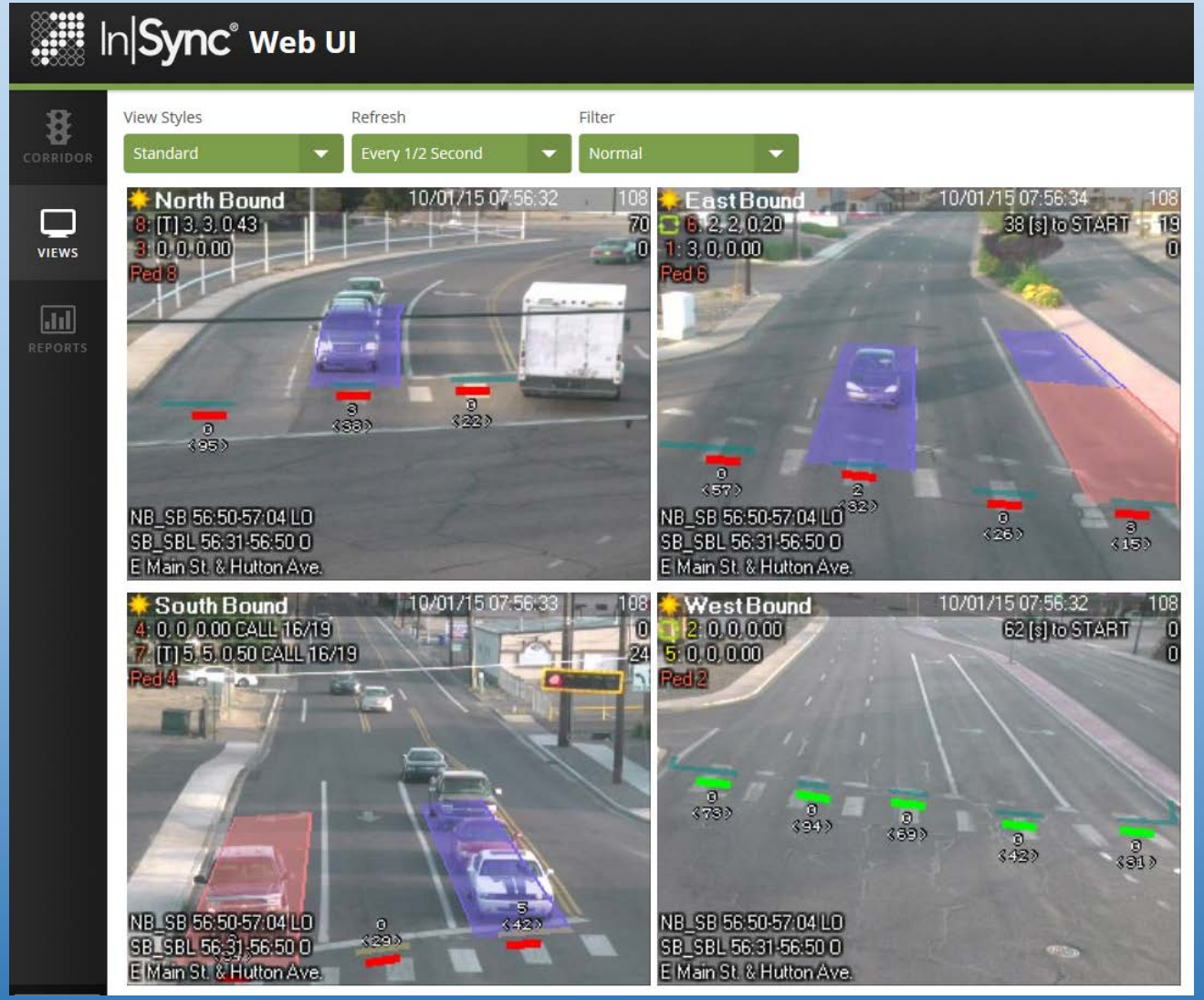
Insync Adaptive Signal Control Technology

Before and After Study

Today's Traffic Counts

- Hutton & Main =1,350,464 vehicles
- English & Main = 1,248,119 vehicles
- Count was conducted from Wednesday August 19th to Friday September 19th (31-Day Count)



East Main Corridor

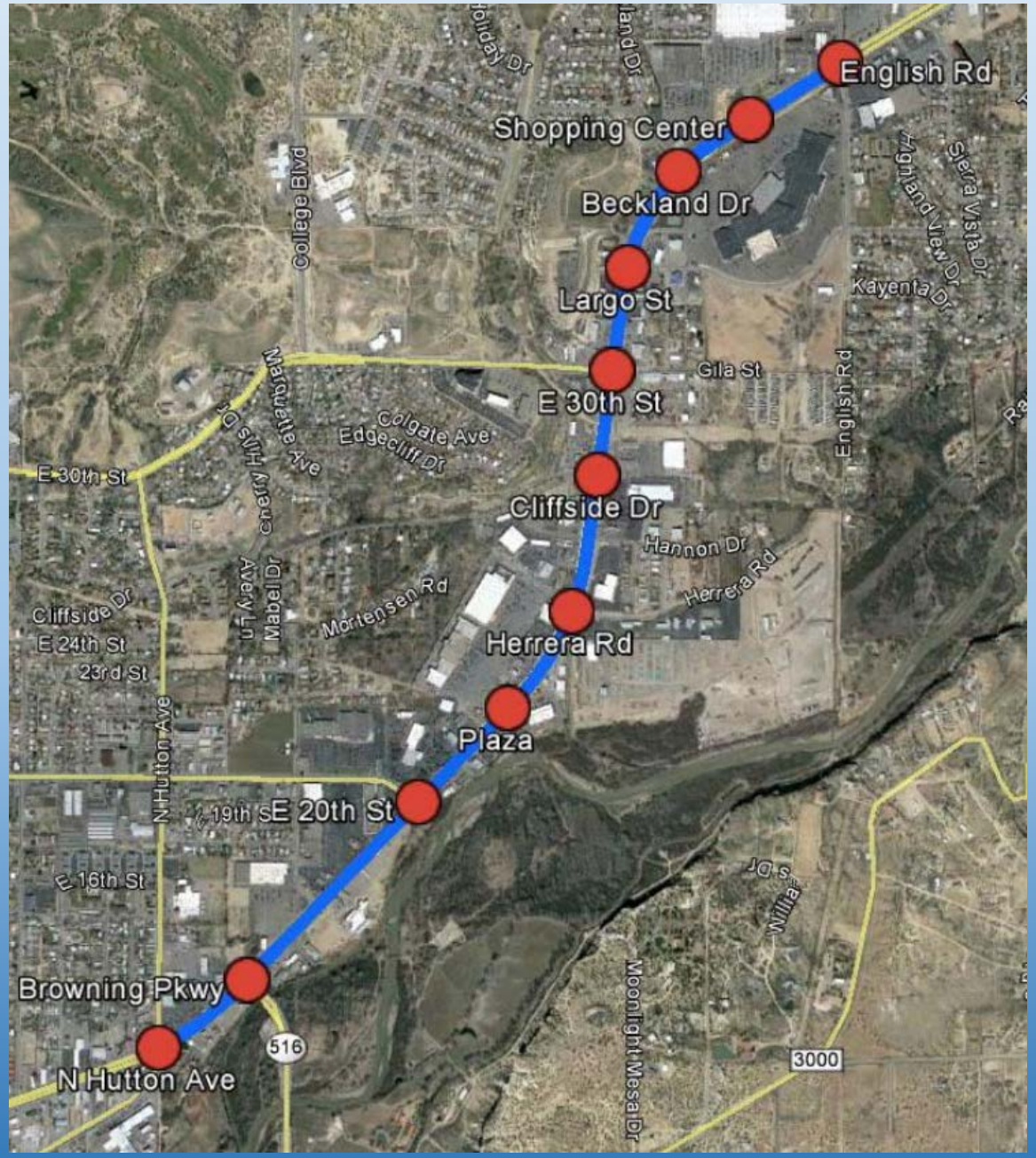
- Eastbound:

  Hutton Ave. – English Rd.

  Westbound:

  English Rd. – Hutton Ave.

- 6-lane Divided Urban Principal Arterial
- 11 Signalized Intersections
- 50,000 Vehicles/ Day



AM Peak Period
7 AM – 9 AM

Eastbound

East Main Street
AM Peak Period – Eastbound (7AM – 9AM)
Speed and Delay Study Results

Performance Measure	Before	After	Percent Improvement
Travel Time (sec)	299	251	16.1%
Trip Speed (mph)	27.5	32.7	18.9%
Cumulative Delay (sec)	65	17	73.8%
Number of Stops	2.7	1	63.0%

Westbound

East Main Street
AM Peak Period – Westbound (7AM – 9AM)
Speed and Delay Study Results

Performance Measure	Before	After	Percent Improvement
Travel Time (sec)	271	235	13.3%
Trip Speed (mph)	31.2	35	12.2%
Cumulative Delay (sec)	37	1	97.3%
Number of Stops	1.7	0	100.0%

Saturday Peak Period
12 PM – 2 PM

Eastbound

East Main Street
Saturday Peak Period – Eastbound (12PM – 2PM)
Speed and Delay Study Results

Performance Measure	Before	After	Percent Improvement
Travel Time (sec)	345	259	24.9%
Trip Speed (mph)	23.8	32.0	34.5%
Cumulative Delay (sec)	111	25	77.5%
Number of Stops	2.8	0.6	78.6%

Westbound

East Main Street
Saturday Peak Period – Westbound (12PM – 2PM)
Speed and Delay Study Results

Performance Measure	Before	After	Percent Improvement
Travel Time (sec)	327	276	15.6%
Trip Speed (mph)	25.8	30.4	17.8%
Cumulative Delay (sec)	93	42	54.8%
Number of Stops	2.0	0.8	60.0%

Summary

- This 11 Signal ASCT System was funded in 2012 by a $400,000.00 Federal TCSP grant plus $100,000 in City participation.
- During the 2-hour PM Peak (4PM-6PM) the Insync System helped reduce delay by over 50,000 vehicle-hours per year.
- Reduction in CO, Nox, and VOC Emissions. During the 2-hour Saturday Peak Period (12PM-2PM), emissions improved by an average of 28%.
- The annual benefit to motorist, in the form of reduced delay and fuel consumption is $1,092,269.00. The equivalent annual cost of the Insync System was $61,645.00 at 4% interest rate.
- Benefit/Cost ratio of 17.7
- It pays for itself approximately every 2 weeks