

Response to comments received from XCAP on Draft Rail Fact Sheets

XCAP Comment	AECOM Response
Overall: They look amazing! I really appreciate the photos of example grade separations on the first page of each fact sheet.	Noted. Thank you.
Overall: As Adina, I think, mentioned at the meeting, I'm in favor of adding info on maintenance costs if we have any.	We do not currently have this info, so we will add a note that it is not included below the table.
Overall: Maybe add how long construction will take into the "By the numbers" section.	Will do.
Overall: For each of the "Neighborhood Considerations" sections, can we move the last bullet point(s) about street impacts during construction up to be the first bullet point?	Will do.
Overall: What does "Escalation to 2025" mean in the cost breakdown?	This means we are escalating the estimated dollars based on 2018 costs out to 2025.
Overall: I'm intrigued by the addition of trees to the "Backyard View" for the viaduct but not the others :). Is there a reason? I'd say let's either do trees for all the options or no trees.	We cannot do trees for the trench due to the subsurface ground anchors. However, we could add them to the hybrid option. We will work to get this rendering updated, but it will take some time.
Trench: I'm not sure what Nadia was referring to in the meeting when she said there wouldn't be cars over the trench like in the Reno, NV photo.	This comment confused us as well. There would definitely be cars crossing the trench at Meadow and Charleston.
Trench: Can this be reworded so it doesn't sound like the option is impossible due to Caltrain's 1% specification? "A non-standard grade of 2% will be required on tracks. Caltrain's maximum allowable grade is 1%."	Will revise wording.
Trench: Perhaps replace the "Vertical clearance..." bullet under Neighborhood Considerations with something about the need to remove vegetation in backyards and get easements.	Will keep vertical clearance bullet and add one regarding ground anchor influence area.
Trench: Relatedly, remove the tree over the ground anchors from the diagram on the inside? Can the expected length of the easements into backyards be included in the diagram?	Will remove the tree. The length of easement will vary and is approximated by the hatched area in the plan view and typical section. The length of the ground anchors will not be determined until the next phase of design, so we'd prefer not to indicate a length of the ground anchor influence area at this early planning stage.
Hybrid: What does the "Retained Embankment (TYP.)" label on the inside diagram mean? Remove?	This is the area where a retaining wall will be to hold the dirt to elevate the track. We will re-word for clarity.
M/C Viaduct: Although you clearly included the electrification wires in the viaduct renderings, a member of the public at the meeting commented that they weren't included. Maybe make them larger/darker? (same for the Churchill viaduct)	This would be a very time consuming edit, which may need to be deferred.
M/C Viaduct: Love the photo from the Australia project :)	Noted. Thank you.
Churchill Closure: Is there another example of an underpass photo we can use other than Homer? That underpass is 20ft wide and neither of our options are similar width, as far as I know. San Antonio was used in a previous presentation. It's my opinion that San Antonio is a better representation.	Will replace with San Antonio photo.
Churchill Viaduct: Where's the linear park photo from geographically? Any idea?	It is in Germany. Will add this to the label.
Churchill Viaduct: Include the removal of the Stanford station on the first page	Will do.
Matrices: Do we need the "Order of Magnitude Cost" row or can we just move that into the currently empty boxes in row E?	Yes, we will keep the Order of Magnitude Costs row as we will be adding text to row E.
I just have one nitpick. On each of the sections we have a distance of 500 per Caltrain posts Would you please add a (') mark to designate feet.	Will label.
Much appreciate the Costs being added to the Criteria.	Noted. Thank you.
On each individual Fact Sheet, include the construction time in the "By the Numbers" section.	Will do.
Replace the Summary of Engineering Challenges with photos and the Neighborhood Considerations for each of the alternatives. Or else, create a separate summary of these items.	The words in these two categories could not be replaced with photos only and still make these points. Please see the Summary of Evaluation with City Council-Adopted Criteria and the Summary of Engineering Challenges for tabulation of many of these items.
Somewhere, provide a least-most comparison of construction cost and estimated time, including both Meadow-Charleston and Churchill. People need to know at a high level how much is the total project estimated cost range and the number of years that traffic will be impacted along Alma Street.	Please see row J and the row below J on the Summary of Evaluation with City Council-Adopted Criteria.
For the Churchill Viaduct Fact sheet, the illustration on p. 1 appears to show a second viaduct in the background in the lower left of the illustration. I had thought that the Churchill Viaduct would be a single structure. Same comment in principle for the Meadow Charleston Viaduct.	There is not a second viaduct in the Churchill viaduct example photo. There is, however, a reduction in the structure depth for the a platform rather than a track bed. We will switch the photo on the M/C Viaduct as this example photo does show two viaducts.

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<p>Summary of Evaluation with City Council Adopted Criteria should include Track Safety; measures for preventing intentional and unintentional injuries and fatalities include uniform fencing, lighting, signage, warning systems, and an Intruder Detection System (IDS) cameras.</p> <p>The cost of installation and maintenance should be calculated over time to ensure overall public health and safety for all citizens. A strong collaborative effort with Caltrain is required for efficiency and effectiveness.</p> <p>The speed and frequency of the electrified trains should be addressed via a public education effort.</p>	<p>These are all good points, but as indicated this is "Council-Adopted" criteria and any new criteria would need to added by Council.</p>
<p>Churchill Closure: According to Frank Frey, Engineer, U.S. Department of Transportation, Washington, DC; he is an expert in rail safety.</p> <p>The safest design for preventing injuries and fatalities at railroad grade crossings is complete closure, per Frank Frey.</p> <p>In addition, uniform fencing is required on the Westside of Alma, since many houses do not meet any type of standardized fencing, such as the 8 foot tall fencing with 13 inch wingleet on the Eastside of Alma.</p>	<p>Noted. For the matrix, the closure has been noted as higher improvement (dark blue) than the viaduct (medium blue).</p>
<p>Churchill Viaduct: This redesign option has photos that show uniform wood fencing on the Westside properties is not accurate; some residents have backyard dilapidated fencing which needs to be replaced with uniform fencing.</p>	<p>Noted. This is a "typical" backyard view and not representative of every property.</p>
<p>Meadow - Charleston Hybrid: Because this redesign option may include driveway modifications, uniform fencing is essential.</p> <p>The photo shows a "Typical Property Westside of Tracks" which is not accurate. The fencing on the Westside is not uniform or considered to be in good condition.</p>	<p>Fencing along the Caltrain right of way will be provided where necessary to prohibit access.</p> <p>Noted. This is a "typical" backyard view and not representative of every property.</p>
<p>Meadow - Charleston Viaduct: Conceptual Photos of residents' backyard fencing on the Westside appears to be standardized in both height and materials. However, uniform fencing continues to be needed.</p>	<p>Noted. This is a "typical" backyard view and not representative of every property.</p>
<p>Meadow - Charleston Trench: This redesign option which lowers the railroad track still allows for illegal trespassing because of "open access".</p> <p>As stated under the Neighborhood Conditions component, a tall fence is required. Please recommend that an 8 foot tall fence with an 13 inch wingleet be integrated into this redesign option.</p> <p>In addition, barriers, signage, warning systems, and an Intruder Detection System Cameras (IDS) should be installed and maintained over time.</p>	<p>Fencing along the Caltrain right of way will be provided to prohibit access.</p> <p>Noted. Exact fence details as well as signage, warning systems, and IDS Cameras would be part of the next phase of design work.</p>
<p>The "Concept Plan and Profile" plots do not include units on the horizontal axis.</p>	<p>Will label.</p>
<p>Some of the "Example Section" graphics (shown on page 3) omit some critical dimensions, such as the distance from backyard fences to structures. Also the minimum value of these distances are critical, so please list both minimum value and typical value.</p>	<p>The varying dimensions from the Caltrain right of way to the edge of the viaduct structure will be added to the Churchill viaduct typical section. For other alternatives this dimension is roughly a constant and will remain as shown.</p>
<p>The first page's "By the numbers" section lists "Maximum grade on roadway is 8%" which may make people incorrectly think that particular design uses an 8% grade roadway. I suggest that the section specify both the design limitation and the design's actual maximum.</p>	<p>Will revise to the grade as designed.</p>
<p>The first page's "By the numbers" section lists "Maximum grade on roadway is 8%" which may make people incorrectly think that particular design uses an 8% grade roadway. I suggest that the section specify both the design limitation and the design's actual maximum.</p>	<p>Will revise to the grade as designed.</p>
<p>The "By the numbers" and "Engineering Challenges" sections use the phrase "Caltrain's allowed maximum of 1%" while the Caltrain documents instead use the phrase "preferred maximum design gradient".</p>	<p>Will revise wording.</p>
<p>A member of the public noted at our last meeting that the animations/illustrations show unrealistically small wires and towers. I tend to agree, as even Caltrain's own graphics do seem to show wires and towers that are more obtrusive than our graphics.</p>	<p>This would be a very time consuming edit, which may need to be deferred.</p>

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<p>First comment on fact sheets. These look like what you should model your webpages after, and what content you would put on them. There should be a page with each one of these options on the website. Then as I mentioned in the mtg, there should be pointers to additional info like the videos, any documentation, etc.</p>	<p>Once the Fact Sheets are finalized they will be posted to the website. Additional links will be added.</p>
<p>In general -- thank you and the consultants for this very detailed and informative stuff!</p>	<p>Noted. Thank you.</p>
<p>I think that we make it more clear that the "Churchill Closure" alternative includes funds and plans for traffic mitigation. Speakers at the last meeting didn't seem to really understand it, and furthermore it takes some careful reading to understand. Perhaps putting a diagram (not just a rendering) of the proposed design for Embarcadero in the vicinity of the rail crossing would help make this clear.</p>	<p>Plan view will be added.</p>
<p>In particular, are funds for the traffic mitigation included in the cost breakdown? It's hard to tell -- if they are, then I think we need to call that out more clearly, perhaps by calling it, "road improvements at X intersection" or whatever.</p>	<p>Costs for the traffic mitigation are included in the breakdown. A note will be added to highlight this.</p>
<p>Row A, "Facilitate movement across the corridor for all modes of transportation"</p> <p>The two viaduct options would allow additional opportunities to cross the "tracks" for pedestrians, bikes, and possibly even cars if we so choose. In theory, the trench could as well if we are willing to pay for it. I think we should mention this under this category for the viaducts and possibly the trench.</p>	<p>Will add this to the viaduct alternatives.</p>
<p>Row G, "Reduce rail noise"</p> <p>In addition to rail noise, train horns, and warning bells, diesel trains also have noisy engines. Should we point out that, for all alternatives, an electrified Caltrain will reduce this noise (except for the freight trains). I know this because I live two miles from the tracks and still hear the horns and engine noise many nights.</p>	<p>Will add.</p>
<p>Row I, "Minimize visual changes"</p> <p>I appreciate the effort to be objective (the hybrid option is 15 feet above grade and the viaduct is 20). However, I really think that the difference between hybrid and viaduct in terms of visual impact is in the eye of the beholder and we should give both the same color. For instance, although the hybrid is less "high" in an absolute sense, since the road goes down the embankments at each intersection will be relatively massive.</p>	<p>Will change hybrid to dark red box.</p>
<p>Row P, "Local street circulation impacts during construction"</p> <p>For Churchill, we're going to have to find some way for the kids to get to Paly during construction. I think we'll need to be more clear about the impact on bike crossings at Churchill during construction, and if it will be unavailable for some time, then we need to say that.</p>	<p>At this time, temporary closures are only planned for nights and weekends on Churchill.</p>