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AGENDA

PENINSULA CORRIDOR JOINT POWERS BOARD

Work Program – Legislative – Planning (WPLP) Committee Meeting

San Mateo County Transit District Administrative Building
Bacciocco Auditorium, 2nd Floor
1250 San Carlos Avenue, San Carlos CA 94070

September 25, 2019 – Wednesday

1:00 p.m.

1. Call to Order/Pledge of Allegiance
2. Roll Call
3. Public Comment on Items not on the Agenda
Comments by each individual speaker shall be limited to three (3) minutes. Items raised that require a response will be deferred for staff reply.
4. Approve Meeting Minutes of July 24, 2019 MOTION
5. Authorize Response to San Mateo County Grand Jury Report on Grade Separation – Bypasses to Greater Safety MOTION
6. Authorize Response to San Mateo County Grand Jury Report on "Just Missed It! Fixing SamTrans "Caltrain Connection" MOTION
7. Update on Rail Corridor Use (RCUP) Policy INFORMATIONAL
8. Update on Transit Oriented Development Policy (TOD) INFORMATIONAL
9. Update on the San Jose Diridon Integrated Station Concept Plan INFORMATIONAL
10. Committee Member Requests
11. Date/Time of Next Regular WPLP Committee Meeting: Wednesday, October 30, 2019 at 1:00 p.m. San Mateo County Transit District Administrative Building, 2nd Floor, 1250 San Carlos Avenue, San Carlos, CA 94070
12. Adjourn

Committee Members: Charles Stone (Chair), Cheryl Brinkman, Cindy Chavez

INFORMATION FOR THE PUBLIC

All items appearing on the agenda are subject to action by the Board. Staff recommendations are subject to change by the Board.

If you have questions on the agenda, please contact the JPB Secretary at 650.508.6242. Agendas are available on the Caltrain website at www.caltrain.com. Communications to the Board of Directors can be e-mailed to board@caltrain.com.

Location, Date and Time of Regular Meetings

Regular meetings are held at the San Mateo County Transit District Administrative Building located at 1250 San Carlos Avenue, San Carlos, one block west of the San Carlos Caltrain Station on El Camino Real, accessible by SamTrans bus Routes ECR, FLX, 260, 295 and 398. Additional transit information can be obtained by calling 1.800.660.4287 or 511.

The JPB meets regularly on the first Thursday of the month at 9:00 a.m. The JPB Citizens Advisory Committee meets regularly on the third Wednesday of the month at 5:40 p.m. at the same location. Date, time and place may change as necessary.

Public Comment

If you wish to address the Committee, please fill out a speaker's card located on the agenda table and hand it to the JPB Secretary. If you have anything that you wish distributed to the Board and included for the official record, please hand it to the JPB Secretary, who will distribute the information to the Committee members and staff.

Members of the public may address the Committee on non-agendized items under the Public Comment item on the agenda. Public testimony by each individual speaker shall be limited to three minutes and items raised that require a response will be deferred for staff reply.

Accessibility for Individuals with Disabilities

Upon request, the JPB will provide for written agenda materials in appropriate alternative formats, or disability-related modification or accommodation, including auxiliary aids or services, to enable individuals with disabilities to participate in public meetings. Please send a written request, including your name, mailing address, phone number and brief description of the requested materials and a preferred alternative format or auxiliary aid or service at least two days before the meeting. Requests should be mailed to the JPB Secretary at Peninsula Corridor Joint Powers Board, 1250 San Carlos Avenue, San Carlos, CA 94070-1306; or emailed to board@caltrain.com; or by phone at 650.508.6242, or TDD 650.508.6448.

Availability of Public Records

All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at 1250 San Carlos Avenue, San Carlos, CA 94070-1306, at the same time that the public records are distributed or made available to the legislative body.

**Peninsula Corridor Joint Powers Board
Work Program – Legislative – Planning (WPLP)
1250 San Carlos Avenue, San Carlos CA 94070**

MINUTES OF JULY 24, 2019

MEMBERS PRESENT: C. Stone (Chair), C. Brinkman, C. Chavez

MEMBERS ABSENT: None

STAFF PRESENT: M. Bouchard, J. Brook, C. Gumpal, C. Fromson, S. Petty,
J. Cassman, S. van Hoften

CALL TO ORDER/PLEDGE OF ALLEGIANCE

Chair Charles Stone called the meeting to order at 9:02 a.m. and led the Pledge of Allegiance.

ROLL CALL

Assistant District Secretary Cindy Gumpal called the roll and confirmed all present.

DISCUSSION OF COMMITTEE ROLE AND MEETING FREQUENCY

Michelle Bouchard, Chief Operating Officer, Rail, stated that the rules of procedure indicated a committee could be dedicated to a wide range of things but they would like to keep it narrow for now; the main focus were the studies from the Business Plan and future expansion to the construction project updates.

The Committee agreed that these meeting should be focused on a key policy initiative framework, and to utilize these meetings as an opportunity to take a deeper dive on policy items so that the JPB Board meetings proceed more smoothly. The Committee stated that the items on the agenda could include shared opinions and recommendations to the JPB Board. They also noted the possibility to invite experts that can share facts on agenda items.

CALTRAIN BUSINESS PLAN UPDATE- Service Vision, Organizational Assessment

Michelle Bouchard, Chief Operating Officer, Rail, noted that Jim Hartnett, Executive Director was not present but sent his greetings to the Committee members.

Sebastian Petty, Director of Policy Development, reported on the Caltrain Business Plan; highlights included a long range vision for Caltrain Service, developing scenarios, weighing Caltrain's choices, the staff recommendation and next steps and organizational assessment. He also noted that the key focus of the complete plan is the service analysis, first and last mile, that includes long-term needs and phasing, funding and revenues that entails existing and new funding sources; the completion of Business Plan is expected in early 2020.

The presentation can be found on the Caltrain website link provided here:
http://www.caltrain.com/Assets/_Agendas+and+Minutes/JPB/2019/2019-07-24+WPLP+business+plan+meeting.pdf

Chair Stone announced a five minute recess at 11:01 a.m.

Director Chavez left at 11:01a.m.

The meeting reconvened at 11:06 a.m.

The Committee members agreed by informal consensus that this is a Committee would like to dive into deeper discussion and public speakers would be allowed up to three minutes each for public comment.

Chair Stone clarified that each speaker may submit only one comment card for each agenda item and have a total of three minutes to speak.

Public comment

Adina Levin, Friends of Caltrain provided suggestions on the Caltrain Business Plan service vision and organizational assessment.

Roland Lebrun, San Jose, commented on the organizational assessment, 25th Avenue, High Speed Rail, travel time savings, station planning and passing tracks.

Drew, San Mateo, commented on slide 84 of the presentation on the four track infrastructure and provided suggestions.

The Committee commended staff on the Business Plan presentation; noted that concerns on the trespassing on the tracks has not yet been discussed, but that it did not need to be addressed at this time.

PUBLIC COMMENT FOR ITEMS NOT ON THE AGENDA

Chair Stone requested that staff place this item at the beginning of the agenda similar to the JPB Board agenda.

Roland Lebrun, San Jose, commented on the Brown Act, posting of agenda packets and public comment cards.

Adina Levin, Friends of Caltrain, commented on the Regional Measure, fare increases and funding stability.

**DATE/TIME OF NEXT REGULAR MEETING: MONDAY, AUGUST 28, 2019 AT 1:00 P.M.
SAN MATEO COUNTY TRANSIT DISTRICT ADMINISTRATIVE BUILDING, 2ND FLOOR,
1250 SAN CARLOS AVENUE, SAN CARLOS, CA 94070**

ADJOURN

The meeting was adjourned at 11:24 a.m.

An audio/video recording of this meeting is available online at www.caltrain.com. Questions may be referred to the Board Secretary's office by phone at 650.508.6279 or by email to board@caltrain.com.

**PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT**

TO: Work Program –Legislative- Planning Committee and Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Michelle Bouchard
Chief Operating Officer

Joan Cassman
Legal Counsel

Seamus Murphy
Chief Communications Officer

SUBJECT: **RESPONSE TO GRAND JURY REPORT "GRADE SEPARATIONS-BYPASSES TO GREATER SAFETY"**

ACTION

Staff Coordinating Council recommends the Board authorize the Executive Director, or his designee, to submit the attached response to the San Mateo County Civil Grand Jury's report entitled "Grade Separations – Bypasses to Greater Safety."

SIGNIFICANCE

On July 18, 2019, the San Mateo County Civil Grand Jury issued a report to respond to the following question:

Should the Peninsula Corridor Joint Powers Board [(JPB)] take on an enhanced role in coordinating and facilitating the completion of the grade separation projects along the Caltrain Peninsula train corridor?

The Grand Jury conducted an extensive analysis, making twelve enumerated findings and four recommendations. In summary, the report recommended that the JPB: (1) create a Grade Separation Master Plan prioritizing all at-grade crossings on the corridor; (2) study other train corridors' implementation of similar master plans and approaches to funding grade separation projects; (3) seek support of such a master plan from the cities on the corridor; and (4) offer funding and design support to cities along the corridor for grade separation projects as prioritized in the master plan.

The JPB is required to respond to the report's findings and recommendations by October 16, 2019.

BUDGET IMPACT

There is no budget impact associated with this action.

BACKGROUND

The JPB currently is completing the Caltrain Business Plan, which includes an evaluation of the importance of grade separations, and consideration of the JPB's role in planning and implementing grade separations, within the broader context of corridor-wide infrastructure improvements. The approved Fiscal Year 2020 Capital Budget includes \$5 million for a corridor-wide grade separation study.

Each county's Civil Grand Jury is authorized by California Penal Code section 925a to investigate any joint powers authority operating within that county. The San Mateo County Grand Jury typically issues approximately 10 reports per year on cities, county agencies, special districts and joint powers agencies.

Prepared By: Michelle Bouchard, Chief Operating Officer

650.508.6240

This is an advanced copy of a Grand Jury report that will be publicly released on July 18, 2019. Penal Code section 933.05 (f) prohibits any officer, agency, department, or governing body of a public agency from disclosing any contents of the report prior to the public release of this report.



GRADE SEPARATIONS – BYPASSES TO GREATER SAFETY

ISSUE

Should the Peninsula Corridor Joint Powers Board (PCJPB) take on an enhanced role in coordinating and facilitating the completion of the grade separation projects along the Caltrain® Peninsula train corridor?

SUMMARY

There are 113 places where the Caltrain Peninsula train corridor intersects roads. Of these intersections, 42 are at-grade railroad crossings where roads and railroad tracks intersect at the same plane, necessitating the use of drop-down safety gates when trains pass in order to prevent accidents. Thirty of these “at-grade” crossings are in San Mateo County.¹ Caltrain describes at-grade crossings as a “particularly pressing and difficult issue within the corridor.”²

At-grade crossings raise safety concerns, contribute to traffic congestion, delay emergency vehicles and cause added pollution due to interruptions in the traffic flow when drop-down gates lower to allow a train to pass.³ Part of the solution for increasing safety and easing the congestion caused by lowered drop-down gates is to separate the railroad tracks from roads by building grade separations.⁴

Caltrain’s Corridor Vision Plan states “We need a unified corridor-wide strategy that ensures the most critical crossings are addressed and funded first. The current practice is that municipalities initiate and fund grade-separation efforts. Consequently, grade separations take place where funding is available, not necessarily where they are most needed. With a corridor-wide strategy, design, engineering and construction best practices can be shared; construction timing can be

¹ Zachery Clark, “Caltrain weighs grade crossing costs”, The Daily Journal, May 2, 2019.

https://www.smdailyjournal.com/news/local/caltrain-weighs-grade-crossing-costs/article_5c52a9b2-6c8e-11e9-9418-470e4ee83502.html

² Peninsula Corridor Joint Powers Board, Caltrain Business Plan Quarterly Update, October 2018, Slide 41.

http://www.caltrain.com/Assets/___Agendas+and+Minutes/JPB/2018/2018-10-04+BUSINESS+PLAN+SPECIAL+MEETING.pdf

³ San Francisco Bay Area Planning and Urban Research Association, Caltrain Corridor Vision Plan, February 23, 2017. https://www.spur.org/sites/default/files/publications_pdfs/SPUR_Caltrain_Corridor_Vision_Plan.pdf

⁴ California Public Utilities Commission, Section 190 Grade Separation Program, California Public Utilities Commission Rail Crossings Engineering Section February 2013.

http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Safety/Rail/Rail_Crossings/190GradeSepOverview-v201708.pdf

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coordinated together with railroad projects; and grade crossings can be coordinated with station-area development.”⁵

Grade separations are expensive. Caltrain estimates that the cost to separate all 42 at-grade crossings could range from \$8.5 billion to \$11.1 billion (representing a range per separation of between \$202M-\$254M) in 2018 dollars.⁶

A new, corridor-wide approach that balances Caltrain’s needs with those of the three counties in the Caltrain Peninsula train corridor is needed. The Grand Jury recommends:

1. The PCJPB create a Caltrain Peninsula train corridor Grade Separation Master Plan, including all at-grade crossings in the corridor, based on a prioritization that takes into account the needs and special circumstances of the cities and counties through which the corridor passes, with special attention to adjacent at-grade crossings so as not to limit future design alternatives.
2. In support of developing the Grade Separation Master Plan, the PCJPB should study other train corridors worldwide to learn how they implemented similar master plans, including methods developed for securing funding.
3. The PCJPB should engage with all cities on the Caltrain Peninsula train corridor to gain support for the Grade Separation Master Plan.
4. After completing the Grade Separation Master Plan, the PCJPB should offer to support funding and design efforts to the cities in the order determined by the prioritization in the master plan. If a city rejects such support for an at-grade crossing, the PCJPB should then proceed to support the next highest priority at-grade crossing in the plan.

GLOSSARY

- **At-Grade Crossings** – Locations where roads and railroad tracks intersect at the same plane, necessitating the use of drop down gates when trains cross in order to prevent accidents.
- **Caltrain** – The name under which the Peninsula Corridor Joint Powers Board operates passenger train service from San Francisco to Gilroy.

⁵ San Francisco Bay Area Planning and Urban Research Association, Caltrain Corridor Vision Plan, February 23, 2017, page 29, accessed April 5, 2018.

⁶ Peninsula Corridor Joint Powers Board, Caltrain Business Plan Quarterly Update, May 2019, slides 44-46. http://www.caltrain.com/Assets/_Agendas+and+Minutes/JPB/2019/Caltrain+Business+Plan+-+Quarterly+Update+-+May+2019.pdf

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- **California Public Utilities Commission (CPUC)** - The commission that has jurisdiction over the safety of highway-rail crossings, including grade separations.
- **Grade Separation** - A method of constructing a junction of two or more surface transport systems at different heights (grades) so that they will not interrupt the traffic flow on other transit routes when they cross.
- **Peninsula Corridor Joint Powers Board (PCJPB)** - Created in 1996, the PCJPB owns (San Francisco to San Jose) and operates (San Francisco to Gilroy) Caltrain’s rail service. The PCJPB is the result of an agreement among San Francisco, San Mateo and Santa Clara Counties; it is made up of nine representatives, three from each county. It was established, in part, to “transfer assets from the State of California to local control.”⁷
- **Riverside County Transportation Commission (RCTC)** - The steward of Measure A sales tax dollars, which funds transportation improvements that Riverside County voters have approved.⁸
- **San Mateo County Transit District (SamTrans)** – The administrative body for the public transit and transportation programs in SMC. By contract it manages the operation of Caltrain and the SMC Transportation Authority.
- **SMC Transportation Authority (TA)** – The steward of Measure A (2004) sales tax dollars, the TA was formed in 1988 with the passage of the voter-approved half-cent sales tax for countywide transportation projects and programs, known as Measure A. In 2004, Measure A was extended through 2033.
- **Section 190 Funding-** The Grade Separation Program that provides state funds to local agencies to separate at-grade crossings.⁹

BACKGROUND

Since 1996, the PCJPB has owned and/or operated Caltrain, which runs 77 miles from San Francisco to Gilroy.¹⁰ Caltrain’s total service area has over 3 million residents.¹¹

⁷ Peninsula Corridor Joint Powers Board, “Joint Powers Agreement, Peninsula Corridor Project,” October 3, 1996. http://www.caltrain.com/Assets/_Executive/PDF/Joint+Powers+Agreement.pdf

⁸ “Current Commissioners,” Riverside County Transportation Commission, accessed April 5, 2018. <http://rctcdev.info/about-us/commissioners>.

⁹ “Railroad Crossing Funding Programs,” California Public Utilities Commission, accessed April 8, 2018. <http://www.cpuc.ca.gov/General.aspx?id=2891>

¹⁰ Caltrain, “Opening New Frontiers for 150 Years,” accessed March 23, 2018. <http://www.caltrain.com/about/Caltrain150/Milestones.html>

¹¹ Caltrain, “The Economic Impact of Caltrain Modernization,” Bay Area Council Economic Institute, June 2012. <http://documents.bayareacouncil.org/caltraînecon.pdf>

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Caltrain owns the railroad tracks between San Francisco and San Jose (and operates the tracks from San Jose to Gilroy). As Caltrain has planned for capital improvements, it has had to collaborate and coordinate these projects with the cities in the corridor.

Impact of Increased Ridership on Caltrain

Ridership has increased in recent years, with the weekday average at 62,400 trips in 2015, up from 24,600 in 1997. With increased demand, many trains have more passengers than seats. “Growth in jobs, uncoordinated land uses, and underinvestment in transit systems are now straining the Corridor’s transportation network.”¹² In response to the growth in ridership, Caltrain is planning to increase daily service to 114 trains per weekday in 2022 from the 92 weekday trains in service today.

Increasing the number of trains will have a negative impact on traffic congestion at at-grade crossings. “... higher train frequencies could impact local street circulation by requiring crossing gates to be down more often or for longer periods.”¹³ Caltrain has projected that the increase in gate down time will range between 28-39 minutes per day.¹⁴

Administrative Complexity

The complexity of the Caltrain Peninsula train corridor’s administration challenges efforts to complete grade separations. The Caltrain Peninsula train corridor runs through 17 cities, involves 10 public transit operators, C/CAG, and regional and state agencies.

DISCUSSION

Current Situation

There are 42 at-grade crossings in the Caltrain Peninsula train corridor.¹⁵ The at-grade crossings delay motorists, emergency vehicles, pedestrians and cyclists who have to wait until a train has passed. This situation is projected to get worse as Caltrain’s Short Range Transit Plan increases daily corridor train traffic to 114 trains per weekday by 2022, up from 92 trains per weekday

¹² San Francisco Bay Area Planning and Urban Research Association, “The Caltrain Corridor Vision Plan, Appendix A,” Page 22, Section 2.11, accessed April 5, 2018.

https://www.spur.org/sites/default/files/publications_pdfs/Appendix_A_Existing_Conditions_and_Methodology.pdf

¹³ San Francisco Bay Area Planning and Urban Research Association, “Caltrain Corridor Vision Plan, How to keep the Bay Area’s innovation economy moving”, February 23, 2017, page 29, accessed April 5, 2018.

https://www.spur.org/sites/default/files/publications_pdfs/SPUR_Caltrain_Corridor_Vision_Plan.pdf.

¹⁴ Caltrain, “Caltrain Business Plan May 2019,” slide 38.

http://samtrans.granicus.com/MediaPlayer.php?view_id=3&clip_id=238.

¹⁵ Caltrain, “Grade Separation Overview,” August 25, 2016, accessed April 5, 2018.

<http://www.caltrain.com/Assets/Caltrain+Modernization+Program/Presentations/Grade+Separation+Update.pdf>

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today.¹⁶

Each grade separation in SMC presents unique challenges including traffic management during construction, disruption of businesses, and the need to purchase land. As a result, grade separation costs vary significantly. Caltrain estimates that the cost to separate all 42 at-grade crossings could range from \$8.5 billion to \$11.1 billion (representing an average range per separation of \$202M-\$254M) in 2018 dollars.¹⁷

CPUC Prioritization

The California Streets and Highway Code (S&H Code Section 2452¹⁸) requires the CPUC to furnish the grade separation funding priority list to the CTC and Caltrans by July 1 of every year. The CPUC uses a two-year process to establish the priority list for two consecutive fiscal years (e.g., fiscal years 2012-2013 and 2013-2014). Nominations are accepted in October before the first fiscal year (e.g., around October 2011), projects are ranked, and the initial priority list is issued before the start of the first fiscal year (e.g., around June 2012). For the second fiscal year, projects receiving an allocation during the first fiscal year are removed from the list, and the revised list is issued as the final priority list before the start of the second fiscal year (e.g., around June 2013). Cities have to wait approximately two years to nominate a project (for the next two year cycle) if it misses the nomination process.¹⁹

S&H Code section 2452 requires the CPUC to establish criteria and develop formulas for determining the priority of projects nominated for separation. The CPUC first developed the formulas in 1975; since then, they have been modified.²⁰

To create a prioritization of at-grade crossings, other California corridors have customized the CPUC equations to better meet their needs. For example, Riverside County (CA) used the CPUC equation as a starting point for prioritizing grade separations. They added other factors to their equation including residential noise, adjacent grade separations, local priority, and isolation of the location, among others, to develop a customized equation.²¹

Several SMC city managers said that a customized equation for SMC should include:

¹⁶ Caltrain, “Caltrain Short Range Transit Plan: FY2015-2024,” October 1, 2015. [http://www.caltrain.com/Assets/ Planning/Strategic+Plan/Strategic+Plan+FY2015+-+FY2024/Caltrain+Short+Range+Transit+Plan+-+FY2015-FY2024+-+Final.pdf](http://www.caltrain.com/Assets/Planning/Strategic+Plan/Strategic+Plan+FY2015+-+FY2024/Caltrain+Short+Range+Transit+Plan+-+FY2015-FY2024+-+Final.pdf)

¹⁷ Caltrain, “Caltrain Business Plan May 2019,” http://samtrans.granicus.com/MediaPlayer.php?view_id=3&clip_id=238, Slides 44-46.

¹⁸ FindLaw, “California Code, Streets and Highways Code – SHC 2450,” accessed April 5, 2018. <http://codes.findlaw.com/ca/streets-and-highways-code/shc-sect-2450.html>

¹⁹ Grand Jury correspondence

²⁰ Ibid.

²¹ Riverside County Transportation Commission, “Grade Separation Priority Update Study for Alameda Corridor East (Riverside County),” March 2012, page 8. http://www.rctcdev.info/uploads/media_items/rctc-gradecrossingpriorityreport-final-withappendix-040612.original.pdf

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- the at-grade crossings' proximity to hospitals (so that emergency vehicles are not delayed) and,
- the number of fatalities at that crossing.^{22,23}

Cities interested in having an at-grade crossing prioritized for grade separation by the CPUC on a statewide list must follow the published CPUC process by providing information about the crossing.²⁴ However, submitting information about an at-grade crossing to the CPUC is not mandatory. During the last submission cycle, five of the seven SMC cities with at-grade crossings applied to get a prioritization.²⁵

Cities with at-grade crossings high on the CPUC's priority list use that information to encourage favorable consideration by the SMC Transportation Authority (TA) and other potential funding sources for funding.²⁶

The Grade Separation Project Process

A Public Works Director in SMC said, "There is no consistent policy or process for grade separations in SMC." The "typical" grade separation process is shown in Appendix B.

Today, cities must initiate the grade separation process.²⁷ Once information is supplied to the CPUC, and an at-grade crossing is listed on the CPUC prioritization list, the city prepares required reports in order to obtain a letter of agreement from Caltrain and initial funding from the TA. Once the design is complete, the city must seek additional funding from other sources. In SMC, it typically takes from 7-10 years from the start of planning process until construction begins.²⁸

²² Grand Jury interviews.

²³ Caltrain, "Caltrain Business Plan May 2019,"

http://samtrans.granicus.com/MediaPlayer.php?view_id=3&clip_id=238, Slide 35. Over 80 collisions occurred at Caltrain's grade crossings in the 10 years from 2009-2018. More than 30 of these collisions involved a fatality.

²⁴ California Public Utilities Commission, "Section 190 Grade Separation Program," August 2017, accessed April 5, 2018.

http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Safety/Rail/Rail_Crossings/190GradeSepOverview-v201708.pdf

²⁵ Grand Jury interview.

²⁶ Grand Jury interviews.

²⁷ San Francisco Bay Area Planning and Urban Research Association, Caltrain Corridor Vision Plan, February 23, 2017, page 29, accessed April 5, 2018.

https://www.spur.org/sites/default/files/publications_pdfs/SPUR_Caltrain_Corridor_Vision_Plan.pdf

²⁸ Grand Jury interviews. However, in one extreme example, studies of a grade separation for Ravenswood Avenue in Menlo Park began in 1950's and a design has not yet been finalized.

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The Importance of Grade Separations to The Public

The California Department of Transportation’s “2018 California State Rail Plan”²⁹ includes the results of a survey made available through the Caltrain website. The survey received a total of 2,189 responses between January and March 2016. When asked, “What do you think Caltrans’ highest priority should be for investments to enhance rail safety?” 72 percent of respondents said, “Improve crossings with grade separations.”³⁰

Despite the importance the public puts on completing grade separations, a range of responses among cities were aired during grand jury interviews. For example:

- San Mateo (City) obtained funding and is completing a grade separation.³¹
- Menlo Park has analyzed design alternatives for decades.³²
- Atherton does not currently have plans to undertake grade separations.³³ However, “Atherton supports grade separations at its two at-grade crossings, and it does not have a source of funding to complete grade separations. If grade separations at those at-grade crossings were proposed and funded by other agencies, the Town would support them.”³⁴

A “Piecemeal” Approach Rather Than a Corridor-wide Plan

A member of the San Mateo Board of Supervisors stated, “There is no current plan to prioritize grade separations. Prior to the commencement of Caltrain’s recent business plan process, corridor-wide grade separations have not been focused on.” The Caltrain Peninsula train corridor “has a multi-billion dollar problem and we have handled it in a piecemeal way.”³⁵

A San Mateo Daily Journal article stated “In August [2019], board members will decide if Caltrain should grow to 12 trains per hour or as many as 16 trains per hour in the coming decades and, if those scenarios are selected, then the cost of improving the 42 at-grade crossings could be as high as \$11.1 billion, according to the report.”³⁶

²⁹ California Department of Transportation, “2018 California State Rail Plan Appendix A,” accessed April 5, 2018. http://www.dot.ca.gov/californiarail/docs/CSRP_Appendices_10102017.pdf

³⁰ Ibid.

³¹ Caltrain, “Caltrain Awards Contract for 25th Avenue Grade Separation,” accessed April 5, 2018. http://www.caltrain.com/about/MediaRelations/news/Caltrain_Awards_Contract_for_25th_Avenue_Grade_Separation_Project.html

³² City of Menlo Park, “Project history – Below is the timeline for the Ravenswood Avenue Railroad Grade Separation Project,” accessed on April 5, 2018. <https://www.menlopark.org/1077/Project-history>

³³ Grand jury interview.

³⁴ Grand Jury correspondence.

³⁵ Grand Jury interview.

³⁶ Zachery Clark, *The Daily Journal*, “Caltrain weighs grade crossing costs”, May 2, 2019. https://www.smdailyjournal.com/news/local/caltrain-weigh-grade-crossing-costs/article_5c52a9b2-6c8e-11e9-9418-470e4ee83502.html#utm_source=smdailyjournal

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With the current city-by-city approach, grade separation projects emerge where there is local interest, political will, grade separation project expertise and funding, and not necessarily where there is the most potential positive impact. Further, the current approach does not take into account the impact that a grade separation's design in one city will have on the available design alternatives in a nearby city. For example, if Menlo Park constructed an elevated grade separation at Ravenswood Avenue, then Atherton would be limited in the design alternatives it could consider.

As the 2018 California State Rail Plan stated "... the CPUC put out an annual list of prioritized grade separation projects, an additional study or criteria is needed to consider grade separations not as stand-alone safety or traffic relief projects, but rather as rail corridor based projects. When organized and pursued strategically as part of an identified corridor, grade-separation projects can dramatically improve rail capacity and passenger service."³⁷

Caltrain also supports the need for a corridor-wide view. Caltrain's Corridor Vision Plan states, "We need a unified corridor-wide strategy that ensures the most critical crossings are addressed and funded first. The current practice is that municipalities initiate and fund grade-separation efforts. Consequently, grade separations take place where funding is available, not necessarily where they are most needed. With a corridor-wide strategy, design, engineering and construction best practices can be shared; construction timing can be coordinated together with railroad projects; and grade crossings can be coordinated with station-area development."³⁸

When asked if there is a corridor-wide plan for future grade separation projects, a Caltrain official confirmed that one is in the works. The Caltrain official said, "We're right now contemplating what the scope [of the plan] would be. We can do [grade separation projects] in a manner that is far more efficient than we do today. You have 42 [remaining grade separation projects] between San Francisco and San Jose so what is the best way to do that? ... It needs to be phased..."³⁹

Options for A Corridor-Wide Plan

Other California train corridors have created corridor-wide entities that employ expertise in acquiring funding, designing, and constructing grade separations.

[.com&utm_campaign=%2Fnewsletters%2Fheadlines%2F%3F-dc%3D1556805610&utm_medium=email&utm_content=headline](http://www.dot.ca.gov/calforniarail/docs/CSRP_Appendices_10102017.pdf)

³⁷ California Department of Transportation, "2018 California State Rail Plan Appendix A," accessed April 5, 2018.

http://www.dot.ca.gov/calforniarail/docs/CSRP_Appendices_10102017.pdf

³⁸ San Francisco Bay Area Planning and Urban Research Association, Caltrain Corridor Vision Plan, February 23, 2017, page 29, accessed April 5, 2018.

https://www.spur.org/sites/default/files/publications_pdfs/SPUR_Caltrain_Corridor_Vision_Plan.pdf

³⁹ Grand Jury correspondence.

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The Riverside County Transportation Commission (RCTC) was formed to create a regional grade separation master plan. In 2006, the RCTC developed a funding strategy for completing grade separations. In 2012, the RCTC applied a Multicriteria Analysis⁴⁰ “using nine criteria as inputs for prioritization.”⁴¹ The result was a master plan that prioritized grade separations in that corridor.⁴²

Kern County established the Greater Bakersfield Separation of Grade District (GBSGD). The duties of the district are “To separate at-grade crossing of streets with railroads by means of underpasses or overpasses, thereby facilitating the flow of traffic and improving public safety.”⁴³

The GBSGD has completed the “Prioritization of Crossings”, which focuses on allowing the county to allocate financial resources to projects that would provide the greatest benefit to traffic flow improvements, freight movement, passenger movement, and safety.”⁴⁴ The GBSGD hired one person to focus on obtaining funding for grade separations and one person to work with the PUC to design grade separations.^{45,46}

The Recommended Approach

The PCJPB should take on an enhanced role in the completion of grade separations along the Peninsula Corridor train corridor. The PCJPB is the “governing body for the Caltrain Peninsula commuter rail transit service between San Francisco, San Jose and Gilroy.”⁴⁷ The PCJPB has the necessary, corridor-wide perspective because its board is comprised of three representatives from each of the three counties in the corridor. The three-county perspective is essential, as grade separations should be seen “not as stand-alone safety or traffic relief projects, but rather as rail

⁴⁰ National Academies Press, *Prioritization Procedure for Proposed Road Rail Separation Projects Along Specific Rail Corridors* (2019), “MCA is the most common approach cited in literature for making assessment and prioritization decisions about grade separations.” See page 8.

⁴¹ *Ibid.*

⁴² Kern Council of Governments, “Grade Separation Prioritization Report,” March 2011, accessed April 10, 2019. http://wordpress.kerncog.org/wp-content/uploads/2010/03/KernCounty_GradeSepStudy_DRAFT.pdf

⁴³ Kern County California, Board, Commissions & Committees, accessed April 10, 2019. <https://www.kerncounty.com/bos/boards/Grtr-bak.aspx>

⁴⁴ Kern Council of Governments, “Grade Separation Prioritization Report,” March 2011, accessed April 10, 2019. http://wordpress.kerncog.org/wp-content/uploads/2010/03/KernCounty_GradeSepStudy_DRAFT.pdf

⁴⁵ Grand Jury interview.

⁴⁶ A SMC LAFCo representative explained that creating special district in SMC requires either a petition of voters, or a resolution by a public agency or a resolution by the Board of Supervisors. Street and Highway Code 8115-8123 concerning formation of grade separation districts was enacted in 1949 prior to creation of LAFCos, but LAFCo law (Section 56036.5) defines a grade separation district as a district subject to LAFCo jurisdiction. The resolution must be accompanied by an application that includes a definition of services provided and a 5-year funding plan. Once LAFCo receives the resolution and application, it can approve or deny the request. If LAFCo concludes that an existing county entity could provide the services defined in the request for consideration, the request is denied. The LAFCo representative anticipated that the application for a SMC Grade Separation Special District would be denied because they thought an existing entity could take on grade separation efforts. As a result, SMC needs a different approach to prioritize and complete grade separation projects.

⁴⁷ Bayrail Alliance, “Peninsula Joint Powers Board,” accessed April 10, 2019. <http://www.bayrailalliance.org/pcjpb/>

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corridor based projects.”⁴⁸

The PCJPB’s enhanced role should include the creation of a Caltrain Peninsula train corridor grade separation master plan that ensures the most critical at-grade crossings are addressed and funded first. Secondly, the PCJPB could support cities with the most critical at-grade crossings in obtaining funding, designing and project managing grade separation efforts.

An enhanced role for the PCJPB would have several advantages:

1. The PCJPB would develop a grade separation master plan, including prioritization that would incorporate (a) intercity spillover effects ignored in the current CPUC approach, and (b) factors such as nearby emergency vehicle traffic and track fatalities.
2. The PCJPB would bring expertise in acquiring funding for high priority projects and avoid the possibility of Caltrain Peninsula train corridor grade separation projects competing against one another for the same Measure A funds. Further, PCJPB is prepared to compete against other California train corridors that are vying for State funding.
3. The PCJPB would bring technical and regulatory expertise to grade separation projects. Since it has already participated in the design of grade separations along the corridor, and has already worked with the CPUC on these projects, it understands the process of getting state approvals.⁴⁹
4. The PCJPB understands that the requirement for grade separation set by the current regulatory framework may be out of pace with the ongoing plans and desires of many communities on the corridor.⁵⁰ Further, the PCJPB employs project managers who have completed grade separations projects.⁵¹
5. The PCJPB has experience working with cities on grade separation projects. Their staff is aware of the perspectives that cities bring to these projects.⁵²

As one Caltrain official said, “In general, I believe that Caltrain either already has, or can readily procure, the required core technical skills to support the kinds of grade separation projects we do today. On a technical level we are the only entity in the corridor with any real experience constructing and building these kinds of projects and the only organization with the detailed

⁴⁸ California Department of Transportation, “2018 California State Rail Plan Appendix A,” accessed April 5, 2018. http://www.dot.ca.gov/californiarail/docs/CSRP_Appendices_10102017.pdf

⁴⁹ Grand Jury interviews.

⁵⁰ Caltrain, “Caltrain Business Plan May 2019,” slide 34.

http://samtrans.granicus.com/MediaPlayer.php?view_id=3&clip_id=238,

⁵¹ Ibid.

⁵² Grand Jury interview.

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knowledge of how they have to work and integrate with the railroad’s increasingly complicated systems (positive train control and signaling systems and, soon, the electrified infrastructure).”

Adopting a corridor-wide grade separation master plan will have challenges. It is clear from grand jury interviews with SMC city managers that some cities would resist a regional approach if it meant receiving a lower priority status for their city’s grade separation project(s). However, as shown in Riverside and Kern Counties, adopting a corridor-wide approach that provides expertise in funding, design, and project management would bring efficiencies that would speed the process of completing grade separations.

FINDINGS

- F1. In SMC, grade separation projects are initiated by cities.
- F2. Cities with grade separation project expertise have an advantage in gaining funding over cities without that expertise.
- F3. A Caltrain Peninsula train corridor grade separation master plan does not exist.
- F4. The CPUC’s annual list of prioritized grade separation projects does not include all at-grade crossings in the Caltrain Peninsula train corridor.
- F5. Other California train corridors have customized the CPUC’s prioritization equation.
- F6. Caltrain plans on increasing train traffic (114 weekday trains by 2022, up from today’s 92 weekday trains), which will be increase “gate down” time at at-grade crossings.
- F7. As of 2018, the cost of building a grade separation in the corridor could range from \$202M - \$264M, according to the “Caltrain Business Plan, April 2019.”
- F8. In SMC, it typically takes from 7-10 years from the start of the grade separation planning process until construction begins.
- F9. The design of a grade separation in one city can limit the design alternatives in an adjacent city.
- F10. Other California counties have developed corridor-wide approaches to address the challenges of completing grade separations.
- F11. The PCJPB is the governing body of the Caltrain Peninsula train corridor.
- F12. The PCJPB has experience in obtaining funding, designing and project managing grade separation projects. It also understands the regulatory environment.

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RECOMMENDATIONS

- R1. By March 31, 2020, the PCJPB should create a Caltrain Peninsula train corridor Grade Separation Master Plan, including all at-grade crossings in the corridor, based on a prioritization that takes into account the needs and special circumstances of the cities and counties through which the corridor passes, with special attention to adjacent at-grade crossings so as not to limit future design alternatives.
- R2. By September 30, 2019, in support of developing the Grade Separation Master Plan, the PCJPB should study other train corridors worldwide to learn how they implemented similar master plans, including methods developed for securing funding.
- R3. By September 30, 2019, the PCJPB should engage with all cities on the Caltrain Peninsula train corridor to gain support for the Grade Separation Master Plan.
- R4. By May 31, 2020, shortly after completing the Grade Separation Master Plan, the PCJPB should offer to support funding and design efforts to the cities in the order determined by the prioritization in the master plan. If a city rejects such support for an at-grade crossing, the PCJPB should then proceed to support the at-grade crossing with the next highest priority in the plan.

REQUEST FOR RESPONSES

Pursuant to Penal Code Section 933.05, the Grand Jury requests responses as follows:
From the following governing body:

- The Peninsula Corridor Joint Powers Board

The governing body indicated above should be aware that the comment or response of the governing Commission must be conducted subject to the notice, agenda, and open meeting requirements of the Brown Act.

METHODOLOGY

The Grand Jury reviewed documents and websites, and conducted interviews as listed below.

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BIBLIOGRAPHY

- Bayrail Alliance, “Peninsula Joint Powers Board,” accessed April 10, 2019. <http://www.bayrailalliance.org/pcjpb/>
- California Department of Transportation, “2018 California State Rail Plan Appendix A,” accessed April 5, 2018. http://www.dot.ca.gov/californiarail/docs/CSRP_Appendices_10102017.pdf
- California Public Utilities Commission, *Section 190 Grade Separation Program*, California Public Utilities Commission Rail Crossings Engineering Section August 2017, accessed April 5, 2018. http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Safety/Rail/Rail_Crossings/190GradeSepOverview-v201708.pdf
- Caltrain, “Caltrain Awards Contract for 25th Avenue Grade Separation,” accessed April 5, 2018. http://www.caltrain.com/about/MediaRelations/news/Caltrain_Awards_Contract_for_25th_Avenue_Grade_Separation_Project.html
- Caltrain, “Grade Separation Overview,” August 25, 2016, accessed April 5, 2018. <http://www.caltrain.com/Assets/Caltrain+Modernization+Program/Presentations/Grade+Separation+Update.pdf>
- Caltrain, “Opening New Frontiers for 150 Years,” accessed March 23, 2018. <http://www.caltrain.com/about/Caltrain150/Milestones.html>
- Caltrain, “Caltrain Short Range Transit Plan: FY2015-2024,” October 1, 2015. http://www.caltrain.com/Assets/_Planning/Strategic+Plan/Strategic+Plan+FY2015+-+FY2024/Caltrain+Short+Range+Transit+Plan+-+FY2015-FY2024+-+Final.pdf
- Caltrain, “The Economic Impact of Caltrain Modernization,” Bay Area Council Economic Institute, June 2012. <http://documents.bayareacouncil.org/caltrainecon.pdf>
- City of Menlo Park, “Project history – Below is the timeline for the Ravenswood Avenue Railroad Grade Separation Project,” accessed on April 5, 2018. <https://www.menlopark.org/1077/Project-history>
- Clark, Zachery “Caltrain weighs grade crossing costs”, The Daily Journal, May 2, 2019, https://www.smdailyjournal.com/news/local/caltrain-weighs-grade-crossing-costs/article_5c52a9b2-6c8e-11e9-9418-470e4ee83502.html
- Kern Council of Governments, “Grade Separation Prioritization Report,” March 2011, accessed April 5, 2019. <http://wordpress.kerncog.org/wp->

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content/uploads/2010/03/KernCounty_GradeSepStudy_DRAFT.pdf

- Peninsula Corridor Joint Powers Board, Caltrain Business Plan Quarterly Update, May 2019, slides 44-46.
http://www.caltrain.com/Assets/___Agendas+and+Minutes/JPB/2019/Caltrain+Business+Plan+-+Quarterly+Update+-+May+2019.pdf
- Peninsula Corridor Joint Powers Board, *Caltrain Business Plan Quarterly Update*, October 2018, Slide 41.
http://www.caltrain.com/Assets/___Agendas+and+Minutes/JPB/2018/2018-10-04+BUSINESS+PLAN+SPECIAL+MEETING.pdf
- Peninsula Corridor Joint Powers Board, “Joint Powers Agreement, Peninsula Corridor Project,” October 3, 1996.
http://www.caltrain.com/Assets/_Executive/PDF/Joint+Powers+Agreement.pdf
- Riverside County Transportation Commission, “Grade Separation Priority Update Study for Alameda Corridor East (Riverside County,” March 2012, page 8.
http://www.rctcdev.info/uploads/media_items/rctc-gradecrossingpriorityreport-final-withappendix-040612.original.pdf
- San Francisco Bay Area Planning and Urban Research Association, *Caltrain Corridor Vision Plan*, February 23, 2017, page 29, accessed April 5, 2018.
https://www.spur.org/sites/default/files/publications_pdfs/SPUR_Caltrain_Corridor_Vision_Plan.pdf
- “San Mateo County Measure A Grade Separation Programs”, San Mateo County Transportation Authority, August 4, 2016.
http://www.smcta.com/Assets/___Agendas+and+Minutes/TA/Board+of+Directors/Presentations/2016/2016-0804+Grade+Separation+Program.pdf

Interviews

- SMC City Public Works Directors
- Representatives of:
 - South San Francisco
 - Burlingame
 - City of San Mateo
 - Redwood City
 - Atherton
- Officials with Caltrain
- Officials with the San Mateo County Transportation Authority
- Officials from the California Public Utilities Commission
- A supervisor on the SMC Board of Supervisors
- A senior member of the San Mateo County management team
- An official from the Riverside County Transportation Commission

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- An official from the Kern County Separation of Grade Special District
- An official from SMC LAFCo

Websites

- Barbara Wood, “Atherton has little interest in elevating train tracks,” The Almanac, December 7, 2017. <https://www.almanacnews.com/news/2017/12/07/atherton-has-little-interest-in-elevating-train-tracks>
- California Public Utilities Commission, “Railroad Crossing Funding Programs,” accessed April 8, 2018. <https://www.cpuc.ca.gov/General.aspx?id=2891>
- Caltrain, “Board of Directors,” accessed April 5, 2018. <http://www.caltrain.com/about/bod.html>
- Caltrain, “Caltrain Awards Contract for 25th Avenue Grade Separation,” accessed April 5, 2018. http://www.caltrain.com/about/MediaRelations/news/Caltrain_Awards_Contract_for_25th_Avenue_Grade_Separation_Project.html
- FindLaw, “California Code, Streets and Highways Code – SHC 2450,” accessed April 5, 2018. <http://codes.findlaw.com/ca/streets-and-highways-code/shc-sect-2450.html>
- Metropolitan Transportation Commission, “Plan Bay Area 2040 Final Plan.” accessed April 5, 2018. <https://www.2040.planbayarea.org/forecasting-the-future>
- Riverside County Transportation Commission, “Current Commissioners,” accessed April 5, 2018. <http://rctcdev.info/about-us/commissioners>.
- The Daily Journal, September 25, 2017, “Inching Ahead” https://www.smdailyjournal.com/news/local/inching-ahead/article_5c63161a-a18f-11e7-9940-37072a787dcc.html

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APPENDIX A – CALTRANS/CPUC GRADE SEPARATION PRIORITIZATION EQUATION

The Caltrans Section 190 Grade Separation Program authorizes funds for grade separation projects. “Funding decisions are based on a priority list of grade separation projects with the use of two formulas. The first formula [shown below] is used for the crossings nominated for separation or elimination.”⁵³ The second formula is used to evaluate existing grade separations that are in need of alteration or renovation.

The CPUC grade separation equation:

$$P = V * (T+0.1*LRT) * (AH + 1) / C + SCF$$

P= priority index number

V= Average Daily Vehicle Traffic

T= Average Daily Freight or Commuter Train Traffic

LRT= Light Rail Traffic

C= Cost Share to be allocated from the Grade Separation Fund

AH= Accident history

SCF=Special Conditions Factor

The CPUC grade separation equation for existing grade separations in need of alteration or renovation is:

$$P = V * (T+0.1*LRT) / C + SCF$$

P= priority index number

V= Average Daily Vehicle Traffic

T= Average Daily Freight or Commuter Train Traffic

LRT= Light Rail Traffic

C= Cost Share to be allocated from the Grade Separation Fund

SCF=Special Conditions Factor

⁵³ “MCA is the most common approach cited in literature for making assessment and prioritization decisions about grade separations.” See “Prioritization Procedure for Proposed Road Rail Grade Separation Projects Along Specific Rail Corridors (2019)”, Page 8.

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APPENDIX B – TYPICAL GRADE SEPARATION PROCESS

The following is a “typical example” of the process followed by recent projects. It is not intended to be a prescriptive or rigidly defined process. Some of the steps below were different for projects that have been completed over the last two decades and could change in the future.⁵⁴

1. A city and Caltrain gather information about an at-grade crossing. The information is sent to the CPUC in order to be put on the statewide prioritization list. As a Public Works Director said, “The city is the initial driver. Cities are always the driver of the project.”⁵⁵
2. The city begins two-way communications (typically forums) with the public. A Project Study Report is funded and completed by the city and/or Caltrain. Funding for the report can come from several sources (typically, the TA and/or the city). (San Mateo provided \$12 million for a grade separation project study report. Burlingame provided \$500,000 for reports on the Broadway project.)⁵⁶
3. The National Environmental Policy Act⁵⁷ and the California Environmental Quality Act⁵⁸ requirements are met. (An EIR may or may not be required under NEPA; under CEQA grade separations are exempt from EIRs.)
4. The completed reports are sent to the funding sources, including the TA and/or CPUC. They are required to obtain funding for a project’s final design phase.
5. Cities need a letter of agreement from Caltrain in order for the TA to proceed with the funding request. The TA evaluates the jurisdiction’s request and decides whether to apply Measure A⁵⁹ funds to the project.⁶⁰
6. With TA approval (or other funding) and after the Project Study Report is complete, 15-35% of design work is completed. After acquisition of funding for final design, Caltrain usually manages the development of the grade separation’s design. However, designs can be driven by the city. Caltrain and a review panel, which includes the CPUC, must approve designs.
7. Once the design is completed, the city seeks additional funding from several sources, including the CPUC, the TA, California state government, and the federal government,

⁵⁴ Grand jury interview.

⁵⁵ Grand Jury interview.

⁵⁶ “CalMod and High-High Speed Rail Joint Local Policy Maker Group,” High Speed Rail, August 24, 2017.

⁵⁷ <https://www.epa.gov/laws-regulations/summary-national-environmental-policy-act>, Accessed February 18, 2019.

⁵⁸ <https://www.wildlife.ca.gov/Conservation/CEQA/Purpose>, accessed February 18, 2019.

⁵⁹ Measure A, which went into effect in 2009, includes funds for more local community shuttle service, railroad/street grade separations, ferry service to South San Francisco and Redwood City, and a major infusion of tax dollars for pedestrian and bicycle projects.

⁶⁰ Grand Jury interview.

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among others.

8. Once the design is finalized, the right-of-way acquisition process begins and utility relocation efforts are initiated.
9. The city and Caltrain update the public on the project throughout the project development process. Once construction funding is secured and the project can proceed to construction, the public is notified of the impending work.
10. Construction begins subject to coordination with the railroad's overall program of capital improvements.

Attachment 1: Draft Response to Civil Grand Jury Report on Grade Separations

October 3, 2019

Honorable Donald J. Ayob
Judge of the Superior Court
c/o Charlene Kresevich
Hall of Justice
400 County Center, 2nd Floor
Redwood City, CA 94063-1655

Dear Judge Ayob:

I am writing on behalf of the Board of Directors of the Peninsula Corridor Joint Powers Board (JPB). This letter will serve as the JPB's formal response to the San Mateo County Civil Grand Jury's July 18, 2019 report entitled "Grade Separations – Bypasses to Greater Security." The JPB's Board of Directors reviewed and approved (on October 3, 2019) this response to the Grand Jury report's 12 findings (numbered F1-F12) and four recommendations (R1-R4).

As the report notes, the environment in which Caltrain operates is complex in terms of the number of jurisdictions through which it operates, the number of other transit agencies it interacts with and the additional involvement of other regional and state agencies. This is further complicated by the logistical and funding challenges involved in planning for and implementing the grade separation program in an active operating environment. Prioritizing which projects proceed first requires a regional approach to this multi-billion dollar program across three counties and 19 cities.

Findings

The JPB agrees with all of the findings set forth in the report.

Recommendations

The JPB values the Grand Jury's recommendations, all of which concern the need to develop a corridor-wide approach to grade separation. As the four recommendations are interconnected, we offer the following response to all of them. We also provide some specific comments to particular recommendations.

The JPB currently is completing a Caltrain Business Plan, which includes an evaluation of the importance of grade separations, an assessment of the financial magnitude of the challenge, and an initial consideration of the JPB's role in planning and implementing these projects within the context of corridor-wide

infrastructure improvements. In public materials and presentations associated with the Business Plan, Caltrain staff has highlighted the complexity of this issue and has indicated that there is a need for additional, in-depth study of grade separations at a corridor-wide level.

To that end, the approved Fiscal Year 2020 Caltrain Capital Budget includes \$5 million for a corridor-wide grade separation study. This corridor-wide grade separation study is yet-to-be scoped, but is envisioned as a multi-phased, comprehensive study that will address grade separation construction; prioritization and phasing; funding strategies; and other topics related to the potential and planned grade separation of the Caltrain corridor.

The success of a corridor-wide study related to this extraordinarily sensitive topic depends on the appropriate participation and buy-in of both regional and state partner agencies as well as local jurisdictions. Developing an agreed-to approach regarding the structure and oversight of the study will be a foundational step in developing the overall scope.

The JPB considers the planned corridor-wide study to be equivalent to the "Grade Separation Master Plan" referenced in R1-R4. With this assumption, Caltrain agrees with the assertions of R1-R3 that 1) any grade separation strategy must account for a prioritization that takes into account the special circumstances of each crossing while also considering their respective functions as one in a system of crossings; 2) peer corridor work and best practices must be elements of the study; and 3) all of the cities along the Caltrain right of way must be engaged in this process.

While the JPB generally agrees with recommendations R1-R3, the JPB disagrees with the timeframe set forth for completion of the corridor-wide grade separation study. The dates in recommendations R1-R3 appear to be arbitrary and unrealistic given: 1) that the grade separation study should be completed after the broader Caltrain Business Plan in early 2020; 2) the level of complexity in scoping and performing the study; 3) the time required to acquire and dedicate experienced resources to conduct a difficult and highly unique study; and 4) the time required to gain the support and engagement of the appropriate stakeholders. A realistic study schedule will be identified as part of the detailed scoping of the Caltrain grade separation study.

The JPB does not agree with recommendation R4. This recommendation presupposes an outcome to the study that may or may not be the correct approach for the corridor. The priority or manner in which grade separations are funded and constructed must be an outcome of a comprehensive study. While the JPB appreciates that R4 recommends one option for approaching the issue, funding and construction strategies will play a large role in determining how grade separation projects should proceed.

In sum, the JPB finds great value in the Grand Jury findings and recommendations, and is confident that the future corridor-wide grade separation study planned in the coming years will yield the outcomes sought by the Grand Jury.

Thank you for the opportunity to respond to your report; I trust you will find our comments helpful.

Sincerely,

Jim Hartnett
Executive Director, Peninsula Corridor Joint Powers Board.

cc: Board of Directors
via email to: grandjury@sanmateocourt.org

DRAFT

PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT

TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Michelle Bouchard
Chief Operating Officer

Joan Cassman
Legal Counsel

Seamus Murphy
Chief Communications Officer

SUBJECT: **RESPONSE TO GRAND JURY REPORT "JUST MISSED IT! FIXING SAMTRANS'
'CALTRAIN CONNECTION'"**

ACTION

Staff Coordinating Council recommends the Board authorize the Executive Director, or his designee, to submit the attached response to the San Mateo County Civil Grand Jury's report entitled "Just Missed It! Fixing SamTrans' 'Caltrain Connection.'"

SIGNIFICANCE

On July 11, 2019, the San Mateo County Civil Grand Jury issued a report to respond to the following question:

Should SamTrans["] "Caltrain Connection" bus schedules be coordinated with Caltrain schedules to minimize wait times for riders transferring to and from trains during peak commute hours?

The Grand Jury made nine findings and four recommendations, and requested that the Peninsula Corridor Joint Powers Board (JPB) respond to all nine findings and two of the recommendations, which are for the JPB to: (1) survey Caltrain riders to determine the extent to which they are interested in better coordination of Caltrain and SamTrans schedules; and (2) convene a joint meeting of the JPB and San Mateo County Transit District (District) Boards of Directors to discuss use of SamTrans' "Caltrain Connection" buses as a feeder system for Caltrain.

The JPB's response is due by October 9, 2019.

BUDGET IMPACT

There is no budget impact associated with this action.

BACKGROUND

The JPB is currently completing the Caltrain Business Plan and the District has recently launched a Comprehensive Operational Analysis (COA) known as "Reimagine SamTrans." The Caltrain Business Plan includes a major service planning effort that will guide the development of Caltrain services over the next 20 years. The COA will evaluate each SamTrans route, including routes connecting to Caltrain stations, and how those routes meet current and potential future riders' needs.

Each county's Civil Grand Jury is authorized by California Penal Code section 925a to investigate any joint powers authority operating within that county. The San Mateo County Grand Jury typically issues approximately 10 reports per year on cities, county agencies, special districts and joint powers agencies.

Prepared By: Michelle Bouchard, Chief Operating Officer

650.508.6240

**Attachment 1: Draft Response to Civil Grand Jury Report on SamTrans
"Caltrain Connection" Service Schedules**

October 3, 2019

Honorable Donald J. Ayoob
Judge of the Superior Court
c/o Charlene Kresevich
Hall of Justice
400 County Center, 2nd Floor
Redwood City, CA 94063-1655

Dear Judge Ayoob:

I am writing on behalf of the Board of Directors of the Peninsula Corridor Joint Powers Board (JPB). This letter will serve as the JPB's formal response to the San Mateo County Civil Grand Jury's July 11, 2019 report entitled "Just Missed It! Fixing SamTrans' 'Caltrain Connections.'" The JPB's Board of Directors reviewed and approved (on October 3, 2019) this response to the Grand Jury report's nine findings (numbered F1-F9) and two of the Grand Jury's four recommendations (R3 and R4).

For context, it is important to note that the JPB, a three-county joint powers authority, operates Caltrain in San Francisco, San Mateo and Santa Clara Counties along a rail corridor passing through 19 cities. Caltrain connects not only with SamTrans buses operated by the San Mateo County Transit District (District), but also with services of the San Francisco Municipal Transportation Agency and Santa Clara Valley Transportation Authority, as well as the Bay Area Rapid Transit District, Capitol Corridor and other means of public transportation, including shuttle programs operated by a range of public, private and non-profit entities.

Findings

The JPB generally agrees with findings F1, F2 and F5. The JPB agrees with finding F6 to the extent that the finding concerns the JPB (as opposed to the District). The JPB is not in a position to agree or disagree with findings F3, F4, F7, F8 or F9.

Recommendations

The Grand Jury requested that the JPB respond to the following two recommendations:

R3: Caltrain should survey existing riders of Caltrain trains in San Mateo County, including those who use SamTrans, to determine their interest in coordinating "Caltrain Connection" bus schedule arrival times at Caltrain stations with existing Caltrain schedules. The Caltrain Board of Directors should consider the results of that study at a public hearing by June 30, 2020.

The JPB surveys its customers fairly frequently. The JPB conducts standard customer surveys every three years in accordance with federal requirements and to inform its decision-making. The JPB also conducts surveys regarding specific areas of interest, when appropriate, e.g., a May 2018 Customer Satisfaction Survey. Most triennial and special-purpose surveys include questions on passengers' travel patterns, including origins and destinations, as well as their modes of travel getting to the train and their final destinations. Answers to these questions are used when the agency contemplates capital and operational improvements to address the first- and last-mile needs of riders throughout the Caltrain service area.

The last triennial customer survey was conducted in October 2016; the next such survey is planned for later this fall. It would not be efficient or add any particularly helpful information for the JPB to conduct a separate study just on bus services in one of the three counties where it operates.

It should be noted that the District also surveys SamTrans passengers, and we understand that the District will be evaluating service characteristics and proposing service changes as part of the SamTrans Comprehensive Operational Analysis ("COA" or "Reimagine SamTrans") that recently commenced. The COA will provide both the District and the JPB an opportunity to consider opportunities to improve their connecting services.

R4: The Boards of Directors of SamTrans and Caltrain should discuss together the value and feasibility of using "Caltrain Connection" buses as a feeder system to Caltrain to reduce traffic congestion. This should be undertaken by December 31, 2019.

The JPB and District are both engaged in major planning efforts at this time: the Caltrain Business Plan for the JPB, and Reimagine SamTrans for the District. Among the many issues being explored in the Caltrain Business Plan is the structure and predictability of Caltrain schedules, including how this structure improves coordination with the many means passengers have for accessing the train. The District is a stakeholder in the Caltrain Business Plan, and the JPB is a stakeholder in Reimagine SamTrans. Staff and the Boards of Directors of each agency will have opportunities to be informed of analysis being conducted for both plans, and to provide input, including as related to Caltrain-SamTrans connections. We do not anticipate that the Boards of Directors will hold a joint meeting to discuss connections between Caltrain and SamTrans, which is just one of the many providers of transportation services providing connections to

Caltrain's passengers; rather, the Boards will provide direction for staff concerning Board priorities, including easing riders' use of public transit.

Thank you for the opportunity to respond to your report; I trust you will find our comments helpful.

Sincerely,

Jim Hartnett
Executive Director, Peninsula Corridor Joint Powers Board.

cc: Board of Directors
via email to: grandjury@sanmateocourt.org

DRAFT

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JUST MISSED IT! FIXING SAMTRANS' "CALTRAIN CONNECTION"

ISSUE

Should SamTrans "Caltrain Connection" bus schedules be coordinated with Caltrain schedules to minimize wait times for riders transferring to and from trains during peak commute hours?

SUMMARY

Approximately 8,000 commuters travel north or south each workday from seven Caltrain train stations in San Mateo County plus Palo Alto. Of these, approximately ten percent travel between their homes and Caltrain train stations on SamTrans buses. Approximately three times as many Caltrain riders commute to Caltrain stations by car. These commuters increase vehicle traffic on local roads, which has become significantly worse over the past ten years.

SamTrans operates 16 bus lines (labeled "Caltrain Connection" on the SamTrans schedules) to and from these Caltrain stations during commute hours. The ECR (El Camino Real) bus line also transports commuters to Caltrain stations. Despite the "Caltrain Connection" designation expressed in the logo shown in SamTrans schedules, SamTrans makes no effort to coordinate these buses' Caltrain station arrival and departure times with the Caltrain train schedules.



A Grand Jury comparison of bus-train schedules during commute hours shows suboptimal wait times, defined as longer than 15 minutes or shorter than 5 minutes. For instance, in the morning commute, only 35 percent of SamTrans' "Caltrain Connection" buses are scheduled to arrive within 5 to 15 minutes of a Caltrain departure. Nineteen percent arrive with less than 5 minutes to make the transfer which, given normal delays in bus schedules, may not allow riders enough time to make the train. Twenty-six percent of buses are scheduled to arrive between 16 and 30 minutes before a Caltrain departure, and scheduled arrival times for 20 percent require riders to wait more than 30 minutes.

Better coordination of "Caltrain Connection" bus schedules with Caltrain during commute hours could make using SamTrans, rather than cars, for the trip between home and Caltrain stations more appealing to commuters. This, in turn, could increase ridership on SamTrans and decrease car traffic. Decreased wait times could also incentivize commuters living on these routes and who currently commute to work by car to try commuting on Caltrain instead.

While it should be possible to more closely align the "Caltrain Connection" schedules with the Caltrain schedule and in doing so potentially improve this commuter option, SamTrans officials

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state that SamTrans service is not meant to act as a feeder system to Caltrain. SamTrans coordinates bus schedules only to facilitate transfers between bus lines, not between buses and trains. Better coordination could help fulfill SamTrans' policy expressed in 2018's Measure W sales tax increase that was passed in order to relieve traffic congestion. Point 10 of the "Core Principles of the Final Investment Plan" in Measure W is to "Incentivize transit, bicycle, pedestrian, carpooling and other shared-ride options over driving alone."

The Grand Jury recommends that SamTrans investigate whether it is feasible to coordinate its "Caltrain Connection" bus schedules with Caltrain train schedules. Further, together with Caltrain, SamTrans should survey existing and potential Caltrain riders to determine the level of commuter interest in improved bus service between homes and Caltrain stations that aligns bus and train schedules.

BACKGROUND

In many large urban areas such as Los Angeles, San Francisco and New York, transportation management, including bus systems, rail systems, tax fund administration, and congestion management, is concentrated under the authority of a single board of directors and the administration of a single chief executive.¹

However, in San Mateo County, due to their creation at different times and through different methods (ballot measures, intercounty agreements, assignment by regional authority), bus, rail, tax fund administration, and congestion management agencies all report to separate boards of directors. The San Mateo County Transit District Board (SamTrans) is responsible for fixed-route bus service, the Peninsula Corridor Joint Powers Board (JPB) is responsible for Caltrain rail service, and the San Mateo County Transportation Authority Board (TA) is responsible for administering transportation funds collected from Measure A (2004) sales tax revenue. For efficiency, these agencies decided to consolidate daily operations under a single Chief Executive Officer who is responsible for executing the policies set by the Boards of Directors.²

Historically, SamTrans, the JPB, and the TA have had no mandate to reduce traffic congestion. The Metropolitan Transit Commission (MTC) which is responsible for local Congestion Management Agencies (CMAs) assigned this responsibility to the City/County Association of Governments of San Mateo County (C/CAG), which then assigned implementation of congestion management to Commute.org. Commute.org is "a public agency whose mission is to reduce the number of drive-alone vehicles traveling to, from or through San Mateo County" by "helping residents and commuters find alternatives to driving alone that are less stressful, less costly and better for the environment."³

¹ See org charts for Los Angeles at http://media.metro.net/about_us/finance/images/fy19_org_chart.pdf and San Francisco at <https://www.sfmta.com/reports/sfmta-organization-chart>, and the structure of the New York MTA at <http://web.mta.info/mta/compliance/pdf/MTA-Creation-Structure.pdf>

² SamTrans Short Range Transit Plan – FY2017-FY2026, Page 17
<http://www.samtrans.com/Assets/Planning/2017-2026+SamTrans+Short+Range+Transit+Plan.pdf>

³ Commute.org website (<https://commute.org/aboutus>)

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In 2018, voters in San Mateo County approved Measure W, a ½ cent sales tax increase projected to generate \$80 million per year to be invested in projects designed to relieve traffic congestion in San Mateo County. This measure was authored by SamTrans who will receive 50 percent of the proceeds to support operations and capital needs of SamTrans bus and paratransit service, Caltrain rail service, and other mobility services administered by SamTrans. (The other 50 percent will be received by the TA to support countywide highway congestion improvements, local safety, pothole and congestion relief improvements, bicycle and pedestrian improvements, and regional transit connections.)⁴

The Congestion Relief Plan included in the text of and funded by Measure W reflects priorities identified through a nine-month “Get Us Moving” process. This was a collaborative program spearheaded by SamTrans and the San Mateo County Board of Supervisors to increase community awareness of current transportation conditions, programs, services, and solutions; help identify and prioritize transportation funding needs in the county; develop an understanding of community opinions about transportation priorities; and inform future transportation revenue opportunities and expenditures. It was a joint effort with local cities, partner agencies, and other stakeholders including regional leaders, transportation experts, employers of all sizes, non-profit groups and volunteer community members.⁵

Point 10 of the Core Principles of the Final Investment Plan of the “Get Us Moving” process, which is included in Measure W Section 1 (c), states one of the purposes of the program is to “[i]ncentivize transit, bicycle, pedestrian, carpooling and other shared-ride options over driving alone.” Further, Section 6 (e) states that, “[i]nvestments will be designed to increase ridership, improve efficiency, and reduce congestion within the County by facilitating the creation of new services that incentivize more riders to choose public transit.”⁶

Prior to adoption of Measure W, SamTrans also issued a Business Plan, dated July 2018 (adopted September 5, 2018), which lists as one of the guiding principles/priorities, “[p]romote programs that relieve traffic congestion”.⁷

DISCUSSION

Commuters in San Mateo County have several alternatives to get to work. On average 71 percent of them commute by car alone, and another 14 percent drive with another person. Ten percent

⁴ Full Text of San Mateo County Measure W (2018 Election) https://www.smcacre.org/sites/main/files/file-attachments/samtransresono2018-29_076022_full_text.pdf

⁵ SamTrans website – Get Us Moving San Mateo County (http://www.samtrans.com/Assets/_Agendas+and+Minutes/SamTrans/Board+of+Directors/Presentations/2018/GUM+Update++July+2018.pdf)

⁶ *Supra*, Note 4

⁷ SamTrans Business Plan July 2018, approved September 5, 2018 http://www.samtrans.com/Assets/_Agendas+and+Minutes/SamTrans/Board+of+Directors/Presentations/2018/SamTrans+Business+Plan+FINAL.pdf

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use some form of public transportation, of which 3 percent use SamTrans and the other 7 percent use some other form of public transport (BART, Caltrain, etc.).⁸

SamTrans Fixed-Route Service operates 16 bus routes that are labeled “Caltrain Connection” connecting to one of eight Caltrain stations. Most of these routes operate between 6 a.m. and 10 p.m., Monday through Friday, but some also provide night and weekend service. This report only addresses operation of these routes during commute periods.⁹ The ECR (El Camino Real) Route also connects to Caltrain and BART stations along the El Camino Real corridor. The eight stations are: Burlingame, San Mateo, Hillsdale, Belmont, San Carlos, Redwood City, Menlo Park, and Palo Alto. Palo Alto is not in San Mateo County but is included in this discussion because it is the destination for four SamTrans “Caltrain Connection” routes and the ECR. (See Figure 1.)

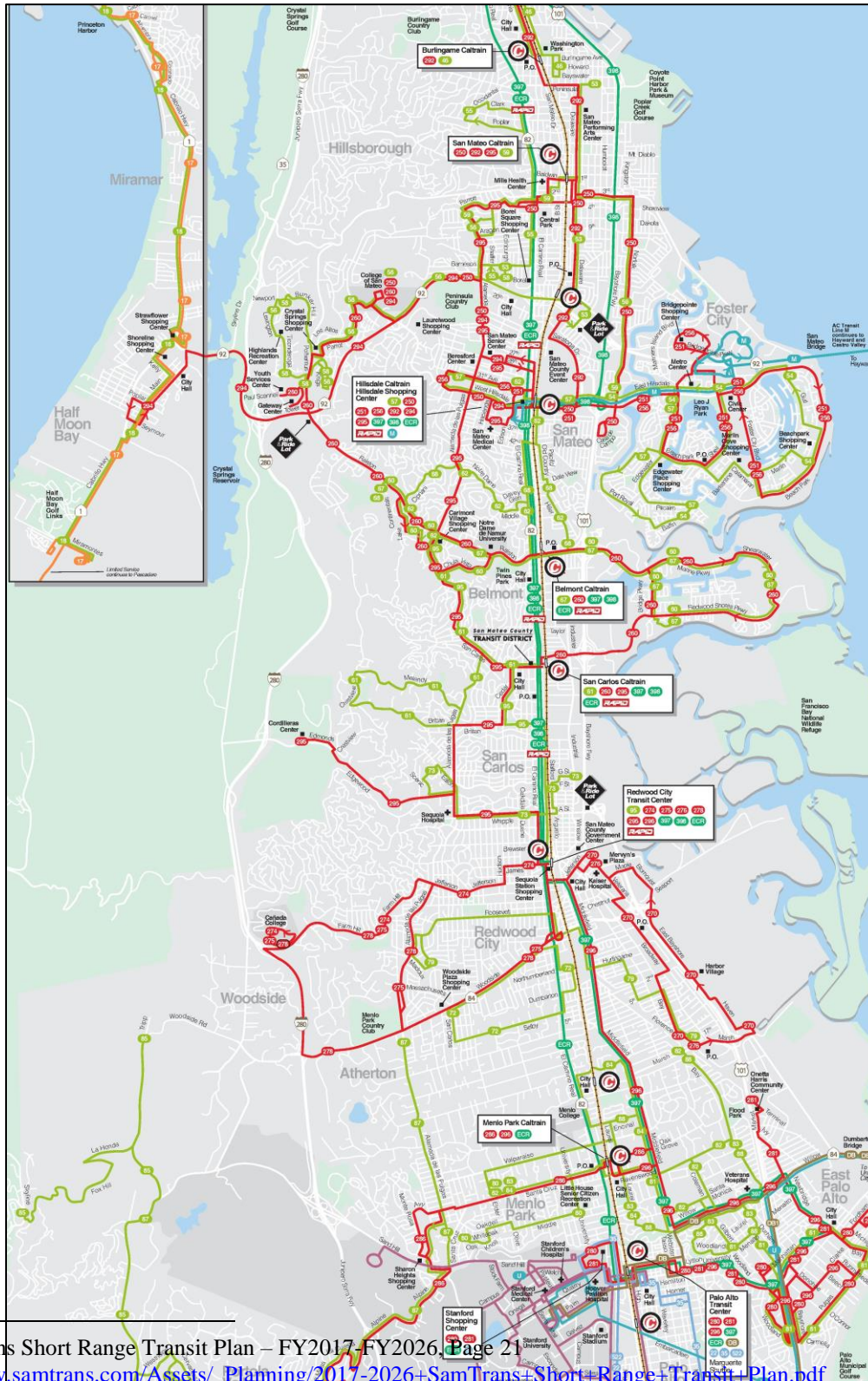
⁸ SamTrans Market Segmentation Study (Spring 2018), Page 15

<http://www.samtrans.com/Assets/MarketDevelopment/pdf/SamTrans+Market+Segmentation+Study+Report.pdf>

⁹ For these eight Caltrain stations, the commute period runs from approximately 6:00 a.m. to 10:00 a.m. in the morning and from 4:00 p.m. to 8:00 p.m. in the evening, on weekdays.

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Figure 1 – SamTrans Fixed-Route Service Routes¹⁰



¹⁰ SamTrans Short Range Transit Plan – FY2017-FY2026, Page 21
<http://www.samtrans.com/Assets/Planning/2017-2026+SamTrans+Short+Range+Transit+Plan.pdf>

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Commuter Service Between Homes and Caltrain Stations

In San Mateo County, the primary public transportation option for the commute between home and Caltrain stations is SamTrans “Caltrain Connection” and ECR bus service. At present, these routes carry approximately 10 percent of the 8,000 commuters¹¹ who use one of the eight Caltrain stations served by SamTrans. Also, of those 8,000 commuters, approximately 45 percent currently walk and 17 percent ride a bicycle to a Caltrain station and so do not need a public transportation option. The remaining 28 percent either drive and park at the Caltrain station, or are driven to the station and dropped off there, and therefore might choose to ride SamTrans if the wait times were more convenient. (See Appendix A for further details.)

The Nonalignment Between SamTrans’ “Caltrain Connection” Bus Schedules and Caltrain Schedules

The Grand Jury analyzed the schedule alignment of all “Caltrain Connection” and ECR bus routes with Caltrain schedules during commute hours. This analysis shows that 26 percent of the morning commute bus-to-train connections require a wait time to the next train after arrival of the buses at the stations of 16 to 30 minutes and 20 percent require a wait time in excess of 30 minutes.¹² In addition, in 19 percent of cases, buses are scheduled to arrive at train stations less than 5 minutes before then next train, making the connection to that train uncertain, especially if the bus is running late. (SamTrans sets a goal of 85 percent on time performance which is defined as between zero minutes early and five minutes late ± 30 seconds.)¹³ Only 35 percent of buses are scheduled to arrive at Caltrain stations between 5 and 15 minutes before the next train is scheduled to depart. (See Appendix B for discussion of methodology and Table B-1 for how percentages are calculated.)

Similarly, in the evening commute hours the wait time for buses after arrival of the trains is 16 to 30 minutes in 21 percent of the cases and in excess of 30 minutes 13 percent of the cases (if there is any bus scheduled at all). Also, buses are scheduled to leave less than five minutes after a train arrives in 23 percent of the cases. Thus, only 43 percent of buses are scheduled to depart Caltrain stations between 5 and 15 minutes after the previous train is scheduled to arrive. (See Appendix B, Table B-2.)

¹¹ Caltrain Annual Passenger Count (January 2018), Attachment 6, Page 6

<http://www.caltrain.com/Assets/Marketing/pdf/2018+Annual+Passenger+Counts.pdf?v=2>

¹² The amount of wait time that is acceptable to transition from a bus to a train on a morning commute (or the reverse in the evening) is subjective. For the purposes of this discussion, the Grand Jury looked to the example of the wait times experienced by the approximately 20,000 commuters in San Mateo County who use BART to get to San Francisco each workday. According to published BART schedules (see <https://www.bart.gov/schedules/bylineresults?route=7&date=05/01/2019>), during commute hours, BART trains are scheduled to leave the Millbrae Station every 15 minutes. (At other stations in San Mateo County the time between BART trains is as little as 3 minutes.) Because of this, commuters who use SamTrans to get to BART stations never wait more than 15 minutes when BART is running to schedule. Therefore, for this report a target wait time of no more than 15 minutes has been used.

¹³ SamTrans Short Range Transit Plan – FY2017-FY2026, Page 42

<http://www.samtrans.com/Assets/Planning/2017-2026+SamTrans+Short+Range+Transit+Plan.pdf>

Combining morning (bus-to-train) and evening (train-to-bus) schedules as described above, in about one quarter of those instances where a longer than 15 minute wait is scheduled, the *previous* bus-to-train or train-to-bus scheduled connection is missed by less than five minutes, which can result in commuters seeing a train pull away just as their bus arrives in the morning or a bus pull away just as their train arrives in the evening. (Just missed it!) (See Appendix B, Tables B-1 and B-2.)

According to SamTrans officials, it should be possible to better align the “Caltrain Connection” bus schedules with the Caltrain schedule. However, notwithstanding the designation “Caltrain Connection,” those officials state that SamTrans buses are not meant to act as a feeder system to Caltrain.¹⁴ The designation “Caltrain Connection” refers to the fact that these routes provide connection to Caltrain stations, not that the buses connect to Caltrain trains.¹⁵ This is particularly interesting since SamTrans, along with Caltrain and various city governments, does contract with Commute.org to manage 20 shuttle routes that travel between various BART/Caltrain stations and certain work locations in San Mateo County,¹⁶ the schedules of which are oriented toward picking up from specific trains in the morning and meeting specific trains in the evening.¹⁷ Also, in concert with Caltrain, the San Francisco Municipal Transportation Agency (MUNI) operates the 81X, 82X, and 83X bus lines, whose schedules are also arranged to meet trains in the morning and the evening.¹⁸

An Example of How SamTrans-Caltrain Schedule Coordination Could be Achieved

In order to test the possibility of modifying “Caltrain Connection” bus schedules to meet trains more often, the Grand Jury examined as an example the schedule of one selected “Caltrain Connection” bus Route, the 275 in Redwood City. This analysis focused on the scheduled wait time between buses and trains in the morning and between trains and buses in the evening. For each morning train, the bus arrival times at the Redwood City Train Station were reviewed to find the bus that has the shortest wait time to the train departure time. Conversely, for each evening train, the bus departure times from the Redwood City Train Station were reviewed to find the bus that has the shortest wait time from the train arrival time.

Table 1 shows the current schedule for bus Route 275, mapped against the corresponding Caltrain schedule. It shows that only one of the 18 bus-train connections that occur each day for northbound (toward San Francisco) morning commuters at the Redwood City Transit Center at Sequoia Station (the “Redwood City Station”) and for southbound (toward the Redwood City Station) evening commuters is aligned with the Caltrain schedule (i.e., for the northbound morning commute to work, the bus arrives between 5 and 15 minutes before the train departs and for the southbound evening return commute to home, the bus departs from the Redwood City

¹⁴ Grand Jury interviews.

¹⁵ Ibid.

¹⁶ Grand Jury interview.

¹⁷ Commute.org Shuttle Schedules, <https://commute.org/shuttles>

¹⁸ San Francisco Municipal Transit Agency Trip Planner, <https://www.sfmta.com/getting-around/muni/routes-stops>

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Station between 5 and 15 minutes after the train arrives). Importantly, Table 1 shows that the current Route 275 schedule does not align with two of the three “Baby Bullet”¹⁹ northbound express trains to San Francisco in the morning or any of the three southbound Baby Bullet express trains returning to Redwood City Station in the evening.

For commuters leaving from Redwood City Station to go southbound (toward San Jose) in the morning and returning on northbound evening trains, the situation is somewhat better in that two of the three southbound morning commute Baby Bullet express train connections can be made within the 5 to 15-minute window and three of the five returning northbound (to Redwood City Station) Baby Bullet express train connections in the evening fit this parameter. But overall, of the 22 bus-train connections that occur each day for southbound morning commuters and returning northbound evening commuters, only seven can be made within this specified window.

Table 2 (below) reflects an alternative schedule for Route 275 developed by the Grand Jury based on trying to get commuters to the trains within the 5 to 15-minute window by changing the bus arrival times by only a few minutes and increasing the utilization of idle buses (see Appendix C). The results of this exercise show that if the alternate schedule were to be used for the northbound (San Francisco) morning commute and returning southbound (Redwood City Station) evening commute, 14 of 18 connections could be made with appropriate leeway, including all of the express trains. For the southbound (San Jose) morning commute and returning northbound (Redwood City Station) evening commute, 16 of 22 connections could be made with appropriate leeway, including eight of the nine express train connections. This alternate schedule (Table 2) does not require any additional buses or operators.

This exercise demonstrates that better SamTrans/Caltrain schedule coordination is possible. Whether this leads to an increase in bus ridership and a reduction in congestion is unknown. The next section discusses the possible impacts and limitations of such changes.

¹⁹ Caltrain operates three types of train schedules; a) Local trains that stop at every station, b) Express trains that only stop at selected stations, and c) “Baby Bullet” trains that stop at only four to six stations between San Jose and San Francisco and have the ability to pass other trains using special bypass tracks at certain locations.

Route 275 - Caltrain Connection (Current Schedule)

		Northbound Morning Trains				Southbound Morning Trains				
		Train Departure Times				Train Departure Times				
		Bullet	Express	Local	Bullet	Express	Local	Bullet	Express	Local
Bus Arrives		6:32 AM	6:47 AM	6:59 AM	7:32 AM	7:47 AM	8:00 AM	8:34 AM	8:51 AM	9:23 AM
RWC Station										
6:57 AM	18 min									
6:58 AM	4 min	19 min	31 min							
6:59 AM	(29) min*	(14) min*	(2) min*	31 min						
7:01 AM	0 min	15 min	28 min							
7:03 AM	(33) min*	(18) min*	(5) min*	29 min						
8:05 AM	0 min	17 min	23 min							
8:24 AM	(29) min*	(12) min*	(6) min*							
9:31 AM										
10:01 AM										

		Northbound Evening Trains				Southbound Evening Trains				
		Train Departure Times				Train Departure Times				
		Bullet	Express	Local	Bullet	Express	Local	Bullet	Express	Local
Bus leaves		4:40 PM	4:53 PM	5:11 PM	5:29 PM	5:36 PM	5:49 PM	6:11 PM	6:29 PM	6:36 PM
RWC Station										
4:50 PM	(10) min*	(23) min*								
5:00 PM	20 min	7 min	(11) min*	(29) min*						
5:10 PM		19 min	1 min	(6) min*	(19) min*					
5:40 PM		31 min	24 min	11 min	(11) min*	(29) min*				
6:30 PM				19 min	1 min	(19) min*				
7:50 PM					31 min	24 min	11 min			

Scheduled Wait Time - Bus to Train

Scheduled Wait Time - Train to Bus

Green
Red

Note: Connections with wait times of 5 to 15 minutes to catch train/bus shown in

Note: Connections with wait times <5 minutes or >15 minutes to catch train/bus shown in

* Negative wait times denote number of minutes by which next morning bus misses train or previous evening bus misses train

Table 1 - Current Schedule

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Potential Obstacles to Coordinating Caltrain and SamTrans Buses

In developing Fixed-Route Bus schedules, SamTrans reviews the needs and goals of each route. In the case of certain transit centers, such as the Redwood City Transit Center located at Sequoia Station, bus schedules are timed to make transfer from bus-to-bus easier. This is accomplished by setting the times that all buses leave the station to a consistent time each hour known as a “pulse time”. Bus-to-train transfer is not currently a key parameter, as SamTrans assumes there is always a train coming. However, the Grand Jury finds that changing bus schedules to align with train schedules should not affect the bus transfers at a pulse point of this type, because the pulse point could be shifted to the train arrival/departure time for *all* of the bus routes. The pulse times would simply not necessarily be on the hour, quarter hour, or half hour.

SamTrans advised the Grand Jury that it is not supposed to compete with or replace school bus service. However, school bell times are a parameter in developing these schedules for only one commuter bus run in the morning and one in the afternoon.²⁰

Can this Improve Local Traffic Congestion?

According to the City/County Association of Governments (C/CAG) of San Mateo County, with the increasing population in San Mateo County the number of drive-alone vehicles has increased traffic congestion not only on major freeways but on local roads such as El Camino Real (State Hwy 82), Woodside Road (State Hwy 84), Willow Road (State Hwy 114), and University Avenue in East Palo Alto (State Hwy 109). The level of service (LOS) during commute hours for all of these local road segments and intersections is now rated “LOS E.” This means “unstable traffic flow and rapidly fluctuating speeds and flow rates, low maneuverability and low driver comfort, significant delays, and poor service.”²¹

As shown in Appendix A, approximately 28 percent of commuters who travel by Caltrain either drive and park, are dropped off, or use a taxi service to get to the train station.²² Each of these contributes to traffic congestion on local roads. With the electrification of Caltrain by 2022, which is planned to increase capacity by over 30 percent, this contribution to local traffic congestion will only get worse.

Would the Improvement in Schedule Alignment Increase SamTrans Ridership?

In the 1970’s Switzerland instituted a pulse system known as *Taktfahrplan* in which public transit vehicles “arrive at a station at about the same time, passengers transfer between vehicles and the vehicles leave.” “Since 1970, the annual number of [public transit] passenger-kilometers

²⁰ Grand Jury interviews.

²¹ San Mateo County Congestion Management Program 2017, Page 20, <http://ccag.ca.gov/wp-content/uploads/2017/11/2017-CMP-Draft-v2.pdf>

²² The Caltrain Corridor Vision Plan, SPUR Report, February 2017, Page 20
https://www.spur.org/sites/default/files/publications_pdfs/SPUR_Caltrain_Corridor_Vision_Plan.pdf

traveled has increased by 113 percent, compared to only 30 percent in the European Union as a whole.”²³

In deciding what method to use, commuters evaluate the various alternatives as to reliability, cost, and time to commute. The SamTrans Market Segmentation Study from Spring 2018 shows that non-Riders and former riders were most concerned with the time SamTrans would take to reach their destination, with two-thirds agreeing with the statement, “SamTrans would take too long to reach my destination.”²⁴ These statements may apply to combined SamTrans-Caltrain commuting. However, it is not possible to say for sure, since such questions have not been included in SamTrans surveys.

FINDINGS

- F1. Under SamTrans’ current “Caltrain Connection” bus schedules for the morning weekday commute, only 35 percent of buses are scheduled to arrive at Caltrain stations between 5 and 15 minutes before the next train is scheduled to depart.
- F2. Under SamTrans’ current “Caltrain Connection” bus schedules for the evening weekday commute, only 43 percent of buses are scheduled to depart Caltrain stations between 5 and 15 minutes after the previous train is scheduled to arrive.
- F3. SamTrans could set its “Caltrain Connection” bus schedule arrival times at Caltrain stations to increase the numbers of buses that arrive at train stations between 5 and 15 minutes before the next train departs.
- F4. SamTrans has not studied the feasibility or desirability of setting “Caltrain Connection” bus schedule times to facilitate transfers between these buses and Caltrain trains, nor the extent of commuter demand for better coordinating these bus and train schedules.
- F5. Caltrain has not studied the extent of train commuter demand for better coordinating “Caltrain Connection” bus schedules with train schedules so as to facilitate their using SamTrans for commuting between home and the Caltrain station.
- F6. While coordinating SamTrans fixed-route bus schedules with Caltrain train schedules for service between home and Caltrain stations could attract current Caltrain riders who now travel from home by car and park at Caltrain stations, no data has been collected by SamTrans or Caltrain to support this hypothesis.
- F7. Before 2018, SamTrans did not identify reduction of traffic congestion as one of its objectives.

²³ Ibid.

²⁴ SamTrans, Market Segmentation Study – Summary Report, Spring 2018

<http://www.samtrans.com/Assets/MarketDevelopment/pdf/SamTrans+Market+Segmentation+Study+Report.pdf>

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- F8. Within the text of the recently passed Measure W, which was authored by SamTrans and will be carried out by SamTrans and the TA, the included Congestion Relief Plan states that SamTrans will “[i]ncentivize transit, bicycle, pedestrian, carpooling and other shared-ride options over driving alone” and that “[i]nvestments will be designed to increase ridership, improve efficiency, and reduce congestion within the County by facilitating the creation of new services that incentivize more riders to choose public transit.”
- F9. SamTrans officials state that “Caltrain Connection” routes are not a feeder service to Caltrain. The designation “Caltrain Connection” refers to the fact that these routes provide connection to Caltrain stations, not that the buses connect to Caltrain trains.

RECOMMENDATIONS

- R1. SamTrans should study the feasibility of coordinating “Caltrain Connection” bus schedules with existing Caltrain train schedules to facilitate bus/train transfers and minimize wait times. The SamTrans Board of Directors should consider the results of that study at a public hearing by June 30, 2020.
- R2. SamTrans should perform marketing research on existing and potential riders of “Caltrain Connection” buses, including those who use Caltrain, to determine their interest in coordinating “Caltrain Connection” bus schedules with existing Caltrain schedules. The SamTrans Board of Directors should consider the results of that survey at a public hearing by June 30, 2020.
- R3. Caltrain should survey existing riders of Caltrain trains in San Mateo County, including those who use SamTrans, to determine their interest in coordinating “Caltrain Connection” bus schedule arrival times at Caltrain stations with existing Caltrain schedules. The Caltrain Board of Directors should consider the results of that study at a public hearing by June 30, 2020.
- R4. The Boards of Directors of SamTrans and Caltrain should discuss together the value and feasibility of using “Caltrain Connection” buses as a feeder system to Caltrain to reduce traffic congestion. This should be undertaken by December 31, 2019.

REQUEST FOR RESPONSES

Pursuant to Penal Code Section 933.05, the Grand Jury requests responses as follows:

From the following governing bodies:

- San Mateo County Transit District (SamTrans) to respond to the foregoing Findings and Recommendations (R1, R2 and R4), referring in each instance to the number thereof.
- Peninsula Corridor Joint Powers Board (Caltrain) to respond to the foregoing Findings and Recommendations (R3 and R4), referring in each instance to the number thereof.

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The governing bodies indicated above should be aware that the comment or response of the governing body must be conducted subject to the notice, agenda, and open meeting requirements of the Brown Act.

METHODOLOGY

Documents

- In investigating coordination of SamTrans “Caltrain Connection” Service and Caltrain schedules the Grand Jury reviewed publicly available documents, reports, schedules, and websites from SamTrans, Caltrain, C/CAG, BART, and the US Census. The bibliography contains a full list of these documents.

Interviews

- The Grand Jury interviewed six persons within SamTrans, Caltrain, and Commute.org.

BIBLIOGRAPHY

- Caltrain, Caltrain 2018 Annual Passenger Counts – Key Findings
Accessed May 2, 2019
<http://www.caltrain.com/Assets/Marketing/pdf/2018+Annual+Passenger+Counts.pdf?v=2>
- C/CAG, San Mateo County Congestion Management Program 2017, January 2018
Accessed May 2, 2019 <http://ccag.ca.gov/wp-content/uploads/2017/11/2017-CMP-Draft-v2.pdf>
- SamTrans Business Plan July 2018, approved September 5, 2018
Accessed June 7, 2019
<http://www.samtrans.com/Assets/Agendas+and+Minutes/SamTrans/Board+of+Directors/Presentations/2018/SamTrans+Business+Plan+FINAL.pdf>
- SamTrans, Short-Range Transit Plan Fiscal Years 2017–2026, May 2017
Accessed May 2, 2019 <http://www.samtrans.com/Assets/Planning/2017-2026+SamTrans+Short+Range+Transit+Plan.pdf>
- SamTrans, Market Segmentation Study – Summary Report, Spring 2018
Accessed May 2, 2019
<http://www.samtrans.com/Assets/MarketDevelopment/pdf/SamTrans+Market+Segmentation+Study+Report.pdf>
- SamTrans, Get Us Moving San Mateo County Presentation, July 2018
Accessed May 2, 2019
<http://www.samtrans.com/Assets/Agendas+and+Minutes/SamTrans/Board+of+Directors/Presentations/2018/GUM+Update++July+2018.pdf>
- SamTrans, Resolution 2018-29, Text of Measure W, August 7, 2018

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Accessed May 2, 2019 https://www.smcacre.org/sites/main/files/file-attachments/samtransresono2018-29_076022_full_text.pdf

- SPUR, The Caltrain Corridor Vision Plan, February 2017

Accessed May 2, 2019

https://www.spur.org/sites/default/files/publications_pdfs/SPUR_Caltrain_Corridor_Vision_Plan.pdf

APPENDIX A

SamTrans Drop Off to/Pick Up from Caltrain Data

There is no survey data available on the number of Caltrain commuters who use SamTrans to get to/from Caltrain stations. In 2014, as part of a report to the Metropolitan Transit District (MTC), Caltrain performed an on-board survey that included information on how all of their riders get to and from individual Caltrain stations.²⁵ Table A1 shows the percentage data from that survey for the eight Caltrain stations included in this analysis in the third through ninth columns.

Station	Total (People)	Park & Ride (%)	Drop Off (%)	Taxi (%)	Bike (%)	Transit (%)	Walk (%)	Other (%)
Burlingame	493	2.0	13.0	1.0	17.0	7.0	60.0	0.0
San Mateo	937	7.0	15.0	2.0	17.0	4.0	54.0	1.0
Hillsdale	1,507	18.0	15.0	2.0	15.0	8.0	41.0	1.0
Belmont	247	10.0	15.0	4.0	15.0	7.0	49.0	0.0
San Carlos	596	14.0	19.0	1.0	15.0	6.0	46.0	0.0
Redwood City	1,086	8.0	20.0	2.0	18.0	10.0	43.0	0.0
Menlo Park	485	4.0	20.0	3.0	21.0	11.0	39.0	1.0
Palo Alto	1,066	4.0	15.0	2.0	20.0	23.0	36.0	0.0
Total/Wt Avg	6,417	9.4	16.4	2.0	17.2	10.2	44.5	0.5

Table A1 – How Caltrain Riders Get To and From Caltrain Stations (2014)

Caltrain also performs an annual survey of how many people embark and disembark trains at each station during peak commute hours.²⁶ Using the values for each station from the 2014 Annual Count during morning weekday peak period (second column of Table A1), the weighted averages from the percentage values in Table A1 indicate that approximately 45 percent of Caltrain riders walk to these stations, approximately 17 percent ride bikes, and approximately 28 percent either drive and park, are dropped off, or use a taxi service.

Table A1 shows that approximately 10 percent of Caltrain commuters get on or off at these stations using “Transit” for their connection to home. That establishes (as of 2014) the maximum possible percentage of Caltrain commuters who connect to Caltrain using SamTrans. SamTrans data from 2018, summarized in Table A2, is consistent with this 10 percent, showing that the total numbers of bus passengers getting on or off SamTrans buses at the 8 Caltrain stations during peak commute hours equaled approximately 9 percent of the total numbers of Caltrain commuters getting on or off trains at these same stops.

²⁵ The Caltrain Corridor Vision Plan, SPUR Report, February 2017, Page 35
https://www.spur.org/sites/default/files/publications_pdfs/SPUR_Caltrain_Corridor_Vision_Plan.pdf

²⁶ Peak trains are those trains departing the San Francisco or San Jose Diridon stations between 4:30 a.m. and 9:00 a.m. and between 2:59 p.m. and 7:00 p.m.

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**SamTrans Passenger AM Drop Off to and PM Pick Up from Caltrain
Daily Averages during Work Day Peak Periods*****

(SamTrans Data is Average Daily Figures from July, August & September 2018)

Bus Route	Palo Alto**		Menlo Park		Redwood City		San Carlos		Belmont		Hillsdale		San Mateo		Burlingame		Totals	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
250											33.5	44.7	18.5	21.2			52.0	65.9
251											0.0	9.2					0.0	9.2
256											14.8	3.5					14.8	3.5
260							11.8	6.5	15.9	15.5							27.7	22.0
270			8.9	13.3													8.9	13.3
274			16.7	23.2													16.7	23.2
275			41.4	26.2													41.4	26.2
276			12.4	7.0													12.4	7.0
280	21.2	6.4															21.2	6.4
281	44.8	28.0															44.8	28.0
286																	4.9	0.9
292																		
294											34.0	27.7	13.7	9.9	8.8	7.0	56.5	44.5
295			3.7	5.1	3.7	5.1	3.3	1.9			5.7	9.5	2.3	1.9			3.5	10.9
296			35.4	35.6	70.6	83.7											105.9	119.3
398					7.6	13.9	3.1	3.8	4.4	4.8	3.7	3.8					18.8	26.4
ECR	99.8	70.3	23.7	23.9	60.6	86.8	34.5	33.4	26.8	31.0	57.9	83.9					303.3	329.4
Bus Grand Total	165.7	104.6	63.9	60.4	221.9	259.2	52.7	45.6	47.1	51.3	153.2	193.2	34.5	33.0	8.8	7.0	747.8	754.2
Caltrain Total*	1217.0	1302.0	557.0	538.0	1709.0	1563.0	660.0	647.0	312.0	279.0	1906.0	1893.0	1350.0	1321.0	708.0	680.0	8419.0	8223.0
Bus/Train All Routes	14%	8%	11%	11%	13%	17%	8%	7%	15%	18%	8%	10%	3%	2%	1%	1%	9%	9%

* Figures taken from Caltrain 2018 Annual Passenger Counts from January 2018

** Palo Alto Bus/Train results estimate low because some of these passengers come via VTA bus routes and Marguerite Shuttle
 *** In the case of morning arrivals, the bus disembarkment data from approximately 15 minutes before the first train and 15 minutes after the last train during the peak Caltrain period were included. In the case of evening departures, the bus embarkment data from approximately 15 minutes before the first train and 15 minutes after the last train during the peak Caltrain period were used to take into account daily deviations in train and bus arrival and departure times.

Table A2

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APPENDIX B

Current Bus/Train Wait Times

The Grand Jury correlated the schedules of 16 SamTrans bus routes that are labelled “Caltrain Connection” plus the El Camino Real (ECR) bus route with the scheduled arrival or departure time of all Caltrain trains at the 8 Caltrain Stations where these bus routes drop off and pick up passengers. This review identified 714 bus/train connections in the peak morning commute period and 759 train/bus connections in the peak evening commute period. (Connections where there is currently no bus scheduled early enough in the morning or late enough in the evening to meet a scheduled train are not included in these counts.)

For each of these connections, the Grand Jury determined the minimum scheduled time that a commuter would wait for a train in the morning or wait for a bus in the evening. These statistics are summarized in Tables B1 and B2 for morning and evening respectively. Combining the results from both tables shows that in approximately 24 percent of the connections between Caltrain and SamTrans buses during commute times, scheduled wait times to board the connecting train or bus is 16 to 30 minutes and in another 16 percent of these connections, scheduled wait times exceed 30 minutes. Also, in about a quarter of those instances when scheduled wait time exceeds 15 minutes, the previous bus or train is scheduled to depart less than 5 minutes before the commuter’s arrival. And in the case of approximately 21 percent of the connections, fewer than 5 minutes are available to make the connection, putting commuters at risk of missing their connection if the train or bus delivering them to their connection is running just a few minutes behind schedule.

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**Morning Commute Time
Bus/Train Connection Scheduled Performance**

Station	North						South						Total					
	Total Connections	< 5 Min Wait	5 to 15 Min Wait	16 to 30 Min Wait	>30 Min Wait	Prev Bus < 5 Min*	Total Connections	< 5 Min Wait	5 to 15 Min Wait	16 to 30 Min Wait	>30 Min Wait	Prev Bus < 5 Min*	Total Connections	< 5 Min Wait	5 to 15 Min Wait	16 to 30 Min Wait	>30 Min Wait	Prev Bus < 5 Min*
Palo Alto	53	9	20	10	14	6	65	3	28	15	19	11	118	12	48	25	33	17
Menlo Park	28	6	13	9	0	3	38	11	16	9	2	5	66	17	29	18	2	8
RWC	75	16	25	19	15	8	96	21	30	25	20	7	171	37	55	44	35	15
San Carlos	30	4	15	7	4	1	47	12	17	9	9	3	77	16	32	16	13	4
Belmont	15	5	4	2	4	4	15	5	4	4	2	0	30	10	8	6	6	4
Hillsdale	100	19	36	23	22	7	73	11	23	20	19	7	173	30	59	43	41	14
San Mateo	29	5	7	13	4	5	28	5	7	12	4	4	57	10	14	25	8	9
Burlingame	10	0	5	4	1	0	12	1	3	6	2	2	22	1	8	10	3	2
TOTAL	340	64	125	87	64	34	374	69	128	100	77	39	714	133	253	187	141	73
Percentage of Total													19%	35%	26%	20%	10%	
Percentage of >15 minutes																		22%

Note: Connections do not include bus/train interactions where there is currently no bus scheduled early enough to meet the train.

* Connections where a bus is scheduled to arrive less than 5 minutes before a train departs resulting in a wait > 15 minutes.

Table B1 – Summary of Peak Morning Commute Wait Times

**Evening Commute Time
Train/Bus Connection Scheduled Performance**

Station	South						North						Total					
	Total Connections	< 5 Min Wait	5 to 15 Min Wait	16 to 30 Min Wait	>30 Min Wait	Prev Bus < 5 Min*	Total Connections	< 5 Min Wait	5 to 15 Min Wait	16 to 30 Min Wait	>30 Min Wait	Prev Bus < 5 Min*	Total Connections	< 5 Min Wait	5 to 15 Min Wait	16 to 30 Min Wait	>30 Min Wait	Prev Bus < 5 Min*
Palo Alto	60	12	23	15	10	8	70	11	34	11	14	6	130	23	57	26	24	14
Menlo Park	26	7	17	2	0	2	40	13	20	5	2	5	66	20	37	7	2	7
RWC	66	18	27	18	3	11	89	27	34	21	7	7	155	45	61	39	10	18
San Carlos	36	4	23	6	3	2	55	19	21	10	5	5	91	23	44	16	8	7
Belmont	13	6	2	4	1	3	14	3	7	4	0	2	27	9	9	8	1	5
Hillsdale	114	25	43	21	25	6	85	14	37	15	19	2	199	39	80	36	44	8
San Mateo	33	6	11	12	4	2	32	3	14	12	3	5	65	9	25	24	7	7
Burlingame	12	4	2	4	2	2	14	2	8	3	1	1	26	6	10	7	3	3
TOTAL	360	82	148	82	48	36	399	92	175	81	51	33	759	174	323	163	99	69
Percentage of Total													23%	43%	21%	13%	9%	
Percentage of >15 minutes																		26%

Note: Connections do not include bus/train interactions where there is currently no bus scheduled late enough to meet the train.

* Connections where a bus is scheduled to leave less than 5 minutes before a train arrives resulting in a wait > 15 minutes.

Table B2 – Summary of Peak Evening Commute Wait Times

APPENDIX C

Route 275 Current and Alternate Bus Schedules

The current schedule for SamTrans Bus Route 275²⁷ is shown on the left side of Table C-1, including extra columns for the bus wait time at the Redwood City Train Station and the far point of the route at Woodside Road and Alameda de las Pulgas Ave. Note that the departure times for leaving the Redwood City Train Station are arbitrarily set at half hour increments on the half hour. As part of the Grand Jury's analysis, an alternate schedule was developed by adjusting the bus wait times and removing the requirement that departure time from the Redwood City Train Station be on the half hour. The Grand Jury finds that this example demonstrates the practicability of an alternate schedule in this case that does not require additional buses or personnel. The alternate schedule simply increases the frequency at which buses traverse the route during commute hours.

²⁷ SamTrans Bus Route 275 Schedule, <http://www.samtrans.com/schedulesandmaps/timetables/275.html>

**PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT**

TO: Work Program–Legislative–Planning Committee and Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Michelle Bouchard
Chief Operating Officer, Rail

SUBJECT: UPDATE ON RAIL CORRIDOR USE POLICY

ACTION

This report is for information only. No Board action is required at this time.

SIGNIFICANCE

Peninsula Corridor Joint Powers Board (JPB) staff will make a presentation to provide an update on the Caltrain Rail Corridor Use Policy (RCUP) to the Board Committee for Work Program – Legislative – Planning (WPLP) at its September meeting. A separate agenda item will provide an update on the Transit-Oriented Development (TOD) Policy to the WPLP at the same meeting.

The RCUP is one of four interrelated planning and policy efforts that will collectively inform and guide the future use of JPB property. The other three projects include the Caltrain Business Plan, the Caltrain Station Management Toolbox (Toolbox), and the Caltrain TOD Policy.

BUDGET IMPACT

There is no impact on the budget.

ADDITIONAL INFORMATION

Since the last update was provided to the Board in March 2019, Caltrain staff have been engaged in developing the RCUP and closely aligning it with the Business Plan. At its September 2019 meeting, the WPLP will receive a presentation with an update on the RCUP. It will begin by reintroducing the purpose of the RCUP and its connection to the Business Plan. The majority of the presentation will focus on introducing key terms for the RCUP and presenting an illustrative RCUP map, and it will conclude with next steps.

For additional context and background, the text below summarizes the four interrelated efforts that Caltrain staff are currently engaged in to inform and guide the use of JPB property. Together, these efforts will provide a cohesive and “living” framework of policy direction and decision-making tools related to the use of JPB property assets, including for access improvements and development projects.

The four individual projects include:

- Caltrain Business Plan: this effort will establish a long-term vision for the Caltrain rail service for the next 20 to 30 years. It will assess the benefits, impacts, and costs of different service visions, building the case for investment and a plan for implementation. The Business Plan will include future service levels and patterns; conceptual infrastructure needs; costs for operations, maintenance, and capital projects; and ridership, mobility, and revenue outcomes. It will also consider the railroad's interactions, benefits, and impacts with surrounding communities. Lastly, it will assess the organizational structure of the agency, including its governance and delivery approaches, as well as funding mechanisms to support future service.
- Rail Corridor Use Policy: this effort will develop a policy framework around the use of JPB-owned property to align with the service vision and the conceptual infrastructure needs developed in the Caltrain Business Plan. It will inventory land owned by the JPB and will develop decision frameworks related to the near- and long-term use of JPB property, including evaluation of potential conflicts between land development opportunities and future transit uses.
- Station Management Toolbox: this effort is funded by an FTA planning grant. It will develop a quantitative tool to help Caltrain evaluate tradeoffs and make decisions at its stations, including how to balance and manage investments in different access modes at stations and how to evaluate the potential use of station land for joint development projects.
- Transit-Oriented Development Policy: this effort will establish goals for transit-oriented development (TOD) on Caltrain property, which will align with the conceptual infrastructure needs developed as part of the Business Plan. It will set forth policies to guide: the disposition of real estate assets; business objectives associated with joint development decisions (including the balance between affordable housing and revenue); engagement with local planning efforts; and other actions to promote the successful execution of TOD on JPB-owned property, as well as on property around transit facilities owned by third parties.

NEXT STEPS:

The RCUP is being closely coordinated with the Caltrain Business Plan. The RCUP is one part of a larger suite of planning and policy tools that will support comprehensive and informed decision-making around JPB property interests. The ongoing work and refinement of these efforts is being synchronized with the work of the Caltrain Business Plan, and additional RCUP updates to the WPLP and the public are anticipated in conjunction with the Business Plan process in 2019.

Prepared by: Melissa Jones, Principal Planner, Caltrain Planning

650.295.6852

Caltrain Rail Corridor Use Policy

WPLP Committee
Agenda Item #7

September 25, 2019



Overview of Presentation

- Purpose of RCUP
- Connection to Business Plan
- Introducing Key Terms for RCUP
- Illustrative RCUP Maps
- Next Steps



What is the Rail Corridor Use Policy (RCUP)?



Policy Framework



Map



Decision-Making Process



2

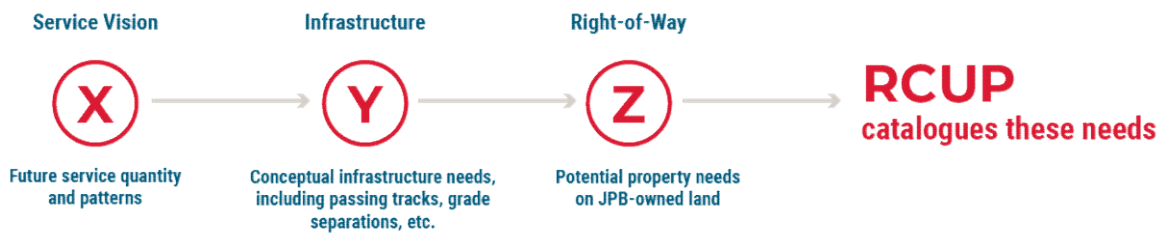
RCUP Objectives

- Provide a Board-adopted **policy framework** that supports the delivery of Caltrain's long-term service vision while also clarifying nearer-term opportunities for the use of JPB property
- Develop a **process** for considering and approving the range of proposed uses and projects on JPB property
- Provide **transparency** on decision-making process and outcomes



3

Connection to Business Plan's Service Vision



Connection to Other Projects

How does the RCUP fit in with Caltrain's other planning and policy tools and documents?

Caltrain Business Plan

How Should Caltrain Grow?

Rail Corridor Use Policy (RCUP)

How could JPB's land be used?

Who could use JPB's property?

What property could be available for non-railroad uses, such as development projects?

JPB Property Assets
Four interrelated policies, plans, and tools to guide use of JPB Property

Station Management Toolbox

What are potential outcomes and tradeoffs associated with development and access improvements at stations?

Transit-Oriented Development Policy

How should JPB develop land that is available for non-railroad uses?

RCUP Users and Applications

Primary Users

- Caltrain staff
- Joint Powers Board

Example Applications

- Proposed revenue-generating land uses of JPB property, such as:
 - A potential long-term lease for a joint development project, or
 - A potential commercial lease for a business.
- Proposed community land uses on JPB property, such as:
 - A potential park, or
 - A potential access facility.
- Other proposed uses of JPB property.



6

RCUP Mapping Process



- Maps will be developed for all the JPB's property.
- Two general components to the RCUP maps:
 - **Property Use Zones (PUZs)** will serve as the **base land use districts** for JPB property in the RCUP.
 - **Capital Project Overlay (CAP Overlay)** will be an overlay to the PUZs and will include all **potential future capital projects** on JPB property that support the Business Plan's service vision.



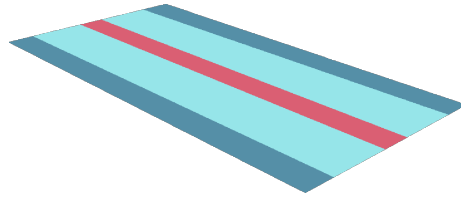
7

RCUP Mapping Process

PUZs



1. PUZs on JPB Right-of-Way: Base Property Use Zones shown in red and blue on illustrative JPB ROW.



8

RCUP Mapping Process

PUZs

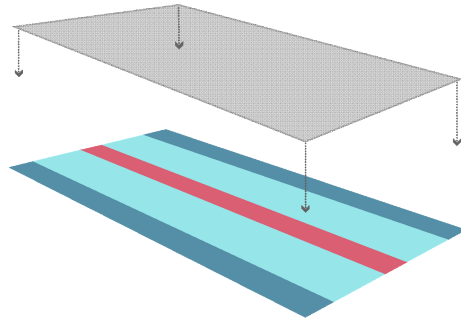
CAP Overlay



+



2. CAP Overlay for Potential Capital Project: Conceptual passing tracks identified in the High Growth Scenario for the Business Plan, to support future service delivery.

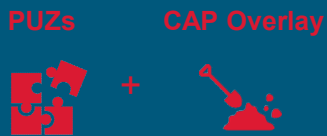


1. PUZs on JPB Right-of-Way



9

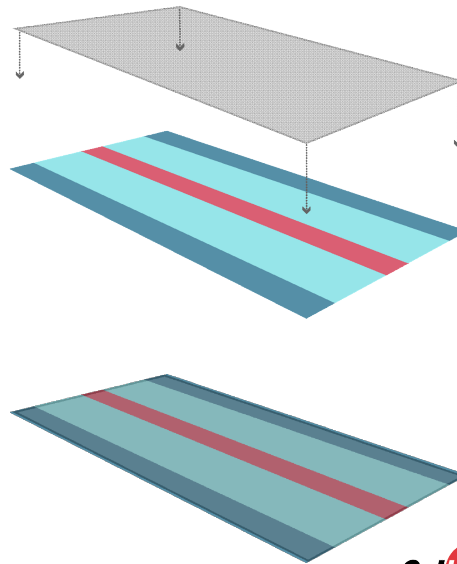
RCUP Mapping Process



2. CAP Overlay for Potential Capital Project

1. PUZs on JPB Right-of-Way

3. RCUP Map: CAP Overlay on top of PUZs, showing ROW needed to support future service delivery and ROW that could have non-railroad uses on it.



Property Use Zones

- Will be applied to all JPB property on the Caltrain corridor



Conceptual RCUP Map

- PUZ 1
- **PUZ 2: Station Right-of-Way**
 - Will include property in the immediate station areas
 - Could be available for non-railroad uses



Note: This is a draft map that is conceptual only. It serves to illustrate the type of maps that will be developed for the JPB's property for the RCUP. It should be used for reference only.



Conceptual RCUP Map

- PUZ 1
- PUZ 2
- **PUZ 3: Non-Railroad Area**
 - Will include property outside of PUZs 1, 2, and 4
 - Could be available for non-railroad uses



Note: This is a draft map that is conceptual only. It serves to illustrate the type of maps that will be developed for the JPB's property for the RCUP. It should be used for reference only.



Conceptual RCUP Map

- PUZ 1
- PUZ 2
- PUZ 3
- **PUZ 4: Special Study Area**
 - Property that merits special consideration and treatment compared to PUZs 1-3
 - E.g. San Francisco, San Jose Diridon station areas
 - (Not shown on this map)



Note: This is a draft map that is conceptual only. It serves to illustrate the type of maps that will be developed for the JPB's property for the RCUP. It should be used for reference only.



16

Capital Project Overlay

Examples of potential capital projects:

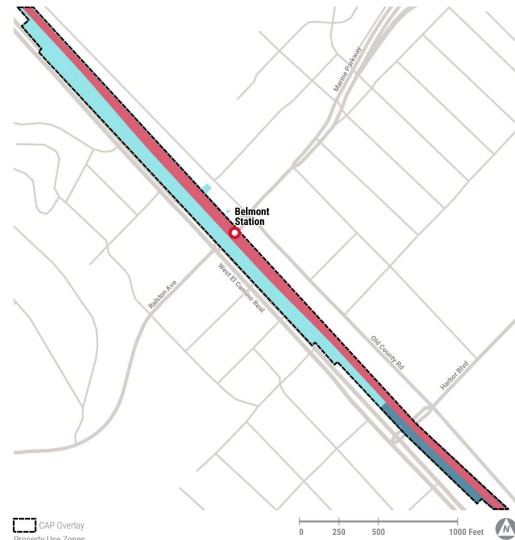
- Grade separations
- Passing tracks
- Partners' projects on the Caltrain ROW (e.g., DTX)



17

Conceptual RCUP Map

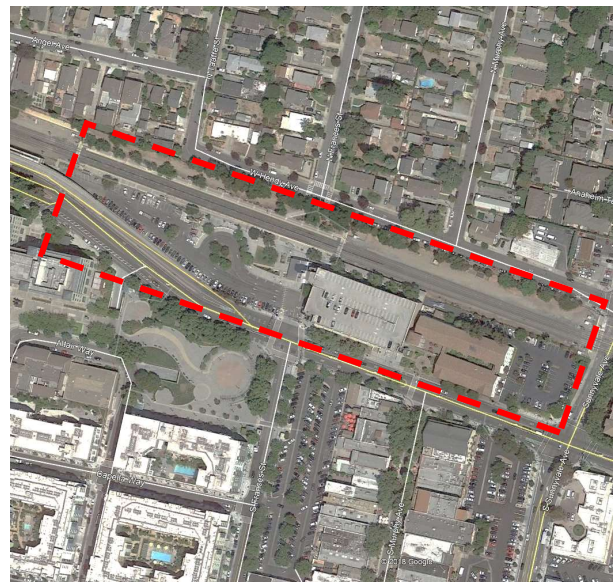
- PUZ 1
- PUZ 2
- PUZ 3
- CAP Overlay



Note: This is a draft map that is conceptual only. It serves to illustrate the type of maps that will be developed for the JPB's property for the RCUP. It should be used for reference only.



Conceptual RCUP Map



Sunnyvale Station



Conceptual RCUP Map

- **PUZ 1: Operating Right-of-Way**
 - Property reserved for safe operation of the railroad
 - Will include rail infrastructure, electrical safety zone for PCEP, and maintenance of way



Note: This is a draft map that is conceptual only. It serves to illustrate the type of maps that will be developed for the JPB's property for the RCUP. It should be used for reference only.



Conceptual RCUP Map

- PUZ 1
- **PUZ 2: Station Right-of-Way**
 - Will include property in the immediate station areas
 - Could be available for non-railroad uses



Note: This is a draft map that is conceptual only. It serves to illustrate the type of maps that will be developed for the JPB's property for the RCUP. It should be used for reference only.



Conceptual RCUP Map

- PUZ 1
- PUZ 2
- **PUZ 3: Non-Railroad Area**
 - Will include property outside of PUZs 1, 2, and 4
 - Could be available for non-railroad uses



Note: This is a draft map that is conceptual only. It serves to illustrate the type of maps that will be developed for the JPB's property for the RCUP. It should be used for reference only.



Conceptual RCUP Map

- PUZ 1
- PUZ 2
- PUZ 3
- **PUZ 4: Special Study Area**
 - Property that merits special consideration and treatment compared to PUZs 1-3
 - E.g. San Francisco, San Jose Diridon station areas
 - (Not shown on this map)

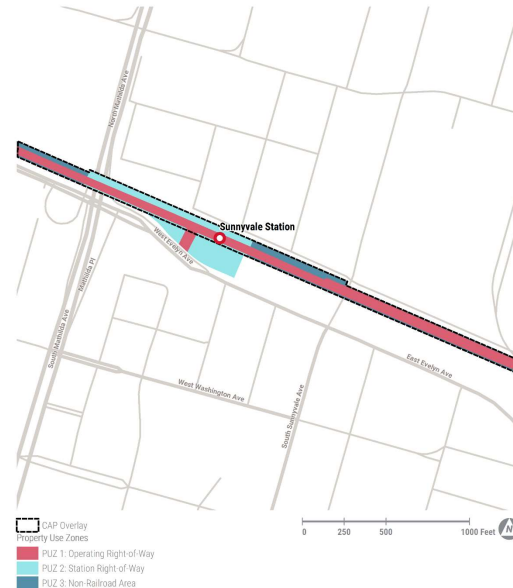


Note: This is a draft map that is conceptual only. It serves to illustrate the type of maps that will be developed for the JPB's property for the RCUP. It should be used for reference only.



Conceptual RCUP Map

- PUZ 1
- PUZ 2
- PUZ 3
- CAP Overlay



Note: This is a draft map that is conceptual only. It serves to illustrate the type of maps that will be developed for the JPB's property for the RCUP. It should be used for reference only.



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RCUP Decision-Making Framework

- In addition to maps, the RCUP will include a decision-making framework document
- Document will include:
 - List of **“allowable uses”** in each zone
 - **Process** to review, evaluate, and approve proposed uses of JPB property, which will include:
 - Identifying which land use decisions can be made by staff, and which should be made by the Board
 - Providing instructions on when to refer to and use the **TOD Policy** and the **Station Management Toolbox** in the process



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RCUP connection to TOD Policy

- Caltrain's **TOD Policy** will:
 - Use the findings from the RCUP mapping process to complete **an assessment of potential opportunity sites** for joint development projects on JPB property.
 - Provide a Board-adopted policy regarding the **process and requirements for potential joint development projects** on JPB property.



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Next Steps

Ongoing Technical Work

- Mapping of potential capital projects

Upcoming Board Updates

- **October:** Following adoption of Business Plan service vision, WPLP Subcommittee reviews and provides feedback on draft maps of corridor
- **November:** WPLP Subcommittee provides feedback on draft decision-making framework
- **January 2020:** Review Draft RCUP with full Board (maps + decision-making framework)
- **February 2020:** Propose Board adoption of RCUP



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Thank you! Questions?



**PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT**

TO: Work Program-Legislative-Planning Committee and Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: April Chan
Chief Officer, Planning, Grants, and Transportation Authority

Michelle Bouchard
Chief Operating Officer, Rail

SUBJECT: UPDATE ON TRANSIT-ORIENTED DEVELOPMENT POLICY

ACTION

This report is for information only. No Board action is required at this time.

SIGNIFICANCE

Peninsula Corridor Joint Powers Board (JPB) staff will make a presentation to provide an update on the transit-oriented development (TOD) policy to the Board Committee for Work Program – Legislative – Planning (WPLP) at its September meeting. A separate agenda item will provide an update on the Rail Corridor Use Policy (RCUP) to the WPLP at the same meeting.

The TOD policy is one of four interrelated planning and policy efforts that will collectively inform and guide the future use of JPB property. The other three projects include the Caltrain Business Plan, the Caltrain Station Management Toolbox (Toolbox), and the RCUP.

BUDGET IMPACT

There is no impact on the budget.

ADDITIONAL INFORMATION

Since the last update was provided to the Board in March 2019, Caltrain staff have been engaged in developing the TOD policy and closely aligning it with the Business Plan and RCUP. At its September 2019 meeting, the WPLP will receive a presentation with an update on the TOD policy. It will begin by reintroducing the purpose of the TOD policy and its connection to the RCUP. The majority of the presentation will focus on the TOD policy goals and strategies to achieve those goals. It will conclude with next steps.

For additional context and background, the text below summarizes the four interrelated efforts that Caltrain staff are currently engaged in to inform and guide the use of JPB property.

Together, these efforts will provide a cohesive and “living” framework of policy direction and decision-making tools related to the use of JPB property assets, including for access improvements and development projects.

The four individual projects include:

- Caltrain Business Plan: this effort will establish a long-term vision for the Caltrain rail service for the next 20 to 30 years. It will assess the benefits, impacts, and costs of different service visions, building the case for investment and a plan for implementation. The Business Plan will include future service levels and patterns; conceptual infrastructure needs; costs for operations, maintenance, and capital projects; and ridership, mobility, and revenue outcomes. It will also consider the railroad’s interactions, benefits, and impacts with surrounding communities. Lastly, it will assess the organizational structure of the agency, including its governance and delivery approaches, as well as funding mechanisms to support future service.
- Rail Corridor Use Policy: this effort will develop a policy framework around the use of JPB-owned property to align with the service vision and the conceptual infrastructure needs developed in the Caltrain Business Plan. It will inventory land owned by the JPB and will develop decision frameworks related to the near- and long-term use of JPB property, including evaluation of potential conflicts between land development opportunities and future transit uses.
- Station Management Toolbox: this effort is funded by an FTA planning grant. It will develop a quantitative tool to help Caltrain evaluate tradeoffs and make decisions at its stations, including how to balance and manage investments in different access modes at stations and how to evaluate the potential use of station land for joint development projects.
- Transit-Oriented Development Policy: this effort will establish goals for transit-oriented development (TOD) on Caltrain property, which will align with the conceptual infrastructure needs developed as part of the Business Plan. It will set forth policies to guide: the disposition of real estate assets; business objectives associated with joint development decisions (including the balance between affordable housing and revenue); engagement with local planning efforts; and other actions to promote the successful execution of TOD on JPB-owned property, as well as on property around transit facilities owned by third parties.

NEXT STEPS:

The TOD policy is being closely coordinated with the RCUP, which will define the site opportunities. The ongoing work and refinement of these efforts is also being synchronized with the work of the Caltrain Business Plan. Additional TOD policy updates to the WPLP and the public are anticipated in conjunction with the Business Plan and RCUP process in 2019.

Prepared by: Xiaomei Tan, TOD Manager

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***TOD Policy Update:
Goals and Objectives***
Work-Program-Legislative-Planning (WPLP) Committee
September 25, 2019
Agenda Item#8

CONTENTS

1. Purpose of Today's Presentation
2. Purpose and Role of TOD Policy and Joint Development Guidelines
3. Process and Timeline
4. Summary of Previous Board Comments
5. Discussion of Potential TOD Goals and Strategies to Achieve those Goals
6. Next Steps/Q&A

PURPOSE OF PRESENTATION

- Provide an overview of the scope of the policy and steps required to complete it
- Propose a set of overarching TOD goals for the Agency, reflecting the Board's feedback from the last Board meeting on this topic (March 2019)
- Present a set of possible objectives and strategies the Agency could apply to its opportunity sites for joint development
- Highlight where these strategies would reinforce or, in certain cases, be in tension with some goals
- Get the Board's feedback on the goals and strategies in preparation for development of the policy



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PURPOSE OF TOD POLICY

- Create a Board-adopted policy framework that expresses the Agency's goals and strategic objectives for joint development on its property
- These goals and objectives will form the basis of the Joint Development Guidelines that outline process and requirements for property asset management including strategic disposition and acquisition



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SCOPE OF THE TOD POLICY

- Will apply to properties that are:
 - Owned by the Agency in fee simple
 - Available for development independent of a capital project (as identified by RCUP)

- Key topics the policy will address:
 - Revenue objectives and business terms
 - Affordable housing requirements
 - Land use and density targets
 - A process for creating appropriate balance of access at stations



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SCOPE OF THE JOINT DEVELOPMENT GUIDELINES

- An administrative document informed by the Board-adopted TOD policy
- Contents will include:
 - Details about properties available for development
 - Information about the developer solicitation process
 - Guidelines for deal structure(s) and business terms
 - Goals for development of agency property:
 - Land uses
 - Affordable housing
 - Density



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TOD POLICY PROCESS

Today	<ul style="list-style-type: none"> • Present revised broad goals and potential objectives
Oct - Jan 2020 (contingent upon RCUP timing)	<ul style="list-style-type: none"> • Identify potential development sites based on RCUP • Evaluate specific development opportunities • Analyze potential to achieve objectives in light of development opportunities • Assess trade-offs related to land use, affordability, parking and other goals
November 2020	<ul style="list-style-type: none"> • Present draft Joint Development Guidelines for review by Board. Guidelines will not include recommendations on topics that require completion of trade-off assessment
Jan 2020	<ul style="list-style-type: none"> • Present findings from analysis of development sites • Solicit Board feedback about refined goals and objectives • Present Draft TOD Policy
March 2020	<ul style="list-style-type: none"> • Propose adoption of Final TOD Policy, including Joint Development Guidelines

SUMMARY OF BOARD COMMENTS (1 of 3)

- Asset stewardship as an overarching framework
 - Should consider the broader question of asset stewardship, including disposition, use, and acquisition
 - Look at how to evaluate assets and, in conjunction with capital projects, have the ability to acquire property in TOD zones.
 - Opportunities for joint investor(s)

- Equity in access is a core value
 - Expand equitable access to transit

SUMMARY OF BOARD COMMENTS (2 of 3)

- Promote sustainable (non-single occupancy vehicle) transportation and land use patterns, not just ridership on Caltrain
 - Expand first/last mile connections
 - Think holistically about where office versus housing should be located along the corridor

- Mixed-use development is important
 - We need not just affordable housing, but housing in general
 - Office and retail are also needed in station areas
 - Station areas should be destinations, places where people want to be
 - Should serve the community, not just transit riders



SUMMARY OF BOARD COMMENTS (3 of 3)

- Include affordable housing as a goal
 - Participate in affordable housing production at a level beyond what the private sector can do
 - How to balance affordable housing against other goals?
 - What types of housing target households that can benefit from having access to Caltrain? Affordable workforce housing vs. student housing vs. value generation?

- Policy should be flexible enough to adapt to future conditions
 - E.g. opportunity to develop on air rights



DISCUSSION: POTENTIAL GOALS FOR TOD

Sustainable Transportation

- Promote Caltrain ridership and sustainable transportation modes

Value Creation

- Create value for the Agency consistent with overall agency business strategy

Equity

- Provide appropriate balance of land uses, equity in access, and other benefits in alignment with the priorities of the local community

Complete Communities

- Establish station areas as complete communities in partnership with other stakeholders



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DISCUSSION: JOINT DEVELOPMENT OBJECTIVES AND STRATEGIES

- The following slides outline a set of potential objectives the Agency could take to further one or more of its four policy goals specifically through joint development on Agency-owned property
- Each objective will lead to one or more joint development strategies the Agency might take to fulfill the objective



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DISCUSSION: POTENTIAL OBJECTIVES FOR JOINT DEVELOPMENT

Potential Objectives:	TOD Goals			
	Sustainable Transportation	Value Creation	Equity	Complete Communities
Encourage transit-supportive development		\$		
Maximize revenue streams to offset operating costs		\$		
Leverage capital projects for joint development		\$		
Contribute to complete communities in station areas				
Support environmental sustainability				
Reduce dependence on private vehicle travel		\$		
Provide affordable housing		\$		
Encourage high labor standards and contribute to workforce development		\$		



DISCUSSION: POTENTIAL OBJECTIVES FOR JOINT DEVELOPMENT

Objective: Encourage transit-supportive development



Potential Strategies:

- Maximize density of development
- Require a minimum density
- Include transit-supportive uses



DISCUSSION: POTENTIAL OBJECTIVES FOR JOINT DEVELOPMENT

Objective: Maximize revenue streams to offset operating costs



Potential Strategies:

- *Participate in the success of development through participation rents*
- *Express a strong preference for long term ground lease*
- *Business terms should ensure Agency receives fair market value of land*
- *Limit land value write-downs* for affordable housing and other community benefits*

* A land value write-down refers to a land disposition deal (e.g. sale or ground lease) in which the Agency is paid an amount below the market value of the land as compensation for the developer providing community benefits such as affordable housing.

DISCUSSION: POTENTIAL OBJECTIVES FOR JOINT DEVELOPMENT

Objective: Leverage capital projects for joint development



Potential Strategies:

- *Pursue strategic land acquisition in conjunction with capital projects*

DISCUSSION: **POTENTIAL OBJECTIVES FOR JOINT DEVELOPMENT**

Objective: Contribute to complete communities in station areas



Potential Strategies:

- *Include a mix of uses in the joint development where appropriate and practical, and complement other uses in the surrounding area*
- *Include local stakeholders on developer selection committee*
- *Consider station area plans and community preferences for use*
- *Implement high quality, context-sensitive urban design standards*

DISCUSSION: **POTENTIAL OBJECTIVES FOR JOINT DEVELOPMENT**

Objective: Support environmental sustainability



Potential Strategies:

- *Incentivize green building methods*
- *Include green infrastructure solutions*
- *Reduce onsite parking and production of GHG emissions*

DISCUSSION: POTENTIAL OBJECTIVES FOR JOINT DEVELOPMENT

Objective: Reduce dependence on private vehicle travel



Potential Strategies:

- *Limit parking for private development*
- *Limit replacement parking for Caltrain*
- *Include a balance of access options on site, as consistent with the Caltrain access hierarchy*
- *Encourage creative parking strategies such as unbundled parking (as consistent with community objectives)*
- *Better partnership with other transit/transportation providers to provide better connections*

DISCUSSION: POTENTIAL OBJECTIVES FOR JOINT DEVELOPMENT

Objective: Provide affordable housing



Potential Strategies:

- *Prioritize housing over other uses*
- *Pursue changes to zoning code where necessary to accommodate housing*
- *Set specific requirements for below market rate units*
- *Implement a portfolio-wide target for affordable housing*
- *Allow land value write-downs to subsidize affordable housing*

DISCUSSION: **POTENTIAL OBJECTIVES FOR JOINT DEVELOPMENT**

Objective: Encourage high labor standards and contribute to workforce development



Potential Strategies:

- *Encourage prevailing wage for labor*
- *Encourage project labor agreements*

NEXT STEPS

- Revise goals and objectives based on feedback
- Draft Joint Development Guidelines
- Develop inventory of potential development sites based on results of RCUP
- Evaluate and refine potential strategies based on inventory

Questions?



PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT

TO: Work Program-Legislative-Planning Committee and Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Michelle Bouchard
Chief Operating Officer, Rail

SUBJECT: **UPDATE ON THE SAN JOSE DIRIDON INTEGRATED STATION CONCEPT PLAN**

ACTION

Staff Coordinating Council recommends the Board receive the attached memo regarding the current status of the Diridon Integrated Station Concept Plan (Plan).

SIGNIFICANCE

Since September 2018 Caltrain staff have been engaged in co-creating the Plan, which is developing a vision for the future of San Jose Diridon Station in partnership with the Santa Clara Valley Transportation Authority (VTA), the California High Speed Rail Authority (CAHSR) and the City of San Jose (City) (together, the "Partners").

The Plan is being developed with the assistance Arcadis/Bentham Crouwel (ABC), a consultant team solicited and managed by the Partners. ABC was tasked with developing three spatial layouts for a future Diridon Station. Spatial layouts are made up of "big moves" including the vertical configuration of the tracks, the location of the station platforms and concourse in addition to the rail alignment to the north and south of the station.

The three spatial layouts and big moves are as follows:

- **San Fernando Street** – At-grade station on San Fernando Street, which is most similar to today's station layout. It utilizes the existing northern and southern track alignment.
- **Santa Clara Street** – Elevated station on Santa Clara Street, which locates the station closer to BART, introduces an optimized northern track alignment and presents the opportunity to relocate the Caltrain Central Equipment and Maintenance Facility (CEMOF). This layout also provides an option to operate some rail service over a new southern rail alignment on a viaduct over Interstate 280/State Route 87.
- **Stover Street** – Elevated station on Stover Street (between San Fernando Street and Santa Clara Street), which locates the station closer to BART, introduces an

optimized northern track alignment and presents the opportunity to relocate CEMOF.

Aside from big moves, the spatial layouts are also made up from a “kit of parts” as they include a variety of station facilities and elements that facilitate access to and from the station and integration with the surrounding community and private development. Such elements include pedestrian, bike, local bus, intercity bus, light rail, taxi/transit network company, private vehicle and parking access.

ABC and the Partners took a “transit first” or “design from the tracks out” approach where rail infrastructure needs were established first to ensure sufficient space was set aside to accommodate future rail service as rail infrastructure is a less flexible, long-lasting and significant investment. ABC actively coordinated with the Business Plan team to ensure the spatial layouts were reflective of the service visions under consideration.

Over the summer, ABC and the Partners weighed tradeoffs and benefits of the three spatial layouts and developed a fourth optimized layout with a combination of favored elements. The optimized layout is as follows:

- **Elevated Duel Concourse** – Elevated station with platforms south of San Carlos Street and concourses located at Santa Clara Street (to connect with BART) and San Fernando Street. The layout utilizes the existing rail alignment to the north and could likely utilize either the existing alignment or Interstate 280/State Route 87 alignment to the south, which is currently under investigation. The relocation of CEMOF would be necessary.

This optimized layout is reflective of community feedback and additional community outreach is scheduled for late September to seek feedback on the big moves and related impacts of rail corridor expansion. The Partners continue to coordinate with other related plans, including the Google Mixed Use framework and Diridon Station Area Plan update.

The Plan is expected to be completed in two main phases. Phase 1 of the Plan will conclude with the Partners selecting an optimized spatial layout around winter 2019. The optimized layout is intended to be endorsed by the governing body of each partner agency. Assuming consensus is reached, Phase II of the Concept Plan effort would begin shortly after completion of Phase 1 and include further development of the optimized spatial layout to arrive at a fully detailed Concept Plan.

BUDGET IMPACT

There is no impact on the budget.

BACKGROUND

San Jose Diridon Station is a major transit hub located within downtown San Jose, the nation’s 10th largest city. It is a historic train depot with not only Caltrain service, but also

train service provided by Amtrak, Capitol Corridor Joint Powers Authority (CCJPA), and Altamont Commuter Express (ACE), as well as VTA light rail and bus service. The JPB owns the historic station depot, the Caltrain parking lots, the bus loop area, and the tracks and platforms. As the landowner, the JPB has a vested stake in the planning process not just for potential shaping of the Station itself, but also as it relates to development in the surrounding area.

With the planned addition of Bay Area Rapid Transit (BART) and California High Speed Rail service at the Station, as well as expanded Caltrain, ACE, Capitol Corridor and Amtrak service, the Station is expected to become one of the busiest intermodal stations in North America. To effectively accommodate such planned activity and future capacity needs, the Station must be reconfigured in an integrated fashion that connects all transit services with each other and with the surrounding urban environment.

Private development of the surrounding area in conjunction with the City of San Jose is accelerating, providing opportunities to fully integrate development with the Station itself. In recent months, Google has publically revealed concepts for development near the Station.

By the Partners working together to prepare the Plan, they hope to maximize funding to implement the Plan and deliver a world-class destination and transportation hub that provides seamless customer experience for movement between transit modes within the Station and into the surrounding neighborhoods and Downtown.

The cost of Phase I is \$5.5 million. Currently, the Partners' contributions plus additional grant funds will adequately fund Phase I. The Partners have agreed to jointly pursue funding for Phase II.

Prepared by: Melissa Reggiardo, Principal Planner

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