

Agenda Item No. (3)

To: Building and Operating Committee/Committee of the Whole

Meeting of November 18, 2021

From: David A. Rivera, Bridge Captain

Steven W. Miller, Deputy General Manager, Bridge Division

Denis J. Mulligan, General Manager

Subject: APPROVE ACTIONS RELATIVE TO THE ADOPTION OF BICYCLE

SAFETY RECOMMENDATIONS, AND AMEND THE MASTER

ORDINANCE ACCORDINGLY

## **Recommendation**

The Building and Operating Committee recommends that the Board of Directors approve actions relative to the adoption of bicycle safety policies as follows:

- 1. Establish a maximum speed limit of 15 mph for bicycles on the Bridge sidewalks along with a maximum speed limit of 5 mph for bicycles on the sidewalk areas around the Bridge towers, subject to the requirement that, under all circumstances, bicycles shall be operated at a speed no greater than what is reasonable for safe operation, and in a manner that does not endanger the safety of others;
- 2. Allow pedal assisted electric bicycles (Ebikes) of Classes 1, 2, and 3 to use the Bridge sidewalks;
- 3. Clarify the list of devices prohibited on the Bridge sidewalks to include other pedestriantype rolling conveyances;
- 4. Establish a District Bicycle and Pedestrian Advisory Committee to ensure continued and ongoing engagement with bicycle and pedestrian users groups of the Bridge and the District's Bus and Ferry systems; and,
- 5. Amend the District's Master Ordinance accordingly.

Additional items that do not require formal Board action, but are included in this recommended slate of improved safety conditions for the Bridge sidewalks are as follows:

1. Continue use of signage and pavement markings to delineate space between bicycles and pedestrians on the East Sidewalk.

- 2. Install changeable directional wayfinding signage for cyclists at major Bridge approaches.
- 3. Continue use of radar speed advisory signage for cyclists on the Bridge sidewalks and install additional radar speed advisory signs on the downhill approaches to the narrow sidewalk sections at the North Anchorage House.
- 4. Add "Path Narrows" signage, object markers, and pavement markings along with 5 mph advisory speed signage on the approaches to the narrow sidewalk sections at the North Anchorage Housing.
- 5. Install additional "High Wind" advisory signage and establish a standard operating procedure to allow cyclists use of the East Sidewalk during high wind events.
- 6. Create a weather station feed to the District's website to advise cyclists of current wind conditions on the Bridge.
- 7. Create a sidewalk safety incident self-reporting tool on the District's website to collect additional information and a more complete accounting of sidewalk safety issues.

This matter will be presented to the Board of Directors at its November 19, 2021, meeting for appropriate action.

# **Summary**

As a transportation agency, the Golden Gate Bridge, Highway and Transportation District (District) wishes to maximize the utility of alternative modes of transportation such as bicycling while maintaining a sharp focus on its overarching responsibility to ensure maximum safety for all persons who use the Bridge for transportation, tourism, and recreation. This slate of recommended Board actions, along with additional sidewalk safety initiatives, will support and further these goals by optimizing the conditions, given the limited space and constrained infrastructure on the Bridge sidewalks, to the extent possible.

# **Background**

Over the preceding two years, staff has engaged in a review of the District's bicycle safety policies and current conditions for bicyclists and pedestrians using the Bridge.

A primary product of this review is the October 2020, *Bicycle Safety Study for the Golden Gate Bridge* (Study) which was presented to the Building and Operating Committee at its February 25, 2021, meeting. The Study was a collaboration between District staff and an independent consulting group, Alta Planning + Design (Alta). The purpose of the study was to gather data and observations on current Bridge sidewalk conditions in order to develop proposals to increase bicycle and pedestrian safety while ensuring maximum utility and accommodation for bicycling on the Bridge for commute and recreational travel. As part of this effort, staff engaged with the

local bicycle community and vendors of bike share and rental bikes for feedback and recommendations during the process.

This public outreach continued during the months of September and October of this year with a web-based virtual open house (Open House) conducted from Monday, September 24, 2021, through Sunday, October 10, 2021. The Open House outlined the key findings and recommendations of the Study and solicited direct public comment regarding the recommended actions. In addition to the Open House, Alta and District Staff hosted a live webinar-style town hall workshop (Town Hall) on October 6, 2021, where we presented the Study findings and recommendations and solicited feedback and questions in real time. Participants in the Town Hall also received a written summary of questions raised during the meeting with staff responses. The question and answer summary is included as an attachment to this item.

The public outreach culminated in a formal public hearing (Hearing) with the Board on October 18, 2021. Summaries of the comments received are as follows and full text of comments received are included as an attachment to this item.

## **Open House**

Two hundred and fifty-eight (258) participants responded to a Likert-type scale asking whether they agreed or disagreed with the following statement:

The recommendations will make the Golden Gate Bridge safer for cyclists and pedestrians					
			Percentage of		
	Scale	Responses	Responses		
Strongly Agree	5	26	10%		
	4	46	18%		
	3	74	29%		
	2	57	22%		
Strongly Disagree	1	55	21%		
Total Responses		258	100%		

(Scale: 5 Strongly Agree – 1 Strongly Disagree)

Two hundred and nine (209) participants also shared narrative comments during the Open House. Many comments involved suggestions or actions that were not directly related to recommendations included in the Open House materials. Of those other comments and suggestions, issues with construction activities and stored materials and equipment on the sidewalks, high wind issues on the west sidewalk, issues related to inexperienced cyclists (tourists), along with infrastructure issues such as narrow sidewalk sections and limited line of sight turns top the list in that order.

Comments directly related to the scope and recommendations of the Open House are summarized in the following table:

OPEN HOUSE COMMENTS SUMMARY				
Comment	Frequency			
Agree With Study Recommendations	36			
Support Speed Limits	21			
Speed Limits Will be Ineffective	17			
Need More/Better Delineation of Space	15			
Disagree With Speed Limits	11			
Scope of Study Too Narrow/Flawed	10			
Do Not Use One Way Traffic Control at Narrow Sections	9			
Disagree With Study Recommendations	8			
Self-Reporting Tool Needed	8			
Allow Cyclists to Use East Side During High Winds	7			
Do Not Force Cyclists to use East Side During High Winds	6			
Support Improved Wayfinding Signage	6			
5mph at Towers and/or Pylons is Too Slow	6			
Study Recommendations Will be Ineffective	5			
Advisory Committee Needed	5			
Support Allowing Type 3 Ebikes	5			
Support Wind/Weather Advisory System	3			
Disallow all Ebikes	3			
Support One Way Traffic Control at Narrow Sections	3			
Establish Minimum Speed	1			
Restrict Type 2 Ebikes	1			
Allow Skateboards on a Trial Basis	1			

## **Town Hall**

Fifty-nine (59) participants attended the Town Hall and one hundred and twenty three submissions were received through the live question and answer (Q&A) dialog during the meeting. The character and frequency of the comments received was similar to what was received during the Open House, with infrastructure issues such as narrow sidewalk sections and limited line of sight turns, expanded or extended access hours for cyclists on the sidewalks, issues with construction materials and equipment and high wind issues topping the list.

Comments directly related to the scope and recommendations included in the Town Hall presentation are summarized in the following table:

TOWN HALL COMMENTS SUMMARY				
Comment	Frequency			
Scope of Study Too Narrow/Flawed	3			
Support Allowing Type 3 Ebikes	3			
Continuous Centerline on Sidewalks	2			
Agree With Study Recommendations	1			
Support Speed Limits	1			
Disagree With Speed Limits	1			
Self-Reporting Tool Needed	1			
Allow Cyclists to use East Side During High Wind Events	1			
Wind/Weather Advisory System Needed	1			
Establish Minimum Speed	1			
Restrict Type 2 Ebikes	1			
Higher Speed Limit on West Sidewalk	1			
Signage for Incident Reporting System	1			

# **Public Hearing**

Forty-five (45) people submitted written comments during the public comment period and oral testimony was received from eleven participants during the public hearing. In this case, written comments were nearly evenly distributed among the top four areas of concern which were: issues with construction materials and equipment on the sidewalks, concerns about the scope and/or methodology of the Study, requests to not restrict other pedestrian-type rolling conveyances or personal electric vehicles (PEV) on the Bridge sidewalks, and requests that signage for the new incident self-reporting tool be clearly displayed to promote awareness of its availability. A summary table of all written comments received and comment frequency is provided here.

PUBLIC HEARING WRITTEN COMMENTS SUMMARY			
Comment	Frequency		
Construction Materials and Equipment	15		
Scope of Study Too Narrow/Flawed	15		
Allow Personal Electric Vehicles (PEV)[EPAMDs?]	14		
Signage for Incident Reporting Tool	13		
Extended/Unlimited access to west sidewalk	4		
Support Speed Limits	2		
More/Better Delineation of Space	2		
Centerline on Sidewalks	2		
Support Allowing Type 3 Ebikes	2		
More Signage for Tourists	2		
Require Single File Only for Bikes	2		

PUBLIC HEARING WRITTEN COMMENTS SUMMAR	Y
(continued)	
Comment	Frequency
High Wind Issues/ Wind Retrofit	1
More Safety Training/Requirements For Rental Bikes	1
Agree With Study Recommendations	1
Study Was Well Done	1
Infrastructure Issues/Narrow Sidewalks	1
Enforcement of Speed Limits Should be Discretionary	1
Open a Lane of Traffic for Cyclists	1
Disagree With Speed Limits	1
No One Way Traffic Control at North Anchorage Choke	1
Points	
Self-Reporting Tool Needed	1
Support Improved Wayfinding Signage	1
5 mph at Towers Should be Advisory Only	1
Enforce Cellphone/Selfie Stick Prohibitions	1
Padding Needed for Hard Surfaces	1
Advisory Committee Needed	1
Cyclists Unnecessarily Blamed for Safety Issues	1
Disallow all Ebikes	1
Include Signage about Awareness and Courtesy	1
Prohibit Children Under 9 Years Old on Bikes	1
Prohibit or Restrict Bikes During Construction	1
Support Continued Use of Radar Speed Signs	1
Prohibit Rental E Bikes and Scooters	1
Require Walking of Bikes Around Towers	1

## **Conclusions**

The list of recommendations included here for Board action go beyond the original slate of recommendations included in the Study. This resulted from extensive engagement with sidewalk users and stakeholder groups who shared their experiences, concerns and creative ideas for safety improvements. It is clear from the Study findings along with the input received from hundreds of stakeholders during the public outreach process that updates to Golden Gate Bridge bicycle policies are not only warranted, but necessary.

Comments received largely favor a policy decision to allow all classes of electric bicycles, as defined in California Vehicle Code Section 312.5, access to the Bridge sidewalks. Commenters also appear to generally accept the notion that establishing maximum speeds for cyclists on the sidewalks will not be unduly burdensome for cyclists and will improve safety for all users.

Concerning continued restrictions on other user groups and devices such as pedestrian-type rolling conveyances including motorized boards, Electric Personal Assistive Mobility Devices (EPAMD), Personal Electric Vehicles (PEV), and motorized scooters, the feedback makes clear that there is strong desire for the District to consider these other modes for use on the Bridge sidewalks. Due to the current congested conditions on the sidewalks and limited understanding of their ability to be accommodated safely under the current conditions, Alta recommends, and staff agrees, that restriction of these other modes should continue until more complete safety data on these new technologies becomes available and their suitability for use on the sidewalks is fully understood.

The remaining list of proposals included here for improved signage and pavement markings, directional wayfinding, weather advisories, and incident reporting system appear to have broad support from all stakeholder groups and staff is actively working on implementing these initiatives. There is also broad support for the establishment of a Bicycle and Pedestrian Advisory Committee to ensure continued and ongoing engagement with bicycle and pedestrian users of the Bridge and the District's Bus and Ferry systems.

It is also clear that there are desires and concerns among the diverse array of stakeholders and users that the District is not in a position to address. The Open House and Town Hall comments included many requests to limit construction activities on the sidewalks, expand access to the west sidewalk for cyclists, open traffic lanes to cyclists, reconfigure sidewalk infrastructure, restrict and/or regulate the use of rental bicycles, among others.

These suggestions indicate that the Bridge is a fully utilized and often oversubscribed transportation resource for the community. At this juncture staff is not recommending that the District's current Bridge priorities, specifically the construction of the Suicide Deterrent System, the upcoming Seismic Retrofit, and ongoing Bridge maintenance projects, be replaced by any of the above suggested Bridge modifications.

The slate of recommendations included in this report are intended to optimize the utility of the infrastructure available and maximize the safety of the sidewalk conditions for all users to extent possible and to create an ongoing engagement and continuous improvement process through the establishment of an active bicycle and pedestrian advisory committee.

## **Fiscal Impact**

The staff labor and materials costs for implementing the proposed initiatives will be absorbed into the Bridge Division Fiscal Year 2021/2022 operating budget. Ongoing expenditures for maintenance of signage and other improvements will be considered during future budget cycles.

#### **Attachments:**

- 1. Virtual Open House Comments
- 2. Town Hall Comments
- 3. Town Hall Question and Answer List
- 4. Public Hearing Written Comments
- 5. Draft District Ordinance 2021-001

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#### ATTACHMENT 1

Golden Gate Bridge, Highway and Transportation District
Virtual Open House on the *Bicycle Safety Study for the Golden Gate Bridge*Written Comments Received
September 24, 2021 through October 10, 2021



I am an employee and cyclist, but thought I'd leave some quick feedback. The ability to divert cyclists back to the East Sidewalk is a good idea for high wind events. I especially like the proposed 5mph speed signs at the towers, and I think it should also be the white regulatory 5mph signs at the narrow pylon passages as well, instead of the proposed yellow advisory signs. The proposed caution signage and clearance markers would be great at the pylons as well.

There is an error on one slide: the West Sidewalk opens at 3:30pm to cyclists on weekdays, not 3pm. Some of your renderings show one way traffic arrow striping (both pedestrians and bicyclists can only travel north or south in the image), but that is not proposed anywhere, and wouldn't work without both sidewalks being open.

It's not clear if you plan to stripe the full length of the sidewalks with the bicycle and pedestrian delineations, but I think it would be good to do so (just a single line to break up cyclists from pedestrians). The current striping and pavement markings on the East Sidewalk are too intermittent to have an impact on pedestrian adherence. It's to be noted that standard design bike lane widths cannot be provided with the existing sidewalk width, so dotted lines would be most appropriate for the delineation between bicycle and pedestrian lanes. Striping around the towers would be especially helpful.

In addition to the sidewalk stripage, I think it would be good idea to add markings in the bicycle lane to also show that it is used by bridge vehicles. Safety patrols, Maintenance, and construction vehicles are instructed to hug the roadway rail in the bicycle lane and to direct bicyclists and pedestrians around them. Additional signage and possibly striping graphics that indicate "Yield to Motorized Bridge Vehicles: Present at Any Time in Bicycle Lane" could be helpful.

I'd be happy to discuss this further. I am an avid cyclist and a Civil Engineer with a background in transportation. Thanks

I just purchased a Class-1 ebike three weeks ago and have been commuting from Marin to SF three days a week, crossing the bridge between 7am and 8am and back between 4:30pm and 5:30pm. I'm glad to read the outcomes and action plan from this study. The biggest challenge for me is the wind gusts and the racing cyclists who pass from behind without announcing their presence. I'm also unsure how to slow/stop when approaching a cyclist coming the opposite way through a narrow section where I think we may collide, as a cyclist behind me may not notice I am moving to the left or stopping or will opt to pass me in the narrow area. Not sure how you can influence the cycling culture to be more tolerant and patient. Signing a 15mph (and 5mph around towers) limit sounds helpful, but enforcing it would be even better. Thank you!

The pedestrian and bike open/closed times for the East and West paths are too complicated, especially for tourists who don't frequent the bridge. The construction equipment stored on the West path wasn't mentioned but also has contributed to bicycle crashes.

The design of the sign indicating which path is open to cyclists is confusing.

Also, the plan doesn't tackle the main hazard of biking on the bridge: extremely narrow paths. Reducing equipment storage and other measures that reduce or minimize choke-points would make biking on the bridge much safer.

Best solution to Light Post 26-28 would be to remove the fencing and restore that section of path to its full width. Barrier could be set up outside concrete west wall. Path would still narrow at that point, but not to such a dangerous degree.

Other ideas: try to discourage bicyclists from using cell phones to take pictures and make videos WHILE riding. This seems to be illegal based on the CVC that doesn't allow use of cell phone. Signage, enforcement of law?

The speed limits are a good idea.

The added pavement paint and signs about where pets should be and where cyclists should be are good. Consideration of making narrow areas one-way is good.

A method to report incidents is crucial! This method must be easily accessible.

Thank you!

Put bike traffic on the West sidewalk 24 hours a day, ends accidents with pedestrians.

Ends bike vs bike accidents caused by bikers distracted by/avoiding pedestrians.

Would make enforcement of speed limits easier, officers not having to dodge pedestrians to catch violators. Stops pedestrians from blocking signs/radar.

Simplifies signage, dont have to pay man hours for changing twice a day seven days a week - instead cheaper to use workers/security to flag twice a day when workers move on/off west walkway five days a week.. Simplifies maps (on handlebars) for largest # of users-bike rentals, other local / tourist riders using Google/ Apple maps.

Work with City of Sausalito / National Park Service / San Francisco & Marin Bike Coalitions / Bike Rental Companies on regular basis in public forum on holistic solutions.

Above observations based on 25 years crossing the bridge 5-10 times a day, talking to tourist and local walkers and bikers (I have bike rack on taxi).

The less wind resistant thinner pickets on the west side was a huge engineering error. The resultant unabated high winds not only affects bikes on the west side, but to a significant extent on the east side as well. I have also witnessed the winds affecting high-profile vehicles traveling south on the roadway as well. In addition, the whistling noise at times is deafening on the bridge and I have heard it as far away as Ft. Mason on my daily evening return bike commute. And, the high winds occur very often - sometimes weeks at a time during summer months. To re-route bikes to a slightly less wind-dangerous, more crowded with pedestrians side of the bridge for that amount of time is a terrible solution. (And just wait for the lawsuit when a Big Bus tourist bus get blown into an accident on the roadway). Please admit and own the engineering error and fix the bridge, not the users.

My best friend had an accident on the bridge where she was blown into a standard cyclone style fence. The fence has wide openings that captured her thumb and tore it backward. Please replace wide opening cyclone fencing with small opening fencing to eliminate this danger.

Tourists are clueless and do stupid things, they need to be educated.

Locals are too aggressive, they should slow down.

Still worried about the last sentence about height of seat, given I own a stand up bike with no set and cross the bridge frequently.

Simply seems like a good idea/start, but maybe not a solution to everything.

Comments about Oct 1, 2020 "Bicycle Safety Study for the Golden Gate Bridge"

As a cyclist who lives in San Francisco and crosses the Golden Gate bridge three or four days a week, I would like to express my concerns about the Alta Planning + Design bicycle safety study.

Concerns with overall emphasis placing fault on cyclists

In my nearly a decade of riding across the bridge, I have seen three serious injury bicycle accidents take place. One of them resulted in a horrific head injury that put the cyclist victim, who had struck her helmeted head on a bridge railing, in rehabilitation for nearly a year. All of these accidents — and all of the near-misses that I've had myself over the years — were due to poor infrastructure on the bridge. This infrastructure includes slick steel plates, unpadded equipment and poles in the bikeway, bumps for

cables to cross the bikeway and cabled railings that can severe injury in the case of a collision.

The tone of the Bicycle Safety Study, however, is to place the blame for collisions on cyclists, rather than on the infrastructure of the bridge itself. This is especially surprising given the history of the Bridge and the safety innovations that it introduced in its construction, saving workers' lives. Currently, about 15 people per year are transported to the hospital due to injuries from bike accidents. Yet the Bicycle Safety Study unacceptably puts the onus on cyclists to solve the issue, primarily by slowing down.

The scope of the Bicycle Safety Study appears unnecessarily narrow – there appears to be little input from the cycling community, no interviews with cyclists and a general disregard for the nuances of day-in-day-out cycling on the Bridge.

Unknown source of embedded assumptions about speed

The primary assumption in the Bicycle Safety Study appears to be that speed causes accidents. However, this is not borne out by the actual data in the report.

At the hours when speeds are highest, crashes are low. The report shows that speeds are high in the late evening and early morning hours. In my experience, this is because experienced cyclists are crossing the bridge at these off hours while commuting or headed for a recreational ride in Marin. Less than 10% of reported crashes happen between 8pm and 8am. This is precisely the time when bike speeds are highest. This dichotomy calls into question the central conclusion of the report that collisions are due to speed.

The report makes a broad assumption about speed, but makes no effort to tie actual speeds during a collision to location of crash and severity of accident. The report contains the tautology "speed is a factor in all collisions." This statement indicates that the authors of the report had in mind a conclusion before looking at the data. It's true that if we were all standing still there would be no collisions. However this is not a very helpful truth in the world of the everyday. In my experience, when an accident occurs on the Bridge, the CHP interviews people from the scene and determines speed at the time of collision. Instead of relying on "speed is a factor in all collisions" the report should make an attempt to verify if that's true in the case of severe bicycle collisions.

Lack of accountability for poor infrastructure on Bridge

From the view of an experienced cyclist, what actually causes accidents is an under-investment in bicycle safety infrastructure on the Bridge. Places where investment should take place are:

There should be as few obstacles in the bikeway as possible. It violates all principles of roadway engineering how many obstacles are in the bikeway. There are dozens of poles in the bikeway. There are hundreds of railing supports on which a falling cyclist can strike their head. There are construction materials left in the bikeway on a semi-permanent basis. There are large wooden boxes blocking much of the bikeway. All of these make navigation difficult and dangerous.

What obstacles remain should be padded. Padding is standard in ski resorts and other places where humans might crash into a pole. It should be standard on the Bridge.

The bikeway surface should be standardized. There should not be bumps for cables to cross the bikeway. There should not be slick steel plates in the bikeway. These all contribute to crashes.

The wind conditions on the west side should be addressed. On a windy summer day, the bikeway on the west side is nearly impassable even to experienced cyclists. The changes made to the railings mean that the full gale-force winds hit cyclists trying to cross the bridge. This must be addressed for safety. No speed limit for bikes will address this danger.

The narrow passages at the north side of the bridge should be widened. Instead of putting the onus on cyclists to navigate these tricky, narrow passages, they should be widened.

There is a historical analogy with the bridge's response to suicide jumpers over the first 75 years of its evolution. Originally, the response was a shoulder-shrugging "hey people are going to kill themselves anyway". Thankfully this response evolved to a quite different position — a decision was made to install life-saving safety nets to prevent suicides. Similarly, the Bridge should invest in life-saving changes to the infrastructure in the bikeway.

Scope should acknowledge reality of users

There is a wide variation in bicycle users who cross the bridge, and a wide variety of ways in which they cross the bridge. This report adds little to no knowledge about how the various types of bicyclists interact with the Bridge or how they experience safety issues. An experienced recreational cyclist crossing the bridge at 6 am in a group of riders has quite different needs and experience than a tourist crossing the bridge at 2pm on a rented bike with their family. These user groups should be understood, characterized and addressed. Similarly, the interaction between pedestrians and cyclists is poorly characterized in this study, and should be well understood.

The proposed approach to using average speeds to inform possible speed limits is not the standard way to evaluate speed limits. According to Caltrans, the 85th percentile is a more correct benchmark to use:

"The most widely accepted method of determining the posted speed limit is to set the speed limit at what is called the "85th percentile speed", which is the speed at or below which 85 percent of the traffic is moving.

The 85th percentile speed is the single most influential indicator of what is safe and reasonable, and it is used to determine the speed limit by rounding to the nearest 5 mph increment, and posting the speed limit at that speed. If there are sufficient conditions not readily apparent to the driver, as determined by a registered engineer, the posted speed limit can be lowered by 5 mph, and such a decision must be clearly documented in the E&TS."

Suggested alternative approach

Here is a suggested alternative approach:

Focus on removing obstructions and padding surfaces. The Bridge should focus first on its contributions to the safety problems, and address them. Obstructions in the bikeway should be removed, and those that cannot be removed should be padded. The railing between bikes and cars should be redesigned so that cyclists will not be needlessly endangered if they strike the railing. Bikeway horizontal surfaces should be textured with friction coatings in a consistent way. Wind speed issues on the western bikeway should be addressed.

Allow bikes to use the western bikeway 24 hours per day. The current daytime restriction to the east side puts bikes in direct conflict with pedestrians and results in large numbers of collisions between 12 and 5.

Install clear striping to separate pedestrians from bikes and northbound bikes from southbound bikes.

If speed limits are to be set, follow Caltrans guidelines in doing so. Setting speed limits arbitrarily low or near average speeds will only result in most cyclists on the bridge being lawbreakers.

All proposals make sense. Thanks for keeping the bridge open to bicyclists -- and pedestrians too.

One more thing:

Post the GGB temperature, windspeed and direction on the GGB Website to better prepare for the bicyclist for the crossing.

The following is located at Crissy Field:

https://tidesandcurrents.noaa.gov//stationhome.html?id=9414290 and is often inaccurate relative to west sidewalk mid- span of the bridge.

- 1) A dotted yellow center line around the towers would add safety. Some of the Ebikes during the evening and nighttime hours cruise around the towers as though no one could possibly be coming in the opposite direction.
- 2) It appears that Alexander Avenue to the Sausalito City Limits has NOT been addressed. a) the pavement around the slide area that occurred a few years ago is like a minefield. b) Rough dangerous uneven pavement at the downslope curve passed Bunker Road c) Antiquated bicycle lanes that haven't been repainted in years. (and lacking periodic bike logos).

3) Just a side note: The contractor who recently did the paving/bike lane delineation did a state of the art job!

The Bicycle Safety Study and proposed mitigations place the blame for collisions on cyclists, rather than on the infrastructure of the bridge itself, asking cyclists to slow down in order to reduce crashes. The primary assumption in the Bicycle Safety Study appears to be that speed causes accidents. However, this is not borne out by the actual data in the report. The report makes a broad assumption about speed, but makes no effort to tie actual speeds during a collision to location of crash and severity of accident. Instead, what actually causes accidents is an under-investment in bicycle safety infrastructure on the Bridge. There is a wide variation in bicycle users who cross the bridge, and a wide variety of ways in which they cross the bridge. I am not one of them, but am deeply involved in the cyclist community and hear stories and concerns about safety on the bridge due mostly to the effects of wind, inexperienced cyclists failing to share the bikeway in a safe manner, and construction debris along the bikeway.

Instead, the safety improvements should focus on removing obstructions and padding surfaces to increase the safety of the bikeway for all cyclists, allow bikes to use the western bikeway 24 hours a day to reduce the likelihood of cyclist/pedestrian interactions, especially with experienced cyclists sharing space with wandering tourists, and improving signage and striping about how to share the bikeway. If speed limits are set, follow Caltrans guidelines to do so rather than setting them at a poorly-calculated average.

It seems like you're addressing real physical challenges with more signage. I'd prefer to see physical changes as well. For example, removing the chain-link fence on the west side / Marin end would give a few more inches of clearance in the most hazardous spot, and also remove the possibility that something get caught in the chain link in the event that contact is made.

As a bicyclist, posting signs indicating high winds for cyclists does not make it more safe to ride across the bridge. Having bicycled on the bridge for close to 30 yrs, I find it distressing to ride across the bridge in the afternoon, when the winds are typically strong. I am no longer riding in the afternoons, which is disappointing, as I live in Marin and often ride to work in SF. I now am taking the ferry home, but would prefer to cycle home if it was more safe.

I don't think that these measures will make much of a difference at all here. I think that the issue is that the bridge doesn't have enough space nor is it bicycle friendly in a lot of ways. The fact that the sidewalk thins out a lot and that is where the most crashes occur isn't surprising - but perhaps a solution could be to widen out the sidewalk and to remove the mostly permanent 'construction' crates on the Marin side right next to the thinned out sidewalk. It may be expensive, but it doesn't seem like this plan has considered it at all.

I think better signage delineating space between pedestrians and cyclists would help. Often, pedestrians are oblivious to staying on one side. Pavement markings should be at shorter intervals.

Using the east sidewalk during high winds should be a Recommendation only. Some cyclists have a lot better balance than others.

It is repulsive as a taxpayer of a federally funded bridge that the SF Bicycle coalition that has bribed and blackmailed the city for years has hijacked this too. This is all geared towards them and what we must do for them and accommodate them and give them the whole right of way.

An example you dedicate one side of bridge totally to bikes. This is a federally funded bridge I should have right as a pedestrian to use both sides. If I cannot use both sides then bikes must be banned from east side. In addition you close path for pedestrians during part of day but leave a taxpayer funded bridge open to bikes all day. Discrimination? Unfair? Sure as

In addition your statistics on bike speeds and accidents is completely fake and has been manipulated to fit an agenda. Go out any day of week and observe no way are bikes going that slow. Bikes are dangerously fast on east side running at excessive speeds as they are on west side and on all approaches. The only reason you could possibly have less accidents for bike/pedestrian than bike alone is because one they are not reported and two pedestrians get the Hell out of the way when they see militant bicyclist barreling towards them! How can you be that stupid? This study should be audited.

I think there is a big difference between experienced commuters and the rental bike/first timers.

Most ideas are good.

the plan does not minimize the considerable hazard caused by parking equipment and materials on the sidewalks, often for months at a time. An effort should be made to minimize the width and not keep the equipment in place for extended periods of time.

Alta's proposal victim-blames cyclists and does not make any useful proposals to increase safety on the bridge. The proposal recommends limiting speed rather than addressing real safety concerns to do with obstructions in the bike path, narrow passages, and high-wind conditions.

Alta's data shows that speed is not clearly identified as a factor in the majority of collisions ("Speed was recorded as a factor in nearly 21 percent of collisions"), yet the recommendations largely revolve around speed limits and radar. Additionally, the majority of collisions were solo bicycle collisions, suggesting that objects in the bicycle path and the narrowing path are the largest issues.

Rather than accepting the limited-in-scope proposal, the Bridge should focus on keeping the western path clear of equipment, boxes, tools, and other obstructions. Additionally, the Bridge should find solutions to decrease the crosswinds introduced by the new, narrower bridge slats. If a physical solution

is impractical, perhaps the eastern sidewalk could be dedicated to cyclists and the western sidewalk dedicated to pedestrians (who have a lower cross-sectional area for high-wind conditions).

Last, I'd recommend the both Alta Design and the Bridge look into more innovative solutions to collisions. Perhaps the eastern and western spans could each become separate one-way bicycle paths in opposite directions to limit on-coming bicycle traffic? Perhaps padding could be added to equipment or the equipment removed from the western span? Perhaps a car lane could be dedicated to cyclists on the weekend to increase unobstructed space on the bicycle path?

The current proposal is inadequate because it focuses on reducing speed when it was not identified as a factor in the majority of collisions and ignores the fact that the majority of collisions were solo-bicycle collisions. I encourage Alta and the Bridge to revisit the proposals with both a more critical eye and with more imagination to what is possible in a livable city.

I agree with most of the recommendations. A few comments:

- 1) In my experience, the construction materials made the path narrower and seemed hazardous. Will they be removed?
- 2) The speed limit makes sense but riders should be able to use judgement and it should only be enforced during hours when there are tourists on the bridge. Experienced commuter cyclists should be able to go a few mph faster without penalty.
- 3) Will there be a sign letting cyclist know how to report crashes? That would help with data collection for future improvements.
- 4) A lot of very inexperienced tourist cyclists use the bridge and are likely the vast majority of the issue. Not sure how much can be done about that. Maybe encourage them to walk their bikes across on the pedestrian side? I'm not sure if that is allowed. If it isn't, maybe it should be and work with the tourist rental companies to promote that.

One largely unaddressed issue is the prevalence of construction/maintenance equipment on the bridge, which drastically narrows the sidewalk and makes passing more dangerous.

It's unclear how much enforcing a speed limit will help, and I'd want to see data on that before making changes. In particular, given the prevalence of solo collisions, that (to me) doesn't imply that it's the fast/experienced recreational riders crashing.

Is there a version of responding to high wind conditions that guides cyclists to the shared (east) sidewalk, but doesn't mandate it?

Also an anecdotal comment and suggestions on collisions at pole 26. I've personally witnessed two crashes there, and both times it was a visibility problem. In both cases, one cyclist (the crashee) had stopped for the view, and was pulling back out into "traffic" close to the end of the pullout section (once it was the north end, once the east end) and the second cyclist (the crasher) didn't see them in time and t-boned them. It seems like a simple fix might be to (through signage or a see-through fence) guide cyclists to re-enter the flow of traffic further from the ends of that section.

Need to have a standard for "strong wind conditions." How "strong" is "too strong."

Could mirrors be added around the towers, so that it would increase visibility to oncoming peds or bikes. visibility is the biggest issue here.

Prior to the global pandemic, something like 80–90% of bridge bicycle traffic on the weekends was comprised of tourists riding rented bicycles. A majority of these tourists have rudimentary bicycle skills at best, and being tourists, are often paying more attention to the scenery than to bicycle traffic. Aside from quadrupling the bicycle traffic density on the bridge, their relatively lacking cycling experience magnifies the potential for collisions. I would suggest that bicycle rental companies such as Blazing Saddles and Sports Basement do not actively encourage tourists to ride across the bridge, especially in the afternoons which bring significant crosswinds.

I still feel that something needs to be done with the new, vertical railings that were installed. The wind situation is horrible, frightening and dangerous for inexperienced cyclists.

I haven't seen any consideration with respect to this information provided around the amount of construction materials and temporary fencing that is in place along the pathways on the bridge, and any consideration with how it may relate to accident occurrances on the bridge. Consider how this equipment may cause the pathway to be narrowed at arbitrary places (often fairly dangerously). I believe that this study needs to be reconsidered at a time where this construction is not happening since it is nearly impossible to evaluate while the bridge is not free and clear of obstructions like it is and has been for years now.

Signs are better than nothing I guess... but I don't see these making a huge difference. People don't read signs. If there is no enforcement, people will not obey speed limits. I wouldn't be surprised if all the agro competitive cyclists get a thrill from seeing how fast they are going when passing the radars at 18mph.

If there was a way to improve the west side with infrastructure- including cleaning up all the construction tools and whatnot that narrow the space in several places that are not noted in the virtual open house.

I think the speed limit is good especially when it's crowded.

I commute across the bridge on bicycle multiple times per week and have been really struggling with the high winds this year, I often feel very unsafe because there is not enough of a safety cushion with oncoming bike traffic at many points along the west side. there's a lot of equipment and narrowed points. Every time you pass some equipment the wind shadow can actually cause your bike to SHOOT 3 feet over to one side. Obviously you aren't going to change the railing back to the old railing, and I DON'T THINK SIGNAGE IS GOING TO HELP US.

I think you should just flat out let cyclists use the east side of the bridge when they do not feel like they are able to safely bike on the west side, since i'm not sure what windspeed criteria you are planning to use- one windspeed cutoff doesn't necessarily apply to the age, level of strength or cycling experience of every cyclist. Thank you for reading this and thank you for your work.

The road after the bridge descending to Sausalito has high speed traffic and dangerous potholes. Cars often hit 50 mph with bikes and peds there. And the potholes are NEVER filled in.

One of the largest hazards I see consistently on the bridge is all of the stored maintenance / construction equipment. It seems to be stored half hazardly and inefficiently at best- or very dangerously to be more accurate. There seems to be no regard for the safety of cyclists. Perhaps those that store the equipment should take a ride on a weekend day to see how it affects cyclists. Or, perhaps these items should be stored on the pedestrian side. Perhaps it should just be removed all together daily- it may cost a bit more in labor, but the safety of cyclists is worth it.

Another hazard is the new fencing and extreme wind. I understand you are going to put up signage for which side of the bridge is open, and close the wind side when extremely windy. We also need a sign at East Road on the Marin side- so one can determine if they can use East Road and go thru the tunnel for the car light route to the bridge. It's very disappointing to get there and find you have to cross over.

I also think the bridge should provide training for riding in high winds. As a 20+ year cyclist, this is very new to me. My bike is leaned so far in the wind. I'm sure I will learn to do it, but some training would be great.

Why not just swap the ped side with the bike side? This would alleviate the wind issue and the stored equipment issue.

As far as the average speed on the bridge- that sign is on downhill section- I, a very slow rider, always speed up to see how fast I can go, and then slow down again, so I think your data may be skewed. Perhaps take the speed on a few parts of the bridge for some accurate data.

I like the idea of the yield signs around light posts 26-28. People go so fast there and making a yield to the uphill will help. I don't agree with speed limits, but yielding will help. I usually try to wait until it is clear to go thru here, pacing myself with respect to the oncoming bike traffic. It's frightening to squeeze thru with another bike.

Again, the biggest issues I see are the wind and the construction equipment- which could be alleviated by swapping the bike and ped sides, and by removing the equipment- or at the very least storing it better. I can't believe all of those things stored on the bridge are used daily- they should be stored elsewhere if not needed every single day. They should be stored with some care and compassion for the cyclists.

Also, to add to the list- I've crashed on the bridge, and it was not reported- there are many more than you count in your crash data- this is a huge issue. Biking over the bridge is usually the worst part of any bike ride. I take a huge sigh of relief when I get over it.

Thanks for reading and considering my comments.

I strong support signalized alternating one-way traffic on the narrow stretch. Cyclists already follow informal alternative g one-way traffic pattern. This stretch is too narrow for two-way bike traffic.

These suggestions are band-aid solutions to a hemorrhage. The bridge district's decisions to cram everyone on the East sidewalk the majority of the time and store construction materials along the bridge to the point where full sidewalk width is a rarity are recipes for conflict and collisions. The district does not cordon off parts of car lanes for construction storage or shut down an entire lane the majority of the weekday use time, nor should they subject active transportation users to this indignity.

I also wish there were mirrors installed around the pillars of two bridge towers to see cyclists around the blind curves. I also think having lines on the ground on the West side delineating the path for bikes going in opposite directions would be super helpful because I often see bikers drift into the oncoming lane's side and then get caught off guard when someone is coming at a high speed in the other direction.

Thank you for doing this work!

The signage will hopefully be helpful, especially near light poles 26 & 28. An additional radar reader on each side of the bridge with the max speed limit listed boldly. As a bicyclist, my biggest areas of concern are all of the construction equipment / crews on the east side of bridge and the speed of the cyclists on both sides of the bridge.

Hi, thank you for all the work to make the bridge safer for cyclists and pedestrians.

I really like the idea of being able to use the east side of the bridge for an afternoon commute back to Marin when the wind is too fierce on the west side, and being able to ride my bike (not having to walk it).

I like most of the recommendations. Is there any way to widen the bike path on the west side of the bridge? I feel like that would have the most impact.

I live in Marin and commute by bicycle 3-5 days per week all year long across the Golden Gate Bridge.

My work schedule varies between morning and evening shifts. In my experience, the most dangerous and frustrating time to cross the bridge is mid-day (Mon - Fri) when cyclists and pedestrians are confined to the East sidewalk. I have had several collision incidents with pedestrians and other cyclists, primarily because there is simply not enough room for everyone to maneuver and flow. I understand and appreciate that the bridge needs constant maintenance/updating, but I I wish that we could officially establish the West sidewalk for cyclists and the East side for pedestrians at all days/times.

Construction materials on the west sidewalk make the pathway dangerously narrow and limit maneuverability. Greater clearances should be required to accommodate two-way bike traffic.

The variable message signs are proposed at four locations: East Lot, Battery Trail, and Merchant Avenue (on the San Francisco end), and Alexander Avenue (on the Marin end). I would also add an additional sign on Conzelman Road just uphill from Alexander Ave on the west side of the bridge.

More analysis is needed to better link the cause of severity of crashes to the proposed treatments.

Speed enforcement should be minimized, and limited to warning/citation for reckless riding, rather than minor violations of the speed limit.

A self-reporting tool is very important. Once tested and implemented, it should be well signed on the bridge deck to capture the greatest share of potential respondents.

The Bridge needs a Bicycle Advisory Committee to report to the Board on matters of bicycle safety. There are currently advisory committees for both the ferry riders and bus riders, but the thousands of daily cyclists should also have a seat at the table.

I agree that better signage and speed limits around known hazards are a good policy. Enforcement should focus on egregious behavior; most cyclists don't have speedometers so it's hard to know if one is going 15 or 17 mph, but most people know when they're going 25+ mph. Speed limits are particularly important for ebikes.

The main way to improve safety is to segregate cyclists from pedestrians in my view. I believe consideration should be give to more hours for cyclists on the west side, particularly at peak periods and that an effort should be made reduce maintenance storage on the west sidewalk. Lanes, where possible, for north and south bound cyclists on the west span, so they stay on the appropriate part of the sidewalk.

Hazards: 1) E bikes going very fast on the East side 2) as well as some road cyclists who insist on going 20+ mph on the East side (cmon guys you can mash the pedal down as hard as you want in the headlands) 3) cyclists that don't use a \$6 1 oz bell to warn pedestrians. I've had many pedestrians thank me for using the bell, I'm sure they've been startled by thoughtless road cyclists. 4) sign should say wind is particularly tricky when rounding the towers.

All told -- great initiatives!

I'm a frequent rider on the GGB (more than once a week). Generally, I think these are all good ideas and I welcome them.

I don't agree with making the switch to the east sidewalk mandatory during high winds. It should be suggested, or recommended, but not mandatory.

I don't agree with having one direction yield to another where the sidewalk narrows. People just need to slow down and be cautious.

Thank you for your time and for your work on bicycle safety.

Yes I strongly agree that we need improvements in ggb I've seen some accidents there and this will make safer.

Cyclists and pedestrians taking pictures off the bridge contribute to the accidents. They are not fully aware of their surroundings and often dart in/out of the path. Also, inexperienced tourist cyclists who do not operate their bicycles well also block the path and cause other cyclists to weave around them. Adding 15MPH signs will not help the situation with distracted cyclists. Stopping on the bridge should only be done in emergencies or by pedestrians. Bicycles should always be moving along the path. Maintenance equipment also narrow the path forcing inexperience cyclists to slow down further.

Imposing a 5mph speed zone through the narrow corridors of the bridge's sidewalks is a driver's solution to a cycling safety issue. 5 MPH is simply a walking speed, and imposing it will just increase non-

compliance for that, and other signage along the sidewalks...unless you also choose to lower the driving speed to 20 MPH for driving vehicles (for, of course, safety issues). I don't think most riders are capable of riding that slowly. Try it.

Happy this is being studied. Things can get pretty hairy when bikes approach bikes from opposite directions.

These plans don't go nearly far enough to increase safety. There needs to be far more signage for pedestrians (in different languages) and much more use of LED signs to indicate upcoming cyclist or pedestrian traffic around the towers. Most tourists do not know about staying to the right, nor do they understand about yield rules. We all know this is only a fraction of the collisions that happen on the bridge as most just limp off and get care at home. Please come up with more significant solutions than these! Also WHY is the West Sidewalk closed during weekdays before 3?

Signage and contiguous floor space markings will help out a lot. Wondering if you can grab data from San Francisco regarding people following instructions in Marina/Crissy Field area path. Anecdotally, I notice people tend to follow instructions once the signage and markings are present.

I object to having cyclists and pedestrians going one direction on one of the sidewalks and the other direction on the other, as if they were one way streets with bike lanes. That seems like B.S. I think cyclists can be respectful of pedestrians on the pedestrian side of the bridge and support the idea of a clear wind break on the ocean side. There should be built in speed limiters in electric cycles topping out at 15 mph with anything faster being 100% pedal power.

While speed limits are common practice for managing vehicle traffic and, on first blush, would appear helpful in reducing bicycle incidents, they're not the best tool to use. Most people bicycling don't have a speedometer on their bikes and would have difficulty differentiating between speeds above or below 15 mph.

It's more important for people on bikes to have situational awareness. The proposals which draw people's attention to where the pathway narrows or bends around the towers, for instance, are far more useful than a speed limit for bikes. We should have more treatments that call out conflict areas and encourage considerate behavior (e.g., using a bell when passing, yielding to people on foot) rather than apply tactics better applied to people driving.

I also suggest considering more opportunities to open up the western pathway for bikes on weekday mornings. Bridge maintenance is common, but if there are days when no work is occurring or it is completed early, the pathway could be opened for people on bikes. This would reduce conflicts between those walking and bicycling on the east side.

I don't think the traffic lights will work.

Could you have a wind meter at the beginning of the bridge indicating "normal | strong | very strong | extreme" winds so people can decide whether to ride their bikes or walk their bikes on the East side

The 5mph tower speed limits should be advisory. From a safety standpoint no one should be looking at their speedometers to see how fast they are going approaching the tower and I'm not sure how you would enforce that speed limit. Regulations should always be enforceable otherwise they are meaningless.

I would suggest painting "fog lines" on the wide areas leading to the narrow sections on the north end of the bridge. This would help delineate pathway areas from stopping areas and encourage riders to stay within line of sight of each other rather than cycling wide of the opposing traffic and popping into view at the last moment and/or swerving into the gap and into oncoming bicyclists.

I think signs are fine and won't hurt to add. The speed limit idea sounds annoying to me as I would like to be able to ride faster than that. The extreme wind conditions are going to be the biggest factor in future accidents on the west side. I've been riding bikes for 13 years and can barely stay upright when crossing the bridge now. The current conditions are extremely dangerous for cyclists. I encourage everyone involved to get a bike and ride across the bridge around 2pm to see how unsafe it feels. The current setup makes me want to move away from SF to avoid the bridge.

It's apparent that there's not enough room on the bridge deck for non-automotive use AND maintenance on the two sidewalks, an aspect exacerbated by the new structural changes on the western sidewalk. Mixing higher-speed functional cyclists, slower-speed tourist cyclists, pedestrians, and maintenance equipment is always going to result in high accident rates in such a limited space.

It would be worth closing the lane of traffic nearest to the east sidewalk in order to build a true multiuse path that can accommodate everyone's needs, instead of kowtowing to private automobile use and the destruction of our planet. With electric-assist bicycles becoming more and more popular for commuting, the Bridge could become a magnet for sustainable transportation between Marin and San Francisco if there were enough space and it was perceived as a safe option. Right now, it's terrifying to use - and none of the suggestions in the Open House appear to do anything to mitigate that.

Please do better.

These seem like good changes.

I think what is missing here is a similar lane set up on the West side like is proposed for the East. There should be a left and right lane on the West - especially a marking that marks where bridge crew can and can not store equipment and how far it can protrude in to the lane.

We need much brighter lines with small, reflective, cycling-friendly, barely-raised Bott's Dots the ENTIRE length of the East side to delineate the walking and cycling sides of the sidewalk. Because so many people use the bridge only one time, when on holiday and distracted by the beauty of their surroundings, these tourist cyclists and pedestrians do not notice sporadic signage. The proposed markings as shown are an improvement. But, they will not suffice. The increased signage will help. But it will not suffice.

I fear that signals to make the narrow bits on the sidewalk one-way will result in pile-ups on one or both sides of the signals because those tourists mentioned above will not expect them -- and will crash into cyclists waiting for the red signals to turn green. Such one-lane signals work on very low-traffic roads for Cars -- with plenty of visibility before drivers approach them. The GGB is a high-traffic area for cyclists who do not expect to see any stop signs or signals on a continuous sidewalk.

I do understand the engineering difficulty. Here, the increased signage seems helpful. Cyclist-friendly Bott's Dots will help 75 feet AHEAD of the narrow section, across the sidewalk perpendicular to traffic flow, to alert cyclists who are not paying attn to signage with tactile reminders.

MOVE THE DANG EQUIPMENT SHEDS OFF THE EAST SIDEWALK. PLEASE.

Please paint the bike lane a green, or some other color, like the bridges in NYC do

I ride across the bridge occasionally. For me high winds on the west side seem to cause the most dangerous situations. I would love to be able to ride on the east side on those days. There was one day it felt so windy I got off my bike and walked the rest of the way (on the west side).

The best way to reduce collisions is to provide more space. The construction equipment creates bottlenecks and removing it should be the first priority.

The crash data and analysis was lackluster in the report and I would hate to see policing on the bridge and cyclists being ticketed for going 16 or 17mph. Frequent cyclists across the bridge (commuters, hobbyists, athletes) are more likely to move faster and also more likely to be paying close attention to their surroundings rather than the view.

I don't like the idea of a traffic signal in the narrow areas, but a "yield to uphill traffic" sign would make sense.

I like the recommendation to allow cyclists on the east side during high wind events. I think any variable signage about which side to ride on will be an improvement.

Thank you for such a thoughtful work. I have been injured in bicycle accident on the bridge that resulted in 7 stitches. I have wanted to write about these safety issues but you have done a better job than I could have.

There is one additional issue to consider. Since recent times neither cyclists nor pedestrians are able to cross the bridge during the San Francisco Marathon. It would be great if the marathon would resume sharing the road with the cars so everyone has the opportunity to enjoy the bridge during this long event.

The bridge is unsafe because the conditions are unsafe. Not because of the behavior of people on the bridge. For example, the modifications to the bridge increased crosswinds. I have seen a cyclist slowly trying to negotiate the tower and get literally blown off of his bike onto the ground. He was moving slowly and fully aware of the windiness. The issue was the bridge design, not the behavior. There is often construction or maintenance equipment on the bridge. This makes the bridge less safe. Move the equipment so it's not in the way. The area where the crashes are highest is because the passage is too narrow. Who is getting in these crashes? Skilled cyclists going too fast or unskilled cyclists panicking in a difficult space? If you're going to add signage, perhaps indicate that the bridge crossing is challenging so unsuspecting tourists don't get into trouble. Any local cyclist knows of the challenge of those narrow passages and takes them at the speed they know they can negotiate. Lastly, I don't think downhill traffic should yield to uphill traffic. It's harder for downhill traffic to stop. Uphill traffic should yield to downhill.

5 miles an hour at the narrow part of the north west side seems a bit punitive.

It seems like separating bikes and pedestrians would be good for everybody. Why is it necessary to close the west path during weekday days?

The safe speed limits are already obvious, signs will not help. Only things that will help are: A) keep the west-side bike lane open \_24x7\_ (as is done for motorists), B) do not store \_any\_ equipment on either sidewalk, and C) fix the fencing so it blocks the wind. This is a no-brainer. A bike and ped hotline would also be helpful.

Not mentioned in the slides are pedestrians and skaters on the bike side, who create very unsafe conditions especially when combined with the wind. CHP seems to be doing a good job of stopping peds

the past few months but more "peds not allowed" signage would be helpful.

If bicyclists are not going to be afforded the same rights as motorists and the union is going to continue to store equipment and force closure of the west sidewalk then at least put in more signage and do more enforcement so peds don't walk in front of cyclists on the east sidewalk.

Thanks for doing the research and asking for our opinion!

Speed signage is not going to change the underlying infrastructure problems. Seems like this is just a CYA thing, or an excuse to ticket folks for speeding. The paths need to be widened at the choke points. Have you even investigated this? Even rounding out the railing could ease the problems since bikes need to lean to navigate these corners. Perhaps some mirrors or detectors could help in the blind corners. Better wayfinding signs would probably improve things more than speed limit signs. For example people biking southbound on the SF side usually miss the hard blind right turn to exit the bridge path. Also there are no directional signs on the west side from Alexander onto Conzelman, or Conzelman into the parking lot, so often folks try to enter the bridge on the car lanes.

I use the bridge on weekdays and weekends. Primarily as a cyclist and secondarily a runner. I am very disappointed in the apparent minimal effort that has been made to make cycling and pedestrian access to the bridge safe. 1) Why do maintenance crews appear to have first priority for use of sidewalks? Specifically, why are so many tools and construction objects permanently stored (for years) on the sidewalks? 2) Why is there no attempt to optimize the opening of the sidewalks to be used by pedestrians and cyclists? It appears that 90+% of the time that the west span is closed, it could be opened without impact to working crews? 3) Rules on which sides are open when are impossible to understand - it is clear no attempt has been made to make them easy to find or understand.

I hope you focus on making effective use of the sidewalks we have today before focusing on enforcing speed limits or putting up signs that effectively say "this sidewalk is unsafe because it's crazy windy and a giant toolbox is using up most of the space"

There is a huge opportunity for the golden gate bridge to become much more friendly to cyclist and pedestrians and I hope the bridge authority takes advantage of this opportunity.

Hello,

I am President of the San Francisco Cycling Club and cross the bridge on my bike 3-5 days per week.

There are some improvements I think are very necessary and will make a big difference:

- better signage and pavement markings

But there are physical infrastructure improvements that are not addressed that would have a greater impact on safety such as:

- moving the chain link fence between light poles 26 and 28 to the outside to allow more room
- modifying the new railings to actually reduce the wind impact

All this doesn't address the construction on both the east and west sides that further narrows the path in many areas with equipment. This has been an issue on the west side for a long time, and now it's an issue on the east side. Equipment on the west side appears to be stored there for long periods of time, and it significantly narrows the path for cyclists to pass safely.

Thank you,			

Additional width or separation of directional travel (i.e., all northbound traffic on west side, southbound traffic on east side). Closure of a vehicular lane on the bridge & dedicated cyclist use to allow for more room for cyclists would ultimately be safer, especially if that lane could be protected by a physical barrier.

I like the recommendations. I suggest getting rid of the construction materials that always seem to be blocking up the bike travel. Thanks!

- 1.) The current signage is pretty bad. Even for an experienced commuter like me, there is no clarity about even where to ride before you reach the bridge. I am often helping tourists on the Marin side understand how to get to the west side of the bridge. Please put signage up on Alexander Ave that clearly states when and where cyclists should ride. Having people wandering around the 101 often in the fog is so dangerous and avoidable. We have a bridge that is an international destination: please treat it as such. Giving people the time to absorb information before they even get to the bridge is as important as what is added to the bridge.
- 2.) A self-reporting tool is very important. Once tested and implemented, it should be well signed on the bridge deck to capture the greatest share of potential respondents. Feedback from users would be so easy if there was an easy method to share it.
- 3.) The Bridge needs a Bicycle Advisory Committee to report to the Board on matters of bicycle safety. There are currently advisory committees for both the ferry riders and bus riders, but the thousands of daily riders should also have a seat at the table.

The slider doesn't work for me

I'm not excited about one way traffic by the light pole. That would cause jams and stop and go.

I like the idea of encouraging people to slow down, but also you noted experienced road cyclists go quite a bit faster and I think that is generally safer than when less experienced people go faster. 15 is pretty slow for a road bike. It does seem reasonable around the corners and narrow section though. I wish we could widen the walkway I think that would help more than just adding signs.

Really excited that this is being studied though! great data and graphs

Construction materials on the west sidewalk make the pathway dangerously narrow and limit maneuverability. Greater clearances should be required to accommodate two-way bike traffic.

More analysis is needed to better link the cause of severity of crashes to the proposed treatments.

Speed enforcement should be minimized, and limited to warning/citation for reckless riding, rather than minor violations of the speed limit.

The Bridge needs a Bicycle Advisory Committee to report to the Board on matters of bicycle safety. There are currently advisory committees for both the ferry riders and bus riders, but the thousands of daily riders should also have a seat at the table.

I think the proposed changes do not address the major issues. I'd honestly safe the money because they're not going to change much.

- 1) The west side railing is simply dangerous and (borderline for experienced cyclists) unrideable in windy conditions. I've seen multiple people go down. The signs will not change that.
- 2) The west side should open earlier on weekdays. Around 9:30 the east side fills up with pedestrians that like to take selfies in the bike lane.
- 3) Pedestrians do not look/care at/about the lane markings and are constantly walking in the bike lane. Bigger markings won't change that. You'd need more physical boundaries or just open west more.
- 4) Tourists on rented bikes on the weekend do not belong there. The rental companies should be required to give a safety training.
- 5) eBikes are banned but no-one is enforcing that. I see them all the time speeding at 30mph and yelling at other cyclists.

- 6) Scooters are banned but no-one is enforcing that.
- 7) Signs that there's no walking on the West side need to be bigger. People don't get it and I needed to have discussions about it

While speed no doubt contributes to SOME crashes, the crash data presented is incomplete. Speed is a factor in ~20% of crashes but the vast majority of crashes had an unknown cause.

As a cyclist I see scores of inexperienced cyclists on rental bikes attempting to cross the GGB. I bike 3 - 4 times per week and find the GGB to be intimidating as is. This is challenging to enforce but someone who can barely ride a bike should be encouraged to bike the bridge. It is a threat to their own safety and to those around them.

These recommendations completely ignore several reasons that the bridge has become more unsafe. The construction that lives on both sides of the bridge has made the space for travel SO much smaller. The turn into and out of the Marin side light-pole on the west side of the bridge is 50% smaller because there is construction material on the fence that juts out into the already blind turn. There should be mirrors added so people can see what's coming and that construction by the pole needs to be moved.

They also ignore the golf cards that are constantly moving up and down the bridge. The golf carts take up 75% of the pathway. When you have cyclists and walkers coming both directions and golf cart drivers waving them on, recipe for disaster.

If they are going to do construction on the east side of the bridge then they need to open the west side of the bridge in the mornings.

The tour groups with inexperienced riders crossing the bridge at peak times (WINDY) is so incredibly dangerous. The riders don't have experience navigating small spaces or spending much time on bikes. There should be some sort of "bridge courtesy" signs that explain the wind is bad, stay to X side, careful on the poles, NO SELFIES WHILE ON BIKE.

There should be some sort sign that says the bridge is dangerous and people need to be careful. No phones on the bridge. No video taping while riding.

Lastly, the wind is out of control. There should be some sort of wind shield (plexiglass??) at the highest wind areas (marin side on the west side of the bridge).

The wind, the construction, the tourists and the blind turns are the reasons for danger and they just were not addressed with this. I tend to go fast on the bridge to get it over with as soon as possible.

This still doesn't address the high speed winds cyclists are exposed to. The western span is increasingly challenging and dangerous to ride on whether out there with other people or even by one's self.

Another thing to consider is making bicycle traffic one way on busy weekends, i.e., on east side going north and on west side going south. This would work especially well when there is a pedestrian stripe to separate peds from bikes on the eastern sidewalk.

Guys! Riders MUST take responsibility for their OWN actions! IF you ride TOO fast = it's your fault! Pay attention on the span, to the wind, to other riders and ANY and ALL obstacles On the path. I have been riding for years. Never had a problem other than a couple idiots riding too fast! The wind will ALWAYS be there - deal with it and ride appropriately. The GGB District cannot babysit for careless riders.

The path is still too narrow and the thinner wind slots push cyclists to the side in windy conditions

Signs aren't useful. Many people who use the bridge don't read or speak English.

Instead, can you clean up the construction equipment? How about improve the bridge's barriers to avoid awful gusts of wind that knock people (like myself, a very experienced rider) over.

The recommendations can be split into two categories: speed limits and better signage.

The signage recommendations make sense. The need for a one way change controlled by signals when the sidewalk narrows is unnecessary (it would be overengineering). I would also add signage at the entrance to the sidewalks on both sides, more in the spirit of "mind your speed, respect tourists" than authoritative road signage. The "path narrows" and "high winds" signs would be very welcome.

The speed limit recommendations make no sense. Bicycles are not cars. They don't all have tachometers. Not all riders are in tune enough or have enough experience to know what the difference between 15mph and 20mph feels like on a bicycle. As the data shows, it's already hard to go faster than 20mph on the bridge. My recommendation: add "SLOW" signs at key points and make obstacles more visible. Number based speed limits are car centric. SLOW is similar to what ski resorts do.

Having ridden the bridge many times over the years, the prevalence of solo accidents makes me think people are riding a bit over their skill level due to the incline. The study correctly notes the areas where the path narrows, but there are bumps and other features of the bridge that are difficult to avoid and ride on. These need to be made more visible, so that riders will slow down sooner and ride on/around them at speeds they can handle.

Notably missing in the study recommendations is one more addition: open the west side of the bridge to bikes and leave the east side for pedestrians permanently, every day of the week. There is an opportunity to remove the pedestrian and bike conflicts entirely and we should take it. While it is not the most common type of accident, it's the easiest to remove completely.

These suggestions do not make the bridge safer- it's all window dressing. The wind, construction materials/debris, narrow pathways, lack of visibility around the pylons, inexperienced riders (who are usually taking selfies as they ride) are what cause the accidents. Speed is not a factor - experienced cyclists are not causing accidents and know to slow down and call out when they reach a pylon or narrow spot. The accidents are mainly caused by those who are too busy riding in the center or two abreast and taking selfies and also are challenged by the high winds and lack of bike handling skills.

Construction materials on the west sidewalk make the pathway dangerously narrow and limit maneuverability. Greater clearances should be required to accommodate two-way bike traffic.

The high winds, especially with the new barriers on the west side, have increased and make it extremely dangerous. The winds are even more dangerous around the pylons, which are already challenging.

Speed enforcement should be minimized, and limited to warning/citation for reckless riding, rather than minor violations of the speed limit. Enforcement should be focused on using phones to take pictures while riding.

The Bridge needs a Bicycle Advisory Committee to report to the Board on matters of bicycle safety. There are currently advisory committees for both the ferry riders and bus riders, but the thousands of daily riders should also have a seat at the table.

No. The primary issue is tourists riding bikes on the bridge with no training whatsoever. They do not wear helmets, are unaware of their surroundings, and stop and weave erratically.

It would be much safer if we didn't have to navigate equipment stored on the sidewalk and if cyclists were instructed to NOT stop and take pictures at the two main posts on the bridge. I've nearly crashed into tourists blocking the turning point a couple of times and it could have resulted in serious injury.

Removal of Bridge Construction equipment from the bike path on the west side of the bridge would increase safety. These construction zones have been the narrowest parts of the bridge with many tourists freaking out and making abrupt stops or turns.

I like the additional signage proposals.

I would add signage instructing tourists to park on the West side railing behinds light posts.

Please consider limiting the maintenance equipment on the bridge path. It seems to be increasing over time. consider removing it more regularly.

It is noticeable the increase wind with the new rail. Has the wind speed been measured on both sides of the rail? Is the rail increasing the wind speed or is it the same on both sides of it?

#### **Thanks**

For 20 years, I've biked from SF to Marin and back again at least 2-3 times a week. Biking on the bridge is a bit sketchy because of 4 things:

- lack of space to pass
- pedestrians
- inexperienced cyclists
- the new issue of excessive wind because of the recent barrier changes.

Is it because of speed? I doubt it and would like to see the data back that up.

Thoughts on this presentation and the issues:

- I think making things one way around lightpole 26 is a good idea.
- I don't think cyclists should be forced to use the east side during high wind events but it should be suggested.
- I think inexperienced cyclists should be encouraged to use the east path.
- Recently, (last 2 weeks of Sept 2021) the east side has had a lot of workers during the weekdays while the west side has been relatively empty. When that's the case, the west side should be made available to cyclists.
- The amount of material that is stored on the west side makes it more dangerous can we stop storing things on the bridge?
- And finally is it really necessary to have continuous work done on the bridge? Can that be limited?

#### **Thanks**

Why is there no discussion or recommendation around updating the yellow bump covers? Additionally with all the construction equipment, the pathway is quite narrow at multiple points on the west walkway.

The data don't make clear where the non-solo bicycle crashes happen. This is a crucial distinction. It's not enough to understand where crashes happen and, separately, what percentage of crashes involve another cyclist or pedestrian. We must know where the crashes that involve another cyclist or pedestrian happen.

It is appropriate to penalize cyclists who can handle themselves safely in order to save would-be solo crashers. Those solo crashes are unfortunate but it's far from obvious they're avoided by slowing or stopping everyone.

Once the data makes clear where the problem is, I would like to see environmental improvements considered before telling the vast number of safe riders to slow down or stop, which won't do anything. Moving all the construction equipment off the sidewalk, moving the spurious chainlink fences, widening the narrow sections, keeping the west side open more of the time - where are these potential solutions?

Get rid of all the crap on the west side or I will start throwing it off the side of the bridge

I have been riding on the GGB for 15 years. I have never had an issue with local cyclists and safety. However, I have had countless near collisions with tourists. The issue of safety is actually the tourist cyclists who are using their cell phones and riding one-handed on the bridge. They are also really dangerous in that many of the tourists are unskilled so they are swerving on the bridge because of the wind or being out of shape which is super dangerous. Then, many of them stop suddenly in the middle of the bridge sidewalk to take photos, adjust their jacket etc and they are not thinking about who is behind them. Another safety issue is all of the construction stuff that is on the bridge which narrows the area for cyclists to ride. There are construction materials that I have seen there before Covid and the materials are still there on the bridge making the sidewalk much narrower. I also think the bridge should be open to cyclists all the time on the west side. Biking on the east side during the week is also really dangerous as there is not enough space for pedestrians and cyclists to share the path. Pedestrians are taking pix, walking with their kids in a stroller, walking hand in hand...as they should. But, when you add biking, the sidewalk is too narrow. Safety would increase if cyclists always had the west side open for their usage.

The easily fixable hazard with West side cycling is the maintenance booths and equipment that significantly narrows the walkway. WHY IS THIS NOT INCLUDED IN THE RECOMMENDATIONS??!!

Additionally, the District should consider halting replacement of West railing with the new design, which has proven to be not just an auditory nuisance, but a safety problem for cyclists (it is also ugly and does not reflect the Art Deco design of the original).

Keeping pedestrians off of the West side 24/7/365 should also be a priority.

I was a Planning Commissioner for a local jurisdiction for 12 years and have experience with bicycle traffic issues and modifications to roadways. Thank you.

One thing that is not mentioned in your safety recommendations section is the large amount of construction materials that are stored on the west sidewalk and make it unnecessarily narrow in many places. It would be great if the District could figure out a way to minimize those many storage areas or to consolidate them in one location.

The data is most certainly lacking as many incidents go unreported if there are only minor injuries. Reducing the amount of construction material I believe improve safety. speed limit signage at the turrets and narrow concrete passages at with and may help. Tourists should be given guidelines by rental agencies on how to cross the bridge safely. Experienced riders simply need to slow down especially when the bridge is crowded.

The recommendations are fine for what they are - but completely neglect the issue of the number of people riding rented bicycles on the west side on weekends. I have observed multiple solo crashes & bike-bike collisions because people riding rented bikes:

A. Are riding one-handed to take pictures or videos as they ride.

B. Can't handle the bikes in the strong cross-wind conditions that are often present on the west side of the bridge, especially; and/or

C. Are riding two-abreast and don't understand they need to ride single-file to allow space

These behaviors are a bigger issue than the folks who ride too fast and pass too close (irritating as that may be).

The companies renting bikes should be required to provide clear directions about the protocols, and the bridge itself needs to have large, clear signs about riding to the right, single file, etc.

I do not believe that increased signage for things like the path narrowing will cause any improvement. It's hard to imagine that someone riding cannot visually see the drastic narrowing in the path. In that particular case, it is not an awareness problem, it's a behaviour problem.

Most accidents or near-accidents that I see are due to people (mostly rentabike tourist) stopping, or going much slower than the average rate of traffic. We need to increase awareness about not stopping except in designated turnouts, and that braking long before pulling into the turnout is not acceptable. Rather than speed limit signs, install signs showing a minimum required speed of, say, 10 mph. If someone does not feel capable or safe at that speed, request they walk the bike across in the pedestrian zone.

In general, non-motorized traffic should be treated similarly to motorized traffic. If you drove across the bridge in a car at 20 mph, Bridge Patrol would respond because you are drastically below the average speed of other traffic. If you stop in a lane of traffic, Bridge Patrol would respond. When you pull off or change lanes, you make your best effort to not decrease your rate of speed before exiting the current lane. Bike behaviour should be no different.

I think the best way to accomplish these behavioural changes is to partner with rental companies like Blazing Saddles and assist them in giving short safety and how-to-ride-in-traffic briefs to tourists. Even a 3 minute spiel would probably accomplish much. On holiday weekends, there should be some sort of ambassadors (wether official law enforcement officers from the relevant agencies, or local bike club volunteers, or whoever) periodically crossing the bridge to assist and remind riders of the expected behaviour.

It seems like the proposed solution for a lot of problems is signage. While this seems applicable for certain situations - eg 'narrowing pathway' signage near Pole 26, there seem to be various situations where it doesn't work:

- 1. Speed limits I'm afraid that unless enforced, it doesn't feel like the speed limits sign will deter any cyclists from going fast across the bridge. Anecdotally, the speed radar signs that up currently are often used as a game to see how fast you can go past it (quite the opposite of desired effect of slowing people down). Perhaps a better solution may be to find have a clear sidewalk with little/no construction equipment? Most people auto regulate their speed when its busy
- 2. Wind signs I don't think the issue here is that that people don't know that its windy. It's just extremely hard across skill levels and especially for new riders/tourists to ride in a strong crosswind. Adding signs will unfortunately not solve the problem.
- 3. Selfie zones Unless enforced, people are going to continue to take selfies. As they should, the bridge is gorgeous and not everyone gets to see it everyday. Maybe this should only happen on the east sidewalk? Or maybe there should be designated selfie zones?

Hi- I bike commute- and I am a pedestrian, too. 5 mph on a bike is too slow. test it out. I appreciate that we need more signs for the narrow areas, but 5 mph for bikes- just not realistic.

As for the wind around the towers- I am 54 and weigh about 115. I feel like the wind is going to pick me up and toss me off the bridge. I am a seasoned cyclist. I brace for the wind. A sign is not going to help me. I got knocked around enough that I put a foot down to brace against the wind and an on-coming cyclist SAW me and still was blown INTO my body. Something beyond signs please.

Make it mandatory that all bike rental companies provide their customers with literature advising them that it's illegal and unsafe to be taking selfies while on their bikes crossing the GGBridge. Most of these recreational cyclists cannot even cycle in a straight line but they are adamant about taking selfie videos & pictures just so they can post them on their FB/Instagram. There have been many, many crashes due to this.

Also, E-Bikes should NOT be allowed on the bridge sidewalks. They operate them like motorcycles at high speeds and it's extremely unsafe.

Construction materials on the west sidewalk make the pathway dangerously narrow and limit maneuverability. Greater clearances should be required to accommodate two-way bike traffic.

The variable message signs are proposed at four locations: East Lot, Battery Trail, and Merchant Avenue (on the San Francisco end), and Alexander Avenue (on the Marin end). We recommend an additional sign on Conzelman Road just uphill from Alexander Ave on the west side of the bridge.

More analysis is needed to better link the cause of severity of crashes to the proposed treatments.

Speed enforcement should be minimized, and limited to warning/citation for reckless riding, rather than minor violations of the speed limit.

A self-reporting tool is very important. Once tested and implemented, it should be well signed on the bridge deck to capture the greatest share of potential respondents.

The Bridge needs a Bicycle Advisory Committee to report to the Board on matters of bicycle safety. There are currently advisory committees for both the ferry riders and bus riders, but the thousands of daily riders should also have a seat at the table.

Speed is not the only important factor - experienced bicyclists can ride safely at higher average speeds that tourists.

Add a 'no stopping/no photo' rule for the west side. Many tourists stop abruptly and unpredictably to take photos etc.

The big safety issue which is not addressed is use of cellphones by cyclist while riding on the bridge. This is the biggest danger I have seen: tourists riding one handed while using their cellphones to take pictures / video.

It isn't the speed of experienced cyclist, the safety issues are related to inexperienced cyclist riding one handed / stopping at dangerous pinch points (towers) / riding erratically or not staying all the way to the right.

Should not allow electric assist bikes to be powered on for the bridge. And instead of signs around the light poles, the area needs to be extended. Or at least include mirrors so moving traffic can see tourists who are hiding around the corner who sometimes move into traffic without looking.

Mirrors can also be helpful with seeing around the corners when traversing around the towers.

As someone who routinely cycles the Golden Gate Bridge, I do not feel that these safety recommendations take into account how people actually use the bridge.

- 1. The west span has been made dangerously windy by the new bridge railings. I say this an experienced cyclists. People on rental bikes \_should not\_ be allowed on the west span of the bridge.
- 2. There needs to be some form of actual traffic enforcement on the GGB. Most of these recommendations assume that pedestrians and cyclists are reasonable and will read and follow signs. In many cases, there are already clear signs (e.g. about no pedestrians on the west span) that I see violated on a daily basis.

To summarize: I used to enjoy riding across the GGB to access cycling in Marin on a regular, nearly daily basis. Since the installation of the new railings, I now routinely avoid this to seek out other areas as I feel that the bridge is made unsafe by the combination of wind, railings, piles of construction equipment, and inexperienced cyclists (not to mention people on prohibited scooters, electric skateboards, etc). Given the high number of tourists, especially those who don't speak English, on the bridge, I do not feel that signage will be effective in mitigating any of these issues.

The suggested improvements are mostly cosmetic and I'm skeptical they will solve problems or improve safety. Frankly I'm pretty disappointed.

The hazards for bicyclists come from:

- 1. Narrowed path due to pinch points
- 2. Narrowed path due to construction equipment on pathway
- 3. Sharing with pedestrians
- 4. Only one lane open on week days

I would strongly recommend permanently making one side open to bikes and one side open to pedestrians. That would help a lot on week days.

I would also recommend trying to remove the construction equipment as soon as possible.

Further, the lanes could be widened in some areas where they are currently narrow. It's a good investment given the danger to bicyclists, cost of ambulances, etc.

The speed limit of 5 MPH is not realistic because it is too slow.

Most of this seems like window dressing. Signs, speed limits, etc. are moderately helpful. It would probably be a lot more helpful to figure out how to separate traffic flows.

I believe allowing cyclists full-time access to the West side (full separation from pedestrians) would most greatly improve safety conditions for both cyclists and pedestrians.

Increased signage, pavement markings, and on site education for all parties will make this great recreational area even better. Currently it's kind of the wild west, if you aren't from here and cycling often there's no way you're going to know what sidewalk is open for what activity. I cross this bridge (round trip) 3-5 times per week and agree with what's being proposed here.

A big issue on the west side especially during peak weekend times, is the number of inexperienced cyclists (rentals, etc.). A lot of times, they come around the towers blazing fast and in the middle of the blind corner. They will also stop in the middle of the bike path to take photos. It might be a good idea to have designated areas, such as the alcoves, for picture taking. The construction equipment on the west side also doesn't help. I would suggest removing this when not in use to widen the path and increase safety.

I don't think speed limit signs will do anything. Two ideas that I believe will make a difference:

- 1) Finish construction quickly to remove the storage of construction equipment from the west sidewalk. The storage of construction equipment on the sidewalk has reduced its width in many sections, which makes any error, whether due to wind or other factors, more likely to result in a crash.
- 2) Add "photo/selfie zone" signs. Many tourists stop in the middle of the sidewalk to take pictures. It would be safer if they stopped in the alcoves where the railing juts out instead.

It would be helpful for me, as a commuter from Oakland to Marin (via Ferry/SF), to be alerted by text or email notification in advance of my after work commute if/when the afternoon bridge crossing shifts from westside to east. I have had multiple times that the physical signage was inconsistent or erroneous (i.e. sign saying closed to bike traffic on BOTH sides of the bridge!), and it is time consuming to travel around to the other side. (I carry panniers and because of the extra weight, it's not realistic to use the stairs/underpass). This confusion and delay has impacted my timing to make it to my SF ferry to the east bay, which encourages speeding, which is not safe!

The speed limit will achieve nothing and be unenforceable. Putting down additional signage around narrow paths will lead to no actual changes either. Forcing cyclists onto the East sidewalk during high wind events will make conditions \*less\* safe by mixing cyclists and pedestrians during high traffic periods.

Open one of the lanes on the bridge to cyclists if you are worried about safety.

I generally agree with the proposals, except for the implementation of a 15 mph speed limit. In most windy situations, road bikes will be safer/more stable when rolling at speeds higher than 15 mph.

Tourists should be strongly discouraged from using their cell phones while riding.

- -Consider separating pedestrian and bike user groups for extended periods of times.
- bike rental companies need to educate bike renters properly on rules of the GG bridge
- allow bike stopping in only dedicated areas along the bridge that has adequate

The recommendations don't go far enough to increase safety, they basically maintain the status quo.

Recently, I have only biked on the bridge on weekends. In the past I road across on both weekdays and weekends. The ride across is the worst part of the ride, whichever side I ride. When riding on the east

side, it's extremely dangerous because of the mix of pedestrians and bicyclists, with both groups having varying degrees of awareness of situation, safety and skills. Each stressful trip across feels like riding a gauntlet. I would always wish that the lane stripes ran the full length of the sidewalk, instead of merely in intervals. My observations of pedestrian behavior is—they are having their own trip across and are in their own bubble, not paying attention to others in their space who are outside of their friend or family group. In the stretches where there are no lane lines, it's easy to see how this happens as there are no reminders to stay to the outside. My wish is to have everyone be able to be safe and enjoy their time on the bridge. The current system does not adequately make all users mindful of the safety of themselves and others, a continuous line might help in addition to more clear and frequent signage. People on bikes are much more stable at speeds above 5 mph, since speed improves one's balance. When pedestrians walk into the bicycle space and especially when inexperienced riders are forced to slow down, the riders have a harder time balancing and keeping their bikes upright. Having a more clearly delineated space would probably help prevent these kind of "solo" crashes from happening.

Dozens of times I have seen pedestrians walk across the bike lanes, not paying attention to traffic and then stand at the railings to take selfies, oblivious to the danger they are causing. I understand that lane stripes will not be a 100% magic cure for this kind of behavior, but they might help.

As a small person, even before the new railings on the west side, I would often have trouble with crosswinds on the west side. More than once, I've been stopped in my tracks turning west going around the towers, it's much worse now with the new railings. I would really appreciate a safe solution for the bridge and for other people of small stature to be able to continue riding across the bridge, especially as there is no other free and more importantly no zero carbon alternative to going to Marin County by bike.

Lastly, the left turn entrance on the southwest side to proceed north, is a dangerous bottleneck as there are always people stopped there waiting for the rest of their party or for some other reason. Clear signage saying no stopping at this entrance and no stopping along the railing would be helpful. Every time a rider has to leave their lane to pass people stopped at the railing, they are going into the oncoming lane, with riders coming at them, often at high speeds, thus increasing the possibility of a crash and at a minimum, causing unnecessary stress.

To say that these increased safety options are not enforceable, and thus not worth implementing, negates the power of education and suggestion. Leaving people to their own devices and then throwing up one's hands when there are crashes is not an acceptable way to manage a public space for transportation and enjoyment. We have long accepted injuries and fatalities in transportation because there was no clamor for better design that would minimize their occurrence. We cannot use that excuse any longer, we now know better, crashes are not inevitable, with good planning they can be designed out of the system. Please make the bridge safer for all by reconsidering the options.

Thank you			

More signs will not create safer conditions. The fact that there are so many accidents at poles 26-28 has to do with the fact that the path constricts at that point and there are metal plates that jostle cyclists as they cross over them. This cannot be remedied by signage; rather the GGBHTD should be looking into ways to build out safer possibilities (perhaps having a southbound path that goes around the cement tower on the west side of it). I think a one-way traffic signal could be effective but due to the intermittent flow of cyclists, I hope that you are looking into demand-based technology so that cyclists do not have to sit at a red signal when no one is coming, leading to cyclists wanting to ignore the light entirely. I feel like what the district is doing here is foisting the responsibility for badly designed infrastructure onto the users rather than looking to fix the problem from the ground up. I know bigger fixes are more work, but as someone who rides over the bridge several days a week, it would make a huge impact on the safety of those who use it.

Please remove a car lane and expand the width of the bike lane. Remove all barriers that currently litter the lane, including lampposts and construction equipment. Also cover the new rail barriers so they provide better protection against wind.

The recommendations seem like a mixed bag. We should focus most on \*actually improving\* the conditions of the path rather than just adding rules (speed limits). The obstructions on the path should be cleared. The construction should be finished ASAP, and a premium should be placed on keeping the bike path clear of obstructions. Further, the study should include a proposal to widen the bike path just north of the north pylon. Obviously the pylon itself isn't movable, but the width of the sidewalk north of it could be increased so the very narrow portion is much shorter. These narrow points are where the danger comes from.

Regarding wind impact to cyclists, why not make the east side span bike-only and the west side for pedestrians? That would limit wind interference to cyclists.

I'm always shocked that bike rental company send tourists across the bridge. It's not a 'beginner' route, and barely classifies as 'intermediate' with the obstructions in the path and challenges. This survey didn't even get in to the problem that is the SF side entrance to the west side path!

Signage is expensive and will not solve the problem. The people whom are breaking the speed limit and are reckless will not follow posted signs. Experienced riders do not need to go as slow as 15mph in my opinion. Finish the construction so bikes can be free of pedestrian traffic, that is the best way to increase safety.

I don't agree with taking a punitive approach to cyclists, like ticketing them for speed. I also think the one-way solution at the narrow path is not realistic or functional and the ensuing confusion may be dangerous. One thing I think that should be explored is sending low-speed tourist bike traffic on the east sidewalk at all times, so that they can avoid hazardous winds and have no pressure from faster-moving

traffic. Additionally, as the lion's share of collisions are solo, it seems clear that other factors like intrusive construction equipment or paying attention (ahem, selfie stick tourists) may be at play also.

Increased signage will not make it safer. Not renting out bikes to tourists during high winds will. i didn't see anything on wind/weather conditions in the report and it's a huge factor.

Mirrors should be added around the pilons to increase visibility. Remove construction equipment as it constricts travel and forces counterflow bikes close together. The most dangerous bike riders always seem to be riding on bike rented from Blazing Saddles.

Mandatory speed limits on the bridge are silly. Also lots of people, including tourists already bring ebikes across. It's fine.

I just want to start off by saying a big thank you for thinking about the safety of our cyclist and walking pedestrians. However imposing a speed limit in my opinion is not the solution. I ride my bike on both the west and the east side 3 times a week, and run on the east side at least once a week.

There are a few things that I've noticed that have caught my attention over the years while riding on the bridge. My number one issue is that people quite often use their phones on the west side of the bridge while riding their bikes. These riders are usually tourists (you can tell by the rental bikes), I'm not saying do not use your phones at all, the bridge is magnificently beautiful and should be photographed and recorded, but there should be segments of the bridge that will allow for a safe operation of mobile phones. There are no signs or education of these areas.

A second issue that I've noticed on the East side of the bridge, pedestrians often do not look before they walk into the bike lane, causing cyclist to swerve into on coming traffic. The indicators on the floor have faded and are not bright enough to alert pedestrians of the flow of traffic. It seems to me that education and public awareness of this multi-use trail is the mostly the solution, and maybe some fresh/brighter indicators on the ground to direct traffic.

After thinking about this issue for quite some time, I'd like to share some solutions.

- Require that companies who rent bikes and suggest the golden gate bridge as a route should educate their riders about the hazards and etiquette of cycling on the bridge.
- Lay down a fresh set of indicators on the ground to direct the flow of traffic, the current set up is worn out and not noticeable enough for people to see. Red, yellow, or any other bright colored paint would help.

- Put up signs stating "pull over to the left" on the west side if you want to take pictures or stop.
- Right-of-way for people coming down hill on narrow sections of the bridge.

Again, thank you so much for bringing this to attention. I love the golden gate bridge, and this city. I think everyone should have the opportunity to experience this beautiful landmark while being safe too.

Speed limits and the enforcement of these limits will only increase bridge congestion, which is obviously a factor in accidents based on the timing distribution of bridge incidents. Signage on the bridge is entirely incomprehensible, and there's already too much of it for users to process. Adding further signs and very slightly slowing down bicycle traffic are band aids that will not address the issues that the Bridge District has created in the past few years. There are clear errors with the data analysis on this project (charts that do not sum to 100%), and the recommendations presented here ignore that data is not available for the large majority of incidents. Additionally, this "virtual open house" is entirely unusable on mobile devices.

The proposed changes do not address the safety issues on the bridge. Most of the accidents happen during the middle day, which is when average speed are slower anyways. And the vast majority of accidents are just solo crashes. I'd also bet the majority of crashes involve tourists who are not experienced cyclists. Issues I see with tourists - (i) they ride with selfie sticks and take pictures, (ii) they make sudden stops which is dangerous, (iii) they do not have good bike handling skills which is exacerbated in windy conditions. You don't need speed limits. You need signs that say no sudden stops, no pictures while riding, and inexperienced cyclists are STRONGLY recommended to walk on the east side of the bridge with their bike. I'll also point out that going slower than 5mph (which is being suggested) makes bike handling more difficult because you have less momentum to maintain a straight line and wind becomes more of an issue.

Please just widen the sidewalk. Take away a car lane if you have to.

- in the area between Light Poles 28 and 26, a "5mph" speed limit does not seem realistic for anyone to follow: would be better a traffic light system if you really want to provide a safe solution there
- pedestrian/bike lane marking is great: why can't

I've been running and cycling across the Golden Gate Bridge 4-5 times a week for most of the last two decades.

The majority of incidents and close-calls that I've witnessed have been the result of inattentive pedestrians or cyclists, particularly (1) individuals focused on taking photos, (2) individuals who stop in the middle of the path unannounced and without checking their surroundings, and (3) individuals riding two or three abreast and not leaving room for oncoming traffic. None of these scenarios are addressed by instituting speed limits on the bridge. As the study notes, speed was only determined to be a factor in 21% of accidents.

- \* Increase signage regarding (a) staying to the right side of the designated bike or pedestrian lane, (b) riding in a single file unless actively passing, (c) the need for attentiveness.
- \* Open the West Sidewalk for bike traffic during peak weekday usage periods (prior to 9 AM / noon, as indicated in the study).
- \* Agreed with the recommendation on better road markings on both East and West Sidewalks re: direction of travel and bike/pedestrian division.

Regardless, I appreciate that steps are being taken to better address the safety of all users of the bridge.

These all look like great changes and really appreciate the thought that went into it, as well as the data that helps quantify the impact and proposed improvements.

Hoping to see all the changes rolled out soon!

I have witnessed numerous accidents on the Bridge. These have mostly been related to extraneous, unused Bridge maintenance equipment. I think the Recommendations ought to address the removal of that equipment when not in use. Other than this, I think extending the hours that the west side is open to cyclists and limiting bridge repair to nighttime hours would go a long way toward increasing safety. Any Recommendations that interrupt the natural flow of cyclists are more dangerous in my opinion. The only signage that makes sense to me is the east side delineations.

These recommendations do nothing to change the fact the new west railing let's significantly more wind through. Since pedestrians are less affected by wind than cyclists, I think they should be constrained to the west side of the bridge.

Everyone I know that rides on the GGB feels like the most dangerous part of the ride is crossing the bridge, especially later in the day when there are more people, particularly tourists, and when the wind usually picks up.

I haven't had any incidents or accidents on the bridge, personally, until this year with the new retrofitted railings. It has turned a manageable, albeit stressful, return trip to the city in to a scary one. I am routinely buffeted by the strong winds and have to ride leaning at an angle in to the wind.

As noted, the towers are especially dangerous and this is where I had my accident. A casual rider was making the right turn from the sidewalk to go around the tower when they were stopped dead by the force of the wind in our faces. I was behind them and forced to stop, one of the worst things you can do when it's so windy. When I tried to get started again, the wind picked up my front wheel and then, before I knew it, the wind pushed me back and slammed me to the ground.

I had a camera strapped across my back and I landed on it. The force of it crush the metal hood - both the circumference of it and back in towards the lens itself.. Luckily, I didn't break any ribs but they hurt for quite a while. I got some scratches and bruises around my knees that seemed to last even longer.

It doesn't seem likely that there are plans to block the extra wind coming through the new railings so I feel the safest solution is to swap it so cyclists are on the east sidewalk by default and pedestrians on the west sidewalk.

The speed of bicycles has nothing to do with a majority of incidents on the bridge, nor with "almost" crashes. The problem is the hordes of selfie-toting tourists who rent bikes and cross the bridge, often in the afternoon during high wind periods. They often swerve across the sidewalk with no control, often while clutching their phone and not paying attention. Local cyclists who use the bridge to commute should not be punished for the actions of people who should not be on bikes, let alone on the bridge, in the first place. A much better proposition would be signage demarcating that rental bikes and scooters use the east span, where they can stop for photos as much as they please, and bike at a speed appropriate for their experience. The local cycling community in the Bay is one of the best in the country, and has hundreds of people cross the bridge without incident daily. The conditions of the bridge (crosswind with oncoming traffic) are what make it dangerous for those ill-equipped to be on a bike. Not going 15 vs 17 mph.

The major issue for safety on the GGB is inexperienced tourists on rental bikes crossing the bridge. The rental shops do not adequately prepare tourists for how hard of a ride this is and they should not allow small children to take bikes across. The winds are too high and tourists often swerve and stop in bad locations. Tourists should be encouraged to either walk, or they should be put on the pedestrian side.

Putting up a few safety signs is not going to address the real issue here where "> 70%" of your accidents are an unknown cause. I bet wind was a factor in many of them.

A sign warning about high winds is \_not\_ the solution to resolving the safety issue caused by increased winds due to the railing change.

Signage will do very little to prevent collisions. Speed self regulates when there is enough traffic. The biggest issue in my experience crossing the Golden Gate Bridge regularly has been distracted and inexperienced cyclists. These cyclists are occupied with their phones and selfie sticks. They are not experienced in handling a bicycle in the unpredictable wind patterns that occur with higher afternoon winds. The only solution that comes to my mind is to separate these two groups of cyclists. Cyclists that would like to stop and take photos should be isolated to a walkway with slower moving traffic so that the rest of the cyclists that are using the bridge as a means of transportation to SF or Marin can get to their destination safely.

Signals and / or "Yield to oncoming cyclists" signage at Pole 26 should be accelerated. The same thing is needed on the East side as well.

Speed limits will not help on the west side

East side sidewalks should be painted first - people don't seem to see the existing signage.

Can helmets be a requirement on the bridge?

What about additional signage and communication with bike rental companies to let people know that the bridge is for intermediate to advanced bicycle riders. Beginner riders should not attempt to cross the bridge as it's dangerous!

Posted speed limits aren't really likely to do very much to increase safety. I don't see how they can hurt, but I have a hard time imagining that they'll significantly increase it.

Please do not shift bicyclist traffic to the East path during high-wind events. The bridge is already closed to bicycle traffic during the week; as both a pedestrian and a cyclist, my experience is much more pleasant when bicycle and pedestrian traffic are separated. In particular, I strongly encourage you to increase, rather than decrease, the amount of time the West path is open to cyclists.

This is a mix of helpful and not helpful ideas.

Signage is always a last choice. Putting up a 'windy' sign is a poor workaround for poor design. The railing should be fixed to handle the wind in a manner to not endanger bridge users or harm (via sound) neighbors.

Similarly, the narrow high crash point is a design issue, though fixing it (widening) is next to impossible. (Dream: a second path above, below, or to the west of the current one?). But consider minimal signage, just enough for a user to see, understand (think: tourists), and react to without being distracted/target fixating.

Understanding the causes here is key. "Excess speed" is often a code for "unknown underlying cause", as going slower (e.g. 0 mph) would prevent it. Please take this into account when considering any design.

- -Make the speed readers flash red, or say slow down etc., when a bicyclist is going over 15 MPH like auto speed readers do.
- -Too many signs= I don't read any of them.

Thank you for all this research and your concern to care for the safety of all who use the GG Bridge sidewalks!!

I have been a very regular user of the sidewalks for bicycle commuting from my home in Marin to my work in SF for the past 18 years. I cycle 3-4 days per week, going from North to South on the East side at about 7am, and from South to North on the West side at about 5-6pm. I agree the "lightpole 26-28" is the most dangerous area.

I think it would be helpful to REPAINT and, if possible, PAINT BRIGHT COLORS all the Pedestrian and Bike markers that are on the sidewalks themselves: I have noticed that many of the Pedestrians are, understandably, tourists and do not necessarily see / pay attention to the signage.

Though I think the 15mph speed limit makes sense in general, I think of speed limit of 20mph would be fine at very low traffic times. When I cycle there are usually no pedestrians in the morning; and, if the 26-28 danger was mitigated, there is little danger in the evening in cycling 15-20 mph. I have done it for years, for certain sections of the Bridge and low occupancy times, and have not had any threat of accident -- it feels quite safe, given those parameters.

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There are two major safety issues and these signs and additional restrictions do disappointingly little to solve either.

First, construction crews constantly are narrowing the sidewalks or make them entirely inaccessible (west side during most of the weekday). This slows bridge crossings and causes many more narrow sections and dangerous interactions between walkers, cyclists and other cyclists. Even when they are not working, these crews leave substantial amounts of equipment that has the same effect. I've biked and walked the bridge for over eight years and this has been the top source of risk and factor in many crashes/near misses. While the east side flaggers now in place are better than nothing, there needs to be more done. Can you imagine if similar dangers were imposed on drivers on a daily basis? There would be pitchforks.

Second, the wind slat changes are shockingly unsafe and must be addressed head-on. Sure, the east side avoids some of the high winds. However, this potential improvement gets more than cancelled out when you are forcing cyclists to mix with walkers during peak usage times (as your data shows). This is a "out of the frying pan and into the fire" type situation, sadly. Making this shift to the east side advisory rather than mandatory would be better than what you're proposing. This would give experienced cyclists a choice on whether to deal with the winds or walkers. What would really help: ask your consulting engineers to mitigate this, much as you're spending money now to fix a sonic issue that some of my cranky neighbors are complaining about (https://interestingengineering.com/the-golden-gate-bridge-has-been-singing-heres-what-engineers-are-doing-to-fix-it).

## Thank you!

The entire bridge is too narrow to permit cyclists, pedestrians and cars. For bikes, missing judging and balance are probably the greater issues here. The data only points to 'speed being an issue: 21% (\*of 241 reported incidents)' yet that doesn't identify what speeds (slow, fast or that there was differential). Placing yield signs (for single lane) might help direct people at choke points.

Lastly I'm not sure capping speeds helps (outside of class 1 and 2 ebikes). You gain stability at faster speeds. The best thing you can do is establish signage that warns people of the confined / narrow areas; so they act more cautiously.

I appreciate your efforts in making the bridge safer. As far as bicycle speed limits go, I don't know how you are going to enforce them. It all boils down to common sense. Education may help to some extent. However, there are riders who will always want to go fast. It would help if the tourists can be reminded to stay to the right. For the narrowing at light pole 26, see if having the NB riders yield will work. It might. However my impression is that SB riders are more likely to yield to NB riders who are going downhill and faster. SB riders also have space to pull over and wait for NB riders to come through. Good luck!

I bike across the Bridge a few times a week, weekdays and weekends. The recommendations proposed are excellent, but not sufficient. A few added steps would help a lot, to decrease stressfulness of biking, and allow for greater safety:

- Disallow young children to bike across the bridge. There are many young children who can barely control their bike, especially given the tight corridors and the wind. Parents of these children are endangering other cyclists, while essentially also relying on everyone else to keep their kids safe. Minimum 7 or 8 years. Instruct the rental companies they are in violation if they rent to young kids.
- Better signage and separation of pedestrians from bikes at the approach to the Bridge, especially on the SF side, where pedestrians routinely meander on / block the bikes-only paths, despite the current markings. Mark the lanes as for bikes only, single file. At the Marin end, better signage to keep pedestrians from obstructing bikes coming off the Headlands or off the Bridge
- More patrols, especially at the SF side
- With some regularity I encounter pedestrians (with dogs!) on the bike side, as well as people on scooters and electric skateboards.
- Tourists on rental bikes routinely riding two-abreast, weaving, filming with their phones. Work with the rental companies to warn tourist / renters against this behavior.
- How about opening up the West side for bikes earlier in the day on weekdays?

These recommendations are very small and seem unlikely to have major impacts. If you want to seriously improve the situation, you should:

- -Allow bicyclists to use the "mini bridge" connecting the west sidewalk near light pole 26 to the northwest parking lot. This was allowed until the 1990s.
- -Expand the hours bicyclists can use the west sidewalk.
- -Study converting a general traffic lane to a bi-directional bike lane, as was recently done on the Brooklyn Bridge.

I can't believe you did all this work and there isn't a single recommendation to INCREASE SPACE FOR BICYCLES. Why isn't "convert an auto lane to bicycle" on the table?

The new railings have made the wind stronger against the west side path which increases the need for a wider path of travel for cyclists. As cycling volumes increase on the weekends, the existing path is not sufficient to safely handle the number of cyclists. There are serious limitations with the pinch points

identified on the west side path. Has the district explored the option of using a car travel lane during the weekends to accommodate the increased cyclist traffic?

"In 2020 the Bridge District conducted a study..."

I understand that a study is necessary prior to any type of changes for GGB sidewalk usage.

But don't you think the info garnered from 2020, smack dab in the middle of pandemic quarantine, probably is a mite skewed? I'm sure bike/pedestrian use of the bridge walkways was significantly lowered during that time.

The proposed changes, to me, seem quite simple and easily done. However they really are just minor fixes. I think that a major help to reduce accidents would be a major increase of on-bike police presence on the bridge. I see police riding there occasionally. But that is rare.

Very clear yield signs at light 28 before the narrow portion is a must. One way traffic signal will cause too much of a back up. Shifting bike traffic based on wind is not a good solution in my opinion - overly complicated/confusing.

I'm a 70 y.o, 35 year GGB recreational cyclist. The permanent, full-length sidewalk markers and the speed limit are most important, with monitored enforcement. Include "ride single file" in the posted directives, and post many signs along the entire length of each sidewalk. The signaling system at post 26 is pretty unappealing, as the sidewalk is plenty wide, though many people are unaware of how narrow their bikes actually are. Again, double yellow striping there could help. What about moving pedestrians to the W side on windy days?

Ebike solutions inadequate as speeds are much higher on an ebike and requirement to not use assist mode unlikely to be observed. It is SF where "rules are for others, not for me". Relying on rules is nearly doomed to failure.

Solo bicycle accidents often due to slippery steel plates (the non-slip coverings have eroded or do not work), paint on cement (the markings themselves are quite dangerous), and inadequate site lines due to chain link fencing. Bikes also crash in avoiding pedestrians on east side that forget the entire bridge is pedestrians to the East bicycles west. The lane marker needs to be for the entire length of the bridge and of a non-slip rough material. Avoid paint!

A large mirror at West side South end so bikes can see oncoming bikes from the opposite directions. Also a NO Stopping zone clearly marked to reduce collisions at the same point. Or redesign the sharp left turn to improve sight lines as even at 5mph collisions occur. Consider the same for each of the

towers.

Require helmets for ALL with a substantial fine (say \$250) for non-compliance.

I'm surprised that the recommendations for improving bicycle safety on the narrow section of the west side of the bridge at the north end do not include the very simple expedient of moving the very dangerous chain link fencing to the outside of the railing, away from cyclists. This would widen the path at that critical juncture and prevent handlebars from snagging on a type of fencing that should never be used next to a cycling route. Posting limits for unrealistically low speeds or worse, introducing one-way traffic will deter use and frustrate cyclists.

Thank you! This was clear and concise. Only addition I can think of is paint a VERY CLEAR bright line around the curves of the two towers of the bridge to delineate sides of travel. Make it "LOUD" And put signs up to warn of oncoming cyclists/pedestrians. Point being is people will go around those curves and go wide, which is exacerbated by wind.

The other thing is put painted "Stop box" areas, indicating IF YOU ARE GOING TO STOP, on your bike, or to take a photo, DO SO HERE... so as not to stop in places that inhibit traffic.

Also put "Be aware/Be Respectful" signs all over the bridge. "Be aware of other cyclists" "Be aware of other pedestrians" etc. It may seem like overkill, BUT if done right, it can foster a culture of respect for others when crossing the bridge.

Example: As a local to the SF Bay Area, when crossing the GGB, mostly on runs or bike rides, I make it a point to slow down to not interfere with people taking photos, mostly because I realize they may be visitors, and this is the only time in their entire lives they will experience the bridge. So I DO NOT want to interfere with their positive experience. But there are times when people on the bridge take a LONG time to take their photos and block the entire passageway for many others. Or they walk as large groups blocking the entire passage way for others to pass. Putting many signs up that encourage "Be aware/Be Respectful" behavior, might encourage more behavior of safe enjoyable travel across the bridge.

Maybe even put a SF Heart sculpture near the entracne points with a sign that says, "Before you cross the bridge, read this" and have some verbiage about "Be aware/be respectful. This is who we are in SF."

Thanks!

If the district really cared about minimizing bicycle danger they wouldn't have installed a railing that now blows us across the deck and into head-on collisions with other cyclists. Signs will make no difference; please spend the money on something useful instead. Allowing motorized conveyances onto the deck will increase danger, not decrease it. Have you re-considered charging a toll? That would

reduce congestion. And there's no mention of rules enforcement. If you want to see how the "honor system" works look at the bridge deck today. I have been riding across the bridge multiple times per week since 1989. The congestion, speed diversity (and now the crosswinds) have turned the bridge crossing into something this cyclist now dreads.

I am an accomplished cyclist, 70 years old and I am at wits' end having to deal with rude and dangerous pedestrians who fling themselves into sudden photo ops, selfie sticks everywhere and causing serious danger. Over the past 35 years I have been knocked over 3 times by pedestrians who suddenly moved in front of me; on 2 occasions I was going less than 5 mph; the other time I was stopped. I broke my arm on one incident, ribs and back on the other two. The pedestrians walked away.

I disagree with the proposal which prioritizes pedestrians; cyclists should have equal treatment. The pedestrian is not "always right". Cyclists are often cited as the problem and this is not true. Last week one of the GGB workers told me "run em over!"...rude pedestrians who wouldn't move over for anyone or assume a single file.

Why are you highlighting a speed limit for cyclists, as speed was a minimal factor in collisions/falls, according to your own research?

\*\*Your proposal does not address the fatal flaw of overcrowding: there are too many people on the GGB at peak times; tourists who may not speak English and who don't follow any signage, even pictorial. The rental bikes are a hazard; the bike rental proprietors should take serious responsibility in making sure the clients have safe bike handling skills and know how to ride on the GGB. There are just too many ignorant tourists on the GGB. I would like to see a fee charged for all those who come to "visit"; those of us who live here already pay SF or Marin taxes, State, and Federal, all of which should exempt us locals. Or, if necessary, I would be happy to pay for an annual pass and get priority to use the GGB at certain times when I wouldn't have to deal with clueless visitors.

The GGB is Highway 101 and its function is for transportation. That can include pedestrians and cyclists, as well as cars/buses. But it has turned into a carnival ride and is a nightmare for those of us who need to cross it to get home or to work.

I cannot make your meeting, in the middle of the day. Please take these comments seriously. Talk with local bike shops. We are not all "spandex brats". We want to get across the bridge safely; now it has become a nightmare and many of my friends have given up and just drive somewhere to ride, which adds to the carbon footprint.

Please reconsider your proposal.

The correlation between speed and crashes was not established in the study: It was barely looked at and seems to be presented as a foregone conclusion. There are pretty graphs of peak hours for crashes, and

also speed. But there's no statistical study of correlation. It appears from the graphs that peak average speeds are during commute hours (before 8am and after 4pm). Cumulatively, those hours account for 28% of the collisions. No data on the report about which sides those happened on. But between 12-1pm the average speed was 15mph West and 11mph East: In that one hour, 14% of collisions happened. These are not statistically valid relations (the number of cyclists at those hours, which side, and crash information are all missing), but it does call into question the conclusion.

Even the speed data itself is suspect: It is contaminated with motor vehicle speeds, and does not capture speeds less than 8mph.

The photo of the location of most crashes shows three metal plates on the ground, only one of which appears to be properly maintained. How many of the crashes here were from wheels slipping on those plates? Silence in the study. How many crashes were caused by changes in wind pressure around the construction junk stored on the sidewalk, or as the sidewalk transitions from wall to fence? How many crashes were caused by rider inattention (ie taking photos?). Silence in this study.

It was not clear from the data presented which direction the cyclist was headed in the collision. Described "downslope" areas are obviously also "upslope" in the other direction. Cyclists moving slowly are \_less\_ stable, so an uphill cyclist would be more likely blown into an oncoming cyclist as they pass from the walled section to the fenced area.

Based on this utter lack of thought and analysis, the report recommends ridiculous amounts of poorly thought out signage and speed limits.

Maintenance of slippery metal plates on the sidewalk? Tons of construction junk blocking the sidewalk? Haphazardly placed fencing? Increased wind pressure differentials due to new railing? Golf carts on the sidewalks? Open hours on the West side? All completely ignored in this study.

\$30m was spent on the movable median barrier to prevent 2.8vehicle collisions per year. The data included in this open house shows that there have been 26 bicycle collisions per year from 2010-2019. Where is the \$300m project to prevent them? (refence: https://www.marinij.com/2020/02/29/goldengate-bridge-median-barrier-saving-lives-after-5-years/)

Signs asking cyclists to slow down won't work. Cyclists need more space to be able to ride in safety, particularly at the towers and the north pylons. We need a permanently open west sidewalk to prevent collisions with pedestrians. We need to reduce (or remove) construction equipment from the sidewalk when not in use.

The increased issues with wind since the railing retrofit are completely unacceptable. Safety issues for cyclists due to crosswinds are a predictable result of the works and should have been anticipated and mitigated as a part of the design process. Moving cyclists to the east sidewalk at times of high wind will

only increase risk to both cyclists and pedestrians. Note that annual collisions were highest from 2013 to 2015 when the seismic retrofit closed the west sidewalk continuously for years.

I would like to see each side of the bridge be one-way, say the east side is always northbound and the west side is always southbound, for both cyclists and pedestrians.

I will attend the Town Hall to provide more in depth feedback. A lot of these recommendations are arbitrary and do not take into consideration that a significant portion of cyclists are on Blazing Saddles rental bikes, or other rental bikes. Further, these people are riding the bike with one hand as they are busy taking selfies. They also, have not been on a bike in many years so do not have good bike handling skills. These people are not the ones riding very quickly, yet are the ones that veer into the oncoming lane. All of the proposed changes seem to negatively impact experienced, recreational cyclists without addressing the above challenge. Fines should be mandated for tourists riding bikes with selfie sticks or some other punishment for such reckless behavior. Alternatively, perhaps rental bikes should only be allowed on the east side and local, recreational cyclists should have exclusive use of the west side.

Thank you for asking the public for comment on all of this!

The self-service reporting system would be a terrific way to finally track the safety hazards caused by bicycle riders who stop mid-span on the bike-only path!

I cross the bridge on bike at least 20 times a month and am constantly finding myself telling tourists they should not be stopping their bike in the middle of the area where others are passing through. While a fraction of the time they are parking the bikes and actually walking around on the bike-only side, most of the time they are just simply stopping suddenly without providing any warning to those riding behind them and/or doing so blocks the flow of traffic and causes moving cyclist to go around them in the direction of oncoming bike traffic.

I am disappointed to see the proposal doesn't include any painted "NO WALKING" or "NO STOPPING" signage on the ground along the bike-only path, but can understand that is probably because there hasn't been enough reporting of minor incidents where it would be a potential solution. Perhaps having a method to report these situations will shed more light on the need.

I am an avid cyclist and have ridden over the bridge for years.

Tourists and untrained cyclists are the number one cause of bicycle incidents on the West Side, especially when they ride in packs of 5 or more. There should be clear rules that these out-of-town riders must follow and agree to before riding over the bridge.

There should be designated traffic lanes for each direction with a dashed white line separating each lane the entire length of the bridge and signage that tells riders:

not to block the traffic lane,

to ride single file,

to pass only when clear,

to call out when passing and

to pull over along the ocean side railing to stop

These are super simple rules that if you would activate along the bridge, would go along way in improving bicycle safety on the bridge.

Thank you,

When work is occurring on the east side there are narrowed areas that only allow single file one-way walking - there is a guard at each end monitoring right-of-way but bikes are still allowed to ride through-bikes should be walked through these areas.

I give tours with San Francisco City Guides and can attest to innumerable near misses and several minor collisions without injury that are not reported. The electric scooters also have to be added to this plan.

- 1. Bad community engagement. How am I supposed to remember all the inane things mentioned and then grade them on a Likert scale and offer comment. Bad faith effort.
- 2. Speed limits intentionally set below the average speed is inappropriate. Also, what was the severity of crashes in the data? Best recommendation better data collection.
- 3. Choke points should be physically changed to increase visibility. If people can't "pop out" from behind a 90 degree angle, it will be easier to gauge appropriate speed and approach.
- 4. Support for not pretending to outlaw class III e-bikes.
- 5. Advanced electronic and automatically updating signage for western sidewalk access would be very helpful especially on Merchant Road near intersection with Lincoln and on Lincoln near Long Ave.

6. If GGBHTD cares about ped/bike access - how about consider physical improvements that enhance the experience, as opposed to simply leaving 6 auto lanes in perpetuity... Even rare experiences like the SF Marathon have been relegated to the narrow sidewalks.

Try allowing skateboards to determine if they affect anything. New signs look good but don't over regulate the sidewalks. I oppose the one way signal idea at the narrow portion of Marin sidewalk.

Always keep bicycle and pedestrian access to the bridge FREE as this decreases auto traffic use.

Distracted cycling (taking pictures while riding), e-bikes dangerously passing, e-stakeboards, and blind turns are the primary issues cycling across the bridge. I do not think that implementing a speed limit is a realistic or appropriate solution to solving the safety problems. For the west sidewalk clearly establishing a directional center line and having points that people can get off their bikes would go along way. The data was not broken down into experience levels but I think that establishing rules around skill/comfort level would be an appropriate thing to study. I personally find that the higher speeds are consistent with experienced cyclists trying to get across the bridge before encountering less-experienced cyclists. And less experienced cyclists tend to have the most difficulty with using the bridge sidewalks in a manner that doesn't danger others. Tourist on rentals bikes should be allowed to use the east sidewalk with pedestrians as they also tend to be the ones who stop frequently as well as not be able to handle the wind challenges on the west sidewalk. We already do this for multi-lane highways where there is a "fast" lane and a "slow" lane so why can't we use this same approach?

Speed limits and advisory signs are unlikely to have any effect. Tourists and casual cyclists rarely exceed the limits proposed while sports/racing cyclists are unlikely to pay attention to them.

At light pole 26/28 the only option is separation of directions. A bridge should be constructed from the service road off Conzleman Rd to a point on the GGB just south of light pole 28 allowing one way flow northbound through the narrow section and onward to the north parking lot. Southbound cyclists would use Conzleman, onto the service road and the use the new bridge to enter GGB south of lightpole 28.

The space currently allocated to bikes and pedestrians leaves little room for improvement, which I suppose is why most of the recommendations in this report come down to signage and suggestions rather than actual infrastructure design changes. No driver or law enforcement officer pays any attention to cars being 5mph over the speed limit, so why should bicyclists? I doubt that the recommendations in the report will have a meaningful impact on safety. If you want real change, both in terms of safety and sustainable mode use, take the Eastern most car traffic lane and repurpose it for bikes, leaving both sides of the bridge for pedestrians. Finally, change your bridge operations to minimize the amount of idle equipment on the West side -- it's an obvious hazard.

The recommendations are a mixed bag.

- 1. I think painting the ground to indicate which side of the sidewalk the pedestrians should be on will help a lot. I think the number one thing you could do to improve the safety of the west sidewalk is to remove objects and fencing that narrow the sidewalk.
- 2. A chainlink fence protruding into an already narrow corridor on the north end of the west sidewalk after the tower is right in the spot where you report the most accidents. Other furniture out there is too large. There are little huts sitting there that narrow the west sidewalk 50%
- 3. My number one recommendation, based on nothing but common sense would be to provide the bike rental shops with a multi-lingual pamphlet to hand out to each bicycle renter. The pamphlet should explain the actual conditions of the bridge, who uses it, what for, and how to be safe on it with a bicycle.
- \*Do NOT allow e-bikes on bridge
- \*Add signage FORBIDDING use of selfie-sticks while riding
- \*Crack down on "Bike the Sites" rental shops that allow irresponsible tourists to endanger local cyclists

I wish there were better solutions that were possible other than just signage, but if not, then I think the signage will help a little bit. The 15mph speed limit sounds fair to me as a cyclist and pedestrian.

The speed limits are reasonable though probably unnecessary, given that average speeds are already not much higher than 15mph. I also like the changeable message signs generally, even apart from the wind issue. But there needs to be an actual solution to the high crosswinds. It's unacceptable that bicyclists were not even considered as part of the railing retrofit. Fix the root cause!

- -disappointed that there is no mention of removing obstacles from the sidewalks to widen the various choke points--that's the real problem!
- -I really don't thinking add "speed limits" will have any impact. Just like cars, people generally ride as fast as

More signs saying, "Pedestrians keep right", not just on the pavement, but at eye level, please. Also, add signs saying, something to the effect of, "Remember, this is a roadway. Pull over to stop cycling. Look before starting to ride. Look before backing up to take a photo." People who are not frequent riders don't know the rules of the road, and think of bicycles as toys, not as human machine systems that can have a lot of momentum!

I bike the GG Bridge on week-ends on a regular basis. I really appreciate all of the efforts to keep the bridge accessible to the public. Thanks! In my experience, the biggest risk to safety on the west side is the mix of bike skills. High performance riders, perhaps on a long ride through Marin, simple want to get across the bridge as quickly as possible. They take risks to keep up their speed. Tourists and casual riders are there for fun and views... perhaps their once-in-a-life chance to see SF from that perspective. 15MPH is still too fast for this mix of users in a small space, especially adding in the e-bikes. Let's think about 12MPH or even 10MPH. High performance riders should be encouraged to think about the bridge as an exception to their performance goals and go "off the clock" for those few miles, then resume their pace at the other end of the bridge. The multi-use of the bridge is simply incompatible with high performance bicycling. And, while I'm here... the automatic tolls on the bridge have had an unintended side effect. Of course smooth traffic without a wait at the toll booth is good for the drivers, but it means that people are driving much, much faster on the bridge resulting in a lot of noise on the bridge. The barrier is secure and its not a safety threat, but riding on the bridge is no longer a pleasant way to experience nature. Now, it is a ride along a freeway. Perhaps there is a way to get people to slow down even though they don't have to pay a toll by hand. Thanks again.

The recommendations do not address the fact that the sidewalks are too narrow. Please study the removal of a car lane to create space for people.

Great recommendations!

Please consider this additional recommendation:

Historically and currently there are numerous verbal and physical altercations causing injury and negative experiences between different levels of riders. Please consider signage to improve safety with messaging encouraging/reminding faster and slower riders to recognize ALL levels of riders are welcome on the bridge. Using wording similar to existing bicycle safety signage currently in use by multiple governmental jurisdictions maintains consistency and is already familiar to riders.

Below is an example and thanks for your consideration.

SHARE THE SIDEWALK

RIDE COURTEOUSLY

Keep cyclists and pedestrians separate at all times.

Request that outfitters (Blazing saddles..) offer orientation to tourists = non selfie stick on the bike, keep your right, look over shoulder when crossing lane

Class 3 e-bikes should be permitted but only below the same speed limit as Class 1 & Class 2. forbidding Class 3 bikes is the equivalent of saying Lamborghinis aren't allowed.

Your proposed regulations on ebikes are way off. You should ban type 2 ebikes, which are essentially motorcycles, which do not require any pedaling to propel them. They can race at 20 mph with no pedaling from the rider at all! The difference between type 1 and type 3 ebikes is only the maximum speed it can travel with assist. The vast majority of road bike ebikes are type 3 ebikes, but that doesn't mean the riders will go 28 mph! Myself and my friends that ride type 3 ebikes are not speeders - we are always near the slowest on the bridge. The Organization of American Bicyclists (OAB) provides insurance for most cycling clubs in the USA. They cover type 1 and 3 ebikes, but do not cover type 2 ebikes. Please allow type 3 ebikes on the bridge!

I support your effort to control speeding on the bridge by enforcing speed limits!

Speed limits will not work without other mitigation measures. Speed is a factor in collisions because the paths are too narrow with so much gear stored in the pedestrian and bike walkways. Posted speed limit signage doesn't stop cars from speeding and is unlikely to stop cyclists from speeding (especially because cyclists do not often have speedometers).

Ideally the east side (which is better protected from wind) would be made a bike-only section, and pedestrians would have the west side to themselves. This would enable bikes to be ridden without experiencing changing cross-winds, which impact cyclists' ability to ride safely at any speed.

Additionally, eliminating mixed-use space for dedicated pedestrian and cyclist space would eliminate pedestrian injury due to collisions with bikes.

I am in favor of allowing both e-bikes (class 1 and 3) as well as e-scooters on the bike paths on the bridge.

All look good EXCEPT the idea of installing a "one way" signal system. That would be a foolish waste, and only increase hazard, as some would obey & others would not.

How about banning rental bikes on the west sidewalk...because those riders are very unskilled and trying to ride a bike they are not familiar with in very challenging cross winds.

And why not ban the use of "e-bikes" as well...most of them are flying along at 25+ mph...and most are also quite unskilled newby riders...

Short of changing the physical layout, this seems like a good series of recommendations.

Shifting bikes from the west sidewalk to the east sidewalk during high winds seems like a bad idea. Oblivious pedestrians are still more dangerous than high winds in my experience.

Also, I was disappointed that there was no discussion of removing some of the clutter on the west sidewalk that leads to more narrow areas (and corresponding risk of collisions). Surely all of the random little structures and other stuff along the west sidewalk can't be permanently necessary.

You are wasting money with the radar system. If you're not going to enforce speed limits, you're also wasting money putting up signs. You already have painted separation lines on the East side of the bridge and pedestrians ignore them all the time so that's yet another waste of money. If you want to experience and know what's safe, don't do a study, go out and ride across the bridge. Ride the East side on a sunny day when there are a bunch of tourists walking aimlessly and randomly across the entire sidewalk. 5 MPH around the towers means people will be stopping and walking bikes to comply; most recreational cyclists will fall over at that speed. The bottom line is that a 5 MPH speed limit will be ignored. Your data shows that the West side average speed is 17 MPH with 20 MPH at the 85th percentile and over a 10 year period there have been a total of 241 reported accidents where only 140 resulted in medical assistance. You can't really expect anything better when most of the accidents occur where the sidewalk narrows such that two bikes barely fit. A 15 MPH speed limit will also end up being ignored. The best thing you can do for safety is to have the West side open at all times for cyclists only and make the East side for pedestrians only. Anything else is simply a waste of money. But apparently that's what you are good at doing - wasting money on useless projects.

These proposals are helpful but don't get at the root cause of the safety issues: bikes and peds are only give a tiny fraction of the space on the bridge. Why not also study a plan to convert a traffic lane to bike and/or ped use?

The 15mph speed limit on the western path, especially if it's enforced, is just going to worsen everyone's experience and lead to more backups (and unnecessary enforcement effort). If there is a speed limit on the western path it should be more like 18-20mph. Rather than implementing a speed limit on the western path the bridge district should make sure that the path is freed of obstructions such that it is safe to pass at more points along the path. The lack of sufficient width for passing is more hazardous to people biking on the western path than someone riding at 16mph.

Adding radar signs and letting riders know how fast they're cycling is a good idea, though, especially approaching the towers.

Measuring the wind and informing riders when it exceeds some threshold is a great idea, but the western path should be kept open for riders who can handle it while encouraging less confident bike riders to go to the eastern path (unless the idea is to switch bikes and peds).

The western path should also be open at more times, particularly on holidays, to lessen conflicts between people walking and biking. A speed limit for people biking would be more acceptable on the eastern path if the western path is open more of the time, and slower riders could be encouraged to go to the eastern path if it's not crowded.

I am an experienced e-bike rider. I agree that in a speed limit & only two things for safety should be considered: (1) Bike speed not bike type, & (2) how safe in general is one riding for the conditions. I do like how the recommendations indicate an understanding of reality. 15 mph is ok with me. But pedestrians on the west side, and riders are all over the sidewalk on the west side create issues. When pedestrians just step into the bike lane at the last sec on the east side creates a safety issue.

One thing that needs to be addressed is the sharp 90 degree turn from the dirt path (Ca Coast Trail) on to & off the west side. The issue is this is a blind turn, no or poorly placed mirrors (if the exist) so when we turn on or off the bridge we have no warning if others are there. Some of them on bikes are turn turning or pedestrians are there. I often encountered other bikers or pedestrians Just stopped at the gate for no reason, clogging the access. I almost crashed into a pedestrian Wed at this locating just standing 5 ft from the gate on the dirt path. I go slow on the hard 90 decree turn for this reason but I still almost ran into him. This sharp 90 degree turn is a problem that needs to be fixed. Is it Poss to build a new path assess that is angled north to the Ca Coast Trail through the trees just south of the existing approach to the bridge? A 45 degree access is better that the current blind 90 degree.

Messaging and signage will never go as long of a way as physical changes that widen the dangerous/narrow areas to improve bicyclist safety.

- -Put a center line on the west side!
- -Speed limit for electric bikes/one wheels/scooters/hoverboards is useless unless it's actually enforced.
- -Make the east side the cycling side since cross winds don't affect pedestrians as much.
- -Replace ALL bicyc

Extending the markings on the East Sidewalk is critical. Pedestrians really don't get it otherwise, and often don't care even when they see the markings, but the markings make it easier as a cyclist to ask the inconsiderate peds to move out of the bike lane where they don't belong. Thanks!

Paint and posted speed limits will not fix the issues. Rental bike companies need to provide actual training for their people to not stop/get off their bikes at the pinch points (bridge towers, narrowest parts of path) and to put the selfie sticks away. I am not in favor of a stoplight to control one-way traffic at the narrow section on the Marin side of the west path; I think people will ignore it. Furthermore, the limited hours and buzzer system are incredibly antiquated and confusing. Drivers do not need to buzz their way across the bridge, nor do they have limited hours. Bike and foot are legitimate transportation modes, so they should not be limited in the way they currently are. Finally, I am in strong favor of switching bike traffic to the east sidewalk when crosswinds are high. I have had traumatizing and scary experiences biking on the west sidewalk since the new railings were installed. I know many people who drive their bikes over to Mill Valley merely because they are afraid of the wind. This is inducing car trips!

I'm so happy to see this work underway. I'm surprised that it does not include opening the west side to cycles 7 days a week during commute times. I ride the bridge frequently and mixing pedestrians and cyclists causes near misses and raised tensions constantly. I'm amazed that the collision numbers aren't higher.

Bicycle users continue to speed and endanger older and wheelchair using pedestrians. A slower speed requirement and better/more enforcement is needed

"More signage" is not a fix for these problems. There should be a road diet of the car lanes to dedicate more space for people on bikes to safely cross the bridge. Why are we dedicating so much of the bridge space to cars when our planet is burning, we need more people riding bikes, and people are getting injured on the sidewalks?

Maybe request that tourists with rental bikes NOT use selfie sticks, or stop in the middle of the path for pictures or put them with the pedestrians instead of seasoned cyclists they pedal slower anyway

## A few comments:

- The fundamental safety problem is the wind with the new railing. It's completely unacceptable and you have honestly ruined the bridge you've been entrusted with. I used to love crossing the GGB by bike—it was always the start of a great adventure and I did it all the time—and now I dread it and avoid the bridge whenever possible, because it's just a miserable experience getting blown sideways and struggling to even stay upright. It's not safe. The railing needs to be actually fixed instead of trying to shuffle us around. Cramming cyclists and pedestrians together during high wind events will not help and will create even more conflict.

- I don't have strong objections to a 15 mph speed limit, but am concerned about the potential enforcement policy, especially given the number of people of color I see using the bridge. A 20 mph speed limit would reduce the number of police interactions.
- Class 3 e-bikes should be allowed too, since as you noted, there's no practical way to disallow them anyway, so maintaining the distinction is silly. Many riders of Class 3 e-bikes use them more slowly than the technology permits, and the speed limit would ensure all cyclists ride at a safe speed anyway. You don't ban Ferraris from the road, even though they're capable at driving at many times the bridge speed limit, so why would you ban Class 3 e-bikes?

These all seem like good recommendations. I would also suggest striping the West side for tourists/ people from other countries who may need indicators to ride on the right side. This would bring awareness to oncoming traffic as well.

I believe there will be more crashes once tourists are back to regular levels because the new railing design makes it so much harder to ride upright in high winds. As someone who has ridden the bridge for 25 years, this new condition is very dangerous - for even a seasoned rider. What about moving the bike only to East side. Pedestrians will not get blown over on the West side, but for cyclists, it is very scary and dangerous.

Love the tour and info! thank you.

There are some good recommendations, but it feels like a lot of gap remain in this plan. For example:

- Chain link fence should be removed or relocated where it is narrowing the path of travel (especially in the high-accident location noted)
- Maintenance and construction equipment should be removed from the path of travel when not in regular use
- Vortex generators should be considered on the new pickets to reduce impact on cyclists
- Class 3 e-bikes are a necessity for many who have to navigate steep hills in Marin and SF, not for speed but just to have enough power to make it up the hills. Restricting class 3 e-bikes would significantly impair green transportation options between SF and Marin.
- Speed limits could create more harm than good, especially on downhill sections where it would force all riders to brake constantly. Safety, legal, and practical implications should be carefully considered.

Based on the data it seems to make sense to have bicycles on the west side all the time. I don't understand (and no where was it stated) why this isn't an option.

The speed limit is probably OK, but very hard to enforce. I would rather it be 17-20MPH. The 5 MPH around the towers sounds great to me. I would suggest adding signage around the towers to say "no stopping or standing" as that is a major issue for me - someone stops to take a photo in a blind spot.

I don't like the shifting bikes to the east sidewalk with higher winds. I have yet to be on the bridge with high winds since the new railings went in, so i can't fully evaluate. That said, by default i would rather wrestle with the wind then worry about wind and pedestrians.

To eliminate pedestrian-bicycle collisions the west side could be opened to cyclists all day.

Bikes should use the West sidewalk at all times.

This would eliminate confusion, congestion and accidents with pedestrians, and some bike/bike accidents.

Would allow for clear signage and mapping on Google / Apple maps, bike rental maps, route signage.

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## **ATTACHMENT 2**

Golden Gate Bridge, Highway and Transportation District Virtual Town Hall Meeting on the *Bicycle Safety Study for the Golden Gate Bridge* October 6, 2021



**Question and Answer Submissions** 

No	Comment or Question
1	If you can post today's presentation at https://www.goldengate.org/events/virtual-town-hall-on-bike-safety/ that would be excellent. Thanks.
2	Will you be providing a link for the Open House? Thanks!
3	Will you please stop victim blaming cyclists and start to address the real infrastructure changes that need to be changed to actually make the bridge a safe place to bike?
4	how do i get tothe poll
5	leave the URL up!
6	please post the poll link again
7	leave the URL up!
8	Please put the URL for the poll link again in the chat
9	a URL in chat would be helpful
10	yes please or copy it into the Q&A so it's clickable. Tnx.
11	Why was only signage discussed? Was there specific budget limit or speed of implementation that was set as a maximum?
12	could you elaborate what would count as a structural change that would not be considered as part of this? understand you won't widen the sidewalks, but what about painting dividing lines on the sidewalk or adding padding to hard surfaces or adding more traction to slippery parts?
13	why do you move cyclists to west side from 3:30 to 6:30 on weekdays
14	Can the access hours be simplified in any way?
15	The crash/collision data makes it clear that there is insufficient space for all of the people who want to walk and roll on the Bridge, and that we need more space for people on foot/wheels. Why wasn't increasing hours and space for bikes considered, for example by opening both sides 24/7 or having bikes allowed on both sides 24/7?
16	Are there any new use counts since 2015?
17	More space is needed for people on foot and wheels. Why aren't both sides open 24/7, and what needs to happen to make that reality?
18	I got cut off on survey two before I finished
19	presumably these are only reported crashes?
20	How are the crashes reported? Do the cyclists need to call 911 to show up in the stats?

21	The polling exercise is not an effective means of getting public comment. I assume I will be able to comment when this portion is over ?
22	Do these represent all crashes on the bridge, or the subset of crashes reported to the Bridge Patrol?
23	Response to the changes I'd like to see implemented: remove construction equipment from the West sidewalk to make more space to safely pass
24	This data wouldn't include wind that has changed since 2019. How can we use old data on something that has only recently been changed in the last 2 years? I would expect wind accidents to be much higher in the last 2 years
25	Why do the crash types and causes don't add up to 100%?
26	what about surfaces/moisture? Really surprised that wasn't a category here
27	Around 75% of the Bridge's width is given to private cars, which is deplorable considering the climate crisis and or need to shift people to more sustainable modes of travel. Why wasn't relocating public space to create a protected bike lane (or two) on the Bridge?
28	Does the planning work here suggest any changes to the form or information collected by Bridge Patrol Officers related to collisions?
29	Sorry, what's the vintage of the crash data? was it 2015?
30	how is the crash data collected? does the bridge patrol have to respond/reported to for it to be recorded?
31	Please just give us more time in the future.
32	did you differentiate between same direction Maneuver Around vs head on ?
33	The crash type totals do not sum to 100%. Are the remainders the crashes where the cause could not be ascertained?
34	% of rental bikes; but what % of bikes present are rental bikes? If crash % is greater than prevalance %, this tells us something.
35	are the slides/study available online? could you share the link
36	One issue for my on the wast side is the sharp 90degree turn on & off the bridge. IS there a plan to make that less sharp by a new access from the Ca Coast Trail?
37	i don't understand how we can draw conclusions on speed when the vast majority of causes are not understood (and likely the vast majority of crashes are not reported)
38	Why are you victim-blaming by proposing speed limits (and limit signs) instead of focusing on systematic design changes (e.g. open both sides 24/7, create separated areas for bikes and/or directional travel)? to decrease crashes/collisions?
39	Why are most of the saftey reccomendations focused on speed when that was only idetified as an issue in a $\sim$ 20% of crashes?
40	why aren't any structural changes being considered?

41	The west side isn't a mixed use sidewalk, but instead is specifically for bikes only. Why are both sides the same speed limit despite the west side not being mixed use?
42	
42	It seems like the underlying assumption here is that the issue with the bridge is that bicyclists are uneducated about the rules and that is causing accidents. Is that correct?
43	Yes. Please only limit by speed & NOT what type a bike one has.
44	What is west side closed to bikes to 3pm week days? Best is to keep west side open all the time except eves when we can switch to east side when that is closed to peds.
45	Regarding the crash report tool, will any steps be made to make that easier to find, such as signage on the sidewalks themselves? Its current location on the website is difficult to find unless you already know where it is.
46	Short of converting a driving lane to a bike lane (or two), the most-obvious solution is to open both sides 24/7 and have bidirectional bike-traffic on one side 24/7. Why wasn't this solution evaluated or proposed?
47	How about a pilot period with:  1) all bikes on West sidewalk 24 hours a day?
	2) Northbound on East sidewalk, Southbound West Sidewalk 24 hours a day?
48	Please see this doc, for a comprehensive response to this survey and all current planned implementations:
	https://docs.google.com/document/d/1HLc0tS8YMaR0Cwev5ep84G0uZ9bluwC_E9NuV_7xcnU/edit
49	Wide opening Cyclone wire fence is dangerous. Fingers can be ripped off. Remove and replace with narrower opening fencing.
50	Maybe I missed it, but are speed bumps an option?
51	The last poll option says that "other" should be submitted in the zoom chat, which is currently disabled. How should we submit "other" recommendations?
52	Have you presented and included Sausalito Bike and Pedestrian Commission input?
53	what does that sign mean: the one that is changeable to direct bikes to the East or West side. I cant figure out what it's trying to say, and this is my second time trying.
54	what are barriers to separation of northbound and southbound traffic? at least for a defined period of time? perhaps 1-2 hours/day?
55	Can the signage be as bright, clear, and reflective as possible?
56	How and when were the crash data collected?  Did it coincede with the new windier west side railing?
57	Widen the path to avoid the abrupt blind corners at the path and improve visibility Add a path around the concrete where the path narrows drastically (particularly toward near the Marin anchorage)

58	Again, maybe I missed it, but is lighting an issue at night for the limited access during nighttime hours, and if so, can sidewalk lighting be examined?
59	Since bike usage is so high and vital - and cyclists are pushed into the margins (5.5ft clearance at points) - what studies and/or plans have been put forward to use one lane of the bridge for 2-way bike traffic.
60	How about some signs indicating: no camera or cell phone use while biking?
61	Enforcement on the bike paths/sidewalks is currently zero. The data confirms pedestrians use the west side and bicycles use the west side when not allowed. This safety issue is nowhere addressed.
62	Are you going to answer questions?
63	also curious, was adding signage/guidance around bike behavior beyond speed limit considered? i.e. 'stay right when not passing' or 'announce when passing'?
64	Hi, good presentation! That makes sense that many of the crashes would be by the Marin tower on the West path; it's a very narrow area with cyclists frequently coming down (from the Marin side) at high speed. Also, the SF west side approach could be tweaked both for width and better lines of sight. You have 2 very tight right turns if you're coming from Marin and arriving on the SF approach apron on the west side, also at grade. Thanks.
65	Please explain why any enforcement is not considered as the threshold safety recommendation?
66	Steve, if you would please thank the bicycle/worker traffic control people who have been working on the bridge recently. My daughter and I ride past them every day, and it is a real breath of fresh air to have resources allocated to clearly toward everyone's safety!
67	Were the loud whining sounds generated by the wind going through the new railings addressed? Earlier in the year, there were several occasions when I was riding on the west sidewalk and the sound was so loud it was painful. Thanks.
68	Peds on theb west side is an issue. I have come accross several that do not belong there. Walking north from SF & south from the Marin underwalk.
69	I understand that the reason for not making the striping of bike lanes from end to end, is because they cannot be enforced. Most traffic laws are not enforced, but we still have them to educate and inform them of the correct way to use the infrastructure and to respect other people's rights. Please make the bike lane stripes continuous from end to end.
70	Reasons for having west side closed for most of day: are the needs still applicable?
71	Please send regards to Sasha Madfes from David Pilpel. Thanks.
72	You say you aren't victim-blaming or focusing on cyclists as the safety issue, but all of your proposed "solutions" are focused on signs and policies to discourage people on bikes from "speeding" and being unsafe. Why aren't you looking into increasing space for people on bikes by, for example, opening both sides 24/7 and/or converting a driving lane to a bike lane (or two)?
73	I don't see anyone elses questions and the chat is disabled. Why are you silencing the group?

74	PPL & bikers stopped & hanging out on the west SF entrance is an issue. They block bikes coming on & off.
75	I hope this isn't intentional.
76	Why can't crews park their vehicles in a driving lane, seeing as 75%+ of the bridge width is given to private cars? Your car-centric thinking is showing
77	Have you considered limiting the construction equipment storage on the bicycle path? Specifically on the West side. It seems to cause more crashes than peds, and almost as many as wind. Is there room on the lower scaffolding or ends of the bridge to store unused equipment?
78	Totally understand the access needed to the west side for maintenance crews but would it be possible for less stuff to be semi-permemently stored there?
79	Per the bridge district's own figures, crossing the bridge by bike you are 42 times as likely to be injured as if you are crossing it in a car.  Why does the safety study not include any *goals* for reducing this substantial disparity?
80	The west sidewalk is filled with construction materials that further narrow the sidewalk - what alternatives are available to de-clutter the west sidewalk on afternoons and weekends?
81	I appreciate Steve's explanation about worker access on the west sidewalk. Perhaps capturing some of that on the signage and website would be helpful, since the access rules and times are not particularly intuitive.
82	Is there any data on the type of cyclist in crashes - commuters versus tourists/ local versus non local for example
83	I love the idea of a reporting system. I had 2 incidents over the years that were too small to call for help, but significant in how scary they were!
84	steve and brett - thank you for your support and hosting this forum. These recommendations, if implemented, will definately reduce accidents and improve safety.
85	Can you expand on the thinking around Class 3 electric bicycle access? Many long distance commuters, myself included, use them, but they are not necessarily ridden any faster than a standard bike over the bride.
86	Once the big retrofit is done, can the westside be opened to cyclists more hours? I am scared to ride on the eastside as I had a bad accident there
87	Use of flaggers during current construction on East sidewalk works, why not on West sidewalk while workers move on off bridge, most of the day the are UNDER bridge
88	Does it make sense to evaluate maintence/work hours with potentially minimizing work shifts during the lowest cycling traffic?
89	Thank you for your answer to the data question. I reccomend continuing to look at wind on the west side I suspect it will continue to increase as a crash factor since the railing changes.
90	Re the west side, can the south access, can this be changed from the hard 90 degree turn by angeling the approcach 45 degress or os to the south to the Ca Coast Trail?

<ul> <li>Suggest posting QR codes, particularly at trouble areas to facilitate reporting of incident hazards.</li> <li>CLARIFICATION: Class three is not throttle- Pedal assist to 27 mph</li> <li>Where are all of these questions that you are referring to? I'm only seeing 4 questions "Q&amp;A". Is there somewhere else to go to see these questions?</li> <li>I am interested in seeing how, where, and why the most severe crashes occurred. The not disaggregate those from the rest of reported crashes. For example, was Light Pole location of the most severe crashes? Or just the greatest number of crashes? Were the crashes solo, bike/bike, or bike/pedestrian?</li> <li>Type 3 are speed peddle bikes. Type 2 is peddle &amp; throtle.</li> <li>Class 3 electric bikes are pedal assist only (not throttle), with a maximum speed of 28m are throttle assist e-bikes with a maximum speed of 20mph.</li> <li>Here is a clear resource on the Three Class System: https://www.bosch-ebike.com/us/about-the-ebike/stories/three-class-ebike-system</li> <li>I would suggest that Class 1 and Class 3 are more appropriate than Class 2, wich you do</li> </ul>	re worn down on g this info?
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97 Class 3 electric bikes are pedal assist only (not throttle), with a maximum speed of 28m are throttle assist e-bikes with a maximum speed of 20mph.  98 Here is a clear resource on the Three Class System: https://www.bosch-ebike.com/us/cabout-the-ebike/stories/three-class-ebike-system	26 also the
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about-the-ebike/stories/three-class-ebike-system	nph. Class 2 bikes
pedal to operate.	
99 I agree agree peddle assist ebile language is fine.	
100 Add a motion detection at towers to alert opposing approaching traffic accordingly	
101 I work in this area. If I can be helpful in providing clarification on this topic, please reach karen@newwheel.net	h out:
102 Class 3 bikes should be allowed but speed limit to poted speed limit.	
103 how will the speed limits be enforced?	
104 If wind continues to increase as a factor in west side crashes, is there the possibility of for peds and bikes? Possibly only durring high winds?	swapping sides
When the west side is open, it is open to bikes only so it is not a shaired use path. So cl be legal.	ass 3 ebikes can
Advising against speed limits because this will require enforcement, which will require carts, which are already a nuisance.	additional golf
107 If there are so many users of bike facilities that they are risking collission, and the seven high, then why not accomodate more space to bike facilities?	rity of collision is
108 Why is the feedback site impossible to browse on a mobile phone?	
109 Total number of types of riders are also important to look at to normalized the data of	
110 ALSO - how about a speed MINIMUM?	the accidents

Question	and Answer	Submissions
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111	A bump with a sign in advance (Slow down, bump ahead) could work. Reinforces speed reduction idea. Would need to work for bridge maintenance vehicles; might be more like a speed cushion or speed table under the MUTCD.
112	Visibility around the pillars can be difficult. Is it possible to increase visibility, perhaps with mirrors? The wind can be surprising too - maybe instead of a sign just use a windsock?
113	I found the access info at https://www.goldengate.org/bridge/visiting-the-bridge/bikes-pedestrians/but that was not so intuitive. Maybe a shortcut like goldengate.org/bicycles that sends people to bike info in each division (Bridge, Bus, and Ferry)?
114	hi steve, i think that's a great idea to open both when wind is moderately bad and close west side if it's extremeley dangerous!
115	Not a question, but a suggestion regarding the bike wind warning signs. The dangerous winds are crosswinds, not headwinds as shown on the current design. The people who most need the warning may not know to expect wind from the west side.
116	The oriional west side railing was fine. Te new railing SUCKS. Since it is reconnesided that the new railing has issues why not revert tot he way it was?
117	For smaller people 20-25 mph winds would be a great theshold for signage.
118	more choice and guidance for cyclists is really ideal for dealing with the wind. would be great to have a sign up that shows current wind speed
119	Do you not see an issue with using the <25% of bridge width (for people on foot and wheels) for work crews and their vehicles rather than the >75%+ that's dedicated for private cars?
120	I got in an accident on a very wet morning when my bike tire slipped on a metal trap door going around the corner of a pillar (slowly!). Normally these trap doors are covered in tar (or something) but in this case part of it had worn away exposing the bare metal. Who is responsible for maintaining this?
121	If the greatest number of crashes occur when speeds are lowest, and the lowest number of crashes occur when speeds are highest, doesn't that indicate that the crash *rate* is more likely correlated to bike volumes?
122	I know I am commenting a lot, but I am still very curious about the construction equipment storage. I hope that can be addressed. THANKS!
123	THANK YOU to ALL for this forum, and for working to make the bridge safer for EVERYBODY!!!

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#### **ATTACHMENT 3**

Virtual Town Hall

Bicycle Safety Study for the Golden Gate Bridge

October 6, 2021

Question and Answer List



*Please note*: There were 123 entries in the question and answer dialog during the Town Hall Meeting. The entries were a mix of questions and comments. We did our best to address all of the questions during the meeting, but we may have missed some. The purpose of this document is to categorize and summarize the questions asked and provide responses from the District. All comments received through the Town Hall meeting will be included in the comments summary provided to the District Board of Directors for their consideration in this matter.

# **The Safety Study**

Q. Are there any new use counts since 2015?

A. We have not performed additional sidewalk traffic counts since 2015. The COVID-19 pandemic and associated shelter-in-place orders were instituted while we were working on the Study. Bridge traffic and visitation declined precipitously and has not since returned to normal. We plan to perform new traffic surveys once we feel we are approaching the "new normal."

**Q**. Does the planning work here suggest any changes to the form or information collected by Bridge Patrol Officers related to collisions?

**A**. Yes – we are including more information in incident reports such as electric vs. traditional bicycle and have tasked our Patrol Officers with gathering as much detail as possible.

**Q**. Why was only signage discussed? Was there specific budget limit or speed of implementation that was set as a maximum?

**A**. Many strategies beyond signage have been considered and there is no specific budget limitation for this work. The goal of the study was to focus on the most effective near-term strategies, implement, and evaluate those before looking at more aggressive mitigations that might involve major project work and/or construction

# The Safety Study (continued)

- **Q**. This data wouldn't include wind that has changed since 2019. How can we use old data on something that has only recently been changed in the last 2 years? I would expect wind accidents to be much higher in the last 2 years.
- **A**. You are correct that that only the tail end of the 10-year data set included the changed wind conditions on the west sidewalk. We will continue to evaluate bicycle incidents and do have some mitigation strategies for the wind conditions included in the slate of recommendations.
- **Q.** How is the crash data collected? Does the bridge patrol have to respond/reported to for it to be recorded? Does the crash data set include only the reported crashes?
- A. That is correct. The crash data set only includes incidents where Bridge Patrol responds and renders aid. One of the valuable suggestions to come through this public outreach is to develop a self-reporting tool so that we have a more complete accounting of safety incidents on the sidewalks. We have developed and deployed a new reporting tool and it can be accessed here (Report a Safety Incident):

Bikes & Pedestrians - Visiting the Bridge | Golden Gate

- **Q**. What is the vintage of the crash data?
- **A**. The crash data included all reported bicycle incidents between January 1, 2010 and December 31, 2019.
- **Q**. Did you differentiate between same direction maneuver around vs head on?
- **A**. Yes, when that information was available in the incident reports, it was noted in the data set for differentiation.
- **Q**. Is there any data on the type of cyclist in crashes commuters versus tourists/ local versus non-local for example?
- A. We do gather data on whether bicycles involved in crashes are riding rental bikes or privately-owned bikes (see slide #16 in the presentation) that serves as loose proxy for local vs non-local. We do not (currently) gather information that would indicate whether a victim was commuting or riding for recreational purposes.

# The Safety Study (continued)

- **Q**. How and when were the crash data collected? Did it coincide with the new windier west side railing?
- A. The crash data set includes any incidents where Bridge Patrol responds and renders aid. Only the tail end of the 10-year data set included the changed wind conditions on the west sidewalk. We will continue to evaluate bicycle incidents and do have some mitigation strategies for the wind conditions on the slate of recommendations.
- **Q**. Per the Bridge District's own figures, crossing the bridge by bike you are 42 times as likely to be injured as if you are crossing it in a car. Why does the safety study not include any \*goals\* for reducing this substantial disparity?
- **A**. At this time, the stated goal of this study is to minimize conflicts and reduce crash frequency to the extent possible. Going forward, we will evaluate the effectiveness of these measures and develop more specific goals that will be helpful as we work together to make the Bridge sidewalks safer for all users.
- **Q**. I am interested in seeing how, where, and why the most severe crashes occurred. The safety study does not disaggregate those from the rest of reported crashes. For example, was Light Pole 26 also the location of the most severe crashes? Or just the greatest number of crashes? Were the most severe crashes solo, bike/bike, or bike/pedestrian?
- **A**. At this time, we can only use whether or not a victim was transported for offsite medical care as a proxy for accident severity. The only information we receive regarding severity of injuries is the Patrol Officer's observations while creating a report, and those are subjective. We do not receive any reports on a victim's condition once they are transported from the scene.
- **Q**. It seems like the underlying assumption here is that the issue with the bridge is that bicyclists are uneducated about the rules and that is causing accidents. Is that correct?
- **A**. We tried very hard not to presuppose any causative factors and examine the information as objectively as possible. Given the constrained physical conditions on the Bridge sidewalks, this effort focuses on limiting speeds to reduce the most severe collisions and measures to increase education and awareness of the hazards present while biking the Bridge.

# **The Safety Study (continued)**

- **Q**. Also curious, was adding signage/guidance around bike behavior beyond speed limit considered? i.e. 'stay right when not passing' or 'announce when passing'?
- **A**. Those signage strategies did not come up during the study but have been suggested in comments during the outreach process. We will be evaluating these suggestions and will continue to make education part of the overall safety system. Please see the following fact sheet: https://www.goldengate.org/assets/1/6/staysafe.pdf

# **The Town Hall Presentation**

- Q. Why do the crash types and causes not add up to 100%?
- **A**. The list on slide #16 was meant to be an illustration of the most common crash types, not a detailed accounting of all crash types.
- **Q**. I don't see anyone else's questions and the chat is disabled. Why are you silencing the group? I hope this isn't intentional.
- **A**. Due to large number of registrations for the meeting (118), the webinar format was selected for the purposes of keeping the meeting focused on the presentation and not on the Q&A or chat dialogs.

# **Facilities and Infrastructure**

- **Q**. Why aren't any structural changes being considered?
- **A**. The goal was to focus on the most effective near-term strategies and then implement and evaluate those before looking at more intensive mitigations that might involve major project work and/or construction.

# **Facilities and Infrastructure (continued)**

- Q. If there are so many users of bike facilities that they are risking collision, and the severity of collision is high, then why not accommodate more space to bike facilities? Why wasn't relocating public space to create a protected bike lane (or two) on the Bridge considered?
- **A**. The Bridge is generally at capacity for all users during busy traffic hours and we do not have any extra or unused space to allocate to people biking. All we can do is attempt to optimize the existing space available.
- **Q**. Why can't crews park their vehicles in a driving lane, seeing as 75%+ of the bridge width is given to private cars?
- **A**. Having crews operate scooters in the traffic lanes would create unnecessary safety risks, introduce challenges to maintenance crews moving equipment to and from the work areas, and impede the flow of traffic during busy periods.
- **Q**. What are barriers to separation of northbound and southbound traffic? At least for a defined period of time? Perhaps 1-2 hours/day?
- **A**. Physical barriers between opposing traffic flows on the sidewalks is something that could be studied. The implementation of such a measure would involve major project work and construction and therefore is beyond the scope of what is being contemplated in this study.
- Q. Are speed bumps an option?
- **A**. We have discussed strategies such as speed bumps or speed tables, but have been advised against those measures as they can present more hazards for people biking than they resolve.
- **Q**. Can the signage be as bright, clear, and reflective as possible?
- **A**. Yes all signage will be reflective and UV resistant in conformance with CA MUTCD standards.

# **Facilities and Infrastructure (continued)**

Q.	Could you elaborate what would count as a structural change that would not be considered as part of this?
<b>A</b> .	The goal was to focus on the most effective near-term strategies, implement, and evaluate those before looking at more aggressive mitigations that might involve major project work and/or construction.
Q.	What about painting dividing lines on the sidewalk?
<b>A</b> .	The recommendations do include adding more painted lines for delineation of space.
Q.	What about adding padding to hard surfaces?
<b>A</b> .	Our goal is to pad objects that are directly in the path of travel, such as security bollards, and we will look for more opportunities to add padding going forward.
Q.	What about adding more traction to slippery parts? Who is responsible for maintaining this?
Α.	Bridge Maintenance forces (Paint Department) maintain the non-skid coatings on the expansion joint cover plates and manhole covers. We just renewed non-skid coatings on the expansion joint covers and we will be inspecting and renewing any non-skid coatings on manhole covers shortly.

- **Q**. One issue for me on the west side is the sharp 90 degree turn on & off the bridge. Is there a plan to make that less sharp by a new access from the CA Coast Trail?
- **A**. We are aware of the issues created by the sharp turn at the southwest bicycle gate, however there are no easy or readily implementable solutions to realign that section with the Battery Trail.

# **Sidewalk Hours**

- Q. Once the big retrofit is done, can the west sidewalk be opened to cyclists more hours?
- **A**. We need to reserve the west sidewalk during working hours on Monday through Friday so that Bridge maintenance work can be performed unimpeded. We are currently opening the west sidewalk to bicycles as much as possible during daylight hours, so there is no change in sidewalk hours planned.
- Q. The crash/collision data makes it clear that there is insufficient space for all of the people who want to walk and roll on the Bridge, and that we need more space for people on foot/wheels. Why wasn't increasing hours and space for bikes considered, for example by opening both sides 24/7 or having bikes allowed on both sides 24/7?
- **A.** The Bridge is open to cyclists 24/7. We must reserve the west sidewalk for our work crews to accomplish Bridge maintenance projects unimpeded during M-F working hours. Otherwise, the west sidewalk is open to cyclists during daylight hours after 3:30pm and all day on weekends. That is the best we can do to optimize the limited resource at this time.
- **Q**. Does it make sense to evaluate maintenance/work hours with potentially minimizing work shifts during the lowest cycling traffic?
- **A**. Bridge maintenance is a hazardous undertaking as it is. We need to perform the major work during daylight hours, whenever possible, so as not to introduce additional risk and hazards for those performing the work.
- **Q**. Why do you move cyclists to west side from 3:30 to 6:30 on weekdays?
- **A**. Once our Bridge Maintenance crews are clear of the west sidewalk at 3:30pm during weekdays, we open it to bicyclists so that they have the advantage, and increased safety, of a bike-only path for their trip across the Bridge. The west sidewalk is also open to cyclists all day on weekends for the same reason.

## **Wind Retrofit**

- **Q**. Were the loud whining sounds generated by the wind going through the new railings addressed?
- **A**. Yes a solution for mitigating the new sound created by the west side railing is in wind tunnel testing currently and hopefully the modifications will be ready for deployment in the very near future.
- **Q.** If wind continues to increase as a factor in west side crashes, is there the possibility of swapping sides for peds and bikes? Possibly only during high winds?
- A. The current slate of proposals includes establishing protocols to open the east sidewalk to cyclists during high wind events. The east sidewalk will remain the pedestrian side because that is the most desirable side for visitors and has the easiest access for pedestrians, particularly those with mobility impairments.
- **Q**. The original west side railing was fine. Since it recognized that the new railing has issues why not revert to the way it was?
- **A.** The new west side railing was installed as an important safety feature to ensure the structural integrity of the Bridge during high wind events. It cannot be reversed.

#### **Speed Limits**

- **Q**. The west side isn't a mixed use sidewalk, but instead is specifically for bikes only. Why are both sides the same speed limit despite the west side not being mixed use?
- **A**. A different (higher) speed limit was considered for the west sidewalk but was not moved forward because it is not truly a dedicated bike lane due to the fact that construction workers and scooters are often present during bicycle hours. The west sidewalk also presents with myriad other potential hazards for people biking, including narrow stretches, limited lines of sight in many areas, and variable wind conditions.

## **Construction Equipment and Materials**

- **Q**. Totally understand the access needed to the west side for maintenance crews but would it be possible for less stuff to be semi-permanently stored there? Have you considered limiting the construction equipment storage on the bicycle path?
- **A**. We always task our own crews with leaving the sidewalks as uncluttered as possible. We ask the same of third-party contractors, but they are allowed under the terms of their contracts to store materials and equipment on the sidewalks as long as they leave a minimum of 6 feet of free clearance between their items and the safety railing. We patrol and check on that regularly, but If you observe an area where there are items encroaching on the 6 feet clearance, please report that to the Sergeants Office at (415) 923-2220 and we will address the issue.

# **Enforcement**

- **Q**. Please explain why any enforcement is not considered as the threshold safety recommendation?
- **A**. We do our best at enforcing all the rules and regulations on the Bridge, but there are over three miles of sidewalks and it is always a challenge to keep eyes on the entire span at all times. We will keep this issue in mind as we move forward.
- **Q**. How will the speed limits be enforced?
- **A**. Our goal is, if maximum speeds are established, that awareness and education of the speed limit will be effective in calming the speeds on the sidewalks such that is becomes the norm not to operate with excessive speed on the Bridge. If we do have issues with unsafe speeds, it will be a citable offense under the California Vehicle Code and the California Highway Patrol would be the agency with jurisdiction.

# **Other Questions**

- **Q**. Can you expand on the thinking around Class 3 electric bicycle access? Many long distance commuters, myself included, use them, but they are not necessarily ridden any faster than a standard bike over the bridge.
- **A**. Our preferred course of action is to allow all three types of pedal assisted e-bikes to use the Bridge sidewalks. We understand that the type 3 is advantageous for many riders and do not want to exclude them.
- Q. Have you presented and included Sausalito Bike and Pedestrian Commission input?
- **A**. We have interacted with members of the Sausalito Pedestrian and Bicycle Advisory Committee individually, but not with the entire committee in any official capacity. We will reach out to the Sausalito PBAC Committee to see if they would like a formal presentation or some other form of engagement.
- **Q**. Use of flaggers during current construction on east sidewalk works, why not on the west sidewalk while workers move on and off the Bridge?
- **A**. The west sidewalk is closed to cyclists during working hours for our maintenance crews, so flaggers are not required in that situation. We will monitor closely and ensure that contractor crews are flagging properly if they are on the west sidewalk during bicycle hours.
- **Q**. What percentage of bikes on the Bridge are rental bikes?
- **A**. We do not have information regarding what percentage of people biking the Bridge overall are using rental bikes versus privately-owned bikes. It would be good information to have, but would be difficult to determine. We will consider strategies to gather that information when we next perform bicycle and pedestrian traffic counts.

#### **ATTACHMENT 4**

Golden Gate Bridge, Highway and Transportation District
Public Hearing
Recommended Actions in the Golden Gate Bridge Bicycle Safety Study
Written Comments Received
September 30, 2021 through October 18, 2021



From: Debra Reynolds < > Sent: Thursday, September 30, 2021 9:32 AM
To: contact < contact@goldengate.org >

Subject: Bike Safety

Hello, I am unable to attend but want to participate. I hope writing this note will add my voice to this extremely important subject.

I'm writing on behalf of me and my husband, Steven Hammerschlag. We live in SF and have ridden over the bridge for over 2 decades and use it almost weekly. Rare is the time we don't reconnoitre and complain about reckless road bikers and errant clueless pedestrians.

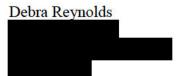
#### Here are our recommendations:

- Encourage only experienced older children (I know it's difficult to define, >8) to ride on the bridge. Parents typically are behind their kids and all bikers on the bridge become surrogate parents to the kids to keep them safe. I'm fine with this as long as parents appreciate how risky it can be to their offspring. Between winds, improper dressing, fear, reckless bikers, their kids are truly at risk.
- To open the west side at 3 would make a huge difference to cyclists.
- Signage disallowing side by side biking. So often a pair lazily cycle along and don't realize others want to pass and it obstructs visibility. Both sides should have signage which shows single file in each direction.
- Signage to be mindful of bikers as selfies/photos taken. I downed a pedestrian (and myself) who stepped back into the bike path to take a photo. While it is my responsibility, pedestrians need to be aware of their space in the bridge and not cross onto bike path. I've seen signage elsewhere depicting dangerous photo taking.
- There should be a 'contract' signed at bike rentals acknowledging an understanding of conditions to safely bike, ie. don't talk on your phone, don't use hand to record, pay attention, no sticks with cameras allowed (I was bonked with one and my husbands bike handle hit one)
- More warnings around the tower re visibility and high winds and SLOW DOWN

Not sure which agency is responsible once off the bridge. Tourists always confused about how to get to Sausalito. On west side, bikers and cars commingle dangerously. Hard to turn either direction (up or down) especially as going up requires a strong start going up a hill.

Your recommendations are excellent especially regarding distinction of pedestrian v biker and speed. Even more than tourists, the hot shot bikers scare me most.

Sincerely,



From: Ben Temple < >
Sent: Wednesday, October 6, 2021 12:35 PM
To: publichearing < publichearing@goldengate.org >
Subject: Comment On the proposed changes to GB

From: Caroline Frost < >
Sent: Tuesday, October 5, 2021 2:34 PM

To: publichearing publichearing@goldengate.org>
Subject: Re: new bike safety measures for GG bridge

Mark Shahinian

# Comments about Oct 1, 2020 "Bicycle Safety Study for the Golden Gate Bridge"

October 4, 2021 Mark Shahinian

As a cyclist who lives in San Francisco and crosses the Golden Gate bridge three or four days a week, I would like to express my concerns about the Alta Planning + Design bicycle safety study.

## 1. Concerns with overall emphasis placing fault on cyclists

In my nearly a decade of riding across the bridge, I have seen three serious injury bicycle accidents take place. One of them resulted in a horrific head injury that put the cyclist victim, who had struck her helmeted head on a bridge railing, in rehabilitation for nearly a year. All of these accidents – and all of the near-misses that I've had myself over the years – were due to poor infrastructure on the bridge. This infrastructure includes slick steel plates, unpadded equipment and poles in the bikeway, bumps for cables to cross the bikeway and cabled railings that can severe injury in the case of a collision.

The tone of the Bicycle Safety Study, however, is to place the blame for collisions on cyclists, rather than on the infrastructure of the bridge itself. This is especially surprising given the history of the Bridge and the safety innovations that it introduced in its construction, saving workers' lives. Currently, about 15 people per year are transported to the hospital due to injuries from bike accidents. Yet the Bicycle Safety Study unacceptably puts the onus on cyclists to solve the issue, primarily by slowing down.

The scope of the Bicycle Safety Study appears unnecessarily narrow – there appears to be little input from the cycling community, no interviews with cyclists and a general disregard for the nuances of day-in-day-out cycling on the Bridge.

## 2. Unknown source of embedded assumptions about speed

The primary assumption in the Bicycle Safety Study appears to be that speed causes accidents. However, this is not borne out by the actual data in the report.

- a) At the hours when speeds are highest, crashes are low. The report shows that speeds are high in the late evening and early morning hours. In my experience, this is because experienced cyclists are crossing the bridge at these off hours while commuting or headed for a recreational ride in Marin. Less than 10% of reported crashes happen between 8pm and 8am. This is precisely the time when bike speeds are highest. This dichotomy calls into question the central conclusion of the report that collisions are due to speed.
- b) The report makes a broad assumption about speed, but makes no effort to tie actual speeds during a collision to location of crash and severity of accident. The report contains the tautology "speed is a factor in all collisions." This statement indicates that the authors of the report had in mind a conclusion before looking at the data. It's true that if we were all standing still there would be no collisions. However this is not a very helpful truth in the world of the everyday. In my experience, when an accident occurs on the Bridge, the CHP interviews people from the scene and determines speed at the time of collision. Instead of relying on "speed is a factor in all collisions" the report should make an attempt to verify if that's true in the case of severe bicycle collisions.

## 3. Lack of accountability for poor infrastructure on Bridge

From the view of an experienced cyclist, what actually causes accidents is an under-investment in bicycle safety infrastructure on the Bridge. Places where investment should take place are:

- a) There should be as few obstacles in the bikeway as possible. It violates all principles of roadway engineering how many obstacles are in the bikeway. There are dozens of poles in the bikeway. There are hundreds of railing supports on which a falling cyclist can strike their head. There are construction materials left in the bikeway on a semi-permanent basis. There are large wooden boxes blocking much of the bikeway. All of these make navigation difficult and dangerous.
- b) What obstacles remain should be padded. Padding is standard in ski resorts and other places where humans might crash into a pole. It should be standard on the Bridge.
- c) The bikeway surface should be standardized. There should not be bumps for cables to cross the bikeway. There should not be slick steel plates in the bikeway. These all contribute to crashes.
- d) The wind conditions on the west side should be addressed. On a windy summer day, the bikeway on the west side is nearly impassable even to experienced cyclists. The changes made to the railings mean that the full gale-force winds hit cyclists trying to cross the bridge. This must be addressed for safety. No speed limit for bikes will address this danger.
- e) The narrow passages at the north side of the bridge should be widened. Instead of putting the onus on cyclists to navigate these tricky, narrow passages, they should be widened.

There is a historical analogy with the bridge's response to suicide jumpers over the first 75 years of its evolution. Originally, the response was a shoulder-shrugging "hey people are going to kill themselves anyway". Thankfully this response evolved to a quite different position – a decision was made to install life-saving safety nets to prevent suicides. Similarly, the Bridge should invest in life-saving changes to the infrastructure in the bikeway.

# 4. Scope should acknowledge reality of users

- a) There is a wide variation in bicycle users who cross the bridge, and a wide variety of ways in which they cross the bridge. This report adds little to no knowledge about how the various types of bicyclists interact with the Bridge or how they experience safety issues. An experienced recreational cyclist crossing the bridge at 6 am in a group of riders has quite different needs and experience than a tourist crossing the bridge at 2pm on a rented bike with their family. These user groups should be understood, characterized and addressed. Similarly, the interaction between pedestrians and cyclists is poorly characterized in this study, and should be well understood.
- b) The proposed approach to using average speeds to inform possible speed limits is not the standard way to evaluate speed limits. According to Caltrans, the 85th percentile is a more correct benchmark to use:

"The most widely accepted method of determining the posted speed limit is to set the speed limit at what is called the "85th percentile speed", which is the speed at or below which 85 percent of the traffic is moving.

The 85th percentile speed is the single most influential indicator of what is safe and reasonable, and it is used to determine the speed limit by rounding to the nearest 5 mph increment, and posting the speed limit at that speed. If there are sufficient conditions not readily apparent to the driver, as determined by a registered engineer, the posted speed limit can be lowered by 5 mph, and such a decision must be clearly documented in the E&TS."<sup>1</sup>

# 5. Suggested alternative approach

Here is a suggested alternative approach:

a) Focus on removing obstructions and padding surfaces. The Bridge should focus first on its contributions to the safety problems, and address them. Obstructions in the bikeway should be removed, and those that cannot be removed should be padded. The railing between bikes and cars should be redesigned so that cyclists will not be

<sup>&</sup>lt;sup>1</sup> https://dot.ca.gov/programs/safety-programs/setting-speed-limits

- needlessly endangered if they strike the railing. Bikeway horizontal surfaces should be textured with friction coatings in a consistent way. Wind speed issues on the western bikeway should be addressed.
- b) Allow bikes to use the western bikeway 24 hours per day. The current daytime restriction to the east side puts bikes in direct conflict with pedestrians and results in large numbers of collisions between 12 and 5.
- c) **Install clear striping** to separate pedestrians from bikes and northbound bikes from southbound bikes.
- d) **If speed limits are to be set, follow Caltrans guidelines in doing so.** Setting speed limits arbitrarily low or near average speeds will only result in most cyclists on the bridge being lawbreakers.

For your comments summary, this gentlemen phoned our office number and spoke to one of my colleagues for a couple minutes. We directed him to the website etc, but a summary of his remarks are provided below.

Commenter Name: Andrew Warnick

Date: 10/6/2021

Comments: He thought the study was well done, but it should include better bike lanes and resurfaced pavement on Alexander Avenue. The slide area just outside of Sausalito creates a real issue forcing bikes into the traffic.

From: Elise Peeples <

Sent: Tuesday, October 12, 2021 9:51 PM

To: publichearing <publichearing@goldengate.org>

Subject: Safety

I was on the bridge on October 8, 2021. It felt very dangerous where the bikes were whizzing by especially in the construction zones. It is my feeling that bikes should either be outlawed until the construction is done or they should walk their bikes through those zones.

Thank you,
Elise Peeples,
Sent from my iPhone

From: Timothy Doyle <
Sent: Wednesday, October 13, 2021 11:50 AM
To: publichearing <pre>publichearing@goldengate.org
Subject: Bicycle Safety Study Public Hearing October 18

Please at all costs keep battery or motorized bikes off these sidewalks. Pedal bikes only. Motorized rental companies will ruin it.

Timothy Doyle

From: Bastian, Boris < > Sent: Wednesday, October 13, 2021 2:51 PM

To: publichearing < publichearing@goldengate.org >

Subject: Bicycle safety study

To Whom It May Concern:

Thank you for your efforts of trying to improve bike safety on the Golden Gate Bridge.

I have seen in your prior announcements that prohibiting class 3 pedelecs is under consideration. This would affect me personally in what I perceive in an unfair way, because I purchased an expensive class 3 bike, which I use whenever I commute from Marin to various UCSF locations in the city. Imposing (and enforcing) a speed limit is a better and fairer alternative. As analogy, we are not prohibiting sports cars to cross the Golden Gate Bridge either.

An additional suggestion to improve safety for bikers and decrease the likelihood of crashes is to clarify the right of way rules for bikers. It is my impression that many bikers are not aware of when they have the right away and when not. This often creates dangerous crossings at narrow sections of the bridge. I would welcome posted traffic rules clarifying this and these rules being monitored and enforced period. From my perspective this is the most dangerous issue I encounter on my daily rides.

Thank you for reading and for your work! Best regards, Boris Bastian

I'm sending a comment that was received in our office earlier today.

Ms. Paula Katz called and asked why the District does not propose to have bicycle traffic only on the west side of the Bridge, and pedestrian traffic only on the east side of the Bridge.

I said that my understanding is that workers use the west side of the Bridge in the day during the work week, and they require the full sidewalk for their activities and equipment.

My answer seemed to satisfy her. She requested this requirement be clarified in the Bicycle Safety Study.

~Elizabeth

Elizabeth Eells, Senior Board Analyst Golden Gate Bridge, Highway and Transportation District

From: Alicia Falcocchio <

Sent: Thursday, October 14, 2021 9:27 AM

To: publichearing publichearing@goldengate.org>
Subject: bicycle safety on Golden Gate Bridge

Hello there, I am an avid cyclist that lives very close to the Golden Gate bridge and commutes on it almost daily. I don't really understand why the left side of the bridge is closed down until 3 o'clock weekdays? It should be open 24/7 to keep pedestrians on one side of the bridge and cyclists on the other. There are too many tourists that don't know these rules as they are not posted anywhere anyway.

There is always too much construction, tourists and cyclists to have everybody filtered on one side the majority of the week days.

\_

Alicia Falcocchio

From: Sprague Terplan <

Sent: Thursday, October 14, 2021 9:36 PM

To: publichearing <publichearing@goldengate.org>

Subject: Bicycle Safety Hearing

To whom it may concern at the Golden Gate Bridge, Highway, and Transportation District,

Regarding the hearing on the subject of bicycle safety on October 18, 2021, I wish to submit comments as follows:

The proposed safety measures seem reasonable and, as a regular cyclist and pedestrian on bridge sidewalks for several decades now, I urge the District to not have a lower speed limit than 15 miles per hour, particularly on the west sidewalk. Of course, it is understandable if the speed limit is lower in the immediate vicinity of the towers (but warning/advisory signs should ideally suffice instead of a lower speed limit at the towers).

I also hope that some degree of discretion is used in the enforcement of any bicycle speed limit, particularly on the west sidewalk - or on both sidewalks at times of very light usage, when the sidewalks are empty/nearly empty. It's not unreasonable for a bicyclist to safely travel up to 18 miles per hour (or perhaps more) and do so in a manner that endangers absolutely no one, when the sidewalk is empty.

As someone who also regularly drives and rides transit over the bridge, I know that many motorists speed, now more than ever since the installation of the median barrier, and it would be preposterous to be hard-nosed in the enforcement of speed limits with bicyclists, while ignoring much more serious and potentially deadly violations by motorists. Indeed, in this era of climate change and with mounting evidence of the necessity of weaning ourselves away from automobiles, particularly those reliant on fossil fuels, it may be more appropriate for the District to consider repurposing an existing automobile lane for bicycle usage at times when the west sidewalk is not available - so as to help ensure the safety of cyclists and pedestrians and so as to promote clean, active transportation.

Thank you very much, Sprague Terplan

From: Scott Takaoka <

**Sent:** Friday, October 15, 2021 8:07 AM

To: publichearing < publichearing@goldengate.org >

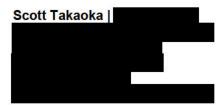
Subject: feedback

Hi,

With regard to the changes being considered for bicycle safety, and the report I wanted to provide some comments back:

- 1. I think the idea of having changeable signs to direct cyclist to the opposite side in the case of a wind event is a good solution. However on the north side of the bridge, I think you would need to install a sign on also on Alexander Ave. before the intersections so cyclist know that they need to take the east side of the bridge, before they get too far (under with underpass) where they would then have to turn around and go all of the way back.
- 2. I think you need to consider all of the construction/maintenance material that is stored on the west side of the bridge often surrounded by barricades. These significantly narrow the lane and make it dangerous when bikes pass each other. This was not mentioned as a factor in the report which is a major oversight. In my experience, based on close calls, this is a major factor in accidents, that was not mentioned in reports. All you have to do to confirm is to spend an hour on the bridge and watch some of these areas and you will clearly understand.
- 3. The solution for having a signal light at the light pole 26-28 is not such a great solution. Speed limit there is fine.
- 4. I agree with MCBC, that you should have an advisory counsel for cycling. This would provide consistent feedback on bicycle safety issues.

- 5. In my experience as a commuter, the cycling commuters know what to expect. The cyclist that are the most danger, are the tourists who don't know what to expect, and are novice riders, who have trouble riding in a straight line, especially with the wind. They are also the ones NOT wearing helmets (!), which was not mentioned at all in the accident numbers. I see that a lot.
- 6.



This message and/or its attachments may contain information that is confidential and/or protected by privilege from disclosure. If you have reason to believe you are not the intended recipient, please immediately notify the sender by reply e-mail or by telephone, then delete this message (and any attachments), as well as all copies, including any printed copies. Thank you.

From: Zackary Rides <

Sent: Friday, October 15, 2021 12:16 PM

To: publichearing <publichearing@goldengate.org>

Subject: Golden Gate Bridge for PEVs

To whom it may concern,

I ride my PEV every day around San Francisco and the rest of the bay area. It is imperative that we have the same rights as bicycles, as we ride together often. The golden gate bridge is an important lane, as I frequently enjoy riding my PEV to Marin to support businesses, and for riding around the beautiful scenery that is the Marin Headlands. Banning all PEV on the Golden Gate Bridge would take away this freedom. I am not asking for more rights, im asking for equal rights as the bikers who are able to cross the golden gate bridge and enjoy Marin.

PEVs are important in reducing carbon emissions, as it allows me to live in San Francisco and not own a car. Pev legalization is very important to me, and will sway my votes for local law makers including elected members of the Golden Gate Bridge board of directors.

I will be in attendance Monday at 10am for the public hearing on PEVs.

Best, Zackary Litalien

From: Kevin Grandon < > Sent: Friday, October 15, 2021 5:55 PM

To: publichearing <publichearing@goldengate.org>

Subject: Public Comment by Kevin Grandon, Allowance of Electric Boards under CVC 313.5

I have written and attached the following message as a PDF as well.

To whom it may concern:

My name is Kevin Grandon, I founded a small business called Alien Rides in the Bay Area. We employ ten individuals currently, and sell products that help to reduce carbon emissions. These products are categorized under CVC 313.5 as "electric boards" and include things like electric skateboards, electric unicycles and electric scooters. These personal electric vehicles are capable of being ridden safely, especially so when self owned, rather than rented due to lack of experience and helmets. They encourage the community to take micro mobility solutions and take a fraction of the space of a car, as well as reduce emissions.

The ban and lack of allowance of electric boards defined under CVC 313.5 on the Golden Gate Bridge sidewalk areas, stifle innovation, our business and the community as our customers are unable to simply cross the Golden Gate Bridge. Instead they opt to drive cars, adding to the traffic and smog of the city.

I would strongly urge the Golden Gate Bridge District Board of Directors to allow the use of all electric boards defined under CVC 313.5 and privately owned PEVS on all bridge sidewalk areas, subject to all speed and safety laws. This will ensure a brighter future for micro mobility, traffic on the bridge and the environment.

Sincerely,

Kevin Grandon

Alien Rides

From: Steven Hines <

Sent: Friday, October 15, 2021 8:50 PM

To: publichearing <publichearing@goldengate.org>

Subject: ALLOW PEV

To the members of the Golden Gate Bridge District Board

My Name is Steven Hines and I am former US Army sergeant who served honorably for 10 years. I am also a former civil servant of the City of New York (NYPD) and I live in the Mission Bay Area of San Francisco and advise a private bank on cyber security issues.

I am writing to ask that you consider:

- supporting and allowing PEV to cross the Golden Gate Bridge;
- supporting and allowing PEV wherever bicycles are allowed (in accordance with California law)
- California citizens and visitors deserve to be able to utilize public infrastructure which is open to all with reasonable restriction. Not to say a ban of the vehicles but a requirement for basic safety PPE such as a helmet and gloves.

Thank you for your time and I hope that you vote to ALLOW these vehicles.

Respectfully, Steven S. Hines

Sent from ProtonMail for iOS

From: Jeff Minard <

**Sent:** Friday, October 15, 2021 11:01 PM

To: publichearing <publichearing@goldengate.org>

Subject: re: Public Hearing (Recommended Actions in the Golden Gate Bridge Bicycle Safety Study)

I wish to write in to offer my voice on the matter of bridge access for bikes, ebikes, and other personal electric vehicles (PEVs). As a resident of the bay area, and an avid, safe PEV rider, I strongly support allowing PEVs to use the bike lanes to safely cross the bridge, including adhering to the same set of rules and guidelines that bikes follow for the same level of safety.

Thank you for your consideration; I look forward to a greener, cleaner future in which commuting by all manners of personal vehicles is safe and allowed.

Jeff Minard

----Original Message-----

From: Ian Montgomery < Sent: Saturday, October 16, 2021 1:31 AM

To: publichearing <publichearing@goldengate.org>

Subject: PEV's

Every time someone reminds me that I live in a progressive city, it does not take long for me to be aware that in fact the reverse is true. At a time when the effects of climate change are becoming more apparent every day, why would you possibly want to do anything that restricts the use of alternate modes of transportation? Quite simply continuing to not allow PEV's on the GG Bridge is the act of a group of selfish people who do not care about trying to move our society forward. A far better idea would be to not allow vehicles with combustion engines on the bridge.

Ian Montgomery

From: Ian Ho-Wong Sent: Saturday, October 16, 2021 1:37 AM

To: publichearing <publichearing@goldengate.org>

Subject: Petra 10/18 public hearing

#### Good morning,

Members of the golden gate district head of directors, we the undersigned community of PEV owners/small business operators/enthusiasts and more wish to have support of all PEV to be able to cross the golden gate bridge [legally], as we should be given the same rights of allowing PEV wherever bicycles are allowed and also the intent to make PEV legalization in your future roles as for local lawmakers, as the aforementioned elected members of the golden gate district of board of directors. Not only do we watch for ourselves and others in the community, but the amount of outreach and support the PEV bay area mentioned operators and individuals is tantamount to that of the adage "it takes a village to raise a child".

Thank you for your time and consideration in this matter,

Sincerly,

Ian Ho-Wong

From: Miles Garnier <

Sent: Saturday, October 16, 2021 10:34 AM

To: publichearing <publichearing@goldengate.org>

Subject: Make PEV legal

I support PEV on GGB.

Thank you, Miles

To: publichearing < publichearing@goldengate.org >

Subject: PEV

Open the bridge! PEVs on the bridge!

Cole M. Bienek

"There is no happiness if the things we believe in are different than the things we do."

-Albert Camus

From: jay cotton < > > > Sent: Saturday, October 16, 2021 3:14 PM

Sent. Saturday, October 10, 2021 S.141 W

To: publichearing <publichearing@goldengate.org>

Subject: PEV

I support PEV! Thank you!

Sent from my iPhone

From: Michael Arnaldo <

Sent: Saturday, October 16, 2021 3:16 PM

**To:** publichearing < <u>publichearing@goldengate.org</u>>

Subject: PEV

I support PEV! It's changed my whole life. Personal electric vehicles are saving the planet! I also don't have to worry about my windows being smashed while parked in the city. Or stolen on the middle of the night. PEVs are safe and effective means of transportation. I sold my car and my motorcycle. Electric is the future.

Sent from my iPhone Michael Arnaldo

To: publichearing < <u>publichearing@goldengate.org</u>>

Subject: PEV

I support PEV (Personal Electric Vehicles) use and want to be able to have shared access to the Golden Gate Bridge.

If you really want to reduce traffic, you need to not discriminate against more efficient modes of transportation.

Thank you,

- Joseph

Sent with iPhone

From: Marlon Mouton <

Sent: Saturday, October 16, 2021 4:08 PM

**To:** publichearing < <u>publichearing@goldengate.org</u>> **Subject:** The future is electric please support

From: antonio vargas <

Sent: Saturday, October 16, 2021 4:08 PM

To: publichearing <publichearing@goldengate.org>

Subject: There are so many of us who want to commute on PEV

I support PEV to go to GGB for my commute.

Sent from my iPhone

From: Anthony Hanni <

Sent: Saturday, October 16, 2021 4:09 PM

To: publichearing < publichearing@goldengate.org >

Subject: Vote for PEV

Sent from my iPhone

From: Jesse Garnier < > Sent: Sunday, October 17, 2021 8:07 AM

**To:** publichearing < <u>publichearing@goldengate.org</u>> **Subject:** Public meeting feedback – e-Bike and PEV status

Dear Madame Secretary--

Attached please find a letter from the Personal Electric Vehicle Riders Association (PEVRA) to be entered into the public record for the Golden Gate Bridge district board of directors meeting scheduled for Monday, October 19, 2021.

Very truly yours--

--

Jesse Garnier / Executive Director / Personal Electric Vehicle Riders Association / <a href="http://pevra.org">http://pevra.org</a>

\*\*\* Join PEVRA today as we work toward safety and legality for personal electric vehicles everywhere! \*\*\*

NOTICE: The .asc file which may be attached to this message can be used to validate the identity of the sender or respond via OpenPGP encryption.



VIA FACSIMILE (

VIA E-MAIL (publichearing@goldengate.org) `

VIA U.S. MAIL

October 14, 2021

Board of Directors Golden Gate Bridge, Highway and Transportation District c/o Amorette M. Ko-Wong, District Secretary P.O. Box 29000, Presidio Station San Francisco, CA 94129-9000

#### Dear Directors:

The Personal Electric Vehicle Riders Association (PEVRA) is a San Francisco-based California nonprofit membership association. Formed in 2018, PEVRA represents riders and private owners of personal electric vehicles (PEV), including electric bicycles, electric unicycles and electric skateboards. PEVRA advocates for the safe and legal operation of PEV within our public infrastructure, and conducts new rider training skills and safety training events.

On behalf of our members, and the broader community of responsible PEV riders in San Francisco, Marin, and throughout the Bay Area, we applaud all efforts by the Golden Gate Bridge, Highway and Transportation District to improve safety on the bridge, including on multi-use sidewalk areas currently utilized by pedestrians and human-powered bicycles.

Specifically, regarding the findings and preliminary recommendations contained in that certain study entitled *Bicycle Safety Study for the Golden Gate Bridge* dated October 2020, and any subsequent revised recommendations put before the Board of Directors, PEVRA wishes to enter the following comments into the public record for consideration by district Directors, staff, other stakeholders, and the public. Regarding:

Recommendation 1: Establish Bicycle Speed Limit. PEVRA concurs with findings that a 15-mph speed limit should be established on sidewalk areas, and a 5-mph speed limit should be established around all tower areas, and that these speed limit should apply to all users of these areas, regardless of vehicle type. In addition, PEVRA believes that a 5-mph speed

1

limit should apply to all areas where signage and pavement markings (see "Recommendation 2," below) indicate are primarily for pedestrian use.

Recommendation 2: Continue Signage and Pavement Markings Delineating Space. PEVRA concurs with the recommendation to increase signage displaying speed limits, and to implement pavement markings delineating areas for pedestrian use. In addition, and in conjunction with our input regarding Recommendation 1, PEVRA believes signage and pavement markings should reflect a 5-mph speed limit for all areas primarily intended for pedestrian use.

Recommendation 3: Continue Radar Speed Signs. PEVRA concurs with this recommendation.

Recommendation 4: Electric Bicycles. PEVRA concurs with the findings and recommendation that Class 1, Class 2, and Class 3 electric bicycles be allowed on multi-use sidewalk areas. PEVRA agrees with the analysis regarding Class 3 electric bicycles, and believes that requiring law enforcement to differentiate between different classes of e-bikes (including any top speed or wattage specifications, which can not be visually discerned with any degree of accuracy) places an onerous burden on public safety officers or other bridge staff. Therefore, PEVRA believes that all privately-owned, electric-powered bicycles should be allowed on multi-use sidewalk areas, subject to the same speed restrictions advocated above in the "Recommendation 1" and "Recommendation 2" sections.

Recommendation 5: Other User Groups and Devices. PEVRA vigorously urges the Golden Gate Bridge District Board of Directors to expressly allow the use of privately-owned electrically motorized boards, including devices commonly known as electric skateboards and electric unicycles (CVC §313.5), and privately-owned electric scooters (defined in CVC §407.5) on all multi-use sidewalk areas, subject to all speed, safety, and operational rules in place for bicycles and other types of traffic. California law (CVC) §21292) already allows use of electrically motorized boards on any street, road, trail or other conveyance where bicycles are currently allowed. Although CVC §21967 also allows districts or municipalities to expressly restrict the use of electric scooters and electrically motorized boards. PEVRA urges the District not to enact any rules or regulations limiting or prohibiting the use of privately-owned personal electric vehicles on multi-use sidewalk areas under the jurisdiction of the Golden Gate Bridge District. Due to several key safety factors, including rider inexperience or inattention, as well as limited battery range which could leave vehicles and/or riders stranded in unsafe locations, PEVRA does not support the use of rental scooters or rental electric-powered bicycles on multi-use sidewalk areas.

Personal electric vehicles are capable of safely operating at speeds compatible with both bicycles and pedestrians, and capable of modulating speed safely in mixed environments. The footprint of many personal electric vehicles is narrower than that of either human-powered or electric-powered bicycles, with some personal electric vehicles, like electric unicycles, having up to a 55% narrower footprint than a typical walking human being, or less

than 20% narrower, when measured at the pavement. In addition, reducing speed on a personal electric vehicle is not accompanied by a necessary increase in exertion when subsequently increasing speed, as it is on human-powered bicycles, often resulting to an unwillingness of bicyclists to slow down, or an expressed or unexpressed level of frustration in having to slow down to safely accommodate others in mixed-use areas.

The range of many contemporary, privately-owned personal electric vehicles could enable emission-free commutes for most of the nearly three in 10 Marin County workers who commute to San Francisco (TAM Origin and Destination Report, Transportation Authority of Marin, April 2018), were it not for rules prohibiting their use on the Golden Gate Bridge and aboard Golden Gate Transit. Golden Gate Bridge represents a key link into and out of San Francisco, potentially unlocking longer-distance trips now possible on modern, privately-owned personal electric vehicles. For example, allowing personal electric vehicles on the Golden Gate Bridge would enable trips into and from the East Bay and San Francisco, a journey currently not possible under current law and infrastructure availability. Personal electric vehicles represent the intersection of efficient, emission-free transportation with the actual transportation needs of thousands of Marin residents.

On behalf of PEVRA members in Marin County, San Francisco, around the Bay Area, and across California and the United States, we urge the Golden Gate Bridge Board of Directors to expressly allow the safe use of privately-owned personal electric vehicles on all multi-use sidewalk areas on the Golden Gate Bridge.

Very Truly Yours,

Jesse D. Garnier

Executive Director, Personal Electric Vehicle

Riders Association

From: Denise Lever <

Sent: Sunday, October 17, 2021 3:20 PM

To: publichearing < publichearing@goldengate.org >

Subject: Comment on Bicycle Safety Study

Dear Board Members and Staff of the Golden Gate Bridge Highway and Transportation District, I am writing to express my appreciation for the decision to develop a Bicycle Safety Study and urge several minor additions to it. However, as a rider of the bridge I am painfully aware of the need to improve safety for people riding across this key piece of infrastructure.

I suggest the following additions to the Bicycle Safety Study:

- -The study should incorporate a goal to reduce serious crashes on the bridge to a lower level. The current number of crashes is unacceptable and the Bridge District should state as much.
- -Construction material on the west sidewalk should be minimized and consolidated to the highest degree possible.
- -More rigorous analysis should be provided to the public about where and how the most serious crashes are taking place.
- -The new crash self-reporting tool should be easily visible to users of the bridge so that people who do crash are aware of its existence.

Thank you very much for your time and consideration. Denise Lever, avid cyclist.

Sent from my iPad

From: Victoria Vogel <

Sent: Sunday, October 17, 2021 3:32 PM

To: publichearing < publichearing@goldengate.org >

Subject: Comment on Bicycle Safety Study

Dear Board Members and Staff of the Golden Gate Bridge Highway and Transportation District.

I am writing to express my appreciation for the decision to develop a Bicycle Safety Study and urge several minor additions to it. However, as a rider of the bridge I am painfully aware of the need to improve safety for people riding across this key piece of infrastructure.

I suggest the following additions to the Bicycle Safety Study:

The study should incorporate a goal to reduce serious crashes on the bridge to a lower level. The current number of crashes is unacceptable and the Bridge District should state as much.

Construction material on the west sidewalk should be minimized and consolidated to the highest degree possible.

More rigorous analysis should be provided to the public about where and how the most serious crashes are taking place.

The new crash self-reporting tool should be easily visible to users of the bridge so that people who do crash are aware of its existence.

Thank you very much for your time and consideration.



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From: Ron Hirsch < > Sent: Sunday, October 17, 2021 3:59 PM

To: publichearing < publichearing@goldengate.org >

**Subject:** Comment on Bicycle Safety Study

Dear Board Members and Staff of the Golden Gate Bridge Highway and Transportation District,

I am writing to express my appreciation for the decision to develop a Bicycle Safety Study and urge several minor additions to it. However, as a rider of the bridge I am painfully aware of the

need to improve safety for people riding across this key piece of infrastructure.

I suggest the following additions to the Bicycle Safety Study:

- How many cyclists are using handheld devices while biking, endangering everyone around them. Could signage cut back on this number.
- -The study should incorporate a goal to reduce serious crashes on the bridge to a lower level. The current number of crashes is unacceptable and the Bridge District should state as much.
- -Construction material on the west sidewalk should be minimized and consolidated to the highest degree possible.
- -More rigorous analysis should be provided to the public about where and how the most serious crashes are taking place.
- -The new crash self-reporting tool should be easily visible to users of the bridge so that people who do crash are aware of its existence.

Thank you very much for your time and consideration.

Ron Hirsch

Bike roundtrip across the GG Bridge once or twice a week Drive my car across the bridge once a week

Training Ride Leader (volunteer) for AIDS/LifeCycle

From: Jack Holmgren <

Sent: Sunday, October 17, 2021 4:18 PM

To: publichearing < publichearing@goldengate.org >

Subject: Comment on Bicycle Safety Study

Dear Board Members and Staff of the Golden Gate Bridge Highway and Transportation District, <BR> <BR>I am writing to express my appreciation for the decision to develop a Bicycle Safety Study and urge several minor additions to it. However, as a rider of the bridge I am painfully aware of the need to improve safety for people riding across this key piece of infrastructure. <BR> <BR>I suggest the following additions to the Bicycle Safety Study: <BR> <BR>-The study should incorporate a goal to reduce serious crashes on the bridge to a lower level. The current number of crashes is unacceptable and the Bridge

District should state as much. <BR>-Construction material on the west sidewalk should be minimized and consolidated to the highest degree possible. <BR>-More rigorous analysis should be provided to the public about where and how the most serious crashes are taking place. <BR>-The new crash self-reporting tool should be easily visible to users of the bridge so that people who do crash are aware of its existence. <BR>-BR>Thank you very much for your time and consideration.

PLEASE COMMIT TO MAKING THE BRIDGE SAFER FOR CYCLISTS!!

Jack Holmgren, Frequent Cyclist User of the GGB

Excuse typos, sent from my mobile.

From: debra charondo <

**Sent:** Sunday, October 17, 2021 4:25 PM

**To:** publichearing < <u>publichearing@goldengate.org</u>>

Subject: Comment on Bicycle Safety Study

Dear Board Members and Staff of the Golden Gate Bridge Highway and Transportation District, I am writing to express my appreciation for the decision to develop a Bicycle Safety Study and urge several minor additions to it. However, as a rider of the bridge I am painfully aware of the need to improve safety for people riding across this key piece of infrastructure. I suggest the following additions to the Bicycle Safety Study: -The study should incorporate a goal to reduce serious crashes on the bridge to a lower level. The current number of crashes is unacceptable and the Bridge District should state as much. -Construction material on the west sidewalk should be minimized and consolidated to the highest degree possible. -More rigorous analysis should be provided to the public about where and how the most serious crashes are taking place. -The new crash self-reporting tool should be easily visible to users of the bridge so that people who do crash are aware of its existence. Thank you very much for your time and consideration.

Sincerely,

Debra Charondo

From: Mike Gregory <

Sent: Sunday, October 17, 2021 4:44 PM

To: publichearing < publichearing@goldengate.org >

Subject: Comment on Bicycle Safety Study

Dear Board Members and Staff of the Golden Gate Bridge Highway and Transportation District,

I am writing to express my appreciation for the decision to develop a Bicycle Safety Study and urge several minor additions to it. However, as a rider of the bridge I am painfully aware of the need to improve safety for people riding across this key piece of infrastructure.

I suggest the following additions to the Bicycle Safety Study:

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- -More rigorous analysis should be provided to the public about where and how the most serious crashes are taking place.
- -The new crash self-reporting tool should be easily visible to users of the bridge so that people who do crash are aware of its existence.

Thank you very much for your time and consideration.

\_.

Michael Gregory

From: Holly Harris <

Sent: Sunday, October 17, 2021 5:38 PM

To: publichearing <publichearing@goldengate.org>

Subject: Comment on Bicycle Safety Study

Dear Board Members and Staff of the Golden Gate Bridge Highway and Transportation District,

I am writing to express my appreciation for the decision to develop a Bicycle Safety Study and urge several minor additions to it. However, as a rider of the bridge I am painfully aware of the need to improve safety for people riding across this key piece of infrastructure.

I suggest the following additions to the Bicycle Safety Study:

- -The study should incorporate a goal to reduce serious crashes on the bridge to a lower level. The current number of crashes is unacceptable and the Bridge District should state as much.
- -Construction material on the west sidewalk should be minimized and consolidated to the highest degree possible.
- -More rigorous analysis should be provided to the public about where and how the most serious crashes are taking place.
- -The new crash self-reporting tool should be easily visible to users of the bridge so that people who do crash are aware of its existence. Although I first put that 5 mph sign at the tower might be punitive, I was mistaken. I thought it was in the middle of the span or further away from the approach.

Thank you very much for your time and consideration.

Thank you, Holly

From: Susan Nawbary <

Sent: Sunday, October 17, 2021 5:43 PM

To: publichearing <publichearing@goldengate.org>

Subject: Comment on Bicycle Safety Study

Dear Board Members and Staff of the Golden Gate Bridge Highway and Transportation District, <BR> <BR>I am writing to express my appreciation for the decision to develop a Bicycle Safety Study and urge several minor additions to it. However, as a rider of the bridge I am painfully aware of the need to improve safety for people riding across this key piece of infrastructure. <BR> <BR>I suggest the following additions to the Bicycle Safety Study: <BR> <BR>-The study should incorporate a goal to reduce serious crashes on the bridge to a lower level. The current number of crashes is unacceptable and the Bridge District should state as much. <BR>-Construction material on the west sidewalk should be minimized and consolidated to the highest degree possible. <BR>-More rigorous analysis should be provided to the public about where and how the most serious crashes are taking place. <BR>-The new crash self-reporting tool should be easily visible to users of the bridge so that people who do crash are aware of its existence. <BR> <BR>Thank you very much for your time and consideration.

Sent from my iPhone

From: Mikhail Binnewies <

Sent: Sunday, October 17, 2021 6:37 PM

**To:** publichearing < <u>publichearing@goldengate.org</u>>

Subject: Comment on Bicycle Safety Study

Dear Board Members and Staff of the Golden Gate Bridge Highway and Transportation District,

I am writing to express my appreciation for the decision to develop a Bicycle Safety Study and urge several minor additions to it. However, as a rider of the bridge I am painfully aware of the need to improve safety for people riding across this key piece of infrastructure.

I suggest the following additions to the Bicycle Safety Study:

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- -The new crash self-reporting tool should be easily visible to users of the bridge so that people who do crash are aware of its existence.

Thank you very much for your time and consideration.

Mikhail Binnewies

From: Paul Moe < > > Sent: Sunday, October 17, 2021 9:33 PM

To: publichearing < <a href="mailto:publichearing@goldengate.org">publichearing@goldengate.org</a>>

Subject: Comment on Bicycle Safety Study

Dear Board Members and Staff of the Golden Gate Bridge Highway and Transportation District, <BR> <BR>I am writing to express my appreciation for the decision to develop a Bicycle Safety Study and urge several minor additions to it. However, as a rider of the bridge I am painfully aware of the need to improve safety for people riding across this key piece of infrastructure. <BR> <BR>I suggest the following additions to the Bicycle Safety Study: <BR> <BR>-The study should incorporate a goal to reduce serious crashes on the bridge to a lower level. The current number of crashes is unacceptable and the Bridge District should state as much. <BR>-Construction material on the west sidewalk should be minimized and consolidated to the highest degree possible. <BR>-More rigorous analysis should be provided to the public about where and how the most serious crashes are taking place. <BR>-The new crash self-

reporting tool should be easily visible to users of the bridge so that people who do crash are aware of its existence. <BR> <BR> Thank you very much for your time and consideration.

To: publichearing <publichearing@goldengate.org>

Subject: PEV on GGB

Golden Gate Bridge district board members,

I'm writing to express my support for updating the rules to allow personal electric vehicles – electric bikes, skateboards, scooters and unicycles – on the west side bike path.

I'm a San Francisco resident of 16 years, and I ride an electric unicycle as my primary transportation. Currently, there is no legal route I can take to travel to visit friends in Marin, or ride trails in the Marin Headlands.

On other designated bike lanes and pathways, bikes and electric unicycles mix with no issues whatsoever. I believe that PEVs should be allowed anywhere bicycles are (in accordance with California law), and I believe they should be allowed across the Golden Gate Bridge. I believe in speed regulation by posted speed limit, not by device class, as it is for cars.

This is an issue I care about deeply, my primary issue in relation to the Golden Gate Bridge, so I hope you'll consider allowing PEVs across, as bikes are.

Thanks for your time, Ryan

From: Raayan Zarandian Mohtashemi <

**Sent:** Monday, October 18, 2021 12:01  $\overline{\text{AM}}$ 

To: publichearing < publichearing@goldengate.org >

**Subject:** Comment on Bicycle Safety Study

Dear Board Members and Staff of the Golden Gate Bridge Highway and Transportation District,

I am writing to express my appreciation for the decision to develop a Bicycle Safety Study and urge several minor additions to it. However, as a rider of the bridge I am painfully aware of the need to improve safety for people riding across this key piece of infrastructure.

I suggest the following additions to the Bicycle Safety Study:

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- -The new crash self-reporting tool should be easily visible to users of the bridge so that people who do crash are aware of its existence.

Thank you very much for your time and consideration.

From: Yasha Mostofi <

Sent: Monday, October 18, 2021 8:22 AM

To: publichearing < publichearing@goldengate.org >

Subject: Comment on Bicycle Safety Study

Dear Board Members and Staff of the Golden Gate Bridge Highway and Transportation District,

I am writing to express my appreciation for the decision to develop a Bicycle Safety Study and urge several minor additions to it. However, as a rider of the bridge I am painfully aware of the need to improve safety for people riding across this key piece of infrastructure.

I suggest the following additions to the Bicycle Safety Study:

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- -More rigorous analysis should be provided to the public about where and how the most serious crashes are taking place.
- -The new crash self-reporting tool should be easily visible to users of the bridge so that people who do crash are aware of its existence.

Thank you very much for your time and consideration.

Sincerely, Yasha Mostofi

From: Parker Day < Sent: Monday, October 18, 2021 9:22 AM

To: publichearing < publichearing@goldengate.org >

Subject: Comment on Bicycle Safety Study

Golden Gate Bridge Highway and Transportation District Board Members and Staff,

I'm writing today to say how much I appreciate the move to develop a Bicycle Safety Study. I'm sure you all agree that riding a bike across the bridge shouldn't be as harrowing of an experience as it is currently, and for that reason I think there need to be a few additions to the study.

- The goal of the study must be focused on reducing serious crashes involving cyclists.
- Construction material narrowing the already narrow sidewalk is unacceptable, unsafe, and needs to be reduced to an absolute minimum.
- The public should know where crashes are taking place and the severity of those crashes.

Finally, I applaud the new self-reporting tool, since crashes while biking are chronically unreported, but there needs to be a significant amount of signage at multiple locations on the bridge, otherwise the public will not be aware of their ability to self-report.

We must have a commitment from the District to measurably improve the safety of people who bike on the Golden Gate Bridge and I hope that you take this feedback into consideration to start working toward that goal.

Thank you,

Parker Day

From: Mike Sallaberry <

Sent: Monday, October 18, 2021 9:43 AM

To: publichearing <publichearing@goldengate.org>

Subject: Bicycle Safety Study comment

Dear Board Members and Staff of the Golden Gate Bridge Highway and Transportation District,

As someone who has ridden across the bridge for over 3 decades, I am writing to express my appreciation for the decision to develop a Bicycle Safety Study and urge several minor additions to it. More than ever - with so many riders and the higher wind conditions created by the new railing - there is a need to improve safety for people riding across this key piece of infrastructure.

I suggest the following additions to the Bicycle Safety Study:

- -The study should incorporate a goal to reduce serious crashes on the bridge to a lower level. The current number of crashes is unacceptable and the Bridge District should state as much.
- -Construction material on the west sidewalk should be minimized and consolidated to the highest degree possible.
- -More rigorous analysis should be provided to the public about where and how the most serious crashes are taking place.
- -The new crash self-reporting tool should be easily visible to users of the bridge so that people who do crash are aware of its existence.

Thank you very much for your time and consideration, Mike

From: James Farinacci <

**Sent:** Monday, October 18, 2021 10:47 AM

To: publichearing <publichearing@goldengate.org>

Subject: Safety on the bridge

Hello folks,

I've been riding the bridge for decades and feel I have expertise to judge.

- \* On the west side we experience cyclists may go a bit fast at moments that the bridge is clear but we also need to acknowledge when it's a moment to slow down. On a busy weekend day we may come to the back of a long line of cyclists and we just have to grin and bear it and wait until there is no one coming the other way to pass
- \* Every local who sees that they can't pass, should not try
- \* Although this is a tourist destination, they have to be better at acknowledging the dangers and learning the rules and being conscious of the shared space. Often folks are in tourist mode and shut their brains off.

- \* Never should they or locals ride side by side in such a tight space. Single file is a must. Never should they take their hands off their bars and whip out their phones for pics/videos. I always yell at them to stop and take pictures, not while riding
- \* Electric bikes are a newer phenomenon and don't necessarily belong. The bridge had a no riding in the power-on mode policy but abandoned it. These bikes can quickly get up to 20mph -28 mph if they're class 3 with hardly a human effort and are up to 60-70 lbs. If they hit a real bike they will cause serious damage
- \* On the east side it's chaos and all my concerns do apply but I suppose better signage and a painted line all the way msy make it a bit safer

James Farinacci longtime and cyclist bike safety advocate

From: D Drayer < **Sent:** Monday, October 18, 2021 11:16 AM

To: publichearing <publichearing@goldengate.org>

Subject: Safety on GGB

Having been an avid cyclist for over 60 years, I highly recommend bikers walk their bike around the towers. The GGB is not a race course.

Regards,

Douwe Drayer

Sent from Yahoo Mail for iPhone

#### **ATTACHMENT 5**

## GOLDEN GATE BRIDGE, HIGHWAY AND TRANSPORTATION DISTRICT ORDINANCE NO. 2021-001

# AN ORDINANCE TO AMEND THE MASTER ORDINANCE TO PERMIT THE USE OF ELECTRIC BICYCLES AND TO ESTABLISH A BICYCLE SPEED LIMIT

November 19, 2021

THIS ORDINANCE is adopted with reference to the following facts and circumstances which are found and declared by the Board of Directors:

- 1. The Golden Gate Bridge, Highway and Transportation District ("District") has observed that the use of bicycles as a means of transportation for commuters and recreational visitors is increasing and a significant share of this growth is attributable to the rising popularity of electric bicycles. Steady advances in energy storage and propulsion systems technologies have made lighter, speedier, longer range and more affordable electric bicycles available to a broader market that are being used for transportation and recreation in ways that exceed the capabilities of traditional bicycles.
- 2. Section 312.5 of the California Vehicle Code, added by AB 1096 (2015), defines an electric bicycle as a bicycle that is "equipped with fully operable pedals and an electric motor of less than 750 watts." The Code further sets out three classifications of electric bicycles:
- (a) "Class 1" or "low-speed pedal-assisted electric bicycle," which is a bicycle with an electric motor that only provides assistance when the rider is pedaling at a speed of less than 20 miles per hour;
- (b) "Class 2" or "low-speed throttle-assisted electric bicycle," which is a bicycle with an electric motor that does not require the rider to pedal and which ceases to provide assistance once the bicycle reaches 20 miles per hour; and
- (c) "Class 3" or "speed pedal-assisted electric bicycle," which is a bicycle with an electric motor, equipped with a speedometer, that only provides assistance when the rider is pedaling at a speed of less than 28 miles per hour.

A Class 3 electric bicycle generally may not be operated on a bicycle path or trail, bikeway, or hiking or recreational trail, unless permitted by the public agency having jurisdiction over the path or trail.

- 3. As a multi-modal transportation agency, the District desires to encourage the use of alternative modes of transportation while maintaining a sharp focus on its overarching responsibility to ensure maximum safety for all persons who use the Golden Gate Bridge ("Bridge").
- 4. In support of these goals, the District engaged a consultant to review the District's bicycle safety policies, conduct a speed study of bicycles on the Bridge, and analyze current conditions for bicyclists and pedestrians at the Bridge. The primary product of this review is the October 2020, *Bicycle Safety Study for the Golden Gate Bridge* ("Study"), which the Building & Operating Committee reviewed at its meeting of February 25, 2021.
- 5. The Study recommends that the District establish a speed limit of 15 miles per hour for bicycles on the Bridge sidewalks. This speed limit is consistent with the 15 mph bicycle speed limit on other shared use pathways adjacent to the Bridge, and around the Bay Area as well as nationally, and is also consistent with the 85th percentile bicycle speeds observed in the Study. The Study recommends that the speed limit be reduced to 5 mph around the Bridge's towers. At all times the bicyclists should travel at speeds that are safe for the conditions of the sidewalk. The Study further recommends that the bicycle speed limit be posted at appropriate locations on the Bridge, and stenciled on the Bridge sidewalks.
- 6. The Study recommends that the District continue to place signage and pavement markings at appropriate intervals to delineate space on the sidewalks for pedestrians and for bicyclists, taking into account that the ten-foot sidewalk width is not sufficiently wide to allow a complete separation of pedestrians and bicyclists, and that the area around the Bridge towers is a special zone of mixed, extremely slow speed bicyclist travel with limited sight distance.
- 7. The Study recommends that the District continue to maintain and upgrade its radar speed signs to inform bicyclists and record their speed of travel to monitor traffic patterns and safety conditions on the Bridge sidewalks.

- 8. The Study recommends that the District permit the use of Classes 1, 2, 3 electric bicycles on the Bridge's sidewalks.
- 9. Currently, the District prohibits roller or inline skates, skateboards, and scooters on the Bridge sidewalks. The Study recommends that these prohibitions continue in effect.
- 10. On September 23, 2021, as part of a comprehensive public outreach program to engage and receive public feedback on the Study, the District's Board of Directors ("Board") authorized the setting of a public hearing (Hearing) to receive public comment regarding the recommended actions included in the Study. The Hearing was set for Monday, October 18, 2021 at 10:00 am via audioconference. Outreach regarding the Study's findings and recommendations began following the Board's authorization to set a Hearing and continued through early October. Outreach activities included the following: 1) a virtual open house (Open House) held from September 24, 2021 through October 10, 2021, 2) a live virtual town hall (Town Hall) was held on October 6, 2021 to present the findings and recommendations of the Study and to solicit public comment on the recommendations, 3) a press release announcing the Hearing was posted on the District's web site on October 12, 2021 and sent to local media on October 13, 2021, 4) posting signs on the Bridge advertising the Open House, Town Hall, and Hearing, and 5) an email announcing the Hearing was sent to customers and community-based organizations, and posted on Twitter on October 13, 2021. Public comments regarding the Study's findings and recommendations were received at the Open House, Town Hall, Hearing, by email to the District, and by written comments to the District Secretary.
- 11. Legal notices of the Hearing were published to the District's website on September 28, 2021; in *La Voz*, in English and Spanish, on September 27, 2021; in the *Marin Independent Journal* and the *San Francisco Chronicle* on September 28, 2021 and October 11, 2021; and, in the *Press Democrat* on October 2, 2021 and October 11, 2021. A public hearing was held on October 18, 2021 to formally receive public comment on the Study's recommendations. As of October 18, 2021, there were 377 written comments received by the District. Of these, 37 commenters explicitly agreed with the Study's recommendations and 9 commenters explicitly disagreed with the Study's recommendations. Other commenters supported some recommendations, but not others. Additionally, 258 participants in the Open House provided feedback on a Likert-type scale which

ranked their agreement with the following statement: "The [Study] recommendations will make the Golden Gate Bridge safer for cyclists and pedestrians." Of the 258 responses, 10% (26) rated 5 (Strongly Agree), 18% (46) rated 4, 29% (74) rated 3, 22% (57) rated 2, and 21% (55) rated 1 (Strongly Disagree).

- 12. Staff reviewed and categorized all comments, and prepared written responses to questions received during the Town Hall, all of which are included as an attachment to the staff report for the November 18, 2021, Building and Operating Committee meeting.
- 13. The bike paths on the west and east sidewalks are part of recognized trails in the State of California, including the California Coastal Trail and the Bay Area Ridge Trail, and are used for recreational purposes, providing access to scenic look out points and recreational activities. The Bridge sidewalks function as bicycle paths and recreational trails for the purposes of Government Code section 831.4(b) and, as such, the District is entitled to trail immunity for accidents occurring on them.
- 14. Due to the Bridge's physical constraints and unique security needs, the District's inhouse and retained engineers determined that the current design is the only reasonable alternative for the Bridge's sidewalks. The District Engineer, the Building and Operations Committee, and the Board approved the design and configuration of the Bridge sidewalks before their construction and use. Substantial evidence supports the Board's determination to approve the design and the District is entitled to design immunity under section 830.6 of the California Government Code.
- 15. Staff recommends that the Board revise the District's Master Ordinance to allow Classes 1, 2, and 3 electric bicycles, as defined in the California Vehicle Code, on the Bridge's sidewalks and approaches. Staff recommends that the Board adopt a maximum speed of fifteen miles per hour for all bicycles and a five mile per hour maximum speed for all bicycles when on blind turns near the Bridge's towers, subject to the requirement that, under all circumstances, bicycles shall be operated at a speed no greater than what is reasonable for safe operation, and in a manner that does not endanger the safety of others. Staff further recommends that the Board revise the District's Master Ordinance to clarify that, unless specifically permitted under the Master Ordinance, other pedestrian-type rolling conveyances are not permitted on the Bridge sidewalks.

- 16. Staff has begun implementing a number of proposals that were offered during the public outreach process. Additionally, many participants in the process expressed interest in a District bicycle and pedestrian advisory committee to ensure continued and ongoing engagement with bicycle and pedestrian users of the Bridge and the District's Bus and Ferry systems. Staff recommends that the Board approve the establishment of a Bicycle and Pedestrian Advisory Committee as further described herein.
- 17. On November 18, 2021 a meeting of the Building and Operating Committee was held to consider staff's recommendation to permit the use of Classes 1, 2, and 3 electric bicycles on the Bridge's sidewalks, to establish the forgoing bicycle speed limits, to clarify the list of wheeled devices which are prohibited on the Bridge's sidewalks, and to approve the establishment of a District Bicycle and Pedestrian Advisory Committee. Following presentation of the staff report, the Building and Operating Committee recommended the proposed revisions to the District's Master Ordinance and the establishment of a Bicycle and Pedestrian Advisory Committee by a vote of \_\_\_\_\_\_.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF DIRECTORS OF THE GOLDEN GATE BRIDGE, HIGHWAY AND TRANSPORTATION DISTRICT AS FOLLOWS:

<u>Section 1.</u> Section II, "Golden Gate Bridge and Approaches," Subsection G.5, "Bicycles," of the Master Ordinance is replaced in its entirety with the following:

- 5. BICYCLES. Bicycle traffic shall be permitted every day of the week, twenty-four (24) hours a day, on the following basis:
  - a. On the east sidewalk: (1) Monday through Friday, excluding holidays, from the commencement of Daylight Hours to 3:30 p.m.; and, (2) every day of the week during non-Daylight Hours on the condition that bicyclists comply with procedures implemented by the District that shall include notification to and authorization from the District's Sergeant's Office prior to entering and exiting the east sidewalk through the remote controlled access gate.

- b. On the west sidewalk: (1) Monday through Friday, excluding holidays, from 3:30 p.m. through the end of Daylight Hours; and, (2) Saturdays, Sundays and holidays during Daylight Hours.
- c. For purposes of this Section II.G.5, the term "Daylight Hours" shall mean at a minimum from 6:00 a.m. to 6:00 p.m. during periods with the shortest days and at a maximum from 5:00 a.m. to 9:00 p.m. during periods with the longest days, which hours will be determined within this range by the General Manager taking into account seasonal variations.
- d. Crossing from one sidewalk to another or walking or riding a bicycle on the roadway of the Bridge or approaches is prohibited, except that bicycle riding is permitted on the roadway of Alexander Avenue.
- e. At all entrances to Bridge sidewalks conspicuous signs shall be posted cautioning bicyclists that wind may be hazardous and advising bicyclists that they should walk their bicycles across the Bridge.
- f. For purposes of this Section II.G.5, the term "Bicycles" includes class 1, 2, and 3 electric bicycles as defined in Section 312.5 of the California Vehicle Code.
- g. The speed of a bicycle on the Bridge's sidewalks and approaches shall not exceed fifteen (15) miles per hour. In addition, the speed of a bicycle shall not exceed five (5) miles per hour while navigating the blind turns adjacent to the Bridge's towers. Notwithstanding the foregoing, in no event may a bicycle be operated at a speed that is greater than what is reasonable for safe operation in the existing conditions, nor in a manner that would endanger the safety of others. Notwithstanding Section V, "Violations," a violation of the bicycle speed limits herein provided is a violation of California Vehicle Code Section 22405 and individuals violating such bicycle speed limits will be subject to all applicable sanctions and penalties.

<u>Section 2.</u> Section II, "Golden Gate Bridge and Approaches," Subsection G.12, "Motor-Driven Cycles on Sidewalks," of the Master Ordinance is replaced in its entirety with the following:

12. MOTOR-DRIVEN CYCLES AND OTHER DEVICES ON SIDEWALKS.

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- a. Except as provided in Subparagraphs (b) and (c) below, no motor-driven cycles or motorized bicycles shall be operated on Bridge sidewalks. Additionally, no person shall use or ride on the Bridge sidewalks other wheeled conveyances, which are defined as forms of pedestrian transportation including, but not limited to, motorized boards, electrical personal assisted mobility devices, and motorized scooters as defined in California Vehicle Code sections 313, 313.5, and 407.5(a)(b), respectively, and any other pedestriantype wheeled conveyances not expressly permitted by this Master Ordinance.
- b. The prohibition in Subparagraph (a) above does not apply to maintenance and emergency equipment of District forces and the California Highway Patrol, nor to equipment used by construction contractors under contract to the District using equipment approved by the District, nor to special equipment used by persons with disabilities such as electrically powered wheelchairs.
- c. Motorized bicycles or motor-driven cycles may use Bridge sidewalks in accordance with other provisions of this Master Ordinance pertaining to bicycles, provided the engines or motors are not in operation and the motor-driven cycle or motorized bicycle is propelled by human power only.

As used herein, motor-driven cycles and motorized bicycles shall have the meaning set forth in Sections 405 and 406, respectively, of the California Vehicle Code.

Section 3. The Board of Directors hereby approves the establishment of a Bicycle and Pedestrian Advisory Committee consisting of interested representatives of the bicyclist and pedestrian communities and District Staff for the purpose of making recommendations concerning bicycle and pedestrian safety on the Golden Gate Bridge and related matters concerning District facilities and services. The proceedings of said Committee shall be reported to the Board of Directors.

Section 4. The effective date of this Ordinance shall be the first day of January 2022.

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Section 5. If any provision of this ordinance or the application thereof to any person or circumstances is held invalid, such invalidity shall not affect any other provisions or applications of the Ordinance which can be given effect without the invalid provision or application, and to this end, the provisions of this Ordinance are severable.

ADOPTED this 19th day of November, 2021, by the following vote of the Golden Gate Bridge, Highway and Transportation District Board of Directors;

AYES:	
NOES:	
ABSENT:	
	Barbara L. Pahre
	President, Board of Directors
ATTEST:	Tresident, Board of Birectors
ATTEST.	
Amorette M. Ko-Wong	
Secretary of the District	

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