Appendix J: Public and Agency Comments Summary and Responses

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Appendix J – Public and Agency Comments Summary and Responses

Prepared by Alta/LandPeople
This appendix summarizes the comments received at the public workshops, in follow-up communications, and at meetings of the project Technical Advisory Committee, and includes responses to the key themes of public comments.

Response to Public Comments

Below is a response to applicable comments received following public workshop #2. Full comment summary is available separately. Comments provided that are not detailed below are noted and were considered. The full, verbatim text of comments is available for review in the hard copy file but not included due to the significant volume. Responses to comments are in italics.

The purpose of the Study has not been met and additional work is needed to address the full range of issues and benefits of the three alternatives – particularly the Alto Tunnel Route. The Study process was not transparent.

The study area is complex and previous efforts to move forward with potential improvements stalled due to the unavailability of technical information. This Study is intended to provide additional technical information to help local policy makers to make more informed decisions on next steps. The purpose of the Study was not to select a specific course of action, identify a preferred alternative, or set policies on which improvements to implement. Decisions on whether or not to pursue progress on any conceptual improvements will be made during a separate process by local decision makers. The study was specifically focused on the technical issues associated with three alternative bicycle/pedestrian corridor routes between Corte Madera and Mill Valley defined in the scope. The Study was not intended to be a comparative study identifying a “best” route or preferred alternative; but rather a conceptual study of the dominant issues, costs, and benefits. Any of the routes will require much more extensive and formal documentation of base conditions, technical studies, and public participation to resolve a plan to adopt. The comments on the Study are very helpful for identifying the issues and scoping further studies.

The Corridor Study process was transparent and conducted in accordance with the County of Marin’s processes. The study scope and schedule was made public prior to the issuance of the Request for Proposals, and reiterated in the public information published before and presented at the workshops. Almost 400 people attended two public workshops and approximately 400 individual letters were submitted that provided detailed input during the course of the study. All materials made available to the public were posted to the project webpage and interested parties were notified. Notices of public meetings were extensively posted and distributed in the study area. Notices of public workshops and links to the project webpage were posted on local agency websites, copies of the draft study were available in the local libraries and public works offices.

The Alto Tunnel cost estimate is inflated, and improperly correlates Cal Park Hill Tunnel costs. The tunnel estimate includes multiple contingencies that were not included in the other segment cost estimates.

A new Tunnel Estimate Summary has been prepared to help clarify the items included, and the assumptions, and the tunnel cost estimate (at the end of Appendix B, Tunnel Feasibility Study) has been enlarged, updated and annotated to improve its clarity.

The Alto Tunnel rehabilitation cost estimate assumptions and contingencies are appropriate for a planning level feasibility study (Class 4 estimate). In this situation, the most recent information describing the condition of the Alto Tunnel is at least 31 years old. There are several unresolved issues associated with the tunnel...
reconstruction which could affect: the structures and properties above and adjacent to the tunnel; security and public safety design elements in the tunnel; site drainage; and, portal configurations. The estimate is the opinion of very experienced tunnel engineers.

Class 4 estimates are generally prepared based on limited information and subsequently have fairly wide accuracy ranges. They are typically used for project screening, determination of feasibility, concept evaluation, and preliminary budget approval. Typically, engineering is from 1% to 15% complete. The Alto Tunnel rehabilitation engineering is less than 5% complete. Class 4 cost estimates have an expected accuracy of -30%/+50% and carry a contingency of 25% to 35%. Figure 1 is a table summarizing the five classes of engineering estimates.

To better understand the current tunnel condition to improve cost estimate accuracy to Class 3 levels, a work plan to enter the Alto Tunnel was considered early in the study process. It would cost approximately $400,000 to get an inspection team safely inside the sealed, partially-collapsed tunnel. The inspection cost was nearly twice the cost of the entire Corridor Study. The County determined that it was not feasible to include this in the current Corridor Study scope but could be considered in the future if Class 3 estimates were desired.

The Alto Tunnel cost estimate includes both a Construction Cost Contingency and a Cost Estimate Accuracy Allowance. The Construction Cost Contingency considers the tunnel contractor’s general risks and uncertainties and was evaluated for each bid item in the estimate. The extrapolated Cal Park Tunnel unit prices included the contractors’ allowance for general risks and uncertainties for the Cal Park Tunnel. The Cal Park Tunnel and Alto Tunnel are similar, but very different tunnel rehabilitation projects. Simply applying the extrapolated unit prices to the Alto Tunnel quantities would not be a responsible cost estimating method. A 20% contingency was assigned to the lower risk items and a 40% construction cost contingency was assigned to the higher risk items. The average Construction Cost Contingency was 34%. In addition, the Cost Estimate Accuracy Allowance considers the completeness of the subsurface investigation and engineering. Based on those factors, a Cost Estimate Accuracy Allowance of 20% was used. Developing a construction cost estimate envelope by adjusting the contingencies or escalation years is a useful analysis technique. However, maintaining contingencies consistent with the level of engineering and the owner’s risk tolerance is critical to developing a credible planning estimate.

A theme of the comments regarding the estimate is that it is inflated in relation to the costs for the Cal Park Tunnel. It should be noted that the Alto Tunnel estimate includes items that were not included in the Cal Park Tunnel – particularly related to the complexities of structure protection over the tunnel. This accounts for approximately $0.5 to $1.5 million of the construction cost, or $1.2 to $3.7 million of the total project cost, including the “soft” costs and “placeholder” estimates for addressing right-of-way issues.

Non-construction costs (usually about 20-25% of total construction costs) are factored in at an additional 37%.

Actually, “soft” costs for further studies, design, environmental analysis, permits, project administration and construction management were added to the construction cost at a collective 45%, plus a placeholder allowance to resolve right-of-way issues. This is a higher ratio than typical project non-construction costs because the tunnel project is far more complex than a conventional project, and has more unknowns. If further progress on this route is planned, the soft costs identified are intended to include the significant technical studies (such as the $400,000 to enter the tunnel) that will be required; design development, environmental documents and mitigations; and project administration costs associated with the tunnel project.
Figure 1: Engineering Cost Estimate Classes

From AACE International Recommended Practice No. 18R-97, Cost Estimate Classification System – As Applied in Engineering, Procurement, and Construction for the Process Industries; Association for the Advancement of Cost Engineering, Feb. 2, 2005.

<table>
<thead>
<tr>
<th>ESTIMATE CLASS</th>
<th>PRIMARY CHARACTERISTIC</th>
<th>SECONDARY CHARACTERISTIC</th>
<th>EXPECTED ACCURACY RANGE</th>
<th>PREPARATION EFFORT</th>
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<tr>
<td>Class 5</td>
<td>0% to 2%</td>
<td>Concept Screening</td>
<td>Capacity Factored, Parametric Models, Judgment, or Analogy</td>
<td>L: -20% to -50% H: +30% to +100%</td>
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<tr>
<td>Class 4</td>
<td>1% to 15%</td>
<td>Study or Feasibility</td>
<td>Equipment Factored or Parametric Models</td>
<td>L: -15% to -30% H: +20% to +50%</td>
</tr>
<tr>
<td>Class 3</td>
<td>10% to 40%</td>
<td>Budget, Authorization, or Control</td>
<td>Semi-Detailed Unit Costs with Assembly Level Line Items</td>
<td>L: -10% to -20% H: +10% to +30%</td>
</tr>
<tr>
<td>Class 2</td>
<td>30% to 70%</td>
<td>Control or Bid/Tender</td>
<td>Detailed Unit Cost with Forced Detailed Take-Off</td>
<td>L: -5% to -15% H: +5% to +20%</td>
</tr>
<tr>
<td>Class 1</td>
<td>50% to 100%</td>
<td>Check Estimate or Bid/Tender</td>
<td>Detailed Unit Cost with Detailed Take-Off</td>
<td>L: -3% to -10% H: +3% to +15%</td>
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Notes:  
[a] The state of process technology and availability of applicable reference cost data affect the range markedly. The +/- value represents typical percentage variation of actual costs from the cost estimate after application of contingency (typically at a 50% level of confidence) for given scope.  
[b] If the range index value of 1 represents 0.005% of project costs, then an index value of 100 represents 0.5%. Estimate preparation effort is highly dependent upon the size of the project and the quality of estimating data and tools.
The unit prices in the estimate are inflated.

There was a totaling error in the prior estimate. This has been corrected.

The unit prices in the Lower Range and Upper Range estimate are not “inflated”, but assume a moderately greater or significantly greater extent of deterioration in the tunnel than was known at the last time the tunnel was accessible. The Lower Range reflects support and rehabilitation of collapse conditions based on the last tunnel inspections between the current plugs (in the 1970’s and 1980’s), and assuming some deterioration into the present.

The Upper Range assumes a much greater deterioration (i.e., greater lengths of collapse sections), and shifts more of the Type III and Type IV tunnel support into the more conservative and costly Type II and Type III tunnel support categories.

A public comment on the estimate was that the tracks have already been removed. There is no record that the tracks have been removed, and lacking the ability to enter the tunnel to determine this, the item is retained in the estimate. The estimate has been revised to delete the item for bollards at the tunnel portal, as this item is covered in the other segment cost estimates.

A theme of the comments regarding the estimate is that it is inflated in relation to the costs for the Cal Park Tunnel. It should be noted that the Alto Tunnel estimate includes items that were not included in the Cal Park Tunnel — particularly related to the protection of structures over the tunnel. This accounts for approximately $0.5 to $1.5 million of the construction cost, or $1.2 to $3.7 million of the total project cost, including the “soft” costs and “placeholder” estimates for addressing right-of-way issues.

Construction costs are escalated, while actual construction costs are falling significantly.

The Cal Park Tunnel Rehabilitation average bid prices are representative of tunnel construction costs in the area and reasonable to be applied to the Alto Tunnel Rehabilitation Study. For tunnel construction projects proceeding in 2009 and 2010, competitively bid tunnel project costs are slightly suppressed (approximately 85% to 90% of the Engineer’s Estimate). However, future bid prices are expected to rebound before the Alto Tunnel Rehabilitation would be bid. Accordingly, although construction of the Alto Tunnel could be years in the future, only a single year of cost escalation was included in the estimate to accommodate for the current economic climate.

The Study should address issues of liability if the Alto Tunnel collapses

Addressing all liability issues from continued tunnel collapse would require significant legal and engineering analysis, was not the purpose of the study, and is not part of the Study scope. The Study does include methodology and costs to address the physical work of backfilling and stabilizing the Alto Tunnel - $11.5 million as stated in Appendix B, Tunnel Feasibility Study, page 20. This information has been included in a new, clearer summary of Alto Tunnel costs.

The number of Alto Tunnel Route users is underestimated.

The use estimate has been revised to provide a higher range estimate reflecting trends in increased bicycling in Marin County.

The Columbia River demand forecasting model should be used for creating the Alto Tunnel range of use.

The Columbia River demand forecasting model is not an appropriate tool for this Study. The consultant team is familiar with the referenced model. One key constraint of this model is that it only looks at Census data and does not look at other factors known to affect cycling attractors/generators, significant populations that traditionally have high cycling rates, the current bike counts, or rates of cycling and quality of facilities.
The Alta model does examine these factors, and the concern that it does not address trends in increased bicycle use should be addressed by the added higher-range estimate.

The next steps should be detailed.

The next steps are briefly outlined in Section 5 of the Study and include major milestones and approximate timeframes. Each of the three routes fall under the responsible jurisdiction of several different agencies and the County of Marin does not make decisions for implementation of projects in other agency’s jurisdictions. Depending on policy decisions, funding availability, and staffing levels, each agency can develop detailed and appropriate next steps if a decision is made to proceed.

The Tunnel is not wide enough to accommodate conventional emergency response vehicles. Smaller responding vehicles could drive on the multi-use paths. Do the responders have such vehicles, and have they been consulted on the logistics of such evacuations?

Emergency response personnel participated extensively in the Study. Conventional emergency response vehicles, including fire engines and medical rescue vehicles (ambulances), could drive on the multi-use paths but not inside the tunnel itself. Approaches to the tunnel were evaluated for emergency vehicle access. In addition to width and height design clearance requirements for emergency access corridor, the study also identifies conceptual level emergency vehicle turnarounds and fire suppression water supply connections near the tunnel entrances, possible fire sprinklers, emergency call boxes and emergency radio repeaters inside the tunnel. Conventional emergency response vehicles would not be practical to use in the tunnel due to its length and limited width and height. Emergency response personnel would enter the tunnel on foot, using gurneys to transport any injured persons. This is an expected practice for local emergency response personnel and is commonly used throughout Marin (ie, recreational trails, mountains etc.). Use of special small vehicles is not contemplated.

What Richter level would the Tunnel be able to withstand before failing?

This would be evaluated during future detailed engineering and design of the tunnel, if policy decisions are made to proceed with improvements of this route. Cost estimates for this route include future seismic evaluation and engineering.
Summary of Public Comment Statements

Specific statements made in comments subsequent to Workshop #2 are summarized below. Similar comments are not repeated, but are detailed in the complied comments in the following section. Most of the comments reiterate the comments of the Marin County Bicycle Coalition.

The Study is flawed, additional work needed:
- There are unnecessary items in the cost estimate.
- Night closures are not necessary – 24 hr access should be assumed for the tunnel.
- High tunnel cost estimate/ low use estimate.
- Insufficient consideration of benefits - costs of not building (i.e. health, crashes).
- Number of estimated users is low – cycling is exploding in Marin County.
- Cost for securing property access rights is underestimated.
- Expand TAC to a wider range of stakeholders – MCBC, Transportation Alternatives of Marin, and Marin Trolleys.
- Use estimates should reference San Jose’s Trail Count 2009, opening bridge linkages in Portland.
- Study should include info regarding SB 375 that requires communities to create specific state certified plans to reduce carbon emissions due to vehicle miles traveled.
- The methodology for the cost estimate is different for Alto Tunnel route than the other alternatives.
- Executive summary should state how these particular routes for study were arrived at. There are other routes to consider (3 others detailed).
- Like to see clearer discussion on next steps and practical direction.

Support for Alto Tunnel:
- Tunnel expensive, but worth it. It is the only option suitable for casual cyclists
- Tunnel would create local jobs
- Reopening tunnel would reinforce and secure the land above – address hazards and liabilities of possible tunnel collapse.
- The $11 million cost to stabilize the tunnel should be considered a deduction form the cost of reopening the tunnel
- Tunnel would provide a route from MV to future SMART train and MV path
- Tunnel provides emergency access benefit.
- Tunnel relatively safe, straight, and flat.
- Only means to support transportation mode shift, address climate change.

Concern about Horse Hill and Camino Alto Routes:
- Camino Alto and Horse Hill Route too dangerous, difficult; elevation gain, conflicting driveways.
- Horse Hill/Casa Buena route exposes riders to exhaust, noise. Meadowsweet Route is scary for most riders.
- Horse Hill (HH)route is too far east to be used
- HH route is easiest to improve while waiting for the tunnel project
• Not enough lights on Camino Alto or HH route
• HH route has security issues – men sleeping along path
• Camino Alto and Horse Hill options should include the liability, costs and disruption involved with stabilizing the tunnel if it is not reconstructed.
• Camino Alto is a vehicular traffic, fire and EVA corridor, scenic corridor. Any improvement should not impact these uses
• Experienced cyclists on Camino Alto will use the entire lane to descend
• Camino Alto route should have signs asking cyclists to ride single file; resurfacing would make it much safer
• Support climbing lane addition to Camino Alto Route
• Engineering Geologist should map landslides along the Alto Grade and Horse Hill routes. Study should address the need to repair or accommodate these slides.
• Note adjacent homeowner’s fervent past opposition to widening Corte Madera Avenue

Concern about the Alto Tunnel:
• Tunnel cost is too high, too many unknowns, dark, unsecured, maintenance, impact for liability on structures overhead
• Don’t hold improvements to other two routes hostage to reopening tunnel
• Impact of high-speed cyclists on local use of pathways should be considered
• Negative impact on ecosystems should be considered
• Discussion of political feasibility of the Alto Tunnel Route is needed
• Discuss what other projects in the County would not get constructed if so much money is spent on the Alto Tunnel.
• Tunnel would be a strange experience for walkers, need a model to experience.
• Did the study include calculations of the ability of the tunnel reinforcement to withstand earthquakes of different intensities/formal assessment of earthquake risk?
• Is evaluation of the chemistry/quantity of hazardous materials and associated treatment and disposal costs included in the study?
• Is there an estimate of maintenance cost for the tunnel?
• Assumed operational longevity of the tunnel, replacement cost?

Other concerns, ideas, questions:
• None of the three plans would benefit walkers – need a sidewalk along Lomita.
• Have a shuttle that runs along Camino Alto to take bikes and others.
• Alto tunnel should be rebuilt double width, with one side for the trolleys, one side for bikes/peds
• Would like a path with switchbacks through the adjacent open space rather than the HH path, to connect to Meadowsweet – could have less grade, noise, avoids Shell/Lomita intersection
• Do a survey on why so many cyclists use Magnolia, rather than the separate Sandra Marker Trail
• Evaluation criteria section should have two added categories; one for viability of higher speed riding and another for attribute to get people out of their cars and on their bikes.
Where does the funding come from to complete any of the proposals? What is the likelihood of obtaining such funding and how much can be anticipated?

Workshop #2 Break Out group Comments

Breakout Group and Comment Card Comments received at the December 9th, 2009 Public Workshop.

Alto Tunnel Route Comments

- This is the only route that will get them out of their cars. Build it and they will come!
- It’s the last piece of the 90-mile greenway. Let’s not obstruct it.
- Any option that condemns homes is NOT an option!
- This IS the answer. A direct, flat, SAFE route. The tunnel will also improve the integrity of the few homes that may be perched upon it.
- Why is this proceeding without knowing if we have access?
- Just imagine if there were NO HIGHWAY 101 between CM & MV.
- Concerned about total cost, cost unknowns, and use of long (1/2 mile) tunnel with no separate pedestrian path, extreme length.
- Need better use estimate. The tunnel will enable many more pedestrians and bikes; lower cost estimate should not have all of the contingencies; need to quantify health and economic benefits; must further discuss the potential collapse NOW and the costs $11.5M to stabilize, to put the tunnel costs in perspective.

Horse Hill Route Comments

- Can’t be ADA
- Good pavement over bad design
- Great alternative to an otherwise outrageous expenditure (re: building the tunnel). The more leveling that can be done, the better. Any alternative that condemns homes in NOT an option!
- Would it be possible to place a crosswalk across the on-ramp leading from Tamalpais to Hwy 101 south, so that bikes and pedestrians on Casa Buena could cross over to the Tamalpais overpass structure area?
- Meadowsweet Hill (SB): Horse pasture hill (Lomita, NB) are too daunting for the average recreational rider – using Horse Hill as a major N-S greenway will not expand cycling in Marin
- Don’t spend money on something that doesn’t work
- Please re-align stop at Lomita and Shell Drive, so Shell Drive traffic must stop, NOT Lomita @ the dip.
- This route is too circuitous. Also, Meadowsweet has too many driveways – too dangerous.
- The intersection at Meadowsweet/Casa Buena/Sanford is in need for some realignment and improvement? Morning traffic at Peet's Coffee seems to avoid using this intersection in favor of going up Casa Buena to the Hwy 101 south on-ramp.
- Has it ever been considered to close the Casa Buena on-ramp to Hwy 101 south?
- “Stop” signs at the intersection of Lomita and Shell should be reconfigured. The “Stop” signs on Lomita should be removed, and placed on Shell instead.
- Meadowsweet seems to be the preferred route as opposed to Casa Buena (slower traffic, more rural, quieter). However, some preferred Casa Buena for northbound and Meadowsweet for southbound.
- Bike lanes need to be added on Tamal Vista.
- Bike detectors should be provided at the intersection of Sanford and Tamalpais.
• Bike detectors should be provided at the intersection of Tamal Vista and Wornum, especially to facilitate a left turn from Tamal Vista onto Sandra Marker Trail.
• Was the routing of a possible trail across County Open Space considered as an alternative to using or improving the Horse Hill segment?
• A better transition from the Horse Hill path to Lomita is required in the location of the Horse Hill parking area.
• Lomita is too busy to be used as the primary bike route. Other surface streets should be considered. Did the study anticipate the possible Whole Foods addition to the nearby shopping center? The new path that bypasses the Edna Maguire parking lot is too close to the adjacent residence.

Camino Alto Route Comments

• If nothing else, improve existing road/pavement on Camino Alto.
• On curvy roads, cars criss-cross into bike lanes!
• Consider lighting and NB congestion @ Redwood; consider Chapman, and then consider travel times for each road.
• Include bike route signs, improve pavement
• Not a route for children, elders or beginners; for experienced riders only.
• How many commuters, transportation travelers VS recreational riders?
• Improve Camino Alto for benefit of all users.
Workshop #1 Break Out Group Comments
Break out group comments and written comments (4) submitted at first public workshop held on March 4, 2009:

Alto Tunnel Route

Neighborhood Safety Concerns…. (7)
- Chapman Meadows; Scott Hill disruptions
- Nearby homes don’t want trail
- Could pose security issue to nearby homes and people using tunnel
- Safety +++
- Neighborhood impact of construction
- Social and safety concerns
- Impacts/issues for homes on either side of tunnel and at both ends

Tunnel Safety/Security Concerns…. (8)
- Illumination and security issues
- Tunnel is under peoples homes
- Tunnel will continue to collapse if nothing is done
- Tunnel needs to be fixed and a path should be added
- Does tunnel have slight curve?
- Will tunnel be lit?
- Lighting and ventilation issues
- Potential for collapse if left alone

Direct Connection…. (10)
- Links both sides with continuous class I facility
- Direct route
- Faster than by car
- Time consideration- modal choice
- Connection to Larkspur
- Could be emergency access
- Would break barrier between communities
- Most direct and flat route, would attract more users
- Don’t need a shower after
- Emergency egress route

User Accommodation…. (17)
- Would best serve commuters and recreational users
- Only route that would be ADA (American Disabilities Act) compliant
- Only route that can really increase non-motorist users
- Could accommodate electric bikes, wheelchairs
- Great for pedestrians
- ADA (American Disabilities Act) compliant
- New tunnel could be wider (add streetcar)
- Great route for recreational riders
- Would get more people on to bikes
- Mode shift
- Offers evening and night usage
- Intermediate rider- best use, no hill
- Good with children
- “no brainer” for non-experienced
- Best route to get people out of cars
- Desire for pedestrian walkway
- Usage predictions

User/Traffic Conflicts…. (7)
- Small kids would not mix well with recreational riders
- Too many pedestrians would make it hard to bike
- Will increased bike traffic be addressed?
- All routes- education-“stop”, share the road, etc
- Issue at Tamalpais Dr/Corte Madera intersection
- Safety on Camino Alto-safer for all users-pedestrians, bicyclists and motorists
- Biking enthusiasts would crowd out children, elderly, walkers

Cost…. (5)
- Too expensive
- Would be expensive
- Cost per user goes up
- Cost/risk of not fixing tunnel
- Wildly expensive vs. widening Camino Alto

Economic, Other Benefits…. (5)
- Could provide positive economic impact
- Climate benefits and air quality benefits
- Property values up
- This route would be an asset to the community
- Would get people out of there cars

Right of Way…. (3)
- Homes may encroach on public right-of-way
- Potential reversion rights in easements
- Easements tied to railroad usage

Other…. (3)
- Tunnel already exists, use it
- Show tunnel study on map
- What do neighbors think about this
Camino Alto Route

Safety Concerns….(19)
- Need wider shoulders/ calming treatments
- Camino Alto is too scary
- Poor pavement
- Needs to be safer for bikes and autos
- Downhill is unsafe, too fast for bikes
- Deer are along route
- Gravel at turns is dangerous to riders
- Widening could make more dangerous
- Poor visibility
- Dangerous (especially uphill)
- Need wider striping (uphill)
- Uneven road surface is dangerous for riders
- Camino Alto traffic and sight and centerline issues
- Camino Alto- needs better bike lanes
- Camino Alto narrow - Chapman alternative not in scope
- Wider shoulders are feasible
- Need better signage
- Mixing it up with cars is dangerous

User Accommodation…..(7)
- Differentiate between serious and non-serious riders
- Will improving route increase ridership?
- Route is only for advanced riders
- Not efficient commute route
- Camino Alto- experience and skill needed
- Independent living on Corte Madera side. ADA (American Disabilities Act) compliant?
- No easy access from Camino Alto to bike path

Traffic Conflicts…. (6)
- Northbound congested during p.m. peak; lots of deer
- “Share the Road”
- Bikes compete with cars and Blithedale and Corte Madera intersection
- Riders go too fast because of grades
- Need bike/vehicle separation
- Road becomes congested during commute

Topography…(4)
- Camino Alto- great climb=personality
- Not as steep as Horse Hill
- Camino Alto = workout
- Too steep

**Other…. (3)**
- Chapman should be used as alternative route
- Concerned widening will affect private property
- Shuttle over Camino Alto

**Horse Hill Route**

**Safety Concerns…..(5)**
- Will lighting be considered?
- Pathway narrow- could cause potential conflicts
- Blind curve at low point of existing trail is dangerous
- Trail prone to landslides
- Visibility bad @ crest

**Traffic Conflicts…. (7)**
- Concerned about stop signs
- Casa Buena- lots of conflict points- lack of safety signage
- 3 way stop and shell road is dangerous should be a 4 way stop
- Closing non-conforming on-ramp to 101 could add more room
- Dangerous intersections/stop signs Lomita and Shell
- North end onto Meadowsweet = traffic
- Meadowsweet to bike path=dangerous

**Topography…. (3)**
- Unsafe; tough to traverse with kids in tow
- Unpleasant; steep and difficult to maneuver
- Can we lower grade and make it a better bike path?

**User Accommodation…. (9)**
- Make it ADA (American Disabilities Act) compliant
- Consider team riders for all routes
- Consider future potential riders
- Fewer on Horse Hill, why?
- Less direct, more residential traffic
- Less fun
- Horse Hill more practical= flat
- Schools – Edna and Ring
- 101 corridor as transportation route

**Direct Connection…. (9)**
- Least direct of three routes, convoluted route
- Northbound-difficult awkward to access Meadowsweet
- Making turn onto Meadowsweet is difficult
- Making turn onto path is difficult
- Trail is out of the way and unpleasant
- Indirect route to Magnolia
- Can’t ride bikes from Corte Madera into Mill Valley
- Disjointed route-No way finding signs
- Needs pedestrian connection from east side of Lomita to school and Community Center

Hwy 101 Noise/Sound Pollution…. (7)
- Northbound bicyclists blinded by car lights at night
- Air pollution along route, freeway noise
- Headlights from 101 are a hazard
- Noisy
- Light shield at path and better freeway separation
- Highway section unpleasant/unhealthy/noisy
- Smelly, noisy, less pretty

Other…. (4)
- Potential solution-overhang to US101
- Is it possible to make path through open space?
- Signage is very different- need more for Horse Hill
- Less known

Evaluation Criteria

Economic Impacts…. (8)
- Evaluate economic impacts to communities
- Evaluate impact routes would have on property values
- Add economic benefits
- Consider other ways money could be used
- Long term benefits
- Operations and maintenance costs
- Cost benefits of all routes including all operating and maintenance costs
- Cost of acquisition estimates

Green Benefits/Impacts…. (14)
- Cumulative impact in regards to entire north/south route
- Estimate potential to reduce auto traffic
- Evaluate potential to reduce greenhouse gases
- Add mode shift
- Sustainable
- Greenhouse gas benefit
- Compatible w/ public transit
- Mode shift
- Mode shift
- Mode shift
- Environmental impacts including climate change
- Environmental costs
- NMTPP-mode shift as criteria

Quality of Life Impacts….(3)
- Evaluate quality of life questions
- Evaluate enjoyment of each route
- Evaluate ability to affect/improve health

User Accommodation…. (9)
- Evaluate estimated number of users
- Evaluate estimated types of users
- Evaluate potential for emergency egress routes
- Ability to increase usage by different users
- Most popular for bike/ped
- Open to electrical bikes
- Propensity to use
- Survey of people using tunnel
- Address community of seniors

Other…. (8)
- Emergency access
- Bike parking
- Need for sound walls
- Connectivity to other modes
- Use study as evaluation criteria
- Property ownership/right of way
- Survey detail difficulties/issues
- Marin County - 8 criteria for bike paths
- Incorporate paradise overpass over 101 into study
Summary of Written Comments following Workshop #1

Summary of written and email comments received following March 4, 2009 public workshop, by April 1, 2009 comment deadline. Page numbers listed refer to comment location in the compiled comments document – available for review upon request to Marin County.

Alto Tunnel

Issues

- Far too costly to deserve allocation of funds. pg 1
- Clearly the most desirable route for bicyclists and pedestrians. pg 3
  - The only route that will result in significant transportation mode shift, is ADA accessible, usable by young children and by older adults, suitable for use by three-wheel cycles and by wheelchairs.
  - Well lit tunnels with video surveillance are typically crime and trouble free. Call boxes can be installed in the tunnel for additional security.
  - Existing alternate routes will remain available for anyone who is concerned about using the tunnel.
  - Has the highest initial cost. However, a properly constructed tunnel has a much longer useful life than the alternative routes, and the cost of reconstructing the tunnel can be amortized over many generations.
  - Reconstructing the tunnel as a bike and pedestrian route provides a significant public benefit while eliminating the risk of continuing collapse. The cost studies must consider the future expenses and liabilities associated with not reconstructing the tunnel.
  - The existing seepage at each end of the tunnel is a breeding ground for disease bearing mosquitoes. Tunnel improvements will include proper drainage and eliminate this hazard.
  - Alto Tunnel can be used as an alternative route for emergency vehicles in case of disaster.

- Cost would be too high. pg 4
- Counts conducted of bikers and walkers on Horse Hill and Camino Alto do not support a possible $50-70 million cost. pg 5
- Drainage issue. pg 5
- Provides flat and easy connection. pg 8
- The large numbers of recreational cyclists could now also have the option of a Sausalito-Mill Valley-Corte Madera-Larkspur-Larkspur ferry loop, bring tourism dollars to more cities. pg 8
- This route fits ALL the ideals of the Non Motorized Transportation Study. pg 10
- Cost is big obstacle pg 10
- If Marin is serious about getting large numbers of people to walk or ride the few miles between Corte Madera and Mill Valley, the Tunnel is the only choice. pg 14
- Maintaining security in the tunnel will be a nightmare. pg 17
- Dangerous because a route without auto traffic will be ridden aggressively by packs of bicyclists. pg 18
- The Alto Tunnel would be the ONLY way we would feel safe for our children to bike north of our neighborhood. pg 21
• Alto tunnel project will ease bike congestion on Camino Alto and make things safer for cyclists and motorists alike. pg 22
• The Alto Tunnel is clearly the safest, most level and most direct route for families. pg 24
• Using the Alto Tunnel would divert most of the bicycle traffic from both of these dangerous passages and reduce accidents and general animosity between motorists and cyclists in southern Marin. pg 26
• An engineering firm bid in excess of $300,000 to study the tunnel alone. Considering this study is budgeted for $250,000, the community is concerned that studying the tunnel route will use up all the resources. pg 30
• The tunnel runs under homes on both sides of the hill. These homeowners may need to be relocated and their homes purchased, which would be anywhere from ~$1.5M for one home to $5M+ if three homes had to be purchased. pg 30
• The rights-of-way, easements, etc. may require negotiation and purchase at considerable expense, but it is unlikely that the residents would be willing to sell them. pg 30
• Bringing all the bike traffic all the way down the multi-use path behind Edna Maguire will bring 1000s of people by causing safety and vandalism problems. pg 30
• We would not feel comfortable walking through a long, narrow tunnel that would have heavy two-way bike traffic through it, so this route would effectively serve only cyclists and no other users. pg 30
• Boring a collapsed tunnel in developed residential canyon neighborhood always comes with modern day problems of noise, traffic, earthquake protection, personal safety in addition to the normative problems involved in reconstruction. pg 34
• The analysis must show that a modification or re-engineering of the existing 101 corridor even when as costly as other corridor alternatives fails to link Mill Valley and Corte Madera to the established bicycle transportation plan. pg 34
• If a drive takes 5 mins and a bike commute takes 20-25 min over Horse Hill or Camino Alto, people aren’t going to change their ways and will just keep driving. pg 35
• With the upcoming re-opening of the Greenbrae-San Rafael Cal Park tunnel (and with evidence from many other rehabilitated tunnels across the U.S.), I hope that our community can learn important methods to ensure the safety of users and surrounding neighborhoods. pg 38
• If we are, as a society and community, going to effect real change and institute sustainable transportation practices that impact the environment less we must fully embrace opportunities such as these. pg 40
• It is a much safer route, no exhaust pollution, a much faster commute.
• It neatly avoids any traffic, provides a level grade that a bicyclist of any level could ride on, and is a direct route. pg 43
• While the cost of opening the tunnel is undoubtedly large, its ability to increase ridership is as large. There is no doubt in my mind that a path through the tunnel would be a huge success for pedestrians and cyclists alike. pg 51
• The railroad easement through our property is no longer valid and gaining access to the tunnel would require significant investment on the Town of Corte Madera, City of Mill Valley and/or Count of Marin. pg 58
• It is important to note that the existing yet closed Alto Tunnel will continue to deteriorate and collapse thereby threatening homes that are located on top of the tunnels. pg 59
• The Alto Tunnel route will serve bicyclists going to the most destinations in Marin including the Larkspur Ferry terminal. pg 59
• Marin's non-experienced bicycle riders deserve to be able to bike the length of Marin in the flatest and safest possible way. The extension of the this linear park all the way to Larkspur should be a goal as it would be a huge asset to the public of this county. pg 63
• The tunnel would encourage more local shopping. pg 65
• Tunnels On Trails: A Study Of 78 Tunnels On 36 Trails In The United States, by the Rails To Trails Conservancy and sponsored by the County of Marin, shows overwhelmingly that reopened tunnels are embraced by their communities pg 78
• Tunnel would provide quick access for folks that want to ride up to Phoenix Lake (on Mountain Bikes) and beyond. pg 79
• Remember the amount of commuters you will be getting off the highways is tiny compared to the large groups of recreational bikers who will dominate this route. pg 83

Suggestions
• Maintain Seasonal Wetlands (bobcat sighting last year, deer, Mallard duck pairings). Provide natural, maintained privacy barriers between path and homes. pg 7
• Route all drainage away from residences. pg 7
• No water fountains or stop areas (if this is to provide $$ for the town’s restaurants, let bicyclists arrive thirsty and tired). pg 7
• No exits onto Tunnel Lane (security and privacy reasons) pg 7
• Provide Dog Park area for pets and owners (a ‘bicycle freeway’ is no place for exercising dogs) pg 7
• Please include any problems with ownership, right of way, easements, etc. for the railroad right of way on both sides of the Alto Tunnel from Blithedale in Mill Valley to Tamalpais in Corte Madera. pg 27
• The study should include observation or other study of the behaviors and issues around the large numbers of bikers who use the Sausalito-MV multi-use path where it travels long Richardson Bay behind the Redwoods, MV Middle School and to the intersection of E. Blithedale. The stretch behind Edna of the path is used every day by young children walking and on bikes and scooters, moms with babies in strollers and people taking walks or walking dogs. These uses would not be compatible with the kind of bike traffic issues seen along Richardson Bay. pg 30
• Water drainage...there needs to be a good plan, because this is a heavy runoff area. The homeowners in this area should be protected. pg 37
• No Stop areas here (benches, water fountains, etc)....This is to be a bike path not a playground or park. pg 37
• Provide a natural privacy barrier between path and homes. pg 37
• Lighting should not change the current state of the natural habitat for Wildlife as well as homeowners. pg 37
• As this would greatly increase multi-use traffic from Blithedale Avenue north, we recommend high-visibility signs to increase awareness of safe speeds and "path etiquette" when passing horses, dogs, strollers, etc. pg 71
mode separation between cyclists and pedestrians should be provided from East Blithedale through the Alto Tunnel to Tamalpais Drive in Corte Madera on this section of the North South Greenway. pg 87

If funds can only be obtained for one tunnel, than it should be designed to accommodate a trolley and used by bikes and peds until the trolley line is put in place.

**Horse Hill Route**

**Issues**

- The route most likely to be used by the greatest number of people. It is also the most expeditious, economical routes to develop. pg 1

- This is the least direct and the least desirable route. This route will not generate significant transportation mode shift. pg 2
  - This route requires riding with dangerous vehicular traffic and is unsuitable for young children.
  - The bike path portion of the route is at the base of a large landslide area which will need to be stabilized in order to protect the path. Landslide stabilization will require grading wetlands.
  - Riding in traffic and next to the freeway is unpleasant.
  - This route is too steep for ADA use or for use by young children.
  - There is a dangerous blind curve at the base of the dip in the bike path near Casa Buena Dive where opposing bikes meet at high speed.
  - In order to maintain momentum for the coming climb, bikes typically do not stop at the stop sign on Lomita Drive at Shell Road. The stop signs should be on Shell Road rather than on Lomita Drive.
  - The freeway on-ramp at Casa Buena Drive is very dangerous for bicyclists.
  - The acute turn at Meadowsweet Drive and the bike path is dangerous.
  - The intersection at Tamalpais Drive is very busy, dangerous, and unpleasant.
  - The various paths and roads involved have a limited life, require frequent maintenance, and are subject to relocation in case of roadway or freeway widening.

- Easiest route to fix. pg 6
- Ugly Corridor with traffic noise. pg 6
- Circuitous and difficult to find. pg 8
- Steep. pg 8
- Already exists and is unpopular. pg 8
- The path along the freeway is unpleasant but is a Class 1 bikepath, wide and safe. pg 11
- These hills deter the very young, the old, and the vast ranks of riders in-between who would like to cycle between Corte Madera and Mill Valley pg 11
- From Meadowsweet to the path going south, one must execute a sharp right turn while coming off a steep left. pg 13
- At dusk or later, car headlights shine brightly into the cyclist's eyes making visibility ahead very poor. pg 13
- The onramp to 101 from Casa Buena crosses the cyclist's path of travel
at the bottom of a hill -- just when a cyclist is reaching top speed. pg 13

- At the bottom of the first stretch on the path, there is a blind curve where both northbound and southbound cyclists are going down hill. In other words, in both directions, cyclists are building up speed to make it up the next hill but the curve is blind. pg 13

- Least expensive to make improvements on pg 18

- Cyclists will always gravitate towards the more scenic, quiet, direct route over Camino Alto. Trying to make that route popular with cyclists will be throwing money away. pg 22

- Meadowswett route is more pleasant than Casa Buena route due to freeway noise and fumes. pg 32

- Riding along the highway-facing frontage road and bike route is a considerable detour for most bicyclists, who are heading from the bike path in Mill Valley to the Ross Valley. Numerous bicycle studies have shown that a detour that is more than one-quarter mile out of a rider's way is considered much less desirable than a more direct route. pg 42

- in these economically tight times the Horse Hill/101 path is the one that can very easily be made great. pg 43

- The Horse Hill route is reasonably peaceful until one gets close to the Tamalpais Avenue/Town Center area, where there is always traffic congestion pg 45

- Inadequate barrier between highway and path. pg 55

- The Horse Hill / Highway 101 frontage route is not feasible. All of the County and community effort to improve signage and educate people to use Horse Hill has not significantly increased its use. pg 59

- No matter how you look at it, the horse hill route is a confusing detour from the existing bike path system. pg 64

- I never see small children on Horse Hill, but I often see stray dogs, lost deer or other hazards. pg 65

- Again, no parent would ever allow their child to ride a bicycle on Tamalpais Drive as it approaches Highway 101, it is simply too busy of a through fare which connects the two major shopping malls in central Marin County. Furthermore, even if one could traverse safely through the Tamalpais Dr / Madera Blvd congestion, continuing on Casa Buena Dr can be physically and mentally challenging, due to the elevation changes and the adjacent freeway traffic and onramp to 101 South. pg 85

Suggestions

- Please focus attention, funding and improvement on Routes A or A1, which children and everyday people will be able to use. pg 1

- In light of the fact that the weakest part of this route is the narrow bike/ped path immediately adjacent to the freeway and the steep, inconvenient and unsafe hilly streets on either end of it; replacing this section with a safer, easier, more pleasant route could dramatically increase the value of the Horse Hill Route. pg 4

- Some "tweaking" (improved signage, bicycle lane striping and perhaps minor civil work) could be made more attractive to cyclists and pedestrians. It is the most cost effective option. pg 11

- Repair/Repave Lomita

- Add lights along CA/CM, tunnel and Meadowswett

- Improve signage all locations
• Ways to flatten and improve the path where needed to a Class A standard where it runs along Casa Buena Drive or perhaps on Meadowsweet (?) should be studied. pg 29
• Planting trees and landscaping would separate the path from the freeway improving the aesthetics and providing shade. pg 29
• The Lomita entrance can be made safer for bikers, as well as the intersection mid-way and the Corte Madera end with signaling and engineering improvements. pg 29
• If the multi-use path is built to travel along the stretch of Lomita by Horse Hill, it would provide a safe route for the many families who reside in the Alto neighborhood who currently can not bike or walk safely along Lomita to Edna Maguire Elementary and nearby schools. pg 29
• Access from the Sausalito-MV path down to Ashford has been put forward as another logical route which would take the “bike freeway” (MCBC term) along streets that already exist. Ashford to Dorsett to the area allotted behind the new 101 exit wall for a path and then connecting to the Horse Hill path would make use of existing streets and right-of-ways which have relatively little traffic. This route would not compromise security or disrupt the four schools. pg 29
• Dangerous because of driveways with roadway-entering vehicles on the Corte Madera side. pg 38
• First, the peak would have to be reduced to match the grade of the freeway. Second, the steep decline and ascent at the north end needs to be eliminated. Ideally, this could be done by closing the non-conforming freeway entrance at Meadow Valley Rd. and using the on-lane for a barrier-protected path. That would still leave a hill going north that prevents the continuation to be at the freeway grade. pg 51
• The recently installed stop sign for southbound bicyclists at the Alto Hill bike path-to-Lomita Drive transition is a good attempt to mitigate the dangers of merging paths and the blind downhill corner just below it. However many cyclists do not stop at the stop sign or slow appropriately for the blind corner, unaware that this is a busy section. Appropriate signage or slowing techniques (Bott's dots?) should be considered. pg 71
• Widen and improve the north shoulder; clarify traffic patterns at schools to allow a safe zone for non-motorized users, post speed limit signs along the "high speed section" (along pasture fence). pg 71
• On the House Hill route, direct the pathway around the Edna Maguire School parking lot and improve the dangerous stop signed intersection at the bottom of the hill on the south side of the ridge. Add “sharrow” signs to the pavement. pg 89

Camino Alto/Corte Madera Ave. Route

Issues
• Camino Alto is hazardous. pg1
• When going northbound on CM Ave there is a new light at the intersection of CM Ave and Tamalpais (the first light you hit going north after the downhill section). This light does not appear to be sensitive to cyclists so you have to jump up on the curb to hit the button up there when there are no cars ahead of you. pg1
• This route is unsuitable for ADA use. pg 3
2. Steep grades and heavy vehicular traffic make this route unsuitable for ADA use, for young children, and for users of three-wheel cycles or wheelchairs.
3. Riding or walking with vehicular traffic is dangerous and unpleasant.
4. The road is narrow, and widening the road will result in tree removal and significant environmental damage.
5. The road crosses landslides which result in recurring longitudinal pavement cracks that are dangerous for cyclists.
6. Widening the road to create bike climbing lanes or a separate bike path will require expensive retaining walls, buttresses, or elevated structures.
7. This route requires bikes to make dangerous left turns at very busy intersections at each end in order to connect with existing bike paths.
8. Athletic cyclists will continue to use this route regardless of alternate routes, but it is too steep and dangerous for non-athletic cyclists, and will not result in a significant transportation mode shift.
9. Because of the steep and unstable terrain, this route will require expensive ongoing maintenance, and periodic reconstruction which must be considered in the cost analysis.

- Direct connection to Magnolia pg 9
- Relatively (but not that great) direct connection to Mill Valley bike path pg 9
- Improvements would aid active recreational cyclists pg 9
- Steep pg 10
- Narrow pg 10
- Lots of traffic pg 10
- A difficult route to travel by bike because of a lack of visibility around winding turns. pg 17
- A very difficult route to walk because it is too narrow and the cars take up the roadway and the bikes take up the shoulders. pg 17
- Frustrating for motorists when trying to pass cyclists who have no choice but to ride in the roadway due to the absence of any bike lane. pg 26
- Widening would necessitate removal of trees and shrubs, which make Marin County what it is. pg 41
- Widening shoulders doesn’t address the fact that most of the cyclist accidents here are solo, i.e. caused by cyclists losing control at high speed pg 52
- there are many driveway entrances on Camino Alto that appear to be blind to oncoming traffic, so cars have to "nose out" to see - directly into the right hand margin of the lane that experiences the most bike use. pg 55
- Climbing from Corte Madera is hazardous because the space for bikes is so small.

Suggestions
- This route exists and I doubt it can be improved. It seems the goal is to provide improvements. pg 10
- No funds should be spent here except on signage. pg 10
- Chapman is safer than Camino Alto. Consider Chapman in study. pg 12
• Repair asphalt on Camino Alto/CM ave. pg 14
• Widen/add lanes. pg 14
• Improve/alter meadowsweet access to Alto. pg 14
• Add striping and fog line to Alto. pg 14
• Improve drainage on CA and CM ave. pg14
• Repaving and maintaining the pavement on Camino Alto/Corte Madera Avenue would go a long way towards improving safety pg 18
• Camino Alto road route can be made somewhat safer with better signage, updated painting of road lines, and even a few signs about cars passing bikes, and bikes riding in single file. pg 43
• No improvements to Camino Alto will ever make this a safe route given the amount of motor vehicle traffic. pg 59
• We recommend "Horse Crossing" signs be placed where the Bob Middagh Trail crosses Camino Alto to the Alto Fire Road. pg 72
• Mill Valley, Corte Madera, and the County should review the improvements that are being made to Los Ranchitos in San Rafael. Camino Alto and Los Ranchitos are similar projects. Camino Alto should be widened on the uphill side by 5’, at least, with a Class II Bike Lane. Ideally, there should be a minimum 3’ Class II Bike Lane for cyclists in the downhill direction. (The Los Ranchitos project succeeded to build 5’ Class II Bike Lanes on both the uphill and downhill directions for most of the length of Los Ranchitos.), pg 86

Other suggestions
• Study other routes pg 17
• The East Blithedale route is quite wide with a few pinch points that are easily corrected, painted bike lanes seem feasible. The CM grade is quite wide on the Mill Valley side, not so on the CM side but the alternative to go through the neighborhoods from the peak to CM is a nice alternative for slower pace riding and the less experienced. I’m an avid, bike commuter to the city, I like most city riders, a growing population, gravitate towards wider streets with established marked bike ways. These sorts of improvements are low cost, and are a quick benefit for both existing corridors.
• While the route over Collins Summit could offer remarkable access to the Paradise area of East Corte Madera and the Strawberry area of Mill Valley with the installation of a east-west bike/ped over-crossing, such a non-motorized transportation infrastructure element is out-of-scope for the current study.
• Also, studying the Alto Tunnel option should include a conversion use study - if a safer and more direct route exists, then more residents of the Twin Cities, Mill Valley, and surrounding areas would definitely opt for it instead of their cars. The study should therefore take a look at side benefits such as lower carbon emissions, decreased traffic congestion, more new and incremental commercial activity in the tunnel portal areas (how great would it be to WALK or ride to Maria Maria restaurant from Corte Madera, and then home again, after having a nice dinner…) pg 55
Technical Advisory Committee Meeting #1 Notes

**Date/Time:** Tuesday December 16, 2008, 2:00 p.m.

**Location:** Mill Valley Community Center, Tamalpais Room, 180 Camino Alto, Mill Valley

**Attendees:**

- **TAC Members**
  - Jill Barnes, Senior Engineer, City of Mill Valley
  - Dan Dawson, Principal Transportation Planner, County of Marin DPW
  - Debra Sue Johnson, PW Manager, Town Of Corte Madera
  - Rob Ruiz, Chief of Parks, for Ed Hulme, Superintendent, County of Marin Parks and Open Space
  - Bill Whitney, Assoc. Project Delivery Manager, Transportation Authority of Marin

- **Project Manager**
  - Carey Lando, Senior Transportation Planner, County of Marin DPW

- **Consultants**
  - Randy Anderson – Alta/LandPeople, Project Manager/PIC
  - Ian Roth, Marin County Outreach Coordinator, Alta/LandPeople
  - Victor Romero, P.E. Tunnel Engineer, Jacobs Associates
  - Blake Rothfuss, P.E. Associate, Tunnel Evaluation Team Leader, Jacobs Associates

**Meeting objectives:**

- Introduce TAC and consultant team members; establish communication channels and protocols;
- Review project goals and objectives - Identify state and federal required elements, applicable design and planning standards, any hot buttons and how to approach, project schedule and milestones;
- Collect background and base information, or identify steps to obtain;
- Review steps and responsibilities to prepare for next TAC meeting and first public meeting.

**Notes:**

**Introductions**

- Attendees introduced themselves
- Carey reviewed role of TAC; to make sure we have accurate, current info.
- Carey review meeting objectives.

**Review Work Plan**

- Randy reviewed the overall Study scope, the three study alignments, and the anticipated product format and content.
- All three alignments will be studied, preliminary improvement plans prepared, evaluated based on cost and other criteria to be confirmed.
- Preferred alternative not likely selected. Decision would be up to agencies how/if to proceed.
- All communications through Carey – there can be joint briefings for agency officials and managers if desired.
Comments:
- Make sure we are clear that we are not making a recommendation.
- Who will make the decision?
- Carey – Will be presented to Board of Supervisors. All communication will be through Carey.
- There will be only 2 public input opportunities?
- Carey – there will also be presentation to the Bd of Sups.
- Randy – Will have complete record of comments, response.
- County PW Director could make a recommendation to the board too.
- Carey – yes
- Carey – Plan will have detail for all three alternatives.

Review background documents and base info needed
- Randy review the data needed for the study – particularly detail of roads under trees such as Corte Madera Ave/Camino Alto, environmental documents.

Comments:
1. Mill Valley is looking for SR2S environmental doc (forwarded later).
2. TAM might have Caltrans off-ramp project PSR.
3. TAM will pass along Marin Ferry info in a couple of weeks, also bike and ped counts for Twin Cities/Greenbrae. project
4. Corte Madera has hi-res aerials w/housing footprints – Ian will pick up disk. Newest bike plan adopted in Sept. – on line in past week.
5. No current projects affecting the Study Area are known.
6. Talk w/ public safety officials – need contacts.
7. Police, contact Sean Smith; Fire, contact Rodger Sprain. Noted serious accident, lawsuit.
8. Unpaved trail through open space, “Alto Bowl Open Space Trail” may be raised as an alternative (out of Study scope).

Organization and preparation for next TAC and upcoming public meetings
- Randy described the presentation – an overview of alignments, opportunities, constraints, design concepts; breakout groups focused on tunnel, Camino Alto, Horse Hill/traffic issues.

Comments:
1. Emphasize separate alternatives from beginning.
2. Will capture all comments and level of concern.
3. Website set up on walk/bike marin.org.
4. Breakout group concept – could show video of ex bike trail tunnel – unlit, unventilated – minimal design?
6. Show a high level of improvement as example per CalPark tunnel, I-80 tunnel in Seattle?
7. Investigate maintenance vehicle requirements – sweeping, etc.
8. CalPark tunnel has bath fan for ventilation. May need more.
9. Have a full size outline of the Alto tunnel size.
10. Could look at Puerto Suelo tunnel as example or look at N. Portal of Alta – could video inside.
11. Tunnel would need to allow access for all types of users.
12. Does the Study include a ped path along Camino Alto? Randy – Yes, but recognizing the significant constraints.

Summarize meeting input, review next steps

- Randy/team members will follow up on data leads and contacts. January will be intense reconnaissance and analysis to prepare for late February Public Meeting.
- Late January or early February TAC meeting will be “dry run” for the public meeting.
- In approximately May a draft Study/preliminary design and cost product will be reviewed by the TAC, revised prior to public presentation.
- Important for all to stress that project is a study, not a plan, and that all communication go through Carey.

The meeting concluded at approximately 3:30 pm.
Prepared by Randy Anderson
Technical Advisory Committee Meeting #2 Notes

Date/Time: Tuesday February 17 at 2:30 pm
Location: Corte Madera Council Chambers, 300 Tamalpais Drive, Corte Madera
Attendees:

TAC Members
- Jill Barnes, Senior Engineer, City of Mill Valley
- Dan Dawson, Principal Transportation Planner, County of Marin DPW (representing Project Manager Carey Lando, who was out sick)
- Ed Hulme, Superintendent, County of Marin Parks and Open Space
- Bill Whitney, Assoc. Project Delivery Manager, Transportation Authority of Marin

Consultants
- Randy Anderson – Alta/LandPeople, Project Manager/PIC
- Blake Rothfuss, P.E. Associate, Tunnel Evaluation Team Leader, Jacobs Associates
- David Parisi, Parisi and Associates, Traffic Engineer

Meeting objectives:
- Refine or confirm approach for public workshop;
- Review and refine route evaluation criteria;
- Review progress on route inventory and evaluation;

Agenda Items

2. Review meeting notes from 12/16:
   - There were no comments

3. Review script and presentation outline for public workshop:
   - Should have shorter Open House portion of the agenda
     - TAC members might be considered biased as facilitators.
     - Have an Intro w/ impetus for the study - funding opportunities, both city councils passed motions to do feasibility study
     - Clarify what we will do with input
     - Have facilitator cover each route: Alto, Horse Hill, and Camino Alto
     - Overview map is missing part of the Sandra Marker trail alignment on former RR line
     - Route should follow SM trail, an existing Class 1 trail. Tunnel Vista trail
     - Class 2 route doesn’t exist N. of Corte Madera
     - Corte Madera town label is in Larkspur
     - Meadowsweet & Casa Buena are not signed as Class 3 routes (they are designated routes on map only)
     - Intro should show 3 corridors, then existing bike network for context.
   - Methodology slide should say:
     - “Public review and input,”
     - Agreed-upon criteria with public input
     - Separate process, delete “if at all”
• Finalization of Alternative Study Report
• Report goes to DPW, decision making parties for information
• Technical feasibility study, not a political feasibility study.
  ▪ Include a profile of each route, length from pt A to pt B
  ▪ Horse Hill Route - Remove 1st constraint bullet
  ▪ City route sends users along Lomita to Ashford to Meadow (but the designated study route goes through school to path). Don’t show opps/constr but mention during photos
  ▪ Powerpoint organization:
    • Show should be more of a pt A to B virtual tour
    • Use full screen images
    • List conditions
    • Do Alto Tunnel last (it’s already designated as Alt B)
    • Describe maps-parcels etc
    • Fix Blithedale spelling
    • Traffic conditions-integrate into overall pres. - David has collision info
    • Show reported crashes before criteria, include existing usage on slide

4. Review specific evaluation criteria and methods:
  ▪ Mention ADA/sidewalks
  ▪ Call them Potential Criteria

5. Review inventory and evaluation progress:
  ▪ Randy summarized progress on technical reports:
    • All routes inventoried, mapped
    • Traffic counts and model done – being reviewed and explained
    • Tunnel and geologic evaluation internal draft completed
    • RR row research – have good set of base/background data
    • Drainage studies – in progress
    • Emergency access meeting and requirements, input complete
    • Traffic and collision data collected
    • Environmental issues – preliminary findings (should be specifically highlighted – always a concern in Marin County

6. Summarize meeting input, review next steps
  ▪ Have deadline for comments
  ▪ and anonymous workshop comment letters
  ▪ Not specific response
  ▪ Clarify that Study product would be provided- no action needed or expected (as part of project scope)
  ▪ Any info on use or market for use by people with mobility issues? (contact the County’s ADA Coordinator)
  ▪ Dan, Bill and David may act as facilitators or recorders at the workshop
  ▪ There should be separate facilitator and recorder for each station
The meeting concluded at approximately 4:00 pm.

Prepared by Randy Anderson
Attendees:

TAC Members
- Jill Barnes, Senior Engineer, City of Mill Valley
- Dan Dawson, Principal Transportation Planner, County of Marin DPW
- Ed Hulme, Superintendent, County of Marin Parks and Open Space
- Bill Whitney, Assoc. Project Delivery Manager, Transportation Authority of Marin

Project Manager
- Carey Lando, Senior Transportation Planner, County of Marin DPW

Consultants
- Randy Anderson – Alta/LandPeople, Project Manager/PIC
- Blake Rothfuss, P.E. Associate, Tunnel Evaluation Team Leader, Jacobs Associates
- David Parisi, Parisi and Associates, Traffic Engineer

Meeting objectives:
- Review key issues and info raised by public;
- Review draft Technical Study products – do they address scope, issues?
- Review/ refine/confirm preliminary improvement concepts
  - Are improvement concepts appropriate for setting, project objectives?
  - Agree on what will be designed, evaluated, estimated in more detail.

Agenda Items:

7. Review summary of comments from March 4 Public Workshop and follow-up
   - Wide range of comments- polarized around the tunnel; generally we have responded in the study and will in the evaluation. Not prepared to respond to the Homeowners detailed access research claims.

   2. Geotechnical Study (Jacobs – Attachment A)
   3. Tunnel Feasibility Analysis/Hazardous Materials Determination (Jacobs – Attachment B)
   4. Drainage Analysis (Nolte – Attachment C)
   5. Environmental Analysis, biological and cultural resources (LSA – Attachment D)

   - Comments to be forwarded through Carey

   Alta/ LandPeople presented a PowerPoint to highlight potential improvements for each route. TAC comments on segment-by-segment review of routes:

   General
   - Bill - use non-motorized funding to look into right of access issue

   Horse Hill Route (starting at Edna Magurie School)

   Segment 2 – From Edna Maguire School along Lomita to Horse Hill Bike path
Sidewalks not needed. Rural pathway OK, but not DG binder, street side path would tend to be parked on.

- Centerline striping, pavement repairs, bike lanes-uphill needed most.
- School area should be accommodating lowest level of users - kids
- Edna Maguire: check driveway/crosswalk/bike directionality
- School community has requested sidewalk (not DG) formalized in SR2S-at least to Shell. City tends not to do centerline striping unless there is conflict. Tends to facilitate speed.
- Potentially AC path-not AC curb. Have grade separation
- Not change stop sign at Shell - helps slow bikes down
- Sidewalks are good
- Bike lanes, or striped shoulders (1 line), can occur w/o center stripe where you have narrow ROW.
- Has seen this done in Contra Costa Co.
- Sharrows have been used by the City on Meadow & Miller

Segment 3 – Class I path running from end of Lomita along hwy 101 to Meadowsweet Dr.

- Plexiglass barrier is expensive
- K rail could also act as retaining wall.
- Bump fence out to widen-got narrowed when Caltrans did project that narrowed south end
- Use paddles that block headlights-put on top of K rail

Segment 4 – Casey Buena Drive from northern end of Horse Hill Path to Roberts Avenue

- Meadow Valley- use 3 way stop
- Traffic circle too tight here
- At Meadowsweet/Casa Buena, bump guard rail on SW approx 4’ to west to reduce turn radius
- Open space label incorrect in this area

Segment 5 – From intersection with the northern end of Horse Hill Path and Meadowsweet Drive along Meadowsweet Drive to Sanford Street

- Neighbors fought prior Meadowsweet widening proposal
- Meadowsweet needs white striping rather than red
- County. could use matting (as per White’s Hill) to add a couple of feet
- Meet with Corte Madera Town Mgr about these and other improvements.
- Add C.L. striping on some curves
- Use sharrows

Segment 6 – From Tamalpais Drive along along Madera Blvd to Wornum Wy. Class II bike lanes

- ADA upgrade to sidewalk, driveways required? Depends on scope of improvements.
- Add sharrow

Alto Tunnel Route (incl. E.Blithedate intersection improvements)

Segment 1

- Bike on-ramp on S. side - have one at HS
- Raise headwall and railing at creek for safety
- Have a curb ramp for bikes on the N. side (if tunnel is opened)
- Pull stop bar back-base crossing parallel with path
- No wouldn’t want to move b/c would be longer for pedestrians
- Thinks intersection works well now
- Would not like sharrows on E. Blithedale because its not a bike route
- They are to facilitate connection from pathway to Camino Alto
- Ped/Bike Bridge in future if tunnel is opened

**Segment 7** – Railroad bed running from Vasco Court to Alto Tunnel
- Like double paths concept
- Shoulders could be maintenance challenge
- Narrow bike path to 8’? - Ed would like 10’
- Separate path facilitates transportation
- Buried culvert rather than ditch could allow more room for path

**Segment 8** - Alto Tunnel
- 13’ clear guaranteed in tunnel, could be 14’
- Show a cross slope to one side
- Cal Park tunnel has no line down middle – is 12’
- Don’t use C.L. striping in tunnel-show as shared space—don’t use center line stripe on paths
- Consider smaller emergency turnarounds (e.g. hammerhead or shunt). To be taken back to public safety - Would allow us to get closer
- Cal Park tunnel-wanted full access for fire, police-side by side
- Hydrants-want on portal side
- In tunnel-use a “leaky wire” rather than a repeater
- Take sprinkler out. What’s going to burn in a concrete tunnel?
- Use standard pipe connections every 200’
- A maintenance vehicle could catch on fire. Ventilation closed circuit monitors?

**Segment 9** – Northern end of Alto Tunnel to Tamalpais Drive
- No pervious pavement – it increases maintenance cost and eventually fills with debris
- There are slope failures that have created claims on north side. Placement of path can help avoid these areas
- Businesses want parking on Montecito for customers accessing across crosswalk to rt.
- Need wayfinding on N side along existing Sandra Marker Trail
- Keeping bikes on Montecito is a better option- same as alignment on N side
- See C.M’s plans for plaza

*Camino Alto/Corte Madera Avenue Route*

**Segment 12** – Camino Alto from E. Blithedale to Corte Madera City Limit
- Do people really walk over? (yes – some do)
- 9-15’ shoulder width would be overkill. People cross at OS gate at City limits.
- Climbing lane would be adequate
- Narrow 14’ lanes to 12’
- Existing path not likely to be politically feasible to remove
Class II bike lanes on both sides is in MV bike plan; serves kids riding to school, following parents
Bike lanes on downhill side a bad idea. Bikes won’t stay in bike lane due to speed

Segment 13 – From Mill Valley/Corte Madera city limit to Redwood Avenue
Back in parking seems problematic
No example of back in parking in County but proposed along Miller. It is being proposed/implemented across nation (e.g. Santa Rosa) and has shown to be much safer

10. Summarize meeting input, review next steps
   • These comments will be reflected in proposed improvement concepts to be reviewed by the TAC in August prior to public review
   • A separate meeting will be set w/ Corte Madera Town Manager to obtain input in light of Debra Sue Johnson’s departure from the Town.
   • A second meeting with Public Safety staff will be held to review alternative tunnel access and other design concepts.

The meeting concluded at approximately 3:30 pm.
Prepared by Randy Anderson
Technical Advisory Committee Meeting #4 Notes

Date/Time: Tuesday November 17, 2009, 2:00 pm – 3:30 pm
Location: Mill Valley Community Center, Tamalpais Room, 180 Camino Alto, Mill Valley
Attendees:

TAC Members

- Dan Dawson, Principal Transportation Planner, County of Marin DPW
- Dan Ring, PW Director, Town Of Corte Madera
- Ed Hulme, Superintendent, County of Marin Parks and Open Space
- Bill Whitney, Assoc. Project Delivery Manager, Transportation Authority of Marin

Project Manager

- Carey Lando, Senior Transportation Planner, County of Marin DPW

Consultants

- Randy Anderson – Alta/LandPeople, Project Manager/PIC

Meeting objectives:

- Review draft Study Report and technical/background reports – identify edits needed for public presentation.
- Discuss December public workshop – agree on basic objectives, format, agenda

1. Review admin. draft Study Report and Technical Studies

- Correct alignment – Lomita bypass (Ashford on Cloverleaf)
- Horse Hill Route – show/label bike/ped lane on Casa Buena
  - Move white lines
  - Is there room?
  - Dan – need 13’ for bike
- Need a disclaimer regarding ROW width
- Bill will get details and costs for TAM study
- Segment 11 show E. Blithedale crossing
- Alternative to going under E. Blithedale
- Powerpoint – talk about tunnel improvement and tunnel safety measures
- Correct Redwood crossing/segment #
- Camino Alto – Have cross section that shows bike lanes on each side
  - Cyclists are required by law to use it
- Put in exec summary why there are ped improvements in some sections and not others
- Camino Alto footer says Alto tunnel route
- Seg 13A - Corte Madera Ave: climbing lane should be 4’ wide
- Chapman – top of hill need bike lanes on each side
- Smooth out cross sections
- Have evaluations after each cross section
- Evaluation – take word “benefits” out of Alto Tunnel
- Carey will send Caltrans agreement for HH path to Bill
- User/Public Safety
- Tunnel should be excellent because of separation of traffic
  - Add separate criteria – safety in a long tunnel?
- Bikeway connections
  - Connects to N/S greenway also applies to Alto Tunnel
- Peds – Alto tunnel
  - Take out “aesthetics”
- Add high visibility crosswalk at Vasco Court
- Cost estimate is too complicated
  - Cost/benefit ratio based on users/construction cost/maintenance cost
- Have opportunity for written comment

2. Discuss December workshop – approach, format agenda
   - Release of report – 2 weeks before
   - Presentations to town councils
     - Take heat off of them
   - Informal briefings
   - BD won’t want to be the “first step” for controversial public document

3. Summarized meeting input, reviewed next steps, schedule

The meeting concluded at approximately 3:30 pm.
Prepared by Randy Anderson