Memorandum

DATE       June 13, 2008

TO       Members of Public Safety Committee: Dr. Elba García, Mayor Pro Tem, Chair; Dwaine R. Caraway, Deputy Mayor Pro Tem, Vice-Chair; Jerry R. Allen, Tennell Atkins, Sheffie Kadane, Ron Natinsky, David A. Neumann, and Mitchell Rasansky

SUBJECT       Red Light Camera Enforcement Program Update
              June 16, 2008

Attached is the briefing document for the Red Light Camera Enforcement Program Update that will be presented to you on June 16, 2008.

Please let me know if you have any questions.

Ramón F. Míguez, P.E.
Assistant City Manager

Attachment

C: Mary K. Suhm, City Manager
   Thomas P. Perkins, Jr., City Attorney
   Deborah Watkins, City Secretary
   Craig Kinton, City Auditor
   Judge Jay Robinson, Judiciary
   Ryan S. Evans, First Assistant City Manager
   David O. Brown, Interim Assistant City Manager
   Jill A. Jordan, P.E., Assistant City Manager
   A.C. González, Assistant City Manager
   David Cook, Chief Financial Officer
   Jeanne Chipperfield, Interim Director, Office of Financial Services
   Edward Scott, Interim Director, Office of Financial Services
   Helena Thompson-Stevens, Assistant to the City Manager – Council Office
   Rick Galcerán, P.E., Director, Public Works and Transportation

"Dallas, The City That Works: Diverse, Vibrant And Progressive."
Red Light Camera Enforcement

Program Update

Presented to the Public Safety Committee
June 16, 2008
Purpose

• Safety Status Report
  • Provide before and after preliminary statistics on violations and accidents

• Program Update

• Present strategy for program continuation
Dallas Safelight Program

Background

- **April 06:** Ordinance adopted to authorize use of photo enforcement, effective August 2006
- **Sept. 06:** Contract awarded to install 60 cameras
  - Completed in June 2007
  - Civil citation is sent to the registered owner of the vehicle - $75 Fine
  - Civil penalty will not impact driver’s license or auto insurance
- **Sept. 07:** Authorized supplemental agreement to add 40 cameras
- **Nov. 07:** Ordinance amended to conform to state law
In Dallas, more than 33% of accidents at traffic signals were related to red light running in 2006

- 13 fatalities
- 82 serious injuries
- 532 minor injuries
## Solution – The 3-“E”s

### Engineering

<table>
<thead>
<tr>
<th><strong>Recommended</strong></th>
<th><strong>Recent Actions</strong></th>
</tr>
</thead>
</table>
| **Improve Visibility of Signals**  
- Install larger/ brighter signals or place signals over roadway | **In 2005 & 2006,** the City replaced bulbs w/ larger – LED-type |
| **Update Signal Timings**  
- Determine appropriate duration of yellow time  
- Revise timings to improve progression & minimize congestion | - **Yellows** are set to accommodate majority speeds  
- **Over 500 signals** have been re-timed in since 2004 |
| **Increase Capacity by Adding Lanes**  
- Provide additional turn lanes, increase capacity, & reduce congestion. | **10%** of the signalized intersections have been widened to reduce congestion over the past 5 years |
### Solution – The 3-“E”s

#### Education

<table>
<thead>
<tr>
<th>Recommended</th>
<th>Recent Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Link at City’s website <a href="http://www.dallascityhall.com">www.dallascityhall.com</a></td>
<td>April 2008—Updated Red Light Camera Fact Sheet and Frequently asked questions and answers</td>
</tr>
<tr>
<td>Teen Driver Safety Campaign</td>
<td>Outreach: presentations to 4 DISD high schools, 2 HOAs and 1 Driving School; Strategic Customer Service training, and HR Safety Fair June 2008</td>
</tr>
<tr>
<td>National Campaign to Stop Red Light Running</td>
<td>Planned for <strong>August 6, 2008</strong> – Press conference and activities for National Stop on Red Week</td>
</tr>
</tbody>
</table>
Solution – The 3-“E”s

Enforcement

- **Install Automated Enforcement System**
  - Provides the continuous enforcement required to change driver behavior and minimize violations

- **Benefits of Automated Enforcement**
  - **Safety** - Police officers not required to chase vehicle through intersection
  - **Congestion** - No need to block traffic lanes while vehicles are pulled over to issue citation
  - **Free officers to address other community policing issues**
Dallas Safelight Program–Preliminary Results

Before and After Comparison of Accidents

* Accident studies are typically conducted 18 to 24 months post implementation due to the random occurrence of accidents

<table>
<thead>
<tr>
<th>Collision Type</th>
<th>Before 3 year average</th>
<th>After One Year</th>
<th>Average Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right Angle or &quot;T&quot; bone</td>
<td>75</td>
<td>33</td>
<td>*56% drop</td>
</tr>
<tr>
<td>Rear End</td>
<td>30</td>
<td>29</td>
<td>* No trend</td>
</tr>
</tbody>
</table>

- Total Number of Red Light Related Accidents at first 36 Sites
- One year analysis for remaining 24 sites in progress
Dallas Safelight Program—Preliminary Results

Before and After Comparison of Violations

- 60% average reduction in citations issued per location per day
- Table below shows changes in driver behavior at various camera sites

Citations Issued Per Day

<table>
<thead>
<tr>
<th>Location</th>
<th>First Month</th>
<th>August 2007</th>
<th>May 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Montfort at LBJ</td>
<td>81</td>
<td>45</td>
<td>27</td>
</tr>
<tr>
<td>Northwest at Dallas N Tollway</td>
<td>53</td>
<td>24</td>
<td>9</td>
</tr>
<tr>
<td>Woodall Rogers at Olive</td>
<td>31</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>Beckley at Colorado</td>
<td>31</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Ledbetter at Lancaster</td>
<td>90</td>
<td>19</td>
<td>5</td>
</tr>
<tr>
<td>Buckner at Bruton</td>
<td>56</td>
<td>14</td>
<td>6</td>
</tr>
</tbody>
</table>
Evaluation of Program

- **Sept 2007**
  - Council approved supplemental agreement to add 40 cameras

- **Dec 07 – Feb 08**
  - Data analysis showed a premature drop in violations compared to programs in other cities
  - Delayed implementation of additional 40 cameras due to rapid change in driver behavior
  - Began accident analysis and data gathering to develop strategy for program modification based on contract structure/terms
  - Studied 43 additional approaches for potential replacement/expansion based on accidents and violation rates
Evaluation of Program

- **Goal of Enforcement Strategy**
  - Develop strategies that support original business model: use fines collected from red light citations to pay for system costs without impacting other city services
  - Maintain safety and keep violations low using strategic and cost-effective enforcement methods (rotate cameras between sites or use decoy cameras)
  - Reduce the potential for red-light running accidents by installing cameras at locations with excessive violation rates
### Solution - The 3-”E”s

**Enforcement**

Developed program strategy as follows:

<table>
<thead>
<tr>
<th>Camera approach recommendation</th>
<th>Original 60</th>
<th>Recommendation for enforcement</th>
<th>proposed active cameras</th>
<th>Approaches enforced</th>
</tr>
</thead>
<tbody>
<tr>
<td>violations &gt; 3 /cam/day</td>
<td>39</td>
<td>Remain active</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td>violations &lt; 3 /cam/day w accident trends</td>
<td>10</td>
<td>Rotate 3 cameras between 10 approaches</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>&lt; 3 /cam/day for behavior modification</td>
<td>11</td>
<td>Relocate to new approaches</td>
<td>n/a</td>
<td>0</td>
</tr>
<tr>
<td>23 new approaches identified violations &gt; 10 /cam/day</td>
<td>n/a</td>
<td>New approaches: relocate 11 cameras &amp; add 12 cameras</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td></td>
<td></td>
<td>65</td>
</tr>
</tbody>
</table>
Program Summary

• Camera program strategy proposed:
  • Original 60 approaches
    • 39 cameras to remain active in place
    • 3 active cameras to rotate between 10 approaches
    • 11 cameras relocated to new (see chart) approaches
  • 23 new approaches identified for expansion and relocation of cameras between July and October 2008
    • 11 existing cameras will be relocated
    • 12 additional cameras will be installed
  • FY08/09 program: 65 active cameras and 72 enforced approaches
During FY 08/09 continue to monitor program on a monthly basis:

- To provide effective enforcement
- For performance and financial impact
- To identify other potential camera rotational schemes
- To identify additional camera approaches
- To recommend changes as required
Appendix

Budget Projections

- Forecast FY07/08
- Forecast FY08/09
### Forecast FY07-08

<table>
<thead>
<tr>
<th></th>
<th>Adopted Budget</th>
<th>Revised May 08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross revenues</td>
<td>$14,781,054</td>
<td>$6,326,233</td>
</tr>
<tr>
<td>Expenses</td>
<td>$4,775,470</td>
<td>$4,971,701</td>
</tr>
<tr>
<td>State 50% share</td>
<td>$5,002,792</td>
<td>$677,266</td>
</tr>
<tr>
<td>Net Revenue</td>
<td>$5,002,792</td>
<td>$677,266</td>
</tr>
<tr>
<td>Change</td>
<td>([$4,325,526])</td>
<td></td>
</tr>
</tbody>
</table>
**Forecast FY08-09**

<table>
<thead>
<tr>
<th>Gross revenues</th>
<th>$ 11,369,176</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenses</td>
<td>$ 4,765,240</td>
</tr>
<tr>
<td>State 50% share</td>
<td>$ 3,301,968</td>
</tr>
<tr>
<td>Net Revenue</td>
<td>$ 3,301,968</td>
</tr>
</tbody>
</table>