Bicycle Advisory Committee Meeting
February 10, 2020

TCAA - Milestone 1

Motion: The Bicycle Committee recommend that bicycle on-board storage should be a fundamental requirement of any transit system, and recommend the list of Equity considerations as provided in a hand-out at the meeting by member Rick Hyman.

The handout referenced in the motion states the following recommendations listed as 1,2,3 below.

1. “Bicycle capacity on transit/day” should include:
   - Ample room on board for bikes
   - Some room for recumbent, cargo and other non-common size bikes
   - Ability to increase room for bikes if demand warrants
   - No bumping bikes on board for other users
   - Security for bikes on board; bikes viewable to owners who are on board
   - No extra charge to bring a bike on board
   - No extra ticket, permit or license to bring bike on board
   - No time restrictions for bikes (bikes can always be on transit)

2. “Effects on Rail Trail” should include:
   - Passenger waiting and loading areas designed not to impede through travel on the rail trail
   - Transit vehicle type & operation that allows bikes (path) as close to transit corridor as possible (all else being equal)
   - Transit vehicle type & operation that requires least vertical separate with bike/ped path (all else being equal)
   - Transit vehicle type & operation with least interference with cyclists and pedestrian crossings of transit corridor (all else being equal)
   - Ancillary and support facilities for transit (e.g., sidings, signs, signals, supports) located away from and not interfering with use of rail trail

3. Add measure: “Bicycle access to transit” including:
   - Easy on/off for bringing bikes on board
   - Easy access to storage on board (no lifting required)
• Comfortable accommodations at platforms and stations for passengers traveling with their bikes
• Secure and ample bike storage at waiting areas for riders who prefer not to bring their bikes on board
• Convenient, safe and signed bikeways leading to and from boarding areas (if transit starts before the rail-trail is constructed in the area in question or if transit deviates off of the current rail corridor)
• Support items for bikes at waiting areas or on board, such as air, drinking water

Input on other Metrics

Economy

• Fiscally feasible
  o Show costs per rider for capital costs as well as for O&M
  o Consider taking ridership over a length of time that is the life of the project (20 – 30 or more years) to get cost per rider
  o Consider including cost per passenger mile
  o Consider if ridership increases over time what O&M costs/ rider will be

Equity

• Promote Active Transportation
  o Change bicycle capacity on transit/day to a measure that takes into consideration capacity of the train – bicycle capacity/trail, bicycle capacity/peak hour, bicycle capacity/total people capacity
  o 3 bikes on bus are not enough, Caltrans has room for many bikes but there is still a limit
  o An alternative that has not limit on the number of bicycles that can get on transit is preferred. How design so that alternatives can be flexible to support bikes or people on a first come/first serve basis
  o What exactly is being considered in the Screening criteria (H, M, L) for the Active Transportation metric?
  o For effects on rail trail - Consider if there are any alternatives that would make it easier to build the trail or create a better experience. i.e. wider, no fencing etc...
  o Consider if there will be ancillary facilities for transit that will get in the way of the trail?
  o Add metric here for “Bicycle access to transit” with consideration for easy on/off – see scanned comments from Hyman
  o See additional comments in document from Rick Hyman
Important that the transit option accommodate bikes

- Provide accessible and equitable...
  - Add metric to show which alternative could provide “independent” physical access for all users – mobile devices, bikes, E-bikes
  - Revise transit vehicle miles traveled to include capacity of transit vehicle – transit passenger capacity miles or capacity during peak periods
  - Travel time/reliability – indicate this would be evaluated for peak periods
  - Include metric that considers flexibility/adaptability to increase capacity

Environment

- Transit Ridership
  - Ridership should vary with frequency of service
  - plug ins for ebikes at stations

Other

- Technical Feasibility
  - Metric that assesses how well the system can adapt to future technology changes

Alternatives

- Consider additional connector services – such as gondola to Cabrillo or UCSC, bike/ped bridge to Cabrillo
- Connectors – pedi-cabs, bike vans with trailer to carry bikes like UCSC

Stations

- Add Almar location for consideration
- Shift 41st ave to 38th ave
- Station at Manresa State Beach
- Station locations – overlay population density maps, employment density
BAC 2-10-20

Re: TCAA - Comments on the “Analysis Framework” and the “Initial List of Alternatives” The following comments refer to specific components of the ‘Analysis Framework’:

1. **Regarding the “Supports Economy” section we offer the following:**
   1. Add a new Evaluation Metric: “Transit Oriented Development” with Description: “To what extent will the project increase housing and small business development near the ROW?” with Phase 1 & 2 Performance Measure: “Letter Graded Score” comparing alternatives to one another.

2. **Regarding the “Supports Equity” section we offer the following:**
   1. Under the part titled “Promote Active Transportation”, we recommend adding “Bicycle capacity per transit vehicle or per trainset” or replace “Bicycle capacity on transit/day” to the Phase 2 Performance Measures. Many cyclists are currently discouraged from using public transit as they know if all three available slots on the front rack of a bus are taken, they will have to wait for the next bus.

   Under the part titled “Promote Active Transportation”, we recommend adding “Ease of loading a bicycle on to or into the vehicle” to the Phase 2 Performance Measures allowing a comparison of how easy it is to load a bicycle with a Phase 1 & 2 Performance Measure: “Letter Graded Score” comparing alternatives to one another.

3. Under the part titled “Provide accessible and equitable…”, we recommend adding “accessibility and ease of vehicle entry/exit use for users with physical or mental disabilities” to the Phase 2 Performance Measures.

4. Under the part titled “Provide accessible and equitable…” we recommend adding “Carrying capacity for wheelchairs, scooters and other mobility equipment per vehicle or trainset” to the Phase 2 Performance Measures.

5. Under the part titled “Provide accessible and equitable…” we recommend changing the Phase 2 Performance Measure ‘Transit vehicle miles traveled’ to ‘Passenger Miles per Transit Vehicle Mile’. Simply comparing the number of transit vehicle miles traveled does not adequately describe the effectiveness of the proposed project in serving the maximum number of persons possible. For example, miles traveled by an empty vehicle would count under the former measure but an empty vehicle serves no one.

6. Under the part titled “Offer reliable and efficient…” we recommend modifying the description for ‘Travel Time’ to read “Does project improve transit travel times during peak commuting periods.” and modify the Phase 2 Performance Measure “Transit Travel Time” to read “Transit Travel Time during morning peak commuting periods” and to include “Transit Travel Time during afternoon/evening peak commuting periods”. Comparing alternatives by average transit travel time is not nearly as important as travel times during peak travel times, especially during the morning peak commute when people are going to work.

3. **Regarding the “Supports Environment” section we offer the following:**
   1. We recommend adding a new evaluation metric titled “Public Transit Mode Share” with Description: “To what extent will the project promote use of public transit” with Performance Measure: “County-wide public transit mode share”. Most everyone agrees the most effective way to reduce GHG emissions that are causing global warming is to reduce automobile use and increase use of public transit. This metric directly measures the effectiveness of each alternative under consideration.
2. We recommend adding a new evaluation metric titled “Life Cycle Emissions” with Description: “To what extent will the vehicle type impact landfill” with Performance Measure: “Vehicle Useful Service Life”. Choosing vehicles with longer useful service lives not only reduces landfill impacts but also reduces the embedded energy and resources used to build the vehicle in the first place.

3. Given the fact we are in a global climate emergency and improving our public transit system is critical to reducing our collective GHG emissions, we recommend adding a new evaluation metric titled “Climate Emergency Response” with Description: “How fast can the proposed project be operational” with Performance Measure: “Years from decision to operational system”

4. Regarding the “Other Goals” section we offer the following:
   1. We recommend adding a new evaluation metric titled “Desirability” with Description: “To what extent will the proposed transit type attract and retain new public transit users” with a Phase 2 Performance Measure: “Potential Ridership” Graded Score comparing alternatives to one another.
   
   2. We recommend adding a new evaluation metric titled “Land Use” with Description: “To what extent does the project promote compact land development patterns” with Phase 1 & 2 Performance Measures: “Letter Graded Score” comparing alternatives to one another.

**Document Titled: Initial List of Alternatives**

1. The study appears to be focused on smaller capacity vehicles. Because larger vehicles including ‘train-sets’, carrying more people are more energy efficient and will move more people during peak travel times when demand is highest, we recommend adding the following sub-categories to the “Form Factor and Capacity…” section:
   - 101-150 passengers seated/standing
   - 151-200 passengers seated/standing
   - 201-250 passengers seated/standing
   - 251-300 passengers seated/standing
   - 301-400 passengers seated/standing

2. Because our community already has one of the highest bicycling mode share figures in the country, the capacity of vehicles / train-sets to carry bicycles should be considered. Accordingly, we recommend adding a new section titled “Bicycle or other wheeled personal equipment capacity per vehicle” with the following sub-categories:
   - 0-4 bicycles or equivalent
   - 5-10 bicycles or equivalent
   - 11-20 bicycles or equivalent
   - 21-30 bicycles or equivalent
   - 31-40 bicycles or equivalent

3. Because accessibility and equity are so important in public transportation that works for everyone, we recommend adding a new section titled “Wheelchair, Scooter or similar mobility device capacity per vehicle” with the following sub-categories:
   - 0-2 wheelchairs or equivalent
   - 3-5 wheelchairs or equivalent
Elderly & Disabled Technical Advisory Committee  
February 11, 2020 

Motion: The E&DTAC support an alternative that provides high carrying capacity for many mobility devices (at least 4 with flexible seating alternatives), level barrier free boarding and disembarking, zero emissions, easy fare structure and payment, easy to add or subtract cars, and safe places to wait in shelters.

- Provides accessible and equitable...
  - Independent level boarding
  - How find and access station platforms for visually impaired
  - Metric that assesses how mobility devices will be accommodated in the transit readily, flexibly
  - Travel time during peak periods - vehicle getting off ROW would impact reliability/travel time
  - Metric that assess how alternatives provide access to development for seniors or other transportation disadvantaged populations
  - Change language to “Does project provide universal access to all ages and abilities?”
  - Change PM to “location relative to transportation disadvantaged populations?”
  - Access to senior centers – land use changes/density would benefit seniors, shouldn’t take away stations for travel time reduction if they provide senior center access