CAG Meeting #4
REFINING OPTIONS,
DRAFT PLAN POLICY COMPONENTS
June 7, 2017
Agenda

1. Update on Community Engagement
2. Research & Analysis
3. Draft Plan Policy Components
4. Discussion
5. Public Comment
6. Next Steps
Study Area
Community Engagement
Community Engagement

Since last CAG meeting (in February)...

- Community Outreach
  - Community Workshop #2
  - Online Survey
  - Booth at Farmers Market & STEAM Fest 2.0

- Commission/Committee/Board Updates
  - Planning Commission
  - Complete Streets Advisory Committee
  - Youth & Teen Advisory Boards

- Business Outreach
  - Postcard mailing & door-to-door (ECR Businesses)
  - Presentations with Downtown Business Group & Chamber of Commerce
Community Workshop #2

Summary of Feedback

– Preference for **multiple Activity Centers**

– Strong support for **protected bikeway**

– Many prioritize bike lanes over on-street, parallel parking, but are concerned about impacts on local businesses

– Enhancing **pedestrian facilities and safety** is important

– Many community members view El Camino Real as an unattractive place to walk and would like to see **pedestrian improvements**

– Improving **branding and identity** is seen as “**icing on the cake.**”
Online Survey

- Received ~600 responses
- 1/3 of respondents lived or worked within walking distance of El Camino Real in Redwood City

Where do you live?

- 47% On or within walking distance of El Camino Real in Redwood City
- 33% In Redwood City, but within driving distance of El Camino Real
- 20% Other

Where do you work?

- 54% On or within walking distance of El Camino Real in Redwood City
- 32% In Redwood City, but within driving distance of El Camino Real
- 14% Other
Online Survey – Activity Centers

How many Activity Centers should there be on El Camino Real?

“Better activity centers. I typically go into downtown…for dinner/bars. El Camino doesn't offer much for me at the moment.”
Online Survey - Bicycles

To what extent should El Camino Real accommodate people riding bikes?

- Protected bikeways: 54%
- Painted bike lanes: 16%
- None; alternative routes: 30%

“Create a safer environment for walking and cycling. You currently take your life in your hands being on El Camino on a bike.”
Online Survey – On-Street Parking

How often do you use on-street parking on El Camino Real?

- Daily 4%
- Weekly 9%
- Monthly 12%
- Rarely 41%
- Never 34%

“I hate parking on El Camino Real and have seen quite a few near accidents of those trying to parallel park there”
Business Outreach

• Mailed postcards to all properties fronting El Camino Real

• City staff met with 50+ businesses on El Camino Real
Business Outreach (cont’d)

• Heard support for:
  – Multiple Activity Centers
  – Parking management strategies
    • Short-term parking (20 min. or less)
    • Employee parking program
    • More shared parking
  – Increased pedestrian traffic
  – Maintenance, cleaning, enforcement, beautification

• Heard concerns regarding:
  – Safety
  – Traffic
  – Parking availability (for customers, drop-offs, employees)
# Key Themes from Outreach Efforts

<table>
<thead>
<tr>
<th>Topic</th>
<th>Frequency or Strength</th>
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<tbody>
<tr>
<td><strong>Land Use</strong></td>
<td></td>
</tr>
<tr>
<td>Multiple Activity Centers</td>
<td>★★★★★★★★</td>
</tr>
<tr>
<td><strong>Mobility</strong></td>
<td></td>
</tr>
<tr>
<td>Protected bikeways (in lieu of on-street parking)</td>
<td>★★★★★★★★</td>
</tr>
<tr>
<td>Improve safety</td>
<td>★★★★★★★★</td>
</tr>
<tr>
<td>Improve pedestrian conditions</td>
<td>★★★★★★★★</td>
</tr>
<tr>
<td>Improve traffic flow</td>
<td>★★★★★★★★</td>
</tr>
<tr>
<td><strong>Business Support</strong></td>
<td></td>
</tr>
<tr>
<td>Parking management strategies</td>
<td>★★★★★★★★</td>
</tr>
<tr>
<td>Improved architecture and facades</td>
<td>★★★</td>
</tr>
<tr>
<td><strong>Community Benefits</strong></td>
<td></td>
</tr>
<tr>
<td>Affordable housing</td>
<td>★★★★★★★★</td>
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</tbody>
</table>
Research & Analysis
Overview

• Caltrans
• Caltrain & Samtrans
• Fire, Economic Development, Parks, Engineering, Public Works
• San Francisco Municipal Transportation Agency
• Traffic/Bikeways Analysis
Feedback

• **Caltrans:**
  - Receptive to protective bikeways, extending Redwood Ave. across El Camino to Main Street, and improving Woodside Road overpass
  - Provided feedback on preferred bikeway and intersection configurations

• **SFMTA:**
  - Suggested iterating on protected bikeway configuration
Feedback

• **Samtrans:**
  – Receptive to floating bus islands
  – Has funding to implement transit signal priority
  – Exploring express/rapid buses on El Camino Real

• **Fire and Public Works Departments:**
  – Provided feedback on emergency access needs and street cleaning

• **Economic Development Department:**
  – Provided feedback on the business support options
Traffic/Bikeways Analysis

• What we heard
  – Strong interest in protected bikeways for the entire length of El Camino Real in Redwood City
  – Bike facilities need to be safe and predictable
Traffic/Bikeways Analysis

• What we did
  – Understand what happens when protected bikeways reach intersections and interact with turning vehicles
    • How should bike facility be designed to maximize safety and efficiency?
    • What are impacts to vehicle traffic?
  – Selected several representative configurations
    • Intersections with high and low volumes of vehicle turns
  – Analyzed impacts to vehicles:
    • Intersection level of service
    • Queuing
    • Corridor travel time
Traffic/Bikeways Analysis
Traffic/Bikeways Analysis
Traffic/Bike Analysis

• Recommendations
  – Intersections
    • Where turning volumes are lower (<100):
      ▪ Remove right turn lanes, and
      ▪ Maintain protected bikeway with protected intersection.
    ▪ Benefits:
      » Physically separates right-turns from peds and bikes.
      » Pedestrian may use the protected barrier, reducing their crossing time and distance
Traffic/Bike Analysis
Traffic/Bike Analysis
Traffic/Bike Analysis
Traffic/Bike Analysis

• Recommendations (cont’d)
  – **Intersections**
    • Where turning volumes are *higher* (>100):
      ▪ *Maintain right turn lane*
      ▪ *Painted bikeway cross-over*
  – **Driveways**: painted and raised
Study Area - Right Turn Turn Removed

2. Brewster Avenue
   Southbound Right

3. James Avenue
   Southbound Right

4. Jefferson Avenue
   Northbound Right

5. Maple Street
   Northbound Right

6. Roosevelt Avenue
   Southbound Right
Study Area - Vehicle Level of Service

Seconds of delay per vehicle (s/veh)

<table>
<thead>
<tr>
<th>Before/After</th>
<th>LOS at Signalized Intersections (s/veh)</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>&lt; 10</td>
</tr>
<tr>
<td>B</td>
<td>10 – 20</td>
</tr>
<tr>
<td>C</td>
<td>20 – 35</td>
</tr>
<tr>
<td>D</td>
<td>35 – 55</td>
</tr>
<tr>
<td>E</td>
<td>55 – 80</td>
</tr>
<tr>
<td>F</td>
<td>&gt; 80</td>
</tr>
</tbody>
</table>

2. Brewster  
11.2/11.6  
B/B

3. James  
26.2/27.3  
C/C

4. Jefferson  
42.9/47.2  
D/D

5. Maple  
4.3/5.0  
A/A

6. Roosevelt  
10.6/11.3  
B/B
## Study Area - Travel Time

### Existing Lane Configurations

<table>
<thead>
<tr>
<th></th>
<th>Travel Time (s)</th>
<th>Delay (s/veh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NB</td>
<td>138.7</td>
<td>43.8</td>
</tr>
<tr>
<td>SB</td>
<td>130.0</td>
<td>43.0</td>
</tr>
</tbody>
</table>

### Without Selected Right-Turn Lanes

<table>
<thead>
<tr>
<th></th>
<th>Travel Time (s)</th>
<th>Delay (s/veh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NB</td>
<td>142.0</td>
<td>46.7</td>
</tr>
<tr>
<td>SB</td>
<td>133.1</td>
<td>46.0</td>
</tr>
</tbody>
</table>
Draft Plan Policy Components
Plan Elements – Land Use

• Incorporate **four activity centers** to support retail establishments, provide options for neighborhoods to meet short term needs, and promote walkability

• Incentivize **shared parking and connecting private parking lots** through reduced parking ratios (similar to DTPP)

• Consider **amendments to MULW district** to address barriers to development
Plan Elements - Mobility

- Consider **protected bikeways** on El Camino Real to improve safety for bicyclists and alternative modes of transit
  - Includes a parking management strategy

- Provide **high visibility crosswalks with median refuges, hawk beacon signals, and shortened crossing distances** to improve safety for pedestrians

- Develop **sidewalk zones** to provide uninterrupted passage for walkers

- **Maintain development requirements for sidewalk improvements** (12’ wide, street trees, pedestrian lighting, bike racks) to improve safety and comfort for pedestrians
Plan Elements – Mobility (cont’d)

• Consider **timed signals and restricting some left turn movements (during commute hours)** to improve traffic flow

• Consider removal of slip lanes and improvements to **Woodside underpass** to improve safety for bicyclists and pedestrians

East Campbell Ave., *before*

East Campbell Ave., *after*
Plan Elements – Mobility (cont’d)

- **Break-up large blocks** with new streets behind and through the Target center (similar to Sequoia Station)

- Improve circulation with **4-way intersections** at Roosevelt and Redwood Ave./Main St.

- Consider **relocating existing traffic signals** based on existing patterns of traffic congestion
  - for example, the signals at Roosevelt and Chestnut

![Break up large blocks](image1)

![Redwood Ave. extension](image2)
Plan Elements – Business Support

• Consider establishing an assessment district to support cleaning, maintenance, and beautification

• Wayfinding signage
  – For example, to Caltrain station, Downtown, HW 84, parking facilities, bicycle facilities

• Marketing program

• Façade improvement program

• Parking management program
  – shared, short term, and employee parking
Plan Elements – Community Benefits

- Incentivize production of **on-site affordable housing** through the existing bonus height provisions and potentially using FAR instead of du/ac

- **Neighborhood program** (visual treatment at neighborhood entries for traffic calming)

- **Community project fund** (used towards community facilities, open space, public art)
Plan Elements – Community Benefits

- **Incentivize **childcare facilities** through the FAR exemption provision**
- **Beautification** *(trees within the medians, banner program, branding)*
- **Plazas and open space**
  - Includes new standards & guidelines for development within activity centers
  - Explore improved public access to Sequoia HS open space
  - Explore expanding Little River Park as part of the Transit Center improvements
  - Potential, new park at Redwood Ave/ECR as part of potential Woodside underpass improvements
Discussion Questions

• Considering CAG discussion and public input to date, do these policy concepts generally reflect and address the primary objectives for the Corridor?

• Should anything be added or removed?
  – Land Use
  – Mobility
  – Business Support
  – Community Benefits
Next Steps

• Continue to refine options
• Begin drafting the Corridor Plan
• Next CAG meeting – end of summer/early fall

Visit [www.redwoodcity.org/elcaminoplan](http://www.redwoodcity.org/elcaminoplan) for information and updates
Online Survey - Bicycles

If there were protected bikeways, how likely would you be to use them?

"Wouldn't even consider biking unless there was the protected bikeways, which I believe would become a model for the Peninsula."
Online Survey - Bicycles

What would you personally use the protected bikeways for?

“More people, including myself and my boyfriend, would commute by bike if we perceived ECR to be safer.”
Online Survey – On-Street Parking

How far away are you willing to park?

- Close parking is required: 24
- Depends on pedestrian experience: 181
- Depends on trip purpose: 173
- More than 3 blocks: 113
- 2-3 blocks: 218
- One block: 159
- In the destination's lot: 77
Online Survey – On-Street Parking

Thoughts on parallel parking?

- Avoid at all costs
- My destinations have lots
- OK if can pull right in, otherwise no
- Like no time limits
- Like parking for free
- Convenient in front of destination
- Good when ECR isn't busy
- Can't live without it

Number of respondents:
- Avoid at all costs: 158
- My destinations have lots: 182
- OK if can pull right in, otherwise no: 180
- Like no time limits: 92
- Like parking for free: 157
- Convenient in front of destination: 154
- Good when ECR isn't busy: 110
- Can't live without it: 40
Online Survey

How would you redesign El Camino Real?

“The addition of a FULLY protected bike lane would be ideal, with a concrete barrier or planters to both beautify and separate cars from bicyclists.”
Study Area- 95th Percentile Queuing

Length of Queue (ft)

T- Through Lane
TR- Shared Through-Right Lane
R- Right Turn Lane

Before

After

2. R- 77’; T- 145’ & 165’
   TR- 174’; T- 162’

3. R- 113’; T- 331’ & 350’
   TR- 366’; T- 353’

4. R- 254’; T- 360’ & 368’
   TR- 342’; T- 353’

5. R- 44’; T- 168’ & 169’
   TR- 162’; T- 166’

6. R- 105’; T- 259’ & 299’
   TR- 310’; T- 267’