NORTH CENTRAL TEXAS AIR QUALITY STRATEGIES:

Light-Emitting Diode Traffic Signal Program

Regional Transportation Council
May 12, 2005

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North Central Texas Council of Governments
# North Central Texas Air Quality Strategies

<table>
<thead>
<tr>
<th>STRATEGY</th>
<th>RTC FUNDS</th>
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<tbody>
<tr>
<td>LED Traffic Signal Replacement Program</td>
<td>$400,000</td>
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<tr>
<td>Pay-As-You-Drive Insurance Pilot Program</td>
<td>$1,500,000</td>
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<td>Employer Trip Reduction Program</td>
<td>$1,000,000</td>
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<tr>
<td>Cleaner Fleet Vehicle Procurement Policy</td>
<td>$250,000</td>
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<tr>
<td>Parking Cash-Out Pilot Program</td>
<td>$250,000</td>
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<tr>
<td>Diesel Freight Vehicle Idling Reduction Program</td>
<td>$1,600,000</td>
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<td>$5,000,000</td>
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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
Proposed Scope of Work

- Develop and Conduct LED Survey and Analyze Survey Findings
- Research LED Vendors and Technology
- Possibly Develop RTC Policy for LED Based on Survey Findings
Survey

Conducted First Survey in July 2004

Updated Survey in February 2005
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
Proposed LED Policy

Include LED Deployment in Existing and Future Transportation Improvement Program (TIP) Projects

Include LED Deployment in TAP
- Phase 2 ~ $6.24 Million
- Phase 3.1 ~ $3.0 Million
- Phase 3.2 ~ $7.0 Million
  - Detector Repair/Replacement
  - LED Implementation
  - Signal Retiming/Coordination