



HIGHWAY 174 SAFETY PROJECT

Presentation to Board of Supervisors

Response to Caltrans' Proposal

September 25, 2018



Outline



- Grateful for attention given to this important matter
- Grateful for meetings with and design changes made by Caltrans
- Review BOS Resolution 17-552
 - What concerns did the Board of Supervisors have?
 - Has Caltrans done was the Board of Supervisors requested?
- Current concerns of Save Highway 174
- Conclusion



BOS Resolution 17-552



- “Design could drastically alter a rural, Scenic Highway”—NCBOS
- “Set a precedent”—NCBOS
- “Caltrans re-assess this project and its scope of work”—NCBOS
- “Reassess and revise the preferred alternative for the project by actively engaging in the local community”—NCTC
- “Type III class of action determination and should instead be classified as a Type I class of action requiring an Environmental Impact Study (EIS) and Noise Study”—NCBOS
- “Data used to justify the project was inflated by a limited data set between years 2010-2013”—NCBOS
- “Only one FHWA safety countermeasure was being used”—NCBOS



Scenic Highway



- State Route (SR) 174, otherwise known as the Colfax Highway, is recognized as one of the most scenic and historically rich highways in the Sierra Nevada Foothills
- The Nevada County General Plan, per Policy 18.8A, designates SR 174 as a scenic corridor worthy of protection and recommends it be placed within a SC “Scenic Corridor” Combining District
- From the Bear River to the Grass Valley city limits is listed in the State Scenic Highway System as being eligible for official designation as a State Scenic Highway
- State Scenic Highway nomination evaluation criteria include that existing visual intrusions do not significantly impact the scenic corridor



Scenic Highway



- Highway 174 would be reworked to match Highways 191 (near Paradise) and 193 (near Lincoln)





Scenic Highway






- Different setting than Highway 174
 - Less mountainous
 - Less tree cover
 - Lower population density
 - Fewer driveways and side roads
- Are they scenic?
- A precedent for other roads in Nevada County?
- Status: Not addressed **✗**



Reassess Project



- “Caltrans re-assess this project and its scope of work”—NCBOS
- Status: Addressed 
- “Reassess and revise the preferred alternative for the project by actively engaging in the local community”—NCTC
- Caltrans has worked with a subcommittee of Save Highway 174
- Only two public workshops held by Caltrans at Chicago Park School in June 2016 & May 2017
 - One with five-day notice
 - 38 public comments received, 30 were in opposition to design
 - Over 1,200 signed petitions from concerned citizens
 - More than 160 members of an online Save Highway 174 group
- Status: Partially addressed  



FHWA Class



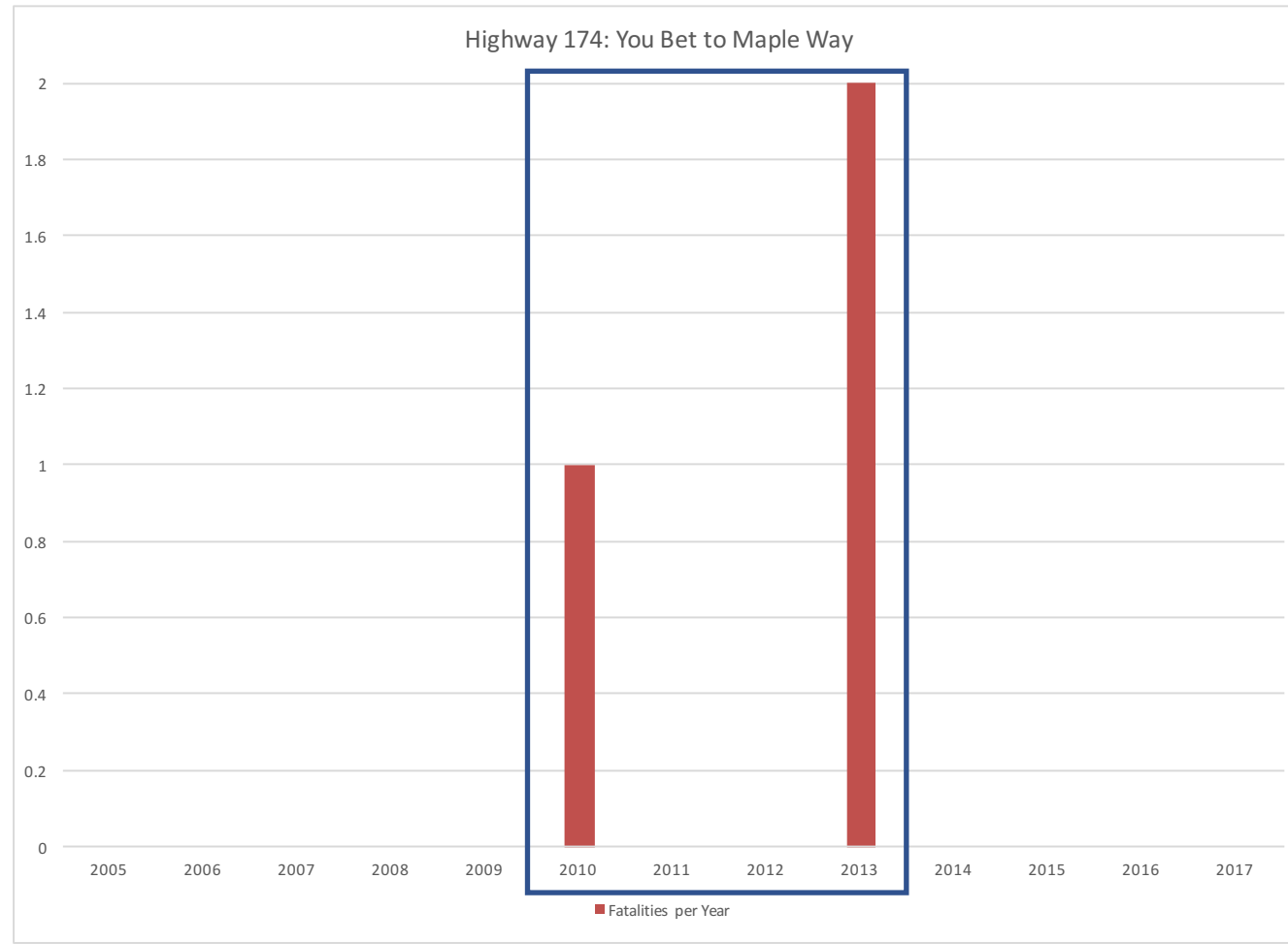
- Type I project:
 - The physical alteration of an existing highway where there is either:
 - Substantial Horizontal Alteration. A project that halves the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition;
 - Substantial Vertical Alteration. A project that removes shielding therefore, exposing the line-of-sight between the receptor and the traffic noise source. This is done by either altering the vertical alignment of the highway or by altering the topography between the highway traffic noise source and the receptor; or
- “Realign several horizontal curves and adjusting several vertical curve lengths”—Caltrans project description
- “Reconstruct entire roadbed at most or at all vertical curve adjustment locations”—Caltrans project description
- Caltrans used FHWA’s Type III classification to limit scope of review
 - Type III is for replacing guardrails, pavement markings, rehab & minor curve corrections
 - Type III requires no environmental impact or noise studies
- Status: Not addressed **✗**



Data For Justification



- Caltrans looked at data from April 1, 2010 through March 31, 2013





Data For Justification



- Caltrans looked at data from April 1, 2010 through March 31, 2013
 - 2016 Conclusion:
 - Road is unsafe and needs to be substantially modified
- Caltrans looked at data from 2013 through 2016
 - July 2018 Conclusion:
 - Level of safety improved
 - Collision rate closer to statewide average
 - Increase speed to 50 mph in project area, even with no changes to road
- Maybe three years isn't long enough to make firm conclusions



Data For Justification



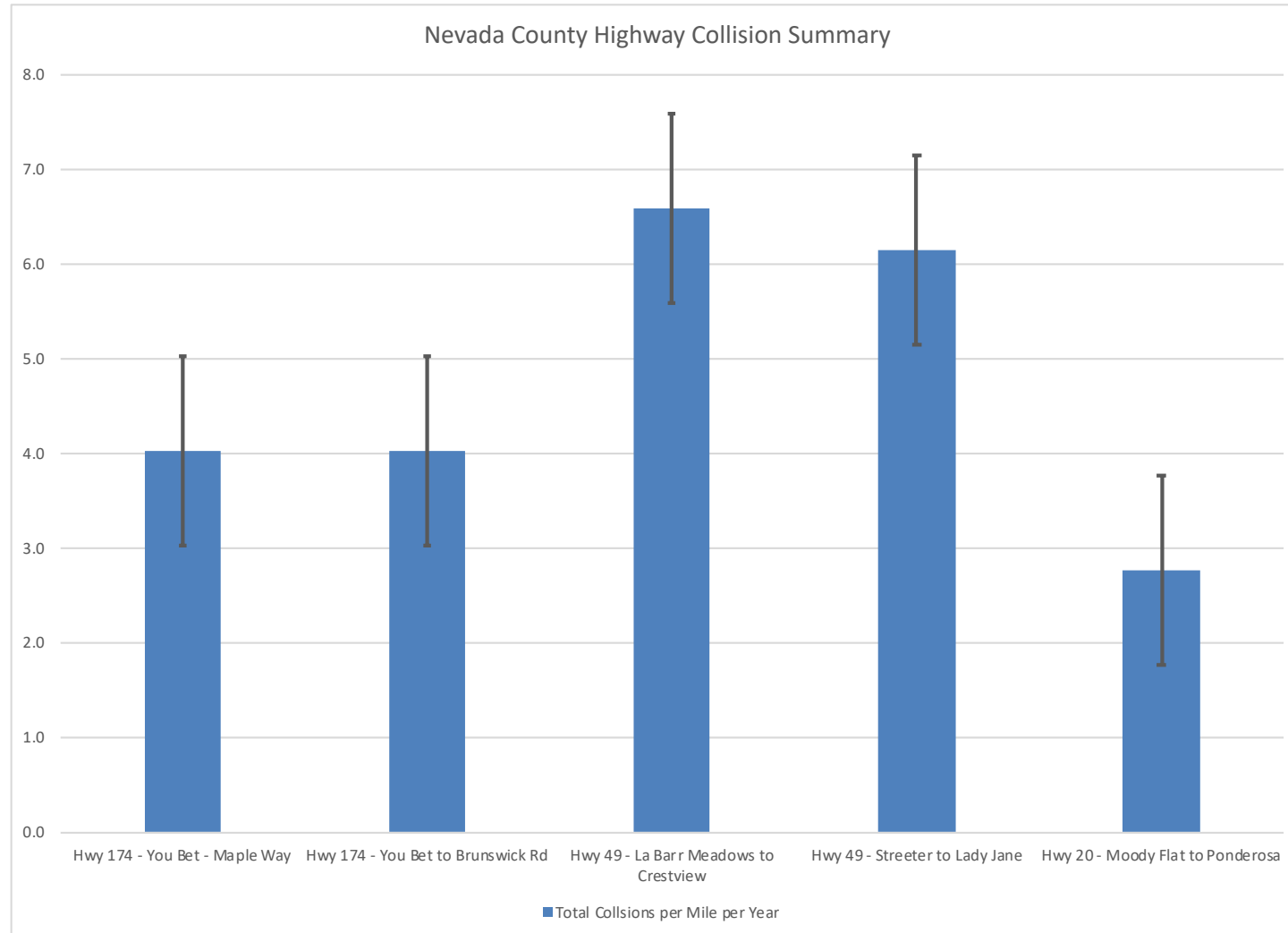
- “I talked to three people and all three will be voting for Candidate A. Therefore Candidate A will win the election.”
- Statisticians can calculate the margin of error (MOE)
 - How much precision we can reasonably expect
 - Example: plus or minus 3 percentage points
- To get that margin of error might require surveying 3,000 or 300,000 potential voters
 - Depends on the situation



Data For Justification



- Collisions per mile per year needs 10 years of data for this MOE

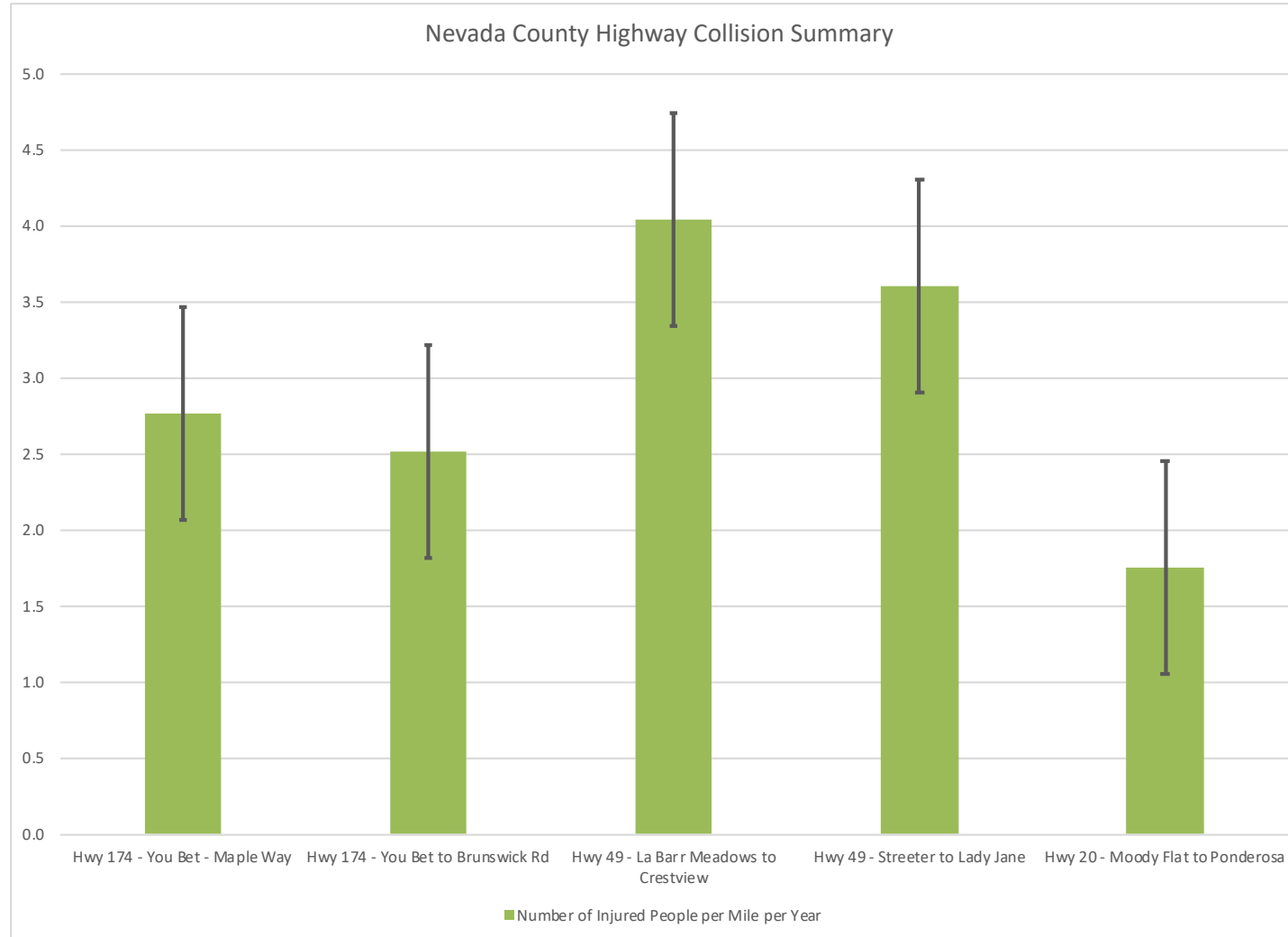




Data For Justification



- Number of injuries per mile per year needs 30 years of data for MOE

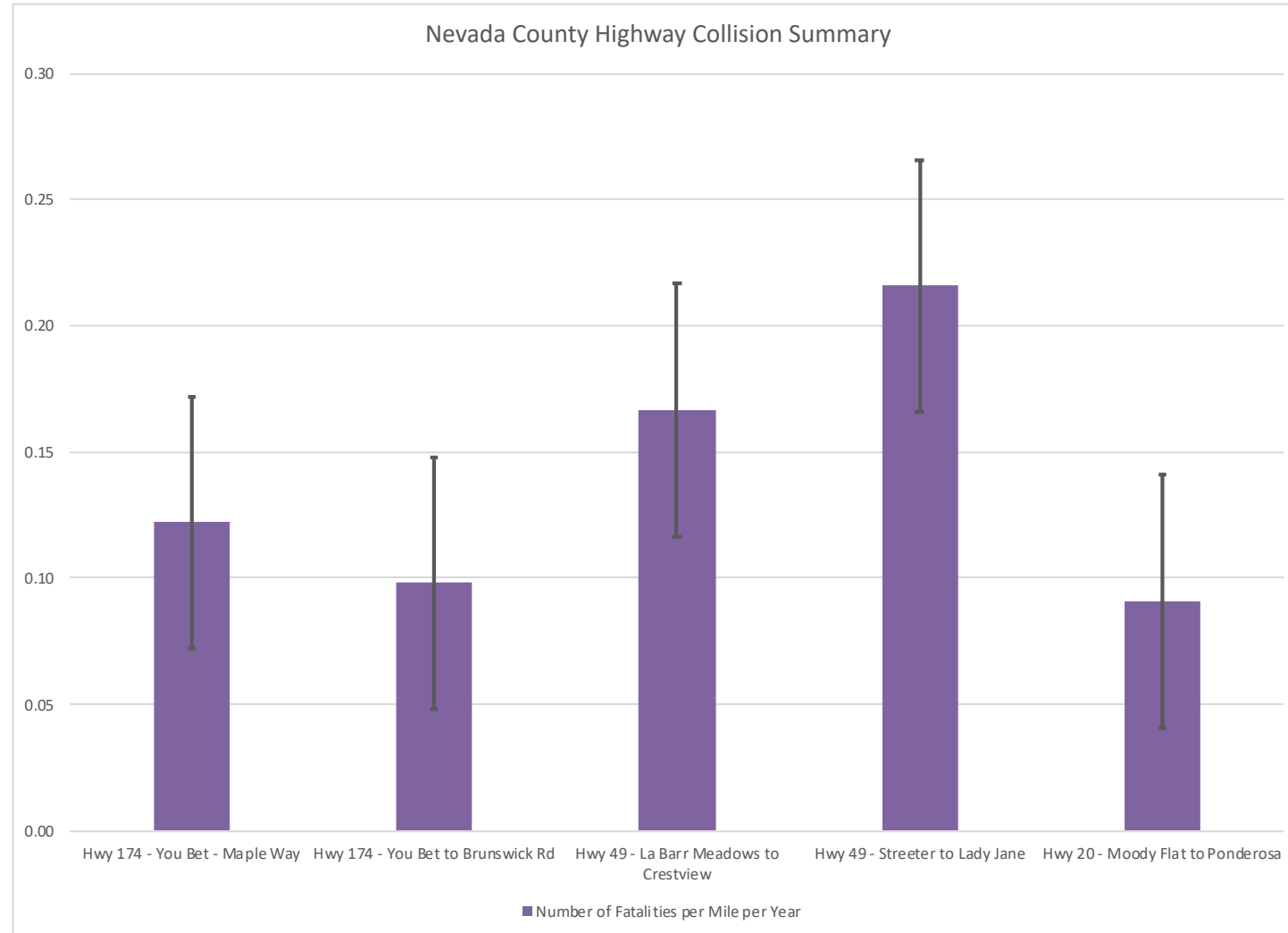




Data For Justification



- No. of fatalities per mile per year needs 150 years of data for MOE

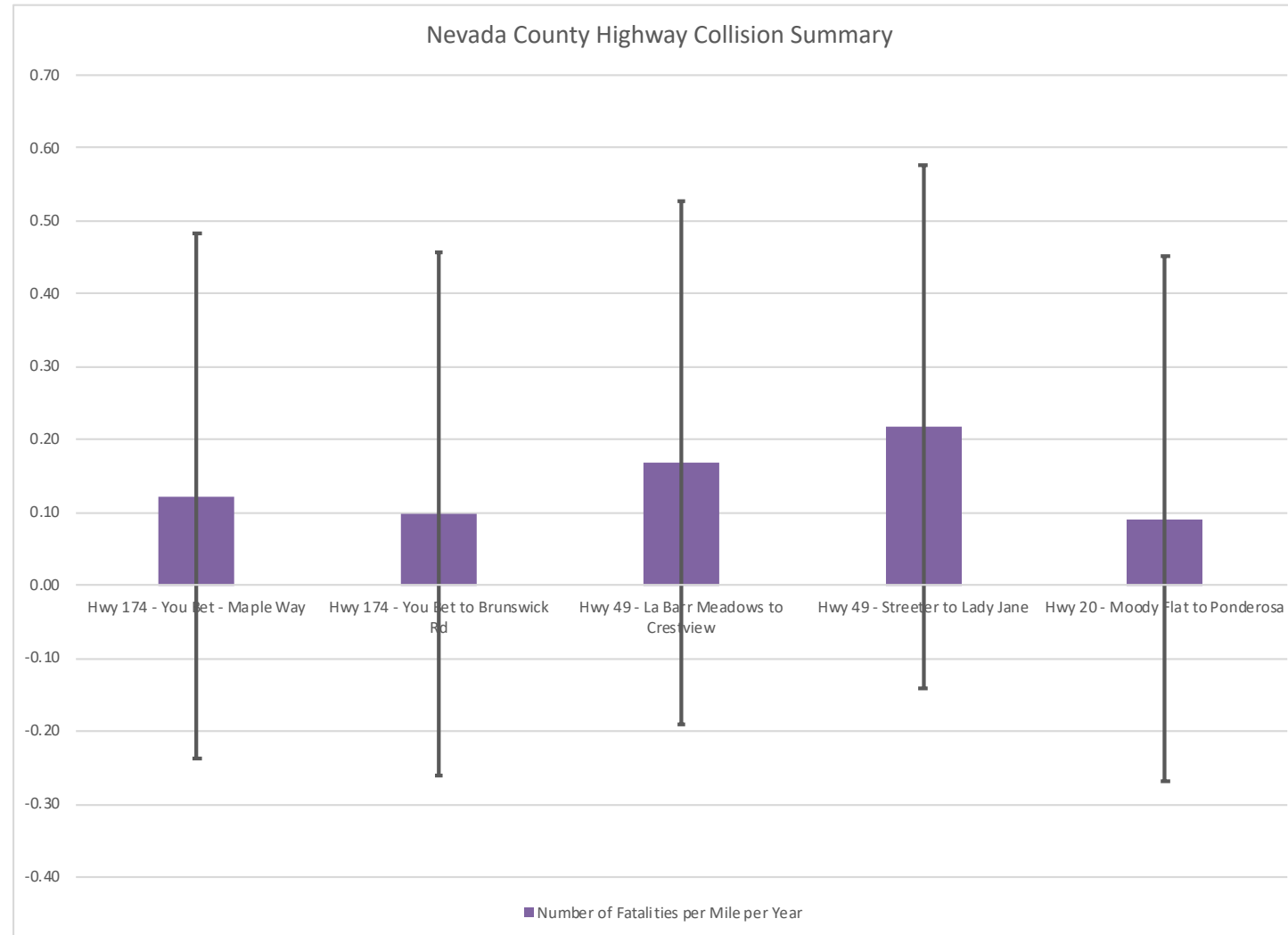




Data For Justification



- If we use three years of data, here's the margin of error





Data For Justification



- Section of Highway 174 is middle of the pack, given 12 years of data
- For collisions, need 10 years of data (which we have)
- For injuries, need 30 years of data (we don't have)
- For fatalities, need 150 years of data (we don't have)
- "Highway 174 is unsafe based on three years of data" = "I talked to three people and therefore Candidate A will win the election."
- Status: Not addressed **✗**



Safety Countermeasures



- Of all the possible safety countermeasures, Caltrans is only employing one: widening, straightening, and flattening the road
- FHWA recommends conducting a safety audit
 - No safety audit was performed
 - No design alternatives were considered
 - “The project has one build alternative and the no-build alternative.” —Caltrans
- Status: Not addressed **✗**



Summary



- Design could drastically alter a rural, Scenic Highway—Not addressed ❌
- Set a precedent—Not addressed ❌
- Caltrans re-assess this project and its scope of work—Addressed ✅
- Reassess and revise the preferred alternative for the project by actively engaging in the local community—Partially addressed ✅ ❌
- Type III class of action determination and should instead be classified as a Type I class of action requiring an Environmental Impact Study (EIS) and Noise Study—Not addressed ❌
- Data used to justify the project was inflated by a limited data set between years 2010-2013—Not addressed ❌
- Only one FHWA safety countermeasure was being used—Not addressed ❌



Remaining Detail Design Issues

(partial list from Subcommittee)



1. Allow flexibility in 40' paved section in safer portions
 - *Such as narrowing shoulders from 8' to 5'
2. Survey Heritage Oaks / groves and Sentinel Trees in ROW and within 30-feet (min) of ROW
3. Prepare Tree-Protection Plan for trees protected in Survey area
4. Prepare Landscape Plan for graded / denuded ROW & TCE areas
5. Install traffic calming measures to slow traffic speeds
6. Construct paved shoulders to bicycle lane standards



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