North Central Texas
Air Quality Strategies:

Light-Emitting Diode (LED)
Traffic Signal Replacement Program

NCTCOG
Surface Transportation Technical Committee
December 02, 2005
Program Goals

Reduce Ozone Pollutant Level

Convert 50 Percent of Region’s Signals to LED by May 2005

Convert 90 Percent of Region’s Signals to LED by May 2006
Survey

Conducted First Survey in July 2004

Updated Survey February 2005

Next Survey February 2006
Survey Results

Anticipated Deployment by May 2005
Program Goal = 50 Percent
Survey Response = 74.5 Percent
Goal Achieved

Anticipated Deployment by May 2006
Program Goal = 90 Percent
Survey Response = 82.9 Percent
Short by 7.1 Percent or 352 Intersections
Funding Shortfall

Funds Available = $300,000

Estimated Cost per Intersection
$4,000 to $6,000
Convert ~ 60 Locations

Remaining Locations
292 Locations
~ $1.46 Million
LED Policy

Adopted by STTC – April 2005

Include LED lamps into existing and future Transportation Improvement Program (TIP) Projects

Include LED lamps in Thoroughfare Assessment Program (TAP)
Revised Results

LED Projects Funded in the TIP
$1,623,000; 396 locations

LED Projects Funded Through the TAP
$1,412,000; 346 locations

Total Locations by May 2006 ~ 470 (93%)
Total Locations by May 2007 ~ 745 (97%)
## LED Lifetime Savings

<table>
<thead>
<tr>
<th>City Name</th>
<th>Population</th>
<th>Total Current Signals</th>
<th>Anticipated Signals by May 2005</th>
<th>Anticipated Signals by May 2006</th>
<th>Current Signals with LEDs</th>
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Questions

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