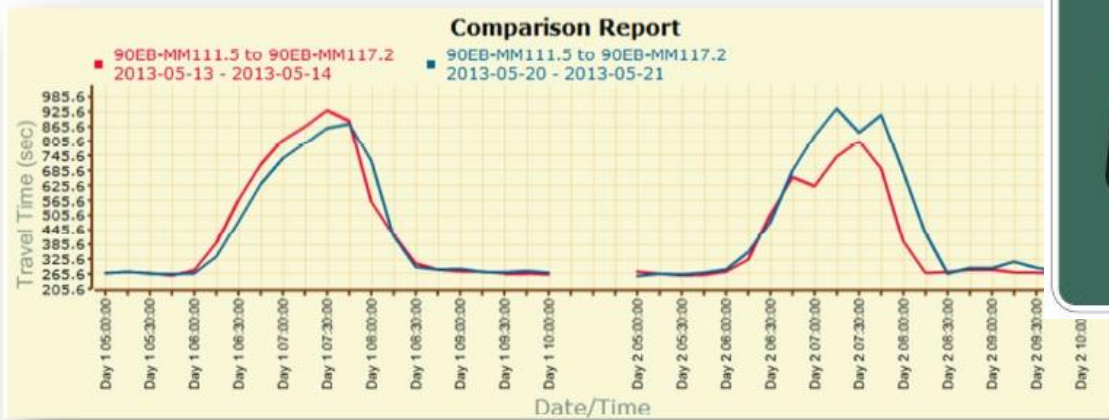


# Travel Time

- “Speed Graph” highlighting drops in speed each morning; also includes raw data points:



- Comparison/Before & After Report displaying travel-times from 5-10am on 5/13 – 5/14 versus 5/20 – 5/21:



## Time To Destination

MUTCD - Conventional Roadway

Dimensions: 36" x 54" (each sign)  
Text height: 6"



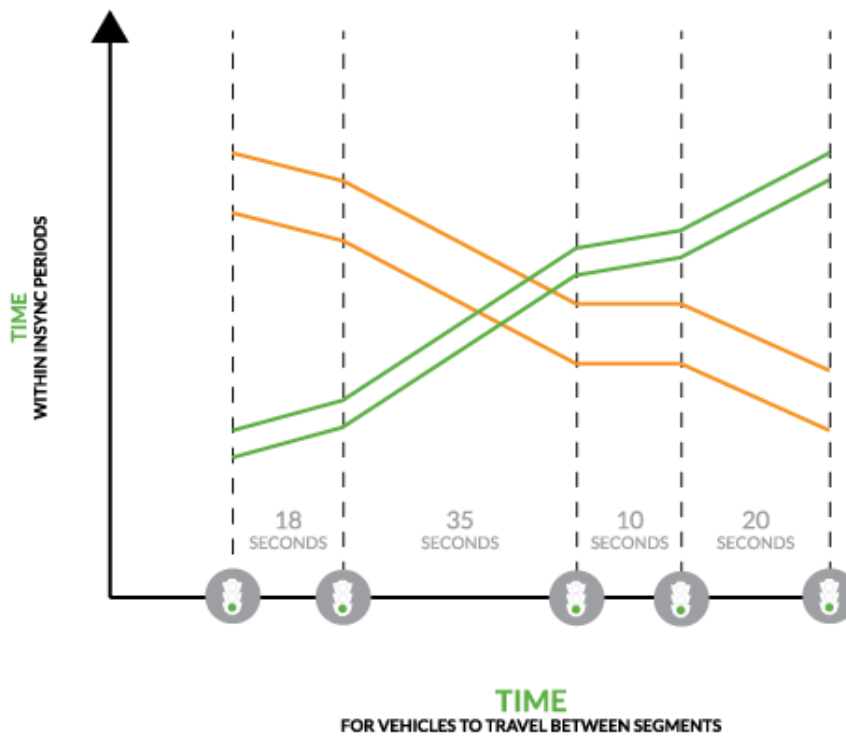
# Adaptive Signal Timing

Intersection:  Camera:

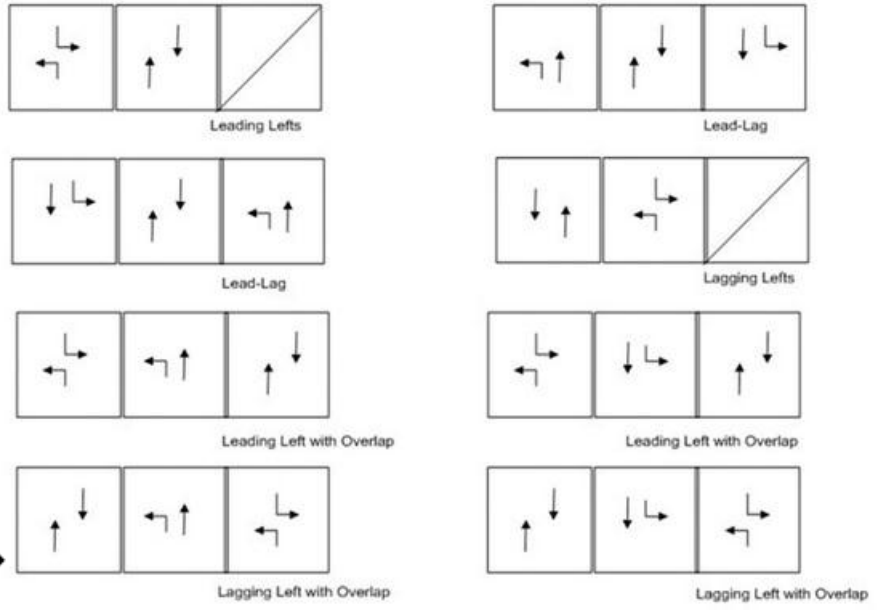


<p><b>North Bound</b> (day) 9/09/10 14:32:38 120</p> <p>phase 4: + 4/13/0.40 42 phase 7: + 12/12/1.20 CALL 19/26 90 CUTOFF 33.48</p> <p>NBLeftTurn_SBLeftTurn 32:32-32:58:0 NBThru_SBThru 32:58-33:34 LO</p> <p>4.4 (7.7) 7.9 (6.6) 7.7 (6.6)</p> <p>Washington and N Belair Rd 2.81/2775.82</p>	<p><b>East Bound</b> (day) 9/09/10 14:32:38 120</p> <p>phase 2: 2/6/0.33 81 (s) to START 14:33:59 0 phase 5 (PP) - 0/6/0.00 0 CUTOFF 33.48</p> <p>NBLeftTurn_SBLeftTurn 32:32-32:58:0 NBThru_SBThru 32:58-33:34 LO</p> <p>0.0 (0.0) 0.0 (0.0)</p> <p>Washington and N Belair Rd 2.81/2775.82</p>
<p><b>South Bound</b> (day) 9/09/10 14:32:38 120</p> <p>phase 8: + 13/13/1.44 38 phase 9: + 10/10/1.11 CALL 19/26 75 CUTOFF 33.48</p> <p>NBLeftTurn_SBLeftTurn 32:32-32:58:0 NBThru_SBThru 32:58-33:34 LO</p> <p>4.4 (6.6) 7.7 (6.6) 5.5 (7.7) 4.4 (2.2)</p> <p>Washington and N Belair Rd 3.19/2775.82</p>	<p><b>West Bound</b> (day) 9/09/10 14:32:38 120</p> <p>phase 6: 7/9/0.78 19 79 (s) to START 14:33:59 0 phase 1 (PP) - 0/3/0.00 0 CUTOFF 33.48</p> <p>NBLeftTurn_SBLeftTurn 32:32-32:58:0 NBThru_SBThru 32:58-33:34 LO</p> <p>0.0 (2.4) 0.0 (0.0)</p> <p>Washington and N Belair Rd 2.81/2775.82</p>

# Adaptive Signal Timing



## Dynamic Signalization Option



# Questions?



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