Traffic Circulation Study in Castro Valley

Presented to
Castro Valley Municipal Advisory Council

March 17, 2014
Update previous circulation study due to:
1. Castro Valley Boulevard Streetscape (Completed)
2. Castro Valley I–580 Interchange Project (Completed)
3. I–238 Widening Project (Completed)
4. Proposed new road to link Strobridge Ave to Castro Valley Boulevard

Identify near term and long term improvements in Castro Valley
Elements of the Study

- Collect Traffic Count Information
- Forecast future traffic volumes
- Conducted level of service analysis
- Identify needs
- Recommend Improvements
Specific Findings

1. Pedestrian Crosswalk at Redwood Road/I-580 interchange
2. Redwood Road traffic signal synchronization
3. Redwood Road improvements
4. Reconfiguration of Norbridge Avenue and Strobridge Avenue
5. Strobridge Avenue restriction at Gary Drive
Pedestrian Crosswalk at Redwood Road/I-580 interchange
Pedestrian Crosswalk at Redwood Road/I-580 interchange
Redwood Road Improvements

Short Term:
- Traffic Signal Synchronization

Long Term:
- Two Way Left-turn lane
- Improvements on Mabel Ave at Redwood Rd
Redwood Road Traffic Signal Synchronization
# Redwood Road Traffic Signal Synchronization

## Table: System Measures of Effectiveness (MOEs) – Percent Change from Existing Conditions

<table>
<thead>
<tr>
<th>Roadway</th>
<th>Approach</th>
<th>Peak Hour</th>
<th>Signal delay/Vehicle</th>
<th>Stops/Vehicle</th>
<th>Total Travel Time</th>
<th>Average Speed</th>
<th>CO Emissions</th>
<th>NOx Emissions</th>
<th>LOS Improve.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redwood Road</td>
<td>Northbound</td>
<td>A.M.</td>
<td>-17</td>
<td>-19</td>
<td>-11</td>
<td>17</td>
<td>-12</td>
<td>-12</td>
<td>E to D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Midday</td>
<td>-53</td>
<td>-45</td>
<td>-43</td>
<td>43</td>
<td>-44</td>
<td>-44</td>
<td>E to C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P.M.</td>
<td>-35</td>
<td>-26</td>
<td>-23</td>
<td>33</td>
<td>-21</td>
<td>-21</td>
<td>E to C</td>
</tr>
<tr>
<td></td>
<td>Southbound</td>
<td>A.M.</td>
<td>-35</td>
<td>-29</td>
<td>-23</td>
<td>27</td>
<td>-22</td>
<td>-22</td>
<td>D to C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Midday</td>
<td>-55</td>
<td>-43</td>
<td>-46</td>
<td>54</td>
<td>-43</td>
<td>-42</td>
<td>D to C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P.M.</td>
<td>-24</td>
<td>-28</td>
<td>-16</td>
<td>18</td>
<td>-17</td>
<td>-16</td>
<td>D to C</td>
</tr>
</tbody>
</table>
Redwood Road Improvements

- Redwood Road/ Village Drive Improvement
Redwood Road Improvements

- Redwood Road / Mabel Avenue Improvements
Reconfiguration of Norbridge Avenue and Strobridge Avenue

EXISTING CONDITION

PROPOSED CONDITION

- Change to 2-Way Street, 1 lane in each direction with RT pocket
- Change to 2-Way Street, 1 lane in each direction with LT pocket
- New road to connect to Castro Valley Blvd
- Existing roadway to be closed
- Install traffic signal
Strobridge Avenue Restriction at Gary Drive
Strobridge Avenue Restriction at Gary Drive
Most intersections will operate acceptably under both near term and future traffic conditions.

Implement Crosswalk on Redwood Road at I–580 Interchange (Caltrans).

Implement Synchronization of Traffic Signals on Redwood Road.
Include Proposed Redwood Road Improvements in future Development and Capital Improvement Projects

Continue to work with Caltrans on implementing the Norbridge/Strobridge Project

Remove restriction at Gary Drive with the Norbridge/Strobridge Project
Questions