CONTRA COSTA TRANSPORTATION AUTHORITY

COMMISSIONERS	Aaron Meadows, Chair | Darlene Gee, Vice Chair | Mark Armstrong | Newell Arnerich | Ron Bernal Diane Burgis | Ken Carlson | Chris Kelley | Sue Noack | Carlyn Obringer | Rita Xavier
ALTERNATES	Candace Andersen | Juan Banales | Susan Candell | Richard Enea | John Gioia | Claudia Jimenez Susannah Meyer | Shanelle Scales-Preston | Shannon Shaw | Karen Stepper | Kevin Wilk
EX-OFFICIOS	Mark Foley, BART | Amy Worth, Public Transit Bus Operators
	Candace Andersen and Sue Noack, MTC
ALTERNATE	Matthew Rinn, BART | Louie Rocha, Public Transit Bus Operators
Executive Director	Timothy Haile

*Countywide Bicycle and Pedestrian Advisory Committee (CBPAC) Meeting **AMENDED AGENDA****

(Full packet with attachments available at www.ccta.ca.gov)
This meeting will be held in-person and via Zoom Webinar for public participation.
**Agenda has been amended to add a member's remote attendance.*

DATE: Monday, January 26, 2026

TIME: 11:00 AM

PLACE: Contra Costa Transportation Authority
2999 Oak Road, Suite 110
Walnut Creek, CA 94597

Please note: Member Evans is attending via teleconference from the following location:

28 Orinda Way
Orinda, CA 94563

IF ATTENDING REMOTELY, REFER TO TELECONFERENCING SPECIAL NOTICE

TELECONFERENCING SPECIAL NOTICE – PUBLIC MEETING GUIDELINES FOR PARTICIPATING VIA TELECONFERENCE

The Countywide Bicycle and Pedestrian Advisory Committee meeting will be accessible in-person, via telephone, and live-stream to all members of the public. The public is invited to participate telephonically or electronically via the methods below:

To observe the meeting by audiocast live stream, please use the link to the Public Meetings webpage on the Authority's website at https://ccta.ca.gov/meetings/.

To observe the meeting by teleconference, please click the link at the noticed meeting time: https://ccta-ca-gov.zoom.us/j/85718856310?pwd=1EOaaLUWoGfiPknaMDrUfF4VuSLUAt.1 and use Passcode 823964.

Instructions on how to join a teleconference are available at https://support.zoom.us/hc/en-us/articles/201362193 -Joining-a-Meeting.

To observe the meeting by phone, please call 1 (669) 900 9128 at the noticed meeting time, then enter the Webinar ID: 857 1885 6310. When asked for a participant id or code, press #.

Instructions on how to join a meeting by phone are available at https://support.zoom.us/hc/en-us/articles/201362663 -Joining-a-meeting-by-phone.

How to Submit Public Comments:

1. Members of the public may submit written public comments by emailing jreyes@ccta.ca.gov with the Agenda item number identified in the subject line of the email. For example: "Public Comment – Not on the Agenda" or "Public Comment – Agenda Item #". All written comments should be 350 words max, which corresponds to approximately three (3) minutes of speaking time. Public comments received by 5:00 PM the day before the scheduled meeting will be distributed to the Committee members before the meeting and posted on the Authority's website; comments submitted after that time will be distributed to the Committee members and posted as soon as possible. Written public comments received after this 5:00 PM cutoff time will be distributed to the Committee members and eventually posted to the website but only if received before the start of the meeting.

2. To comment by video conference, click the "Raise Your Hand" button to request to speak when the Public Comment period is opened on an Agenda item. You will then be unmuted when it is your turn to make your comments for up to three (3) minutes. After the allotted time, you will then be re-muted. Instructions for how to "Raise Your Hand" are available at https://support.zoom.us/hc/en-us/articles/205566129 -Raise-Hand-In-Webinar.

3. To comment by phone, you will be prompted to "Raise Your Hand" by pressing "*9" to request to speak when the public comment is opened on an Agenda item. You will then be unmuted when it is your turn to make your comments for up to three (3) minutes. After the allotted time, you will then be re-muted.

4. To comment in-person, please complete a Public Speaker card and hand it to the Clerk. You will be called upon when it is your turn to make your comments for up to three (3) minutes.

The Authority cannot guarantee that the public's access to Zoom via phone or other device or the

live-stream via YouTube will be uninterrupted, and technical difficulties may occur from time to time. Unless required by the Brown Act, the meeting will continue in-person despite technical difficulties for participants using the Zoom or YouTube option.

---

1. **CONVENE MEETING:** *Robert Sarmiento, Chair*

2. **PUBLIC COMMENT:** Members of the public are invited to address the Committee regarding any item that is not listed on the agenda. Please refer to the Teleconferencing Special Notice for Public Comment guidelines.

3. **CONSENT CALENDAR**

   A. Countywide Bicycle and Pedestrian Advisory Committee Summary of Actions from November 17, 2025

4. **REGULAR AGENDA ITEMS**

   A. Draft Evaluation Criteria for the Route Alignment Concept Alternatives for the Iron Horse Trail and Contra Costa Canal Trail Connection Feasibility Study near the Interstate 680 and State Route 4 Highway Interchange

   Recommendation: Staff will provide an update for review of the Draft Evaluation Criteria for the Study. This item is for information only; no staff recommendation at this time.

   B. Draft Countywide Bicycle and Pedestrian Advisory Committee (CBPAC) Bylaws Update

   Recommendation: Staff will provide an update for review of the Draft CBPAC Bylaws. This item is for information only; no staff recommendation at this time.

   C. Update on the Metropolitan Transportation Commission's Active Transportation Working Group

   Recommendation: This item is for information only; no staff recommendation at this time.

   D. Other Business/Information Sharing

   E. Upcoming Subjects for Discussion

5. **ADJOURNMENT** to the next regular meeting proposed for March 23, 2026 at 11:00 AM.

***Footnote:** In accordance with Government Code Section 84308(b) and (c), no Commissioner shall accept, solicit,

or direct a contribution of more than five hundred dollars ($500) from any party, or his or her agent, or from any participant, or his or her agent, while a proceeding involving a license, permit, or other entitlement for use is pending before the agency and for 12 months following the date a final decision is rendered in the proceeding if the officer knows or has reason to know that the participant has a financial interest, as that term is used in Article 1 (commencing with Section 87100) of Chapter 7. Any Commissioner who received a contribution within the preceding 12 months in an amount of more than five hundred dollars ($500) from a party or from any participant shall disclose that fact on the record of the proceeding and the Commissioner shall not make, participate in making, or in any way attempt to use his or her official position to influence the decision.

A party to a proceeding before the Authority shall disclose on the record of the proceeding any contribution in an amount of more than five hundred dollars ($500) made within the preceding 12 months by the party, or his or her agent, to any Commissioner. No party, or his or her agent, shall make a contribution of more than five hundred dollars ($500) to any Commissioner during the proceeding and for 12 months following the date a final decision is rendered by the agency in the proceeding. The foregoing statements are limited in their entirety by the provisions of Government Code Section 84308(b) and (c) and parties are urged to consult with their own legal counsel regarding the requirements of the law.

ANY WRITINGS OR DOCUMENTS pertaining to an open session item provided to a majority of the Committee less than 72 hours prior to the meeting shall be made available for public inspection at the Authority's website at www.ccta.ca.gov.

PUBLIC COMMENT: The public may comment on any matter on the agenda, or related matters not on the agenda. Please refer to the Teleconferencing Special Notice for ways to provide Public Comment. Public Comment is limited to three minutes (or other such time period as determined by the Chair), in accordance with the Authority's Administrative Code, Section 103.4(b).

TRANSLATION SERVICES: If you require a translator to facilitate testimony to the Authority, please contact Tarienne Grover at (925) 256-4722 no later than 48 hours in advance of the scheduled meeting. Si usted requiere a un traductor para facilitar testimonio a la Authority, por favor llame Tarienne al (925) 256-4722, 48 horas antes de la asamblea.

ADA COMPLIANCE: This Agenda shall be made available upon request in alternative formats to persons with a disability, as required by the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132) and the Ralph M. Brown Act (Cal. Govt. Code Sec. 54954.2). Persons requesting a disability-related modification or accommodation should contact Tarienne Grover (925) 256-4722 during regular business hours, at least 24 hours prior to the time of the meeting.

MEMORANDUM

Date: **January 21, 2026**

To: **Countywide Bicycle and Pedestrian Advisory Committee (CBPAC)**

Subject: **Alternatives Analysis: Evaluation Criteria for Route Alignment Concepts for a Potential Future I-680 and SR-4 Highway Interchange Crossing: Iron Horse & Contra Costa Canal Trails Connection Feasibility Study (Multi-Agency Planning Phase)**

1.0 Purpose of this Memorandum

This memorandum serves as an additional opportunity for the Committee (CBPAC), stakeholders, partner agencies, and the general public to provide input on the draft Iron Horse and Contra Costa Canal Trails Connection Feasibility Study (Planning Phase evaluation ongoing) by providing comment on the identification, evaluation, and qualitative & quantitative scoring process for potential trails connection route alignment concept alternatives (RACs).

2.0 Background

During the preliminary design phase for the Interstate 680 (I-680) and State Route 4 (SR-4) Highway Interchange Improvements Project, community members and active transportation (including pedestrian and bicycle) user groups commented on the need to connect the existing Iron Horse and Contra Costa Canal trails in the Pacheco community. Both trails serve as popular, multiuse trails suitable for bikers, runners, walkers, and equestrians. The I-680 and SR-4 highway interchange serves as a perceived socioeconomic and actual physical barrier between the trails, and the trails run parallel to each other along either side of I-680 throughout the unincorporated County and the cities of Concord, Pleasant Hill, and Walnut Creek. Thus, in 2024, regional funding was allocated by the Metropolitan Transportation Commission (MTC) for Contra Costa Transportation Authority (CCTA) to conduct a feasibility study, in coordination with public agency partners, to determine where and how the two regional trails could be connected.[1]

Connecting the Contra Costa Canal and Iron Horse trails in the Pacheco community area would close a gap in the regional trail network in northern Contra Costa County, providing improved connectivity and opportunities to support off-street transportation (and recreational) access to key transit hubs, regional destinations, and points of interest. Also, connecting these trails would provide improved and safer connection between neighborhoods and key uses on the east and west sides of I-680 in the Pacheco

[1] This planning effort was funded by MTC's Regional Measure 3: RM3-19.2-funded Project No. 6001C.1: Iron Horse Trail and Contra Costa Canal Trail Connection Feasibility Study near I-680/SR-4 Highway Interchange (Planning a Potential Crossing).

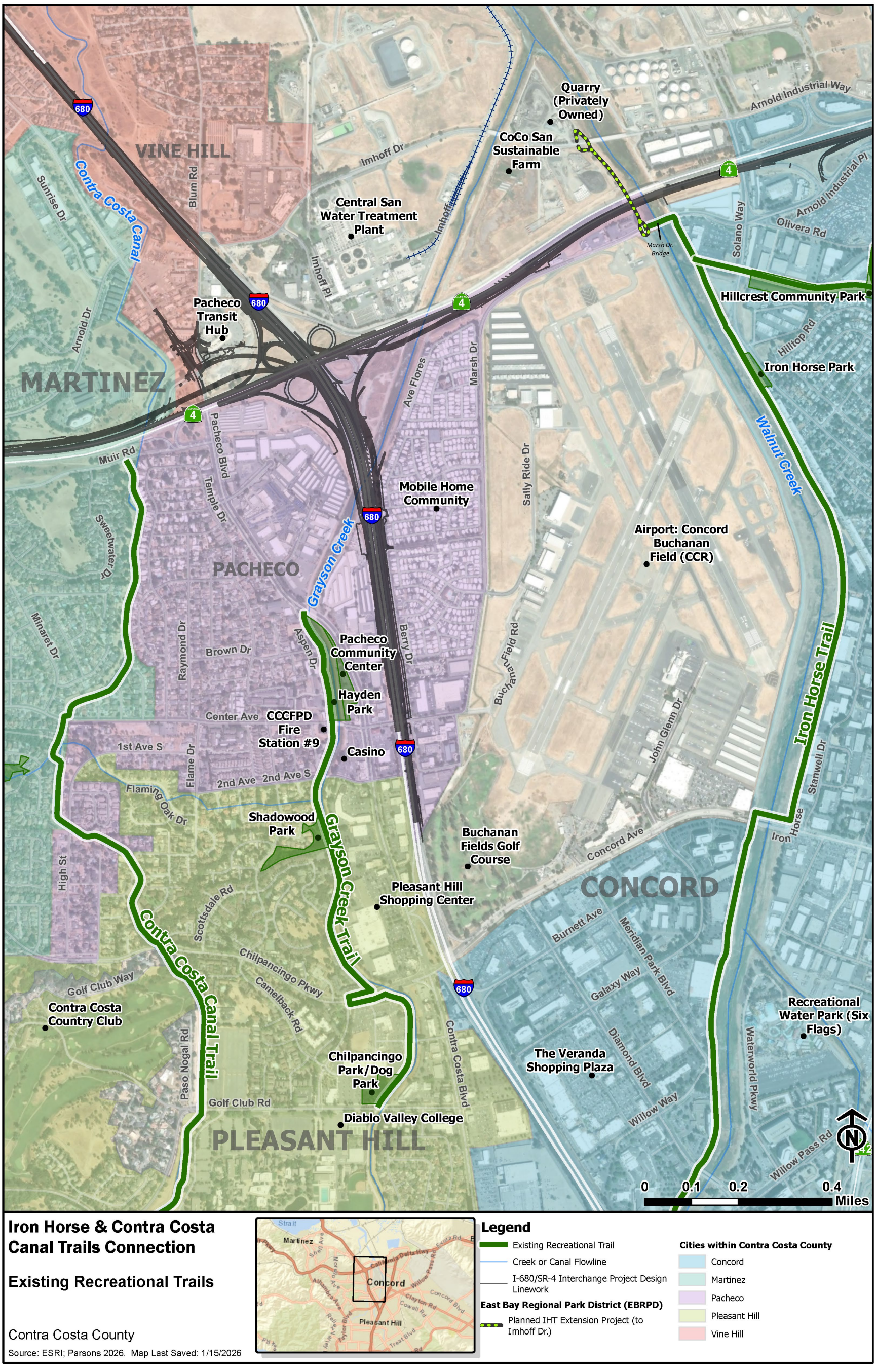
community, which is designated by MTC as an Equity Priority Community prioritized for transportation improvements in CCTA's Community-Based Transportation Plan (CBTP). Figure 1 shows the existing trail network and the lack of connectivity between these two major regional trails in the northern Contra Costa County.

3.0 Goals and Key Considerations for a Potential Future Trails Connection

Goals for connecting the Contra Costa Canal and Iron Horse trails are based on public comments received by CCTA and California Department of Transportation, District-4 (Caltrans) as part of the public process for the I-680/SR-4 Highway Interchange Improvement Project, feedback shared during CCTA CBPAC meetings, and feedback from stakeholder agencies with jurisdictional responsibilities[2]. Agencies with jurisdictional responsibilities include those with property or operations in the vicinity of identified route alignment concept alternatives, and agencies with overlapping purpose that would support trails and bicycling and pedestrian facilities infrastructure. A list of the aforementioned participating project stakeholders is provided in Attachment 1, Table A. Table 1 provides a list of the key stakeholder and community feedback about the goals and considerations for a potential future trail connection. Stakeholder feedback about the goals and key considerations for a trail connection guided the identification of potential trail connection RACs.

[2] Public comment and feedback from stakeholders and Advisory Committee Members were received during CBPAC meetings held on July 22, 2024, and March 24, 2025, and survey questionnaires and community events related to the Countywide Transportation Plan update through 2050, and the CBTP update.

Figure 1: Existing Trails



Iron Horse & Contra Costa Canal Trails Connection

Existing Recreational Trails

Contra Costa County

Source: ESRI; Parsons 2026. Map Last Saved: 1/15/2026

Legend

- Existing Recreational Trail
- Creek or Canal Flowline
- I-680/SR-4 Interchange Project Design Linework

East Bay Regional Park District (EBRPD)

- Planned IHT Extension Project (to Imhoff Dr.)

Cities within Contra Costa County

- Concord
- Martinez
- Pacheco
- Pleasant Hill
- Vine Hill

Table 1. Summary of Public and Stakeholder Input

Key Goals and Considerations by Participating Stakeholders
Separate users from vehicle traffic (buffer distance or physical barrier)
Class I (or Class IV) bikeways where possible, and highest comfort/lowest traffic stress
Connect with (and travel along) Grayson Creek Trail
Connect with existing Park and Ride or future mobility hub
Consider Safe Routes to School (SRTS) multi-purpose
Design to avoid (frequent) flooding of trail
Ensure no obstructions to water flow or disruption to aquatic ecosystems
Preserve the flow capacity of the creek and maintain the integrity of the United States Army Corps of Engineers-certified levees along Grayson Creek
Separate e-bikes/micro-modal from bikes and pedestrians
Provide speed limit signage
Connect with CoCo community garden
Connect with Pacheco Slough restoration area/planned trails
Traffic calming or bike/pedestrian buffer from traffic at SR-4/Pacheco Boulevard and Center Avenue
Provide seating
Provide shade
Provide safety lighting
Provide bike repair stations
Consider eligibility for California Relief Grants – adding tree and shade canopy in low-income communities
Support Bay Area Rapid Transit (BART) connectivity
Avoid Buchanan Field Airport Runway Protection Zone
Avoid heavy truck traffic in the I-680/SR-4 interchange vicinity (Central San, Quarry, local industrial uses)
Potential odors from Central San facility
Compatibility with Central San facility and operations expansion plans
Identify trail maintenance and operations responsibilities and funding
Existing homeless encampment concerns along Grayson Creek and general concern for any new trail

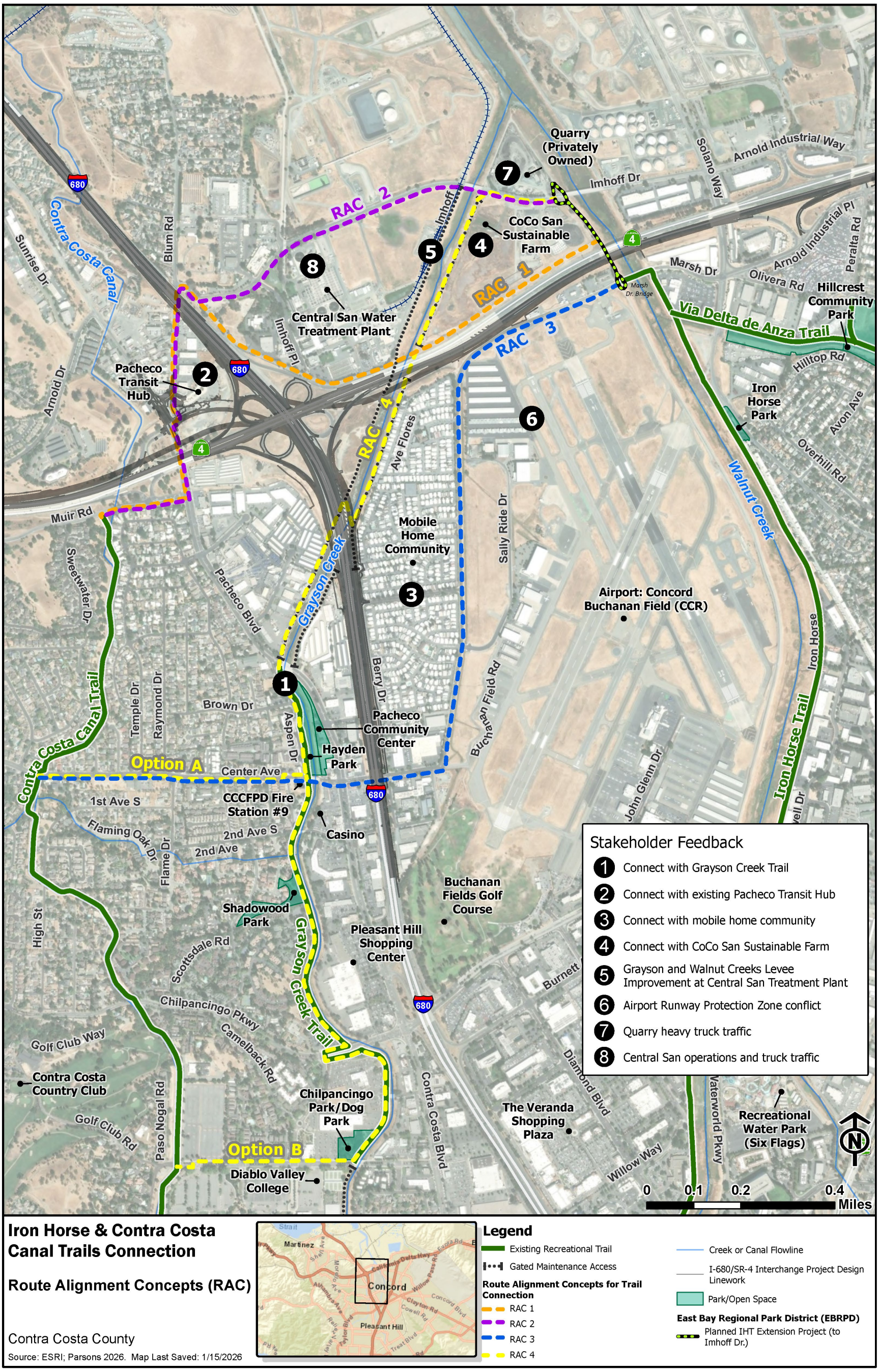
4.0 Alternatives Analysis of Each Route Alignment Concept

The project team identified four RACs that could connect the Iron Horse and Contra Costa Canal trails (both regional) through and within the Pacheco community. Figure 2 depicts the RACs and associated stakeholder feedback. A description of each RAC is provided in the following subsections, including a summary of to which extent each RAC would meet each goal and address key considerations raised by stakeholders. Table 2 lists the total length of each RAC and the approximate percentage of length/distance that the RAC segment(s) would be set back from an existing roadway (off-street) versus alongside an existing roadway (on-street). Trails set back away from streets and driveways generally offer a more trusting, calmer, more all ages and abilities welcoming recreational experience and are a significantly higher preference to attract trail users, more trips, and more mode shift away from vehicle trips. Available right-of-way width (without acquisition of a portion of individual private property[ies]) to support construction of a dedicated trail set back from a roadway can be the biggest challenge in identifying potential routes. All of the RACs include a portion of the route that follows alongside a roadway, as indicated in Table 2, but an on-street protected bike lane or grade-separated bikeway (adjacent trail) could retain a contiguous Class-IV or Class-I user experience.

Table 2. Route Alignment Concept (RAC) Length and Roadside Percentage

Route Alignment Concept Alternative/ Option		Driveway Crossings	Major Intersections/ Crossings	Minor Intersections/ Crossings	Approx. % On-Street	Approx. % Off-Street	Total Length (miles)
RAC 1		15	4	3	70%	30%	1.70
RAC 2		21	4	6	100%	0%	1.54
RAC 3		42	2	18	100%	0%	2.11
RAC 4	Option A	35	2	13	33%	67%	2.19
	Option B	10	6	4	22%	78%	3.06

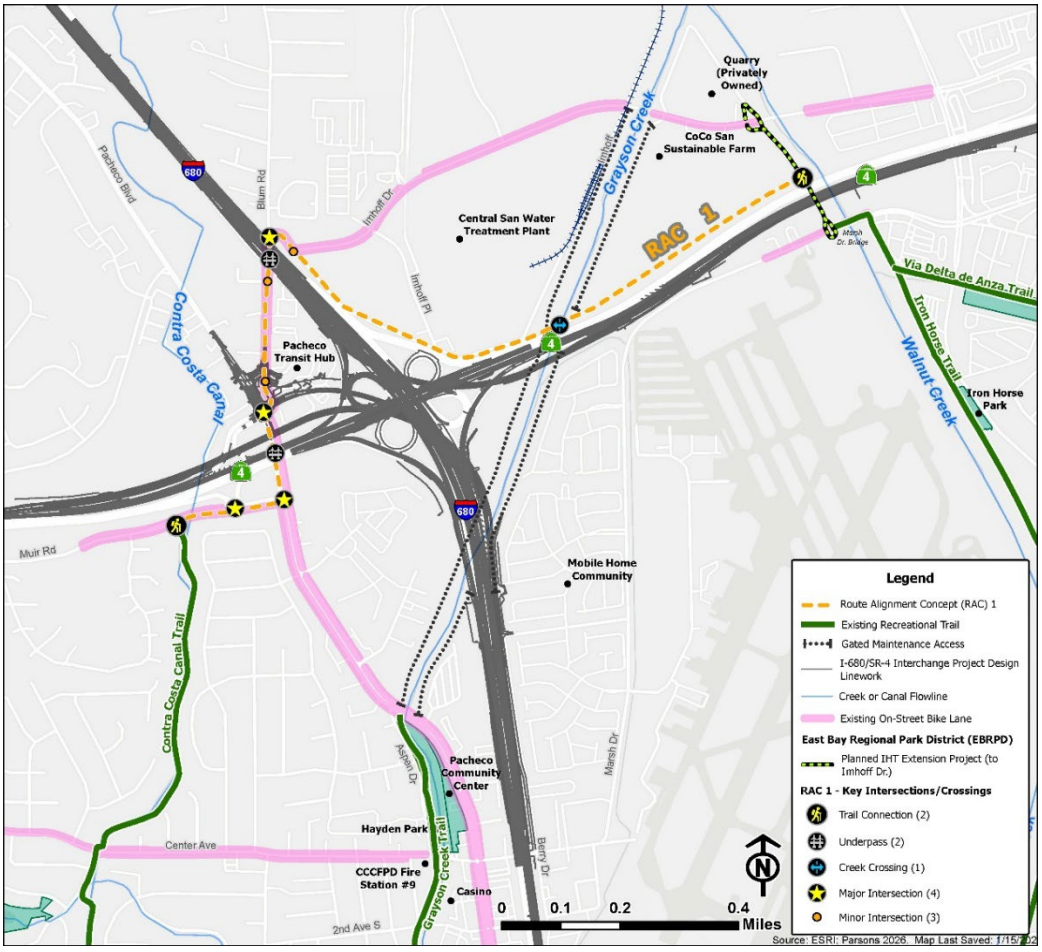
Figure 2: Route Alignment Concepts for Potential Future Trails Connection



Route Alignment Concept 1

RAC 1 primarily follows existing highway right-of-way and streets north and west of the I-680/SR-4 highway interchange, relying on the feasibility of available right-of-way alongside the highway alignments to achieve dedicated trail separated from vehicle (e.g., car, van, and truck) traffic, as well as multimodal and traffic calming along streets shared with vehicles. Most of the land use along RAC 1 is municipal industrial (airport and sanitation), as well as other nearby industrial and commercial uses. RAC 1 would extend new trail from the northern Iron Horse Trail terminus along the north side of SR-4 to Imhoff Drive near the Imhoff Drive/Imhoff Place intersection, continuing northwest to the Imhoff Drive/Blum Road intersection, south along Blum Road and under I-680 to the Pacheco Boulevard/Blum Road intersection, continuing south along Pacheco Boulevard under SR-4 to the Pacheco Boulevard/ Muir Road intersection, and west along Muir Road to connect with the Contra Costa Canal Trail northern terminus. RAC 1 would require a crossing of (under or above) Grayson Creek near the existing SR-4 Grayson Creek undercrossing. An advanced feasibility analysis would consider the feasibility of a creek crossing, right-of-way to provide dedicated trail physically separated from vehicle (e.g., car, van, and truck) traffic along SR-4 and the I-680/SR-4 highway interchange, Blum Road and Imhoff Drive, and compatibility with multimodal and traffic-calming projects under study (planning phase led by the County) for Pacheco Boulevard. Figure 3 depicts RAC 1.

Figure 3: Route Alignment Concept 1



RAC 1 key benefits include a less circuitous route with direct connection to the Pacheco Transit Hub that may offer right-of-way for dedicated trail along the north side of SR-4; however, providing dedicated trail or a low-stress bicycle facility along Imhoff Drive, Blum Road, and Pacheco Drive may not be feasible due to heavy truck traffic and right-of-way constraints. Table 3 summarizes the existing conditions of RAC 1 presented by segment.

Table 2. Route Alignment Concept 1 Existing Roadway Characterization by Segment

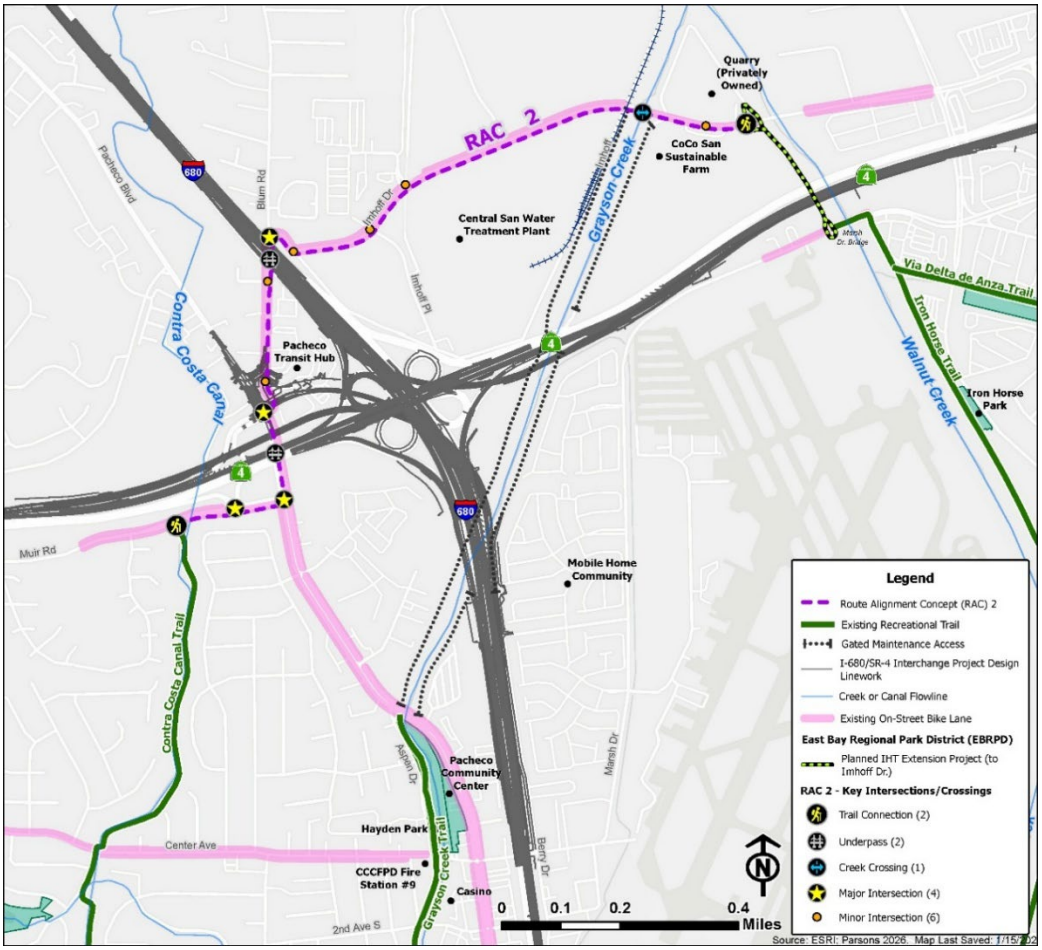
Segment Description	Existing Conditions	Functional Class	Total Length (miles)	On-Road Arterial	On-Road Collector	On-Road Other*	Off-Road Other*
From Iron Horse Trail to Imhoff Drive along maintenance road	Unpaved - maintenance road	Highway - maintenance road	0.52				0.52
Imhoff Place to Imhoff Drive	Road without marked bike facility	Private property road	0.48			0.48	
Imhoff Drive to Blum Road	Marked bike lane on road	Major collector	0.05		0.05		
Blum Road to Pacheco Boulevard	Marked bike lane on road	Major collector	0.30		0.30		
Pacheco Boulevard to Muir Road	No designated bike lane	Minor arterial	0.16	0.16			
Muir Road to Contra Costa Canal Trail	No designated bike lane	Minor arterial	0.19	0.19			
Total			1.70	0.35	0.35	0.48	0.52
			100%	20%	21%	28%	30%

*Maintenance or access road.

Route Alignment Concept 2

RAC 2 follows along streets that have existing or planned bicycle facilities. RAC 2 follows existing streets north and west of the I-680/SR-4 interchange, relying on the feasibility of available right-of-way to achieve dedicated trail separated from car and truck traffic north of the interchange, as well as multimodal and traffic calming to achieve a low-stress bike facility along shared vehicle streets west of I-680. RAC 2 would extend new trail from the northern planned Iron Horse Trail terminus at Imhoff Drive west along Imhoff Drive to the Imhoff Drive/Blum Road intersection, south along Blum Road and under I-680 to the Pacheco Boulevard/Blum Road intersection, continuing south along Pacheco Boulevard under SR-4 to the Pacheco Boulevard/Muir Road intersection, and west along Muir Road to connect with the Contra Costa Canal Trail northern terminus. RAC 2 would require a crossing of Grayson Creek at Imhoff Drive. An advanced feasibility analysis would consider the feasibility of a creek crossing, right-of-way potential to provide dedicated trail physically separated from car and truck traffic along Imhoff Drive and Blum Road, and compatibility with planned multimodal and traffic-calming projects under study for Pacheco Boulevard and the Muir Road/Pacheco Boulevard intersection. Figure 4 depicts RAC 2.

Figure 4: Route Alignment Concept 2



Key benefits of RAC 2 include a less circuitous route with direct connection to the Pacheco Transit Hub that may offer a substantial stretch of right-of-way for dedicated trail along Imhoff Drive; however, providing dedicated trail or a low-stress bicycle facility along Blum Road and Pacheco Drive may not be feasible due to heavy truck traffic and right-of-way constraints. Table 4 summarizes the existing conditions of RAC 2 presented by segment.

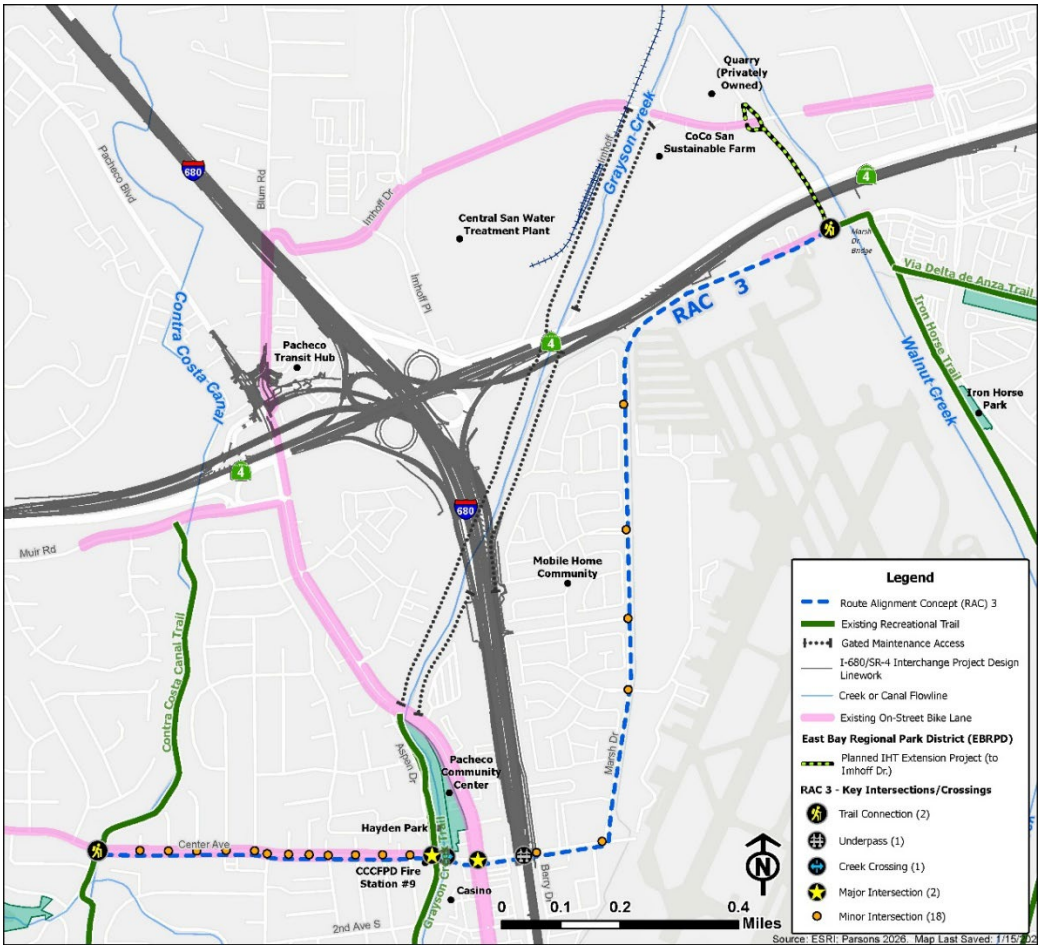
Table 4. Route Alignment Concept 2 Existing Roadway Characterization by Segment

Segment Description	Existing Conditions	Functional Class	Total Length (miles)	On-Road Arterial	On-Road Collector
From Iron Horse Trail to Blum Road on Imhoff Drive	Marked bike lane on road	Major collector	0.89		0.89
Blum Road to Pacheco Boulevard	Marked bike lane on road	Major collector	0.30		0.30
Pacheco Boulevard to Muir Road	No designated bike lane	Minor arterial	0.16	0.16	
Muir Road to Contra Costa Canal Trail	No designated bike lane	Minor arterial	0.19	0.19	
Total			1.54	0.35	1.19
			100%	23%	77%

Route Alignment Concept 3

RAC 3 follows streets that have existing or planned bicycle facilities south and west of the I-680/SR-4 interchange. RAC 3 would extend new trail from the northern Iron Horse Trail terminus along the south side of SR-4, at the newly constructed Marsh Drive Bridge, which supports a 10-foot-wide separated bike and pedestrian facility over Walnut Creek. RAC 3 would extend new trail from the Marsh Drive Bridge southwest along Marsh Drive to Center Avenue, and west along Center Avenue crossing under I-680 and Pacheco Boulevard to the northern terminus of the Contra Costa Canal Trail at the Center Avenue/ Hidden Lakes Drive intersection. An advanced feasibility analysis would consider the feasibility of right-of-way to provide dedicated trail physically separated from car and truck traffic along Marsh Drive, implications of the Airport RPZ, and compatibility with planned multimodal and traffic-calming projects under study for Center Avenue and the proposed Marsh Drive Class I Bikeway. Figure 5 depicts RAC 3.

Figure 5: Route Alignment Concept 3



Key benefits of RAC 3 include direct connection to the high-density mobile home community and central Pacheco, as well as compatibility with Pacheco Area of Benefit (AOB) projects supporting Vision Zero needs south of the I-680/SR-4 interchange, including a Class I Bikeway along Marsh Drive and improvements to the Pacheco Boulevard/Center Avenue intersection. However, establishing the trail along Marsh Drive north and east of the mobile home community conflicts with the Buchanan Field Airport Runway Protection Zone, and it may not be possible to secure right-of-way bordering the airport. It is anticipated that the entirety of RAC 3 would be an on-street/shared vehicle facility with limited ability to separate users and provide trail amenities, and it would maintain a limited recreational trail experience. RAC 3 would not provide direct connection to the Pacheco Transit Hub. Table 5 summarizes the existing conditions of RAC 3 presented by segment.

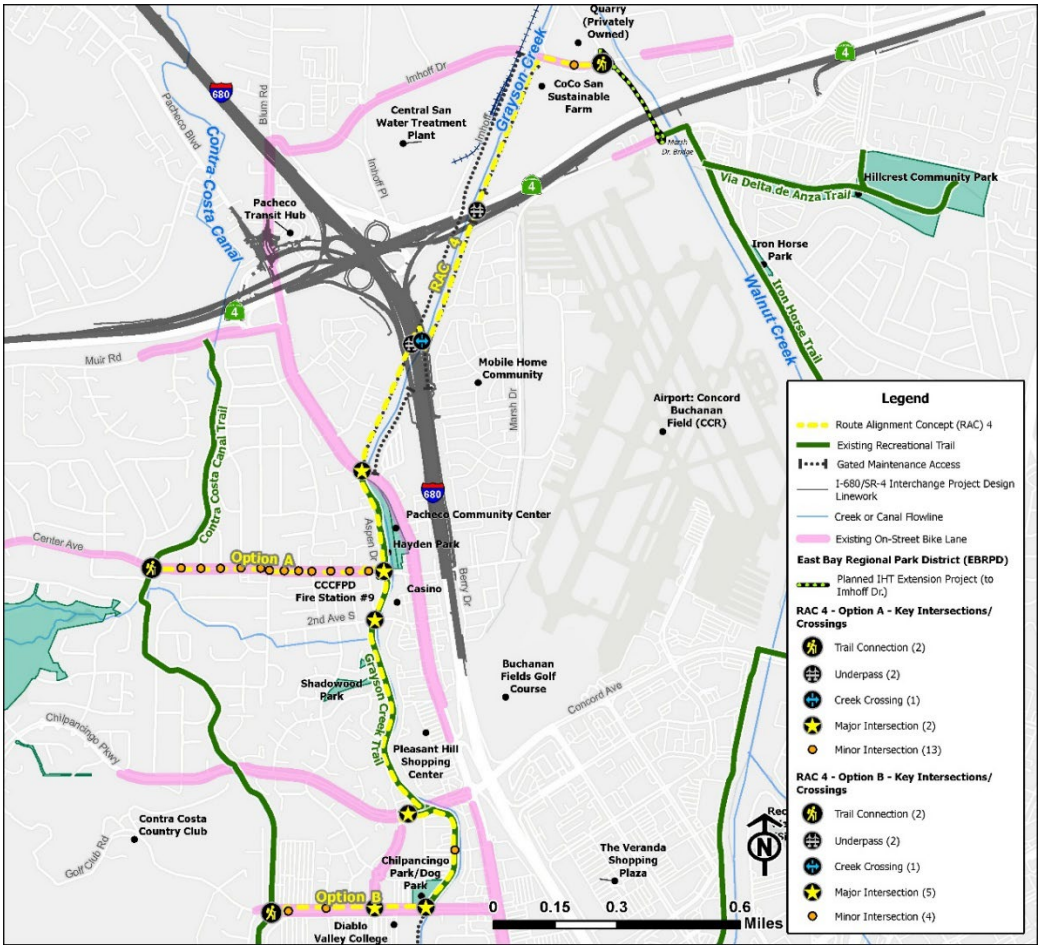
Table 5. Route Alignment Concept 3 Existing Roadway Characterization by Segment

Segment Description	Existing Conditions	Functional Class	Total Length (miles)	On-Road Arterial	On-Road Collector
From Iron Horse Trail to Center Avenue on Marsh Drive, then on Center Avenue to Grayson Creek Trail	No designated bike lane	Minor arterial	1.55	1.55	
Center Avenue from Grayson Creek Crossing to Contra Costa Canal Trail	Marked bike lane on road	Minor arterial	0.56	0.56	
Total			2.11	2.11	0.0
			100%	100%	0%

Route Alignment Concept 4

RAC 4 provides a primarily off-street route that follows Grayson Creek, providing new trail from the proposed northern terminus of the Iron Horse Trail to the northern terminus of the Grayson Creek Trail at Aspen Drive, and an on-street connection from Grayson Creek to the Contra Costa Canal Trail along either Center Avenue (Option A) or Golf Club Road (Option B). RAC 4 involves a crossing of Grayson Creek, SR-4, I-680, and two major streets (Pacheco Boulevard and Center Avenue or Golf Club Road). An advanced feasibility analysis would consider the feasibility of extending the existing Grayson Creek Trail north to connect with the Iron Horse Trail, with a crossing of the creek and a couple major street intersections, and available right-of-way to provide a low-stress bike facility or dedicated trail physically separated from vehicle traffic along Center Avenue (Option A) or Golf Club Road (Option B). Figure 6 depicts RAC 4.

Figure 6: Route Alignment Concept 4 (Selection of Option A or B)



Key benefits of RAC 4 include the opportunity to provide a recreational trail experience that would also connect with the Grayson Creek Trail to the south. RAC 4 includes limited on-street/shared vehicle alignment, with greater right-of-way potential to separate trail users and provide trail amenities. RAC 4 provides direct connection to the high-density mobile home community and central Pacheco, as well as compatibility with Pacheco AOB projects supporting Vision Zero needs south of the I-680/SR-4 interchange. There are no identified conflicts with municipal agencies at this time; however, several agencies and utilities operate along Grayson Creek, including Contra Costa County Flood Control & Water Conservation District, Contra Costa Water District (CCWD), and Contra Costa County Department of Conservation & Development (CC-County DCD), and there is potential for conflict or design constraints with creekside municipal industrial operations. RAC 4 would not provide direct connection to the Pacheco Transit Hub. Tables 6 and 7 summarize the existing conditions of RAC 4, Option A and B, presented by segment.

Table 6. Route Alignment Concept 4, Option A: Existing Roadway Characterization by Segment

Segment Description	Existing Conditions	Functional Class	Total Length (miles)	On-Road Arterial	On-Road Collector	Off-Road Trail	Off-Road Other*
From Iron Horse Trail to Grayson Creek Maintenance Road on Imhoff Drive	Marked bike lane on road	Major collector	0.14		0.14		
Grayson Creek Maintenance Road to Pacheco Boulevard	Unpaved maintenance road	Flood control - maintenance road	1.22				1.22
From Pacheco Boulevard to Center Avenue on existing Grayson Creek Trail	Existing Grayson Creek Trail	Established trail	0.25			0.25	
Center Avenue from Grayson Creek Trail to Contra Costa Canal Trail	Marked bike lane on road	Minor arterial	0.58	0.58			
Total			2.19	0.58	0.14	0.25	1.22
			100%	26%	7%	11%	56%

*Maintenance or access road.

Table 7. Route Alignment Concept 4, Option B: Existing Roadway Characterization by Segment

Segment Description	Existing Conditions	Functional Class	Total Length (miles)	On-Road Arterial	On-Road Collector	Off-Road Trail	Off-Road Other*
From Iron Horse Trail to Grayson Creek Maintenance Road on Imhoff Drive	Marked bike lane on road	Major collector	0.14		0.14		
Grayson Creek Maintenance Road to Pacheco Boulevard	Unpaved maintenance road	Flood control - maintenance road	1.22				1.22
From Pacheco Boulevard to Center Avenue on existing Grayson Creek Trail	Existing Grayson Creek Trail	Established trail	0.25			0.25	
From Grayson Creek Trail crossing at Center Avenue to Chilpancingo Parkway	Existing Grayson Creek Trail	Established trail	0.63			0.63	
Chilpancingo Parkway to Old Quarry Road and back to Grayson Creek Trail	Marked bike lane on road	Minor arterial	0.15	0.15			
Grayson Creek Trail from Chilpancingo Parkway to Golf Club Road	Existing Grayson Creek Trail	Established trail	0.29			0.29	
Golf Club Road to Contra Costa Canal Trail	Marked bike lane on road	Major collector	0.39		0.39		
Total			3.07	0.15	0.53	1.16	1.22
			100%	5%	17%	38%	40%

*Maintenance or access road.

5.0 Evaluation Criteria and Methodology for Alternatives Analysis of Route Alignment Concepts

Stakeholder feedback about the goals and key considerations for a trail connection guides the establishment of performance evaluation criteria to be applied to the RACs with the intent of identifying a single RAC to carry forward for advanced feasibility analysis. Table 8 provides a summary of the evaluation criteria and associated metrics for identifying the ability of each RAC to meet trail connection goals and address key stakeholder considerations. The scoring for each performance metric is provided in the following Tables 9-14.

The scoring methodology uses a four-point scale where 1 represents the least favorable performance and 4 represents the most favorable, goal-supportive performance across all evaluation areas. Each RAC is assessed against a consistent set of criteria on how it meets the goals and key considerations for a trail connection expressed by stakeholders. For each performance metric, a score of 1 indicates substantial conflicts, limited benefits, or constraints that do not meet the intent of the goal, while a score of 4 indicates strong performance, minimal conflicts, and clear support of the goal; intermediate scores (2 and 3) are used when performance is partial or moderate compared to the lowest and highest scores.

Table 8. Goals & Considerations, Metrics, and Evaluation Methodology for a Trail Connection

Goals and Key Considerations	Metrics	Evaluation Methodology (Scoring)
Scoring Criteria: Trail user experience continuity and contiguity		
The trail connection should maintain an all ages and abilities recreational trail user experience similar to the existing nearby segments of the Iron Horse and Contra Costa Canal trails (both regional) providing off-street connection with destinations, including improved air quality (cleaner air), landscaping, and recreational resources. The trail connection should be wide enough to support multiuse and separate users (e.g., pedestrians, runners, joggers, recreational and leisure cycling, [electric] long-distance biking+) by speed, and designed to meet or exceed Americans with Disabilities Act (ADA) accessibility standards. It should be able to support facilities accommodations such as landscaping, shade (e.g., extreme heat resilience for all ages and abilities), seating, wayfinding, restrooms, electric charging, and drinking water access. The trail connection should avoid or minimize the total distance of street segments along the bicycling+ designated route that would be shared with vehicle (i.e., car, van, and truck) traffic.	• Set back from roadways and connecting with open space, recreational resources • Right-of-way potential for ADA accessibility and to separate users (multiuse trail) • Potential for trail features (e.g., shade, seating, lighting, bathrooms, security) • Percent of trail that is off-street (not adjacent to or shared with vehicles)	4 – Mostly off-street, well set back from traffic, good open space connections, width for ADA and user separation, strong amenity potential, minimal on-street segments. 3 – Primarily off-street with some roadside/on-street gaps, generally adequate width and ADA, some user separation, and amenities. 2 – Large share on-street or roadside, constrained width in places, limited separation and amenities, weaker resemblance to regional trail experience. 1 – Mostly on-street or next to busy roads, narrow and constrained, difficult ADA/separation, few amenities.

Table 8. Goals & Considerations, Metrics, and Evaluation Methodology for a Trail Connection

Goals and Key Considerations	Metrics	Evaluation Methodology (Scoring)
Scoring Criteria: Low-stress on-street connections		
Any shared vehicle/on-street segment that connects the trails should be safe and convenient, providing dedicated trail physically separated from vehicle (i.e., car, van, and truck) traffic. Low-stress characteristics typically include low volume, wider right-of-way, or calm traffic, sufficient space designated each for bicyclists+ and pedestrians, lighting, protected crossings, and clear signage.	• Percent of dedicated trail on a higher volume arterial street • Percent of dedicated trail on a lower traffic volume collector street • Major intersections/crossings • Minor intersections/crossings • Driveways crossings	4 – On-street portions short (less than 1 mile) and mainly on calm, low traffic-volume streets; where on arterials, high right-of-way potential to construct well-protected trail and low-stress trail crossings; low number of total driveways (10 or fewer), and low number of intersections/crossings (10 or fewer); there is good potential for protected, low-stress facilities and crossings. 3 – On-street portions short (less than 1 mile) on a mix of low-volume, calm streets and some higher-volume and arterial streets; moderate number of driveways and intersections/crossings; where on arterials, high right-of-way potential to construct well-protected trail and low-stress trail crossings. 2 – Heavy reliance on high-volume arterials; streets with heavy truck traffic; moderately high number of driveways and intersections/crossings; low right-of-way potential to construct well-protected trail and low-stress trail crossings. 1 – Long stretches on high-volume arterials; large number of intersections (15 or more) and driveways (20 or more); streets with heavy truck traffic; low right-of-way potential to construct well-protected trail; potential for unavoidable high-risk crossings.

Table 8. Goals & Considerations, Metrics, and Evaluation Methodology for a Trail Connection

Goals and Key Considerations	Metrics	Evaluation Methodology (Scoring)
Scoring Criteria: Transit connectivity and transformative potential		
A trail connection should support connectivity to regional transit and local transit services; and support the potential to reduce community vehicle miles traveled (VMT) and increase bicycling and pedestrian local and commuter trips. The Pacheco Transit Hub located just northwest of the I-680/SR-4 interchange supports regional transit connectivity, including to BART, and it is identified in MTC planning studies to potentially serve as an MTC Mobility Hub in the future. [3]	• Connect with Pacheco Transit Hub • Connect with local transit services (Along MTC's designated Regional Active Transportation Network) • Connect with commuter destinations (job, commercial, institutional hubs)	4 – Direct, safe access for Pacheco residents and regional trail users to the Pacheco Transit Hub or other local transit lines, direct access to the Pacheco commercial corridor/Central Pacheco, direct access to commuter destinations. 3 – Direct and safe connection for Pacheco residents to either Pacheco Transit Hub or other transit stops; and substantially improved connectivity to the Pacheco commercial corridor and commuter destinations. 2 – Improved access to nearby transit connections but not to commuter destinations; limited influence to increase bicycling and pedestrian trips. 1 – No meaningful improved transit or commuter destination connections.
Scoring Criteria: Equity and community impact		
Provide equitable improved access to regional and local points of interest, indoor and outdoor extracurricular (e.g., recreational) facilities and open space, jobs and essential services; including for impacted communities.	• Connect/serve impacted communities • Equitable expanded access to recreational opportunities and commuter destinations	4 – Provides safe and improved connectivity for residents within Pacheco and specifically provides direct connectivity for impacted mobile home communities located between Buchanon Field Airport and I-680 with direct access to recreation and open space, Pacheco Boulevard commercial corridor, and commuter

[3] In 2023, CCTA completed a feasibility study on potential shared mobility hub locations along the I-680 corridor, identifying the Pacheco Transit Hub as a potential mobility hub (https://ccta.ca.gov/projects/innovate-680/shared-mobility-hubs/).

Table 8. Goals & Considerations, Metrics, and Evaluation Methodology for a Trail Connection

Goals and Key Considerations	Metrics	Evaluation Methodology (Scoring)
	• Right-of-way acquisition potential to impact businesses or residential properties/ parking and access	destinations. would directly connect with central Pacheco and connect Pacheco with the high concentration of commuter destinations, points of interest, and commercial corridor in the city of Pleasant Hill, including Sun Valley Shopping Center and Diablo Valley College. Right-of-way acquisition impacts limited to manageable parking or access changes without negative impacts to property values or business. 3 – Provides safe and improved connectivity for residents within Pacheco and specifically provides direct connectivity for impacted mobile home communities located between Buchanon Field Airport and I-680 with direct access to recreation and open space and the Pacheco Boulevard commercial corridor. Right-of-way acquisition impacts limited to manageable parking or access changes without negative impacts to property values or business. 2 – Provides safe and improved connectivity for residents within Pacheco with recreation and open space, Pacheco Boulevard commercial corridor. Right-of-way acquisition impacts limited to manageable parking or access changes without negative impacts to property values or business. 1 -– Bypasses residential neighborhoods and impacted communities, providing little or no equitable connectivity and access benefit or would require impactful right-of-way acquisition from residential or commercial properties.

Table 8. Goals & Considerations, Metrics, and Evaluation Methodology for a Trail Connection

Goals and Key Considerations	Metrics	Evaluation Methodology (Scoring)
Scoring Criteria: Safety and Vision Zero Policy		
Support Countywide Vision Zero Policy 21-40-G, as amended, and its Safe System Approach to eliminate transportation-related fatal and severe-injury collisions. Existing and increasing heavy truck traffic in the area identified as a key concern. Align with identified Pacheco AOB projects for safety, capacity, and multimodal improvements along Center Avenue and Pacheco Boulevard; and Complete Street modifications projects targeting the need for Vision Zero projects south of the I-680/SR-4 interchange.[4] Existing and increasing heavy truck traffic in the area identified as a key concern.	• Aligns with City and County Complete Streets and traffic-calming planned projects • Avoids heavy truck traffic routes • Avoids collision hot spots or offers potential to address hot spots • SRTS	4 – Strong alignment with Complete Streets/traffic-calming planning efforts; avoids truck routes and hot spots or robustly treats them; offers SRTS opportunities. 3 – General safety alignment; limited exposure to heavy truck traffic; good potential to mitigate hot spots and high-risk crossings; offers SRTS opportunities. 2 – Mixed safety performance; notable exposure to trucks or hot spots or high-risk crossings with limited mitigation potential; unlikely SRTS benefits. 1 – High exposure to truck routes or collision hot spots with little mitigation; potential for unavoidable high-risk crossings; unlikely SRTS benefits.

[4] Pacheco Area of Benefit (AOB) established by County Ordinance No. 2021-12 is a program to fund improvements to the County's roadway, bicycle and pedestrian facilities within the unincorporated Pacheco community.

Table 8. Goals & Considerations, Metrics, and Evaluation Methodology for a Trail Connection

Goals and Key Considerations	Metrics	Evaluation Methodology (Scoring)
Scoring Criteria: Local agency planned projects and operations		
Several public agencies operate in the community, and a new trail connection should be compatible with the multiple agency missions, operations, and planned uses in the area including, but not limited to, stormwater management and flood control, sanitation services, water district operations, airport functions, traffic-calming, Complete Streets, climate resilience, and cultural, educational, and planning efforts by the East Bay Regional Park District (EBRPD). Avoid the established tiered vertical and horizontal Runway Protection Zone (RPZ) outside of the Buchanan Field Airport fenceline. Grayson Creek, Walnut Creek, and other waterways (e.g., tributaries) may present periodic flooding concerns for a proposed trail.	• Potential for conflicts with easements or maintenance access for municipal and utility agencies • Conflict with Central San expansion plans/truck traffic • Avoid increased pedestrian activity and amenities inside the Buchanon Field Airport RPZ • Potential for flooded trail conditions and associated maintenance concerns • Project synergy – potential to leverage existing and planned infrastructure (i.e., bike facilities, creekside trails) and compatibility with agency planning efforts (i.e., Complete Streets & Vision Zero, Equity Priority Community)	4 – Manageable/limited conflict potential with critical municipal operations, avoids RPZ, manageable flood risk, and strongly leverages existing/planned infrastructure and EBRPD efforts, compatible with flood control, environmental, recreational, land use, and transportation planned projects. 3 – Manageable conflicts with municipal industrial operations and utilities, manageable flood risk; some use of existing/planned projects, compatible with planned projects. 2 – Notable conflict potential with critical municipal industrial operations or utilities, including Central San or the airport; notable flood risk issues; limited synergy with plans and projects. 1 – Major potential conflicts with critical municipal industrial operations or utilities, including Central San or the airport; high flood risk; misaligned with local projects and planning efforts.

Table 9. Trail User Experience Evaluation for Route Alignment Concepts

Trail user experience continuity and contiguity – Scoring	**RAC 1**	**RAC 2**	**RAC 3**	**RAC 4A**	**RAC 4B**
Set back from roadways and connecting with open space, recreational resources	2	2	2	4	4
Right-of-way potential for ADA accessibility and to separate users (multiuse trail)	2	2	2	4	4
Potential for trail features (e.g., shade, seating, lighting, bathrooms, security)	2	2	2	4	4
Percent of trail that is off-street (not adjacent to or shared with vehicles)	2	1	1	4	4
Totals	**8**	**7**	**7**	**16**	**16**

Trail user experience continuity & contiguity – Key Takeaways
➢ Only RAC 4 (including Options A and B) would maintain a recreational trail experience like that of the Iron Horse and Contra Costa Canal trails.
➢ Only RAC 4 (including Options A and B) offers the benefit of connecting these two trails with the Grayson Creek Trail.
➢ RAC 1 and RAC 2 are in proximity to noise, odors, and heavy truck traffic from the municipal operations and industrial uses, and highway.
➢ Significant segment length(s) of the potential future trail connection are shared with existing streets and vehicle traffic.
➢ RAC 1 and RAC 2 right-of-way constraints are expected to limit the ability to separate users and provide trail amenities.

Table 10. Low-Stress On-Street Connection Evaluation of Route Alignment Concepts

Prioritize Lower-Stress On-Street Connections – Scoring	**RAC 1**	**RAC 2**	**RAC 3**	**RAC 4A**	**RAC 4B**
Percent of dedicated trail on a higher volume arterial street	2	2	1	2	2
Percent of dedicated trail on a lower traffic volume collector street	2	1	4	4	3
Major intersections/crossings	2	2	4	4	1
Minor intersections/crossings	4	3	1	2	4
Driveway crossings	4	3	1	2	4
Totals	**14**	**11**	**11**	**14**	**14**

Prioritize Lower-Stress On-Street Connections – Key Takeaways

- All identified RACs for connecting the Iron Horse and Contra Costa Canal trails (both regional) require a shared roadway/on-street segment (but could be physical barrier- and grade-separated).
- RAC 4 (Option B) includes the shortest (approximately 0.4-mile) and lowest stress shared roadway/on-street segment, along Gold Club Drive.
- RAC 4 (Option A) and RAC 3 include the second shortest and lowest stress roadway/on-street segment after RAC 4B, along Center Avenue (approximately 0.5-mile), which includes notably more street crossings and driveways than Golf Club Drive (Option B).
- RACs 1 and 2 include substantial segments of shared roadway/on-street alignment on high-stress arterials (Pacheco Boulevard, Blum Road, Imhoff Drive) that support heavy truck traffic where low-stress roadway conditions may not be feasible.

Table 11. Transit Connectivity and Transformative Potential Evaluation of Route Alignment Concepts

Transit Connectivity and Transformative Potential – Scoring	**RAC 1**	**RAC 2**	**RAC 3**	**RAC 4A**	**RAC 4B**
Connect with Pacheco Transit Hub (inactive potential future mobility hub)	4	4	1	1	1
Connect with local transit services	4	4	3	3	4
Connect with commuter destinations (commercial uses, job centers, academic, points of interest)	1	1	3	3	4
Totals	**9**	**9**	**7**	**7**	**9**

Transit Connectivity and Transformative Potential – Key Takeaways
➢ A low-stress, direct connection to the Pacheco Transit Hub may not be feasible with any RAC because it is accessed by high-stress arterials (Pacheco Boulevard, Blum Road, Imhoff Drive) that support heavy truck traffic.
➢ RAC 4 (Options A and B) and RAC 3 would directly connect to the Pacheco Boulevard commercial corridor and central Pacheco community, offering transformative potential and increased bicycling and pedestrian local trips; as well as improved access to local transit service.
➢ RAC 4 (Option B) is the only RAC that would directly connect Pacheco with the high concentration of commuter destinations, points of interest, and commercial corridor in the city of Pleasant Hill, including the Sun Valley Shopping Center and Diablo Valley College.

Table 12. Equity and Community Impact Evaluation for Route Alignment Concepts

Equity and Community Impact – Scoring	**RAC 1**	**RAC 2**	**RAC 3**	**RAC 4A**	**RAC 4B**
Connect/serve impacted communities (mobile home communities)	1	1	4	4	4
Equitable expanded access to recreational opportunities and commuter destinations	1	1	3	4	4
Right-of-way acquisition potential to impact businesses or residential properties/parking and access	2	2	3	3	4
Totals	**4**	**4**	**10**	**11**	**12**

Equity & Community Impact – Key Takeaways

- The Pacheco community located south of SR-4 and along the Pacheco Boulevard corridor is identified in CCTA's CBTP as an impacted community and designated an Equity Priority Community, prioritized for transportation improvements that address needs in low-income and challenged communities.
- RAC 1 and RAC 2 bypass residential neighborhoods and are located primarily outside the designated Pacheco Equity Priority Community, providing little equitable connectivity and access benefits.
- RAC 3 and RAC 4 (Options A and B) provide direct benefit to impacted communities within the Pacheco Equity Priority Community, including improved connectivity for residents with recreation and open space, and the Pacheco Boulevard commercial corridor. Moreover, RAC 4 Option B provides direct connectivity for Pacheco residents with the high concentration of commuter destinations, points of interest, and commercial corridor in the city of Pleasant Hill, including the Sun Valley Shopping Center and Diablo Valley College.

Table 13. Safety and Vision Zero Policy Evaluation for Route Alignment Concepts

Safety and Vision Zero Policy – Scoring	**RAC 1**	**RAC 2**	**RAC 3**	**RAC 4A**	**RAC 4B**
Aligns with City and County Complete Streets and traffic-calming planned projects	3	3	4	4	4
Avoids heavy truck traffic	1	1	3	4	4
Avoids collision hot spots or offers potential to address hot spots	2	2	3	3	2
SRTS	1	1	4	4	4
Totals	**7**	**7**	**14**	**15**	**14**

Safety & Vision Zero Policy – Key Takeaways

- The Contra Costa County General Plan Transportation Baseline Report (2019) documents that Pacheco is a hot spot within the County for pedestrian, bike, and vehicle collisions.

RAC 1 and RAC 2 are located outside the Pacheco AOB and have no direction connection to the list of Complete Street modifications projects targeting the need for Vision Zero projects south of the I-680/SR-4 interchange.[5]

- RAC 1 and RAC 2 are located in an area with significant volumes of heavy truck traffic from the Quarry, Central San and Republic Services waste management). Potentially high volumes of heavy truck traffic also travel along Marsh Drive, which is the longest segment of RAC 3 (approximately 1.5 miles).
- RAC 4 (Options A and B) avoids truck routes and provides a trail connection primarily along Grayson Creek, which is separated from vehicle traffic.

[5] Pacheco Area of Benefit (AOB) established by County Ordinance No. 2021-12 is a program to fund improvements to the County's roadway, bicycle and pedestrian facilities within the unincorporated Pacheco community.

Table 14. Compatibility with Local Agency Operations Evaluation for Route Alignment Concepts

Local agency planned projects and operations – Scoring	**RAC 1**	**RAC 2**	**RAC 3**	**RAC 4A**	**RAC 4B**
Potential for conflicts with easements or maintenance access for municipal and utility agencies	2	2	3	3	3
Conflict with Central San expansion plans/truck traffic	1	1	4	4	4
Avoid increased pedestrian activity and amenities inside the Buchanon Airport RPZ	4	4	1	4	4
Potential for flooded trail conditions and associated maintenance concerns	2	2	2	2	2
Project synergy (potential to leverage existing and planned infrastructure (i.e., bike facilities, creekside trails) and compatibility with agency planning efforts (i.e., Complete Streets and Vision Zero, Equity Priority Community)	2	2	3	4	4
Totals	**11**	**11**	**13**	**17**	**17**

Local agency planned projects & operations – Key Takeaways
➢ RAC 1 and RAC 2 may conflict with existing and planned Central San operations.
➢ RAC 3 conflicts with the Buchanon Field Airport RPZ.
➢ RAC 4 (Options A and B) may pose conflict with operations and maintenance of Grayson Creek as a flood control facility. All RACs are anticipated to involve a manageable flood risk.
➢ RAC 3 leverages plans for a Class I bikeway along Marsh Drive.
➢ RAC 3 and RAC 4 (Option A) leverage Complete Street improvements to the Pacheco Boulevard/ Center Avenue intersection and along both streets.

6.0 Conclusion

Table 15 provides an overall performance rating for each RAC based on the scoring evaluation methodology presented in Table 8, and the scoring presented in Tables 9 through 14. As shown in Table 15, RAC 4 (Options A and B), a trail connection that primarily follows alongside Grayson Creek, best meets the goals, and addresses stakeholder considerations for a new Iron Horse and Contra Costa Canal trail connection. Specifically, RAC 4B performs higher than RAC 4A because the on-street segment under RAC 4B is shorter and lower stress than the on-street segment under RAC 4A, with notably less street crossings and driveways. RAC 3 performs moderately, while RAC 1 and RAC 2 overall offer low performance. Table 16 provides a comparative summary of the pros and cons of each RAC, broken down by the evaluation criteria.

Table 15. Route Alignment Concept Performance Summary

Evaluation Criteria	RAC 1	RAC 2	RAC 3	RAC 4	
				Option A	Option B
Trail user experience	Low	Low	Low	High	High
Low-stress on-street connections	Moderate	Low	Low	Moderate	High
Transit connectivity and transformative potential	Moderate	Moderate	Moderate	Moderate	Moderate
Equity and community impact	Low	Low	Moderate	Moderate	High
Safety and Vision Zero Policy	Low	Low	High	High	High
Local agency planned projects and operations	Low	Low	Moderate	Moderate	Moderate
Overall Performance Rating*	**Low**	**Low**	**Moderate**	**Moderate**	**High**

**High – strong performance; Moderate – partial/limited performance; Low – minimal performance*

Table 16. Route Concept Performance Comparison

RAC 1	RAC 2	RAC 3	RAC 4		Summary
			Option A	Option B	
Trail user experience					
PROS: Shorter route (approximately 1.7 miles); Alongside SR-4, segment may offer right-of-way potential to separate users and provide trail amenities, more so than RAC 2.	**PROS:** Shorter route (approximately 1.5 miles); Aligns with Complete Streets plans for Pacheco Boulevard.	**PROS:** Route (approximately 2 miles) is fairly linear, few crossings along Marsh Drive segment (73% of route); Although route is entirely roadside, Marsh Drive may offer right-of-way potential to separate users and provide trail amenities for a longer segment than RACs 1 and 2.	**PROS:** Maintains recreational trail experience, open space, natural resources; Connects all three trails: Grayson Creek, Iron Horse, and Contra Costa Canal trails; Avoids heavy truck traffic, sustained highway noise exposure, treatment plant odors; Route (approximately 2 miles) is fairly linear, avoids on-street crossings for 62% (along Grayson Creek); Greatest right-of-way potential for amenities and separated users.	**PROS:** Same as RAC 4A. The slightly longer route (approximately 3 miles) includes/leverages the stretch of existing Grayson Creek Trail (northern terminus at Pacheco Boulevard).	RAC 4 (Options A and B) substantially outperforms the other RACs for trail user experience for these reasons: • Only RAC 4 (Options A and B) would maintain a recreational trail experience like that of the Iron Horse and Contra Costa Canal trails. • Only RAC 4 (Options A and B) offers the benefit of connecting these two trails with the Grayson Creek Trail. • RAC 1 and RAC 2 are in proximity to noise, odors, and heavy truck traffic from the municipal operations and industrial uses, and highway. • Significant segment length(s) of the potential future trail connection are shared with existing streets and vehicle traffic. • Right-of-way constraints are expected to limit ability to separate users and provide trail amenities for RAC 1, RAC 2, and to a lesser extent RAC 3.
CONS: Large share of alignment is on-street or roadside (70%); Heavy truck traffic; Treatment plant odors and highway noise; Limited right-of-way potential for amenities and separated users.	**CONS:** Entirely on-street or roadside alignment (100%); Heavy truck traffic; Treatment plant odors and noise; Very limited right-of-way potential for amenities and separated users.	**CONS:** Entirely on-street or roadside alignment (100%) with significant truck traffic along Marsh Drive; Truck and airport noise.	**CONS:** Addressing slope and other ADA access may be more challenging than other RACs.	**CONS:** Same as RAC 4A.	
Low-stress on-street connections					
PROS: Fewer minor intersection crossings and driveways compared with RAC 3 and RAC 4A.	**PROS:** Fewer minor intersection crossings and driveways compared with RAC 3 and RAC 4A.	**PROS:** Potential to separate users and provide amenities along Marsh Drive; Few crossings and driveways along Marsh Drive (approximately 73% of route).	**PROS:** Well-protected trail along Grayson Creek, with an approximately 0.5-mile on-street Center Avenue segment.	**PROS:** Same as RAC 4A; except for significantly fewer street crossings (10) and driveways (10) by utilizing Golf Club Drive versus Center Avenue.	RAC 1 and RAC 4 (Options A and B) notably outperforms the other RACs for low-stress on-street connections for these reasons: • RAC 1 and RAC 4B have the potential to provide substantial segments with no street crossings and driveways; however, RAC 1 includes a substantial segment of shared on-street alignment on high stress arterials. • RAC 4 (Option B) includes the shortest (approximately 0.4 mile) on-street segment, and also the lowest stress shared roadway/on-street segment (along Gold Club Drive). • RAC 4 (Option A) and RAC 3 include the second shortest and lowest stress roadway/on-street segment after RAC 4A (along Center Avenue for approximately 0.5 mile), which includes notably more street crossings and driveways than Golf Club Drive (Option B).
CONS: Large percent of trail (70%) on high-volume streets with arterial street crossings and truck traffic.	**CONS:** Trail almost entirely on high-volume streets with arterial street crossings and truck traffic.	**CONS:** Large percent of trail (73%) on Marsh Drive supports high volumes and airport-related truck traffic; Many street crossings (18+ on Center Avenue segment) and driveways (40+); Two major street crossings with high volumes.	**CONS:** Many street crossings (18+ on Center Avenue segment) and driveways (40+); Two major street crossings.	**CONS:** Six major street crossings and 4 minor street crossings, 10 driveways.	

Table 16. Route Concept Performance Comparison

RAC 1	RAC 2	RAC 3	RAC 4		Summary
			Option A	Option B	
Transit connectivity and transformative potential					
PROS: Connects with Pacheco Transit Hub/Potential Future MTC Mobility Hub; Connects with local transit service along Pacheco Boulevard.	**PROS:** Connects with Pacheco Transit Hub/Potential Future MTC Mobility Hub; Connects with local transit service along Pacheco Boulevard.	**PROS:** Connects with local transit service along Pacheco Boulevard, Center Avenue, and Marsh Drive; Connects high-density mobile home community with central Pacheco.	**PROS:** Connects with local transit service along Pacheco Boulevard, Center Avenue, and Marsh Drive; Connects high-density mobile home community with central Pacheco.	**PROS:** Same as RAC 4A; RAC 4B directly connects Pacheco with the high concentration of commuter destinations, points of interest, and commercial corridor in the city of Pleasant Hill, including Sun Valley Shopping Center and Diablo Valley College.	RAC 1, RAC 2, and RAC 4B perform better than RAC 3 and RAC 4A for transit connectivity and transformative potential for these reasons: • Only RAC 1 and RAC 2 provide direct connection to the Pacheco Transit Hub; however, a low-stress, direct connection to the Pacheco Transit Hub may not be feasible because it is accessed by high-stress arterials (Pacheco Boulevard, Blum Road, Imhoff Drive) that support heavy truck traffic. • RAC 4 (Options A and B) and RAC 3 would directly connect to the Pacheco Boulevard commercial corridor and central Pacheco community, offering transformative potential and increased bicycling and pedestrian local trips, as well as improved access to local transit service. • RAC 4 (Option B) is the only RAC that would directly connect with central Pacheco and connect Pacheco with the high concentration of commuter destinations, points of interest, and commercial corridor in the city of Pleasant Hill, including Sun Valley Shopping Center and Diablo Valley College.
CONS: Very limited direct connection with commuter destinations, central Pacheco, or neighborhoods.	**CONS:** Very limited direct connection with commuter destinations, central Pacheco, or neighborhoods.	**CONS:** No direct connection to Pacheco Transit Hub/ Potential Future MTC Mobility Hub.	**CONS:** No direct connection to Pacheco Transit Hub/ Potential Future MTC Mobility Hub.	**CONS:** No direct connection to Pacheco Transit Hub/ Potential Future MTC Mobility Hub.	
Equity and community impact					
PROS: Northern segment is alongside SR-4, thus right-of-way impacts to local business and residential properties limited to Blum Road and Pacheco Boulevard.	**PROS:** Northern segment is alongside Imhoff Drive, thus right-of-way impacts to local business and residential properties limited to Blum Road and Pacheco Boulevard.	**PROS:** Directly connects impacted neighborhoods on both sides of SR-4 with central Pacheco; Low potential for adverse impacts to residents and businesses.	**PROS:** Directly connects impacted neighborhoods on both sides of SR-4 with central Pacheco; Expands direct access to open space and recreational resources; Minimal potential for adverse impacts to residents and businesses.	**PROS:** Same as RAC 4A Directly connects Pacheco community with high concentration of commuter destinations, points of interest, and commercial corridor in the city of Pleasant Hill, including Sun Valley Shopping Center and Diablo Valley College.	RAC 3 and RAC 4 (Options A and B) perform significantly better in achieving positive equity and community impact for these reasons: • RAC 3 and RAC 4 (Options A and B) directly connect impacted neighborhoods on both sides of SR-4, including the high-density mobile home community, with central Pacheco, providing direct connection to essential services and community resources in central Pacheco. • RAC 1 and RAC 2 bypass impacted residential neighborhoods and are located outside the Pacheco AOB, which identifies Vision Zero projects to meet needs south of the I-680/SR-4 interchange. • RAC 4 Option B is the only RAC that provides direct connectivity for Pacheco residents with the high concentration of commuter destinations, points of interest, and commercial corridor in the city of Pleasant Hill, including Sun Valley Shopping Center and Diablo Valley College. • RAC 4B has the least potential for adverse right-of-way-related impacts to residents and businesses. • RAC 4 (Options A and B) outperforms other RACs with providing expanded access to recreational opportunities and greenspace.
CONS: Largely bypasses equity priority communities; Provides very limited connection between neighborhoods and recreational resources/open space, community resources, small trip and commuter destinations.	**CONS:** Largely bypasses equity priority communities; Provides very limited connection between neighborhoods and recreational resources/open space, community resources, small trip and commuter destinations.	**CONS:** No direct connection to greenspace.	**CONS:** None.	**CONS:** None.	

Table 16. Route Concept Performance Comparison

RAC 1	RAC 2	RAC 3	RAC 4		Summary
			Option A	Option B	
Safety and Vision Zero Policy A					
PROS: Aligns with Complete Streets and traffic-calming plans for Pacheco Boulevard.	**PROS:** Aligns with Complete Streets and traffic-calming plans for Pacheco Boulevard.	**PROS:** Within the Pacheco AOB and supports the related Vision Zero goals for south of the I-680/SR-4 interchange; Aligns with Complete Streets and traffic-calming plans for Pacheco Boulevard and improvements to the Pacheco Boulevard/Center Avenue intersection; Supports SRTS by directly linking neighborhoods.	**PROS:** Within the Pacheco AOB and supports the related Vision Zero goals for south of the I-680/SR-4 interchange; Aligns with Complete Streets and traffic-calming plans for Pacheco Boulevard and improvements to the Pacheco Boulevard/Center Avenue intersection. Supports SRTS by directly linking neighborhoods.	**PROS:** Same as RAC 4A; except RAC 4B would not specifically include improvements to the Pacheco Boulevard/Center Avenue intersection.	RAC 3 and RAC 4 (Options A and B) perform significantly better in safety and supporting Vision Zero Policy for these reasons: • RAC 4 (Options A and B) avoids truck routes and provides a trail connection primarily along Grayson Creek, separated from vehicle traffic. • RAC 1 and RAC 2 are located in an area with significant volumes of heavy truck traffic Potentially high volumes of heavy truck traffic also travel along Marsh Drive, the longest segment of RAC 3 (approximately 1.5 miles). • RAC 1 and RAC 2 are located outside the Pacheco AOB have no direction connection to the list of Complete Street modifications projects targeting the need for Vision Zero projects south of the I-680/SR-4 interchange; while RAC 3 and RAC 4 (Options A and B) align with the AOB Vision Zero projects.
CONS: Heavy truck traffic; High-stress intersections Outside the Pacheco AOB/Vision Zero goals for south of the I-680/SR-4 interchange; Minimal SRTS benefit.	**CONS:** Heavy truck traffic High-stress intersections Outside the Pacheco AOB/Vision Zero goals for south of the I-680/SR-4 interchange. Minimal SRTS benefit.	**CONS:** Marsh Drive corridor balances truck traffic and transit service, the needs for which may increase in the future.	**CONS:** None.	**CONS:** None.	
Local agency planned projects and operations					
PROS: Leverages Complete Streets plans for Pacheco Boulevard; Potential for reduced exposure to Central San truck traffic and conflict for treatment plant expansion plans compared with RAC 2; Reduced flood control considerations compared with other RACs and may leverage exiting SR-4 Grayson Creek crossing.	**PROS:** Leverages bike path along Imhoff Drive and Complete Streets plans for Pacheco Boulevard; Leverages direct connection with planned Iron Horse Trail extension to Imhoff Drive; Reduced flood control considerations compared with RAC 4 and leverages to some extent existing Imhoff Drive Grayson Creek crossing.	**PROS:** Reduced flood control considerations compared with RAC 4; Aligns with Pacheco AOB projects, including Vision Zero and Complete Streets plans for Pacheco Boulevard and the Marsh Drive Bikeway Project.	**PROS:** Aligns with Pacheco AOB projects, including Vision Zero and Complete Streets plans for Pacheco Boulevard.	**PROS:** Leverages existing Grayson Creek Trail (south of Pacheco Boulevard); Leverages bike facility on Golf Club Drive and surrounding traffic-calming projects.	RAC 3 and RAC 4 (Options A and B) perform notably better in considering compatibility with the local agency planned projects and operations in the area because: • RAC 1 and RAC 2 may conflict with existing and planned Central San operations and other industrial operations along Imhoff Drive involving heavy truck traffic and driveways. • RAC 3 conflicts with the Buchanon Field Airport RPZ and may limit right-of-way potential along all of Marsh Drive; moreover airport truck traffic may increase over time. • RAC 3 leverages plans for a Class I bikeway along Marsh Drive. • RAC 3 and RAC 4 (Option A) leverage Complete Street improvements to the Pacheco Boulevard/Center Avenue intersection and along both streets. • While all RACs are located within varied flood zones, they are anticipated to involve manageable flood risk. However, RAC 4 (Options A & B) may pose conflict with operations and maintenance of Grayson Creek as a flood control facility. The existing Grayson Creek Trail performance offers insights into these issues.
CONS: Potential Caltrans right-of-way conflict; Potential Central San right-of-way and operations conflict; Potential utility conflicts along roadside/shared street alignment (approximately 70%).	**CONS:** Potential Central San right-of-way and operations conflict. Potential utility conflicts along roadside/shared street alignment (100%).	**CONS:** Potential utility conflicts along roadside/ shared street alignment (100%); Identified conflict with the Airport APZ, and potential for right-of-way constraints or conflict with airport plans, which may include increased truck traffic; Culvert runs along the east side of Marsh Drive, which may pose additional right-of-way constraints.	**CONS:** Potential utility conflicts along roadside/ shared street alignment (approximately 33%); Potential conflicts with flood control, water resource, and environmental agency operations along Grayson Creek; Potential conflict specifically with operations and maintenance of Grayson Creek as a flood control facility.	**CONS:** Same as RAC 2A, although reduced potential utility conflicts along roadside/shared street alignment (approximately 22%) with Gold Club Drive on-street connection versus Central Avenue on-street connection.	

7.0 Stakeholder Input and Next Steps

This memorandum serves as an invitation to participate in the Iron Horse-Contra Costa Canal Trails Connection Feasibility Study by providing comment on the evaluation of trail connection RAC (Tables 9 through 14), and input on which RAC to carry forward for advanced feasibility analysis. Advanced feasibility analysis for a single RAC will consider right-of-way, utility conflict, environmental and community impact, construction and maintenance costs, and potential funding. The aforementioned analysis will inform recommendations for creek and street crossings, and on-street/shared vehicle improvements required to support a trail connection. The right-of-way and utility analysis will identify potential conflicts and compatibility recommendations to support continued critical municipal operations in the area.

Attachment 2 provides a comment card for handwritten comments, and feedback via email can be sent to:

Colin Clarke, Senior Transportation Planner; cclarke@ccta.ca.gov; 925-256-4726

ATTACHMENT 1: Stakeholders

Table A. Feasibility Study - Participating Stakeholders

Stakeholder Agencies with Jurisdictional Responsibilities
East Bay Regional Park District (EBRPD)
City of Martinez
City of Concord
City of Pleasant Hill
Contra Costa County Public Works Department
Contra Costa County Department of Conservation and Development
Contra Costa County Resource Conservation District
Contra Costa County Fire Protection District
Contra Costa County Central Sanitation District (Central San)
Contra Costa County Water District
Contra Costa County Flood Control & Water Conservation District
Contra Costa County Airports Division
Caltrans
Stakeholders: Civic Commissions and Working Groups
Contra Costa Transportation Authority Countywide Bicycle and Pedestrian Committee (CBPAC) (includes user group advocacy representation: Bike East Bay, Bike Concord)
Iron Horse Corridor Management Program Advisory Committee (ICHAC)
Pacheco Municipal Advisory Council (MAC) & its Pacheco AOB program (County Ordinance No. 2021-12) that funds improvements to its County roadway, bicycling, and pedestrian facilities
Vine Hill MAC
Central Contra Costa Regional Transportation Planning Committee (RTPC) Transportation Partnership and Cooperation Technical Advisory Committee (TRANSPAC-TAC)
TRANSPAC Policy Advisory Committee (PAC) (includes offices of local elected officials)
Contra Costa County Planning Commission

Table B is a "living document" list of recommended stakeholders and community outreach opportunities for next steps to support advancement of a proposed project, following completion of the feasibility study.

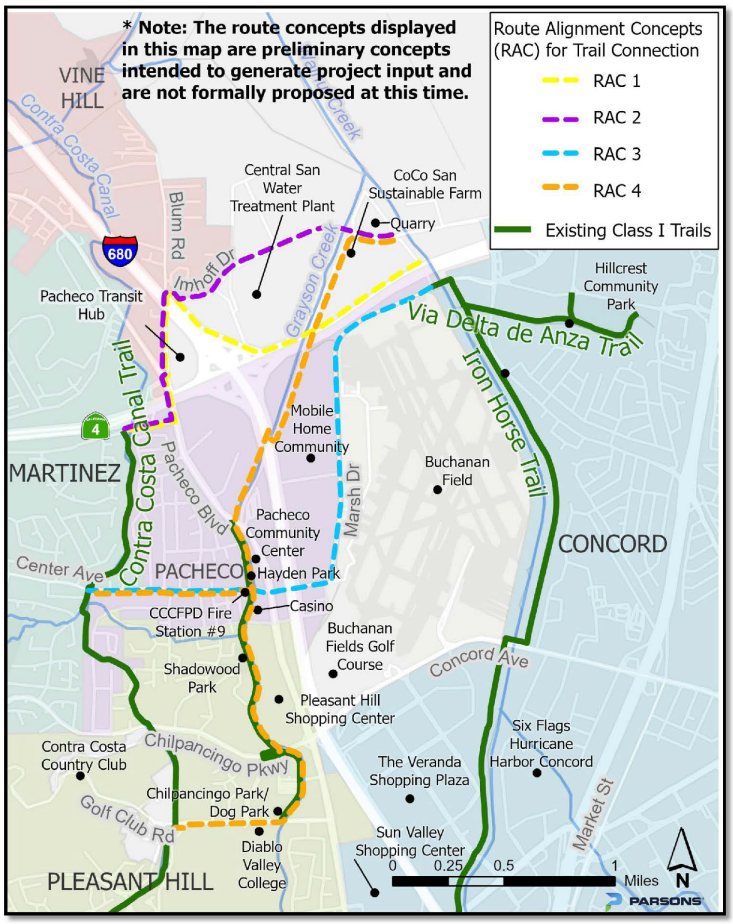
Table B. Stakeholders for Future Public Engagement

Agencies and Municipal Groups
Walnut Creek Watershed Council
Quarry (privately owned?)
CCWD
EBMUD
Caltrans District-4
Zone 7
Organizations
Bike East Bay (nonprofit advocacy in Contra Costa and Alameda counties)
Bike Concord
Bay Area Bike Project
Downtown Martinez and Co.
Martinez Chamber of Commerce
Sun Valley Village Mobile Home Park (HOA for ages 55 & older)
Rancho Diablo Mobile Home Park (HOA for ages 55 & older)
Outreach Events and Opportunities
Farmer's Market – Sundays 9:00 a.m. to 1:00 p.m.
511CCTA (formerly known as 511 Contra Costa)
Martinez Library
John Muir Birthday/Earth Day Festival – April 26, 2025
Martinez Beavers Run Club - group runs every Wednesday night at 6:30 p.m., starting at Del Cielo Brewing
Martinez Education Foundation Run for Education

ATTACHMENT 2
Comment Sheet

Iron Horse & Contra Costa Canal Trails Connection Feasibility Study

CCTA
CONTRA COSTA TRANSPORTATION AUTHORITY



Community Input Opportunity:

Future route alignment concepts are being studied to connect the Iron Horse & Contra Costa Canal Trail.

Feedback via email can be sent to:
Colin Clarke,
Senior Transportation Planner
cclarke@ccta.ca.gov
or 925-256-4726

Please share suggestions, comments, & concerns on the potential future trail gap closure routes and which features would be important to you in a new trail, if funded.

Iron Horse & Contra Costa Canal Trails Connection Feasibility Study

CCTA
CONTRA COSTA TRANSPORTATION AUTHORITY

How important is it to you that a new connector trail would…

	Importance (Less 1 2 3 4 Most)	
… generally not be located alongside a road and would connect with open space and recreational resources?		**Recreational trail experience**
… be wide enough to separate users (walkers, runners, leisure cycling, long distance biking), meeting Americans with Disabilities Act (ADA) accessibility standards as well as support amenities such as landscape, shade, seating, restrooms and drinking water access?		**Accessible and multi-use trail**
… avoids or minimizes sharing streets with car traffic?		**On-street/shared vehicle trail**
… if shared vehicle/on-street trail connection is used, it is to be physically separated from car and truck traffic, on calm streets and avoiding heavy truck traffic?		**Low-stress on-street connections**
… be a direct connection to the Pacheco Transit Hub northeast of the I-680/SR-4 interchange, and to local bus service?		**Transit connectivity**
… supports potential to reduce car trips by providing attractive bike and walking options for accessing shopping, entertainment, and other commercial uses?		**City and commercial connectivity**
… connects neighborhoods on both sides of the I-680 to central Pacheco and open space & recreational resources, benefiting equity impacted communities?		**Neighborhood connectivity**
… improve pedestrian and bicycle safety in Pacheco, and align with Countywide Vision Zero projects to reduce transportation-related fatalities and incidents?		**Pedestrian and bicycle safety/Vision Zero**

RAC 1	RAC 2	RAC 3	RAC 4, Option A	RAC 4, Option B
Running on the north side of **SR-4**, along Blum Rd, Pacheco Blvd, and Muir Rd	Running north of SR-4 along **Imhoff Dr**, along Blum Rd, Pacheco Blvd, and Muir Rd	Running along **Marsh Dr** and Center Ave	Following **Grayson Creek**, Grayson Creek Trail, and **Center Ave**	Following **Grayson Creek**, along Grayson Creek Trail, and **Golf Club Rd**

Is there any one Route Alignment Concept (RAC) that stands out as the best option to connect the Iron Horse and Contra Costa Canal Trails? Please explain: