Agenda

• Welcome and Introductions
• Presentation
• Small Group Breakout
• Report Out
• Next Steps
Meeting Goals

1. Share traffic-related concerns
2. Discuss pros and cons of conceptual designs
3. Select preferred concepts
Background

• Previous Meetings
  • Focused meeting – October 2015
  • Initial concepts meeting – December 2015

• Updated City’s Traffic Calming Program

• Minor Changes
  • Upgraded street lights to LED
  • Installed “Stop Ahead” signs for the Hopkins/Hudson intersection
  • Marked crosswalk at Grand Street
Traffic Calming Process

Community Engagement Process

- Preferred Measures
- Initial Design
- Final Design

Approval Process

- Neighborhood Survey
- Complete Streets Advisory Committee
- City Council
Existing Conditions
Traffic Volumes

Collected volumes at 7 intersections during peak periods (7-9 AM and 4-6 PM)

- Vehicles
  - Most traveling along Hopkins
  - Few vehicles crossing Hopkins (except at Hudson)

- Bicycles
  - Generally 5-10 bicycles traveling along Hopkins
  - Highest activity at Elwood during AM peak hour (34 bicycles turning left from Hopkins onto Elwood; most likely students going to Sequoia HS or MIT)

- Pedestrians
  - Most activity occurs at King and Lowell
Speed and Collision Data

• Speed
  • Posted: 25 mph
  • Average speeds: 25 – 29 mph
  • 85th percentile speeds: 30 – 32 mph

• Collisions
  • Reviewed collisions between 2014 – 2016
  • Most were vehicle-vehicle collisions (80%), 4 with bicycles
  • Most collisions occurred at Hudson (7 collisions) and King (6 collisions)
  • Most common collision types: broadside (38%) and rear-end (22%)
Driving Speeds and Pedestrian Fatalities

Pedestrian Fatal Injury Rates by Vehicle Speed and Age

- Hit by a vehicle traveling at 20 MPH: 9 out of 10 pedestrians survive.
- Hit by a vehicle traveling at 30 MPH: 5 out of 10 pedestrians survive.
- Hit by a vehicle traveling at 40 MPH: only 1 out of 10 pedestrians survives.
Traffic-Related Concerns

• Submitted via web map
  • Top concerns:
    • Pedestrian Safety
    • Driver Behavior + Speeding
  • Main intersections of concern:
    1. King Street
    2. Lowell Street
    3. Hudson Street

• Similar concerns were shared at previous meetings

153 Survey Responses
Field Observations

• Speed feedback signs near Stafford Park did not result in vehicles slowing

• Vehicles on side streets were able to find gaps to enter or cross Hopkins

• Some vehicles on Hopkins did not yield to pedestrians

• Confusion maneuvering Broadway/Duane/Hopkins intersection
All-Way Stop Evaluation

• All-way stops were considered at King Street and Lowell Street
  • Next to Stafford Park
  • Complaints about drivers not yielding
• Evaluated according to CA MUTCD and City’s Policy and Guidelines for Stop Signs on Residential Streets
  • Neither intersection meets CA MUTCD criteria
    • Low volume on cross streets, less than 5 collisions in 12 months
  • King Street met City’s criteria
Conceptual Designs
## Block Alternative Pros & Cons

<table>
<thead>
<tr>
<th>Block Alternative</th>
<th>Pros</th>
<th>Cons</th>
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</thead>
<tbody>
<tr>
<td>1 – Median Separation</td>
<td>• Moderate speed reduction</td>
<td>• High cost</td>
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<tr>
<td></td>
<td>• Reduced likelihood of high speed collision</td>
<td>• No left turn access to driveways</td>
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<tr>
<td>2 – Buffered Bicycle Lanes</td>
<td>• Moderate speed reduction</td>
<td>• No storage for Left-turn queues</td>
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<td></td>
<td>• No parking loss</td>
<td>• Reduced driveway access</td>
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<td>3 – Occasional Left-Turn Pockets</td>
<td>• Low cost</td>
<td>• Some parking loss</td>
</tr>
<tr>
<td></td>
<td>• Some storage for left-turn queue</td>
<td>• Limited speed reduction</td>
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<tr>
<td>Intersection Alternative</td>
<td>Pros</td>
<td>Cons</td>
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<td>---------------------------------</td>
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<tr>
<td>A – Raised Pedestrian Crossing</td>
<td>• Significant speed reduction</td>
<td>• No bicycle safety improvements</td>
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<td></td>
<td>• Increased visibility and increased safety for pedestrian</td>
<td>• Some parking loss</td>
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<tr>
<td>B – Curb Bulbouts</td>
<td>• Increased pedestrian visibility and reduced crossing length</td>
<td>• High cost</td>
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<tr>
<td></td>
<td></td>
<td>• Some parking loss</td>
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<tr>
<td>C – Traffic Circle</td>
<td>• Significant speed reduction</td>
<td>• Moderate cost</td>
</tr>
<tr>
<td></td>
<td>• Reduction in intersection conflict points</td>
<td>• No bicycle safety improvements</td>
</tr>
<tr>
<td>D – Median Separation</td>
<td>• Moderate speed reduction</td>
<td>• No left turn access to driveways</td>
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<td></td>
<td>• Pedestrian refuge</td>
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"Intersection Alternative Pros & Cons"
Next Steps

- Review comment cards
- Refine most preferred block and intersection alternatives designs
- Public meeting
- Refine final design
- Survey neighborhood
- Present design to Complete Street Advisory Committee and then City Council
Small Group Breakout

- Break into 3-5 groups
- Select someone to report out for the group
- Review block and intersection alternatives
- Rank alternatives
- Identify locations for preferred intersection alternatives (time permitting)
- Share the group comments
Block Alternative 1 – Median Separation
Block Alternative 2 – Buffered Bicycle Lanes
Block Alternative
3 – Occasional Left-turn Pockets
Intersection Alternative A – Raised Pedestrian Crossing
Intersection Alternative B – Curb Bulbouts
Intersection Alternative C – Traffic Circle
Intersection Alternative D – Median Separation
Vehicle-Vehicle Conflict Points

- Crossing (0)
- Diverging (4)
- Converging (4)

- Crossing (16)
- Diverging (8)
- Converging (8)
Vehicle-Pedestrian Conflict Points