

### The Setup

In the coastal city of Baytown, TX, an average of 80,000 daily travelers crowd the North-South State Highway 146 and Garth Road corridors. Heavy trucks entering large manufacturing hubs along the corridors merged with commercial and retail traffic, causing unpredictable surges in congestion and excessive travel times during peak hours. Research conducted by the Houston-Galveston Area Council found that some intersections along State Highway 146 had heavy truck usage of up to 8 percent, 6 percent more than the average corridor. This idling led to significant, costly road damage.

The City of Baytown needed to reduce motorist travel time, delays, and road damage, and Trafficware's SynchroGreen Real-time Adaptive Signal Control System was up for the challenge.

### How It Works

SynchroGreen optimizes signal timing based on real-time traffic conditions, allocating green time based on vehicle demand and adjusting as traffic ebbs and flows. It analyzes intersection arrival times to promote traffic signal coordination, increasing the probability that signals will be green upon arrival to heavy flow traffic. This synchronization reduces travel times and vehicle stops along the corridor.

<b>Updated Intersections</b> <b>28</b>	<b>Average Daily Traffic (ADT)</b> <b>80k</b>	<b>Reduced Travel Time By</b> <b>25%</b>
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### The Results

SynchroGreen mitigated choke points in the corridors as they occurred, reducing average travel time along the Garth Corridor by nearly four minutes during peak hours. The improved traffic flow for heavy trucks also prevented additional, costly road damage. As a result of SynchroGreen's superior performance, the City of Baytown contracted the product for a third, 9-intersection corridor on Main Street.

