5 Implementation

This section outlines typical major steps to implement the alternative route improvement conceptual projects, and potential considerations for priorities and phasing of improvements. No actual project commitments, priorities, or phasing are included in the scope of this Study. This must be resolved separately by the agencies with jurisdiction or interest in the projects. The implementation factors in this section are provided for consideration in future discussion and decision-making processes.

As discussed in the introduction to the Study, the objective is not to pick the best route, but to delineate and estimate the desirable improvements to each of the three routes. It may be desirable and feasible ultimately to improve two routes, or all three routes.

Project Implementation Steps

The three project alternatives have different implementation steps due to the differences in jurisdictions, conditions, issues, and facility type. This section provides a simplified summary of the steps to implement the projects, and assumes that each project is independent from the others. A basic step common to all the alternatives is the assignment of staff to administer the project and take responsibility for completing each of the steps. This specific assignment of responsibility would need to be resolved in conjunction with future decisions about proceeding with any of the alternatives. “Placeholder” costs for project administration are included in the cost estimates.

The Alto Tunnel alternative has the most complicated process for implementation due to right of way issues, technical complexities, and the number of parties involved. Horse Hill has some complications since it is in Caltrans right-of-way, and Camino Alto/Corte Madera Avenue is the least complicated because it only involves the two cities and is an adopted project in both the Corte Madera Bicycle Transportation Plan and Mill Valley Bicycle and Pedestrian Transportation Plan.

Potential Project Phasing

Phasing of the work may be desirable to implement portions with the greatest benefit, fewest constraints, simplest process, and/or most feasible funding. There are specific areas of improvement along the routes that could be implemented and provide significant benefits whether or not any of the other routes were improved:

- Improvements on East Blithedale at Lomita Avenue (Segment 11) may be a potential high priority/early phase of implementation. These improvements would be of immediate benefit to bicyclists, pedestrians, and drivers. They would not entail a commitment to any of the 3 routes, but would complement any of the 3 routes.
- The ramp from Ashford to the existing multi-use path (part of Segment 1) and the path bypassing the parking lot at Maguire Elementary School (Part of Segment 2A), along with the extension of sidewalks or a path along Lomita, and bike route making and signage improvements (Segments 2A and 2B) are other projects that would have immediate benefits and not entail any commitment to an alternative.
- Similarly, improvement of the existing pathway and bike route connections north and south of Redwood Avenue (Segments 9B and 10) would benefit existing users regardless of whether other improvements were implemented,
• Improvement of the Sanford Street and Madera Boulevard intersection with Tamalpais Drive (Segments 5 and 6). This intersection is a challenge for bicyclists and pedestrians to negotiate. It is already the subject of improvement concepts identified in the TAM-sponsored Greenbrae/Twin Cities Corridor Study.

• Widening of Camino Alto and Corte Madera Avenue for climbing lanes or bike lanes is the next logical project phase because the project is already an adopted plan of all involved agencies, there are no major right-of-way or permit requirements, and the project is relatively straightforward from a technical standpoint, though it is a long route and there are many details of design and implementation that would need to be resolved. Improvement of this route would be beneficial to bicyclists and drivers, because it is popular with many bicyclists for its winding, hilly, and scenic qualities, and bicyclists have stated that they will continue to use regardless of other route improvements.

The implementation of any of the above phases as a discrete project would involve the basic steps outlined in the following sample project timelines, probably in a compressed schedule, depending on project requirements and schedule.

**Sample Implementation Timelines**

Sample timelines for implementation of the three routes between Mill Valley and Corte Madera were prepared to show typical implementation steps based on the known requirements. These timelines are highly simplified and are likely to vary due to many unpredictable factors that can affect a complex project. They illustrate the relative sequence and duration of tasks rather than a precise schedule. The actual schedule would need to be detailed by the project managers in coordination with partner and funding agencies.

The following three graphs show potential “best case” implementation scenarios for the three projects. Year zero does not represent the present, but is the point at which project commitments and funding are in place, and implementation is actively undertaken.
<table>
<thead>
<tr>
<th>Project Stage</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 - Surveying, Technical Studies</td>
<td>0</td>
</tr>
<tr>
<td>A2 - Prelim. Design/Environmental</td>
<td>2</td>
</tr>
<tr>
<td>A3 - Caltrans Encroachment Permit</td>
<td>4</td>
</tr>
<tr>
<td>A4 - Plans, Specifications, and Estimate</td>
<td>6</td>
</tr>
<tr>
<td>A5 - Project Bid</td>
<td>8</td>
</tr>
<tr>
<td>A6 - Project Construction</td>
<td>10</td>
</tr>
</tbody>
</table>

Note: illustrates potential sequence and duration of tasks after project commitment, funding and start-up. Actual schedule would be detailed by the project managers in coordination with partner and funding agencies.

Figure 5-1: Horse Hill Route Implementation Timeline Example
Note: illustrates potential sequence and duration of tasks after project commitment, funding and start-up. Actual schedule would be detailed by the project managers in coordination with partner and funding agencies.

**Figure 5-2: Alto Tunnel Route Project Timeline Example**
Note: illustrates potential sequence and duration of tasks after project commitment, funding and start-up. Actual schedule would be detailed by the project managers in coordination with partner and funding agencies.

**Figure 5-3: Camino Alto/Corte Madera Avenue Route Project Timeline Example**

**Funding Sources**

Funding for bicycle and pedestrian projects can come from a variety of sources. The funding section in the 2008 *Marin County Unincorporated Area Bicycle and Pedestrian Plan* covers federal, state, regional and local sources of funding, as well as some non-traditional funding sources that have been used by local agencies to fund bicycle and pedestrian infrastructure.