Iron Horse Corridor Management Program

New and Emerging Mobility Modes in the Corridor Element

Vision

The New and Emerging Mobility Modes in the Corridor Element of the Iron Horse Corridor Management Program is intended to comply with Assembly Bill No. 1025 (AB 1025), which states:

> SEC. 2 (a) The County of Contra Costa shall do both of the following:
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> (1) Revise the bylaws of the Iron Horse Corridor Management Program Advisory Committee to include a seat for a Contra Costa Transportation Authority representative and expand the management program elements to include a new, seventh element that considers proposals to study new and emerging mobility modes and technologies in the corridor.
> (2) Include a new task in the committee's work program to recommend a framework for acting on the proposals.

This document outlines the scope of this element and how the Iron Horse Corridor Management Program Advisory Committee (IHCMPAC) should address any proposals for new mobility modes in the Iron Horse Corridor (IHC or corridor).

In responses to AB 1025, a Contra Costa Transportation Authority (CCTA) representative was appointed to the IHCMPAC effective February 2, 2021.

Background

In 1978, Southern Pacific Railroad (SPRR) received federal permission to abandon the rail line that once ran along what is now Contra Costa County's (County) IHC property. The IHC stretches 18.5 miles from the Alameda County line northward to Mayette Avenue in Concord. It passes through the communities of Concord, Pleasant Hill, Walnut Creek, Alamo, Danville, and San Ramon. Adjacent property use is both residential and commercial along the IHC.

To facilitate the purchase of the IHC, the County obtained $10.6 million in grant funding from the state to launch a feasibility study and pay for the partial acquisition in fee title of the SPRR's property. To comply with the terms of the state grants that the County received, the County was required to preserve a 34-foot-wide transit corridor easement for a busway or exclusive mass transit guideway within the corridor. No building or planting projects that would impair the ability to implement a busway or transit guideway were allowed to be implemented in the IHC.

In 1986, the County entered into a license agreement with the East Bay Regional Park District (EBRPD) to operate a 10-foot-wide paved multiuse trail in the IHC called the Iron Horse Regional Trail (IHRT). The IHRT has been expanded northward to include Contra Costa County Flood Control and Water Conservation District (Flood Control) property along Walnut Creek terminating at Marsh Drive, near Highway 4. The trail has also been expanded southward into Alameda County, passing through the City of Dublin before terminating in City of Pleasanton. However, the scope of this element is strictly within the County.

The IHRT connects to a number of EBRPD trails running east and west but remains the sole regional connector trail in the north-south direction in central County. It connects to two Bay Area Rapid Transit (BART) stations at Contra Costa Centre/Pleasant Hill and Dublin/Pleasanton, thus providing a vehicle-free commuting route through the central part of the County.

The IHC is typically 50 to 100 feet wide. In Walnut Creek, the IHC narrows down to the width of the EBRPD trail from Civic Park to Rudgear Road along Flood Control's San Ramon Bypass channel and the City of Walnut Creek's South Broadway roadway (1.8 miles). Similarly, in Danville, the IHC from West Prospect Street south to San Ramon Boulevard is only 30 feet wide.

With the implementation of AB 1025 in 2019, the requirement to maintain space for busway or transit guideway in the IHC was removed, with the understanding that proposals for new mobility modes would be considered by the IHCMPAC.

Aside from EBRPD's IHRT, much of the IHC property currently remains relatively undeveloped at the surface. The City of San Ramon and the Town of Danville maintain by agreement with County several small rest areas with shade, benches and drinking water in their respective areas. County Service Area R-7 maintains Hemme Station Park adjacent to the IHC in Alamo with restrooms, drinking water, a children's playground, and some bicycle facilities. Civic Park in the City of Walnut Creek provides restrooms and drinking water.

A number of underground utilities are present in the subsurface of the IHC and include the following:

- Kinder Morgan Energy Partners LP (SFPP L.P.) (petroleum products pipeline)
- Central Contra Costa Sanitary District (CCCSD) (wastewater pipeline)
- East Bay Municipal Utility District (EBMUD) (potable water pipeline)
- Pacific Gas and Electric (PG&E) (gas and electrical service)
- Dublin San Ramon Services District (DSRSD) DSRD/EBMUD Recycled Water Authority (DERWA) (recycled water pipeline)
- Level 3/Century Link (Formerly Time Warner) (cable and communications)

- Contra Costa Water District (CCWD) (potable water pipeline)
- AT&T (Formerly SBC, PacBell) (cable and communications)
- Astound Broadband (cable and communications)

Underground utilities are a significant constraint in the IHC and frequently have strong easement rights.

What are New and Emerging Mobility Modes and Technologies and How are They Impacting the IHC?

Originally, the IHRT in the IHC was envisioned and built to serve equestrians, pedestrians, and cyclists. The use of e-bikes and e-scooters, which are new mobility modes, was not anticipated. In 2019, EBRPD approved the use of Class I and II electric bicycles on the IHRT. Subsequently, these new mobility modes, coupled with the increased use of the trail by pedestrians and cyclists during the COVID19 pandemic, have begun to exceed trail capacity in areas. Furthermore, these new mobility modes frequently are in conflict with pedestrian use of the trail. To accommodate emerging multimodal transportation options, several engineering constraints with the IHC will need to be addressed.

While the authors of AB 1025 had envisioned potentially using the IHC for autonomous vehicles or similar mass transit modes, it is evident that the current trail system requires expansion to safely accommodate all current modes of transportation--including equestrians, pedestrians, bikes, e-bikes and e-scooters—while minimizing conflicts and supporting a sustainable multimodal future.

Consideration of Proposals to Study New and Emerging Mobility Modes and Technologies in the Corridor

The IHCMPAC will review any proposals put forth by the County, Contra Costa Transportation Authority (CCTA), or a Joint Exercise of Power of the County or CCTA and any other governmental organization for new and emerging mobility modes in the IHC. If the proposal is acceptable to the IHCMPAC, a recommendation to elevate the proposal to the Contra Costa Transportation, Water, and Infrastructure Committee (TWIC) would be made. If the proposal is approved by TWIC, it would be sent to the Board of Supervisors for approval.

In late 2023, the Department of Public Works (PW) began design for adding a second pathway to the IHC to separate pedestrians from bikes, e-bikes and e-scooters in San Ramon. This project will extend from Bollinger Canyon Road to Crow Canyon Road in San Ramon.

Criteria that the IHCMPAC will consider when reviewing the feasibility of a proposed change to the mobility modes in the IHC, such as the one noted above, generally fall

into seven categories. Proposals for new mobility modes shall address the following items:

1. Funding for the IHC to implement construction and ongoing maintenance improvements;
2. Planning and design/engineering considerations and constraints, especially regarding available space, utilities, and potential soil contamination in the IHC;
3. Adjacent housing and development considerations, such as access and trail capacity, for the IHC;
4. Maintaining and enhancing connections to schools while providing a safe environment for children using the IHC;
5. Providing park-related amenities, such as landscape, restrooms and drinking water, in the IHC;
6. Ability to accommodate additional proposed new mobility modes; and
7. Legal/liability issues associated with accommodation of the new mobility modes.

For each of the above seven categories, there are several issues that need to be addressed by the proposal. The IHCMPAC will consider each of the above-noted criteria in depth. Proposal submissions to the IHCMPAC will require a detailed set of plans and other documents to address the above-noted issues. Proposals will need to address the following:

1. IHC funding and ongoing maintenance of IHC improvements

At present, County operations of the IHC are funded by interest on the IHC trust fund and fees paid by some utilities that have located recently in the corridor, which is very limited. Most (92.1% in 2024) of EBRPD's funding comes from property taxes, and their budget does not have funding for additional facilities in the IHC. Future accommodation of new mobility modes will need to consider the following financial issues:

- The proposal should describe the revenue sources available to fund construction and the ongoing maintenance of the improvements made for new mobility modes.
- The proposal shall include a cost-benefit analysis for the proposed mobility mode.

2. Housing and development considerations

As cities along the IHC work to increase their housing stock, the zoning near the trail will change from industrial or commercial zoning to high-density residential, with a focus on minimizing automobile use. Increased housing near the IHC will impact trail use and the demand for recreation and commute facilities for bicycles, E-bikes, and

pedestrians. Implementation of new mobility modes should consider the following regarding adjacent development projects:

- The proposal shall consider and address how the new mobility modes will serve new housing along the IHC. This may include potential cost sharing with developments for trail improvements.
- The proposal should discuss how the new mobility modes will be connected to the trail from new developments and should identify any barriers and potential solutions to these connections.
- The proposal should help prioritize improvements near transit hubs such as BART stations and Bishop Ranch to promote walking or biking on the IHRT.

3. Planning, Design/Engineering and Safety Considerations

To accommodate emerging multimodal transportation options, several engineering constraints within the IHC will need to be addressed. These considerations include:

- What is the current capacity of the IHC? How will the new mobility mode change use of the IHC?
- What are the potential conflicts of the proposed mobility mode with underground and aboveground utilities?
- Will the existing pathways in the IHC need to be realigned or relocated to accommodate the new mobility mode?
- What will be the impacts to motor vehicle traffic at road crossings?
- What is the expected quantity of soil remediation in the IHC that will be needed to accommodate the new mobility mode? Will remediation require excavation and disposal off-site?
- What are the potential conflicts between pedestrians and new mobility modes at overcrossings such as San Ramon's overcrossing at Bollinger Canyon Road, Walnut Creek's overcrossing at Ygnacio Valley Road, and the County's overcrossing at Treat Boulevard?
- What are the impacts to creeks and IHC drainage?
- How will adding a second lane for bikes change street crossings and the warning signals that been set up at these crossings?
- High speed e-bikes are incompatible with slower pedestrians. How will they be kept separate?
- Where will the new mobility mode be located in those portions of the IHC that are narrow? Examples are the South Broadway area in Walnut Creek.
- There are limited width bridges over a number of creeks along the IHC. Will new bridges need to be built to accommodate the new mobility modes?

- The IHC underground is crowded with utilities, and this will impact our ability to put in an additional pathway for potential new mobility modes. There are issues with compacting over utilities that affect the longevity of the existing pathway.
- What happens to-at grade improvements when utilities construct new, larger pipes or replace existing facilities.
- There are portions of the IHC, such as at the Fostoria Crossing in San Ramon/ Danville, that need realigned to improve pedestrian safety.

4. Maintaining and Enhancing Connections to Schools While Providing a Safe Environment for Children

There are at least 12 public schools located either on or near the IHC. Every school day, hundreds of children use the trail going to and coming from school. Children often cross streets and spread out on the trail without looking. We need to make the IHC a safe place for children as they go to school. Implementation of new mobility modes should consider the following regarding schools.

- Potential conflicts between pedestrian and bicycle traffic to nearby schools. There is extensive use of the trail by children. Are more crossing guards and over/underpasses needed for children to safely cross streets or the trail?
- How would children safely cross the trail if a new mobility mode is added to the IHC?
- Do we need to create a safety area around schools? Would there need to be a mandatory speed limit for bikes and e-bikes during school commute hours to prevent conflicts between commuters and children?
- Is there a need for emergency call boxes near schools for safety and security purposes?

5. Providing Park-Related Amenities in the IHC

Increased usage of the IHC may drive the demand for more park and recreational facilities, such as restrooms, tables and chairs, drinking water, and shade. The IHC in Danville and San Ramon has long stretches with little to no shade, which has long been recognized as an issue. Implementation of new mobility modes should consider the following regarding parks and recreation:

- Will the mobility mode conflict with the recreational nature of the IHC?
- How will the County or other entities provide shade, water, restrooms and other recreational facilities along the IHC to accommodate the increased usage? What funds will be used to pay for these amenities?
- How will trees be managed in the IHC? Increasing trail capacity may require tree removal and replanting to provide shade. How will tree planting and replanting

be managed, particularly in areas with existing utilities that are in conflict with trees?
- How will irrigation be provided to shade trees? Who will manage and operate the irrigation system (County or EBRPD)?
- How will conflicts between utilities and the need for shade trees be worked out?

6. Ability to Accommodate Proposed New Mobility Modes

Given the limited width of the IHC, there is a limited ability to accommodate proposed mobility modes. Ability to accommodate a particular mobility mode will be dependent on the following:

- Proposed width of the mobility mode and impacts on other uses of the IHC.
- Conflicts with a potential second bicycle pathway and other proposed improvements to the IHC.
- Technology appropriateness (age of technology and application).
- Speed of the proposed mobility mode. Will the new mode exceed the allowable speeds on the trail or create a threat to trail users?
- Where is the most potential benefit to adding a new mobility mode (for example, a second trail)? San Ramon and Pleasant Hill, where development will occur? We need to build where the need is greatest.

7. Legal/Liability Issues

Addition of a new mobility mode will create new risks and liabilities to the County and EBRPD. How will these be addressed?