



DATE: March 2, 2020

TO: Planning, Policy and Legislation Committee

FROM: Carolyn Clevenger, Deputy Executive Director of Planning and Policy
Kristen Villanueva, Senior Transportation Planner

SUBJECT: 2020 Countywide Transportation Plan: Needs Assessment Part 2

Recommendation

This item is to provide the Commission with an update on the second of two parts of the Needs Assessment conducted of the Alameda County transportation system for the 2020 Countywide Transportation Plan (CTP). This item is for information only.

Summary

Each year, Alameda CTC produces a Performance Report, which compiles data on countywide trends and issues and how performance of the transportation system has changed over time. Developing the CTP every four years provides the opportunity to investigate these issues at a deeper level and recommend strategies for addressing them. The Needs Assessment for the 2020 CTP organizes challenges and strategies for five types of transportation modes or facilities in Alameda County: active transportation, transit, arterial roadways, freeways, and goods movement. While people use multiple facilities and multiple modes in the course of their travel, it is still helpful to consider the needs by facility type and mode; findings and strategies will be integrated to ensure multimodal needs and strategies are identified. The assessment also identifies challenges for each of the four planning areas in the county. This effort will help inform how the Commission ultimately identifies a 10-year set of priority projects and programs to advance through the CTP as well as a focused set of strategies for Alameda CTC to advance that would address remaining gaps in the transportation system.

This memo presents Part 2 of the Need Assessment, focused on transit, arterials and goods movement. The strategies included in this memo have been compiled based on a review of recent county plans and relevant local planning initiatives, and are aligned with the four goals adopted by the Commission in September 2019 for the 2020 CTP. Staff shared Part 1 of the Needs Assessment on active transportation and freeways in January 2020 and plans to release the final Needs Assessment document in May 2020.

Approach to CTP Needs Assessment

As presented in January, the Needs Assessment sourced data, findings and recommendations from a multitude of planning efforts that have been completed or are underway since the update to the previous countywide plan was adopted in 2016. Table 1 presents the main sources referenced. Needs for the CTP are also summarized by planning area. Planning areas represent collections of 3-6 Alameda County jurisdictions that have similar characteristics in travel and development patterns. Attachment A presents the four Alameda County Planning Areas and the jurisdictions contained within each one.

Table 1. Sources for 2020 CTP Needs Assessment

Plan/Project Name and Year Adopted	
<ul style="list-style-type: none"> • 2015 BART Station Profile Study • 2016 Countywide Transportation Plan • 2016 Alameda Countywide Multimodal Arterial Plan • 2016 Alameda Countywide Transit Plan • 2016 Alameda County Goods Movement Plan • 2016 AC Transit Major Corridors Study • 2017 Assessment of Mobility Needs of People with Disabilities and Seniors in Alameda County 	<ul style="list-style-type: none"> • 2018 Level of Service Monitoring Report – Traffic and Transit 18 Rail Strategy Study • 2018 and 2019 Corridor Projects: East 14th Street/Mission Boulevard and Fremont Boulevard, San Pablo Avenue • 2019 Countywide Active Transportation Plan • 2019 MTC Transit Use Study (UCLA) • Alameda CTC Safe Routes to Schools Site Assessments (on-going) and Evaluation Reports (underway)

Needs Assessment – Transit

Alameda County is served by two of the region's highest-ridership operators, yet only 15% of residents take transit to work each day. Part of the reason for this is the high degree of variation in land use intensity, from high density houses and jobs in north county to more suburban homes and office parks in south and east county. A key overarching challenge for this CTP will be to identify ways to increase transit ridership across the entire county, leveraging innovative strategies already employed by our operators and continuing to focus on strong markets for transit.

From a review of previous plans and agency performance monitoring reports as well as discussions with transit operators, the key challenges for transit in the county include:

- Countywide congestion results in increasingly slow and unreliable local and express bus service.
- Some high-quality transit services lack safe and comfortable walking and biking connections.
- Limited hours of operations and low frequency of service deter ridership growth, especially during weekends and evenings when competition from Transportation Network Companies is also the highest.

- Different payment options and ticketing systems make the county's (and region's) transit system difficult to use.
- Interregional service is limited between Alameda County and Contra Costa, San Joaquin, San Mateo and San Joaquin counties despite high shares of regional trips between these areas.
- Systemwide operating costs are increasing faster than ridership and revenues.
- Core BART service is at-capacity and over-subscribed during peak periods.
- Paratransit users face on-time performance issues and longer rides, which have been exacerbated by increasing regional congestion.

To address these needs, Table 2 presents an initial set of potential strategies the Commission may consider as part of the 2020 CTP. These strategies will be refined throughout the first half of 2020 via discussions with ACTAC, smaller planning area meetings with agency staff and Commissioners, and public engagement. Staff have also conducted focused meetings with the major transit operators in Alameda County to vet these strategies. Table 2 incorporates suggested comments from AC Transit, BART, LAVTA and WETA staff.

Table 2. Potential Strategies to Consider Including in CTP for Transit

Potential Strategy	Brief Description
Dedicated Infrastructure	Improve bus service speed and reliability by prioritizing transit through treatments like queue jumps, signal priority, dedicated bus lanes, and bus boarding islands. Increases in transit speeds are needed for frequency improvements to effectively boost ridership and minimize increases in operating costs.
Fare Integration	Facilitate transfers between transit systems by reducing or eliminating the transfer cost penalty for riders through interagency discounting agreements, or through fare integration.
More Comfortable Transit Stops and Stations	Improve the comfort and safety of transit riders by providing amenities like lighting, transit shelters, Wi-Fi and benches. At BART stations, locate bus stops and pickup/drop-off areas in well-lit locations near the station.
Fare-Free Zones and Passes	Consider establishing free transit zones or lines. Potential locations include areas with high ridership where fare collection slows transit speeds, as well as lines and areas with substantial ridership from disadvantaged populations. Enact means-based fare policies that keep fares affordable for youth, seniors, and people with disabilities.
Targeted Service Improvements	Focus service improvements, such as frequency increases, as well as operational improvements, such as signal priority, on lines with high existing or potential ridership that experience heavy congestion and slow transit speeds.
First/Last Mile Access	Provide high-quality pedestrian and bicycle facilities and bikeshare stations near major transit stops, including ferry terminals, to improve first/last mile access. Improve wayfinding and consider supporting a regional standard for wayfinding. Consider shuttles and other motorized forms of first/last mile access.
Supportive Land Use Strategies	Encourage local jurisdictions to enact and enforce transit-supportive design standards for developments along transit routes, as well as car-light or car-free land use regulations near major transit stops.

Potential Strategy	Brief Description
Developer Agreements/TDM	Partner with the private sector to expand or enhance service or provide funding for capital projects, particularly as part of large land use developments. Consider transit services such as buses and ferries as an option in local TDM programs.
Interregional Service Expansion	Expand interregional transit services that would facilitate and encourage the use of transit for travel into, out of, and through Alameda County, reducing strain on congested freeways and local roadways.
Operator Shortage Strategy	Support policies that would allow transit operators to live closer to their jobs and reduce commute burdens.

Needs Assessment – Arterials

Alameda County's 1,200 miles of arterials carry approximately 40% of daily trips, making arterials key connections between the varied activities that residents complete in a given day. Arterials are where regional and local transportation networks connect to communities and also where opportunities exist to support planned development and local growth strategies. In response to a strong regional economy, demand for roadway use is rising, with cars, transit, bikes, pedestrians and trucks all trying to navigate the same roads.

From a review of previous plans and agency performance monitoring reports, the key challenges for arterials in the county include:

- Arterials have multiple competing goals among mobility, access and placemaking for local development, all of which require different transportation solutions.
- Major arterials account for 14% of road miles in Alameda County but for 71% of the mileage of the High-injury Network.
- Many arterials are wide and currently not attractive or safe for walking and biking. Congestion on freeways spills onto arterials further decreasing attractiveness for non-auto modes.
- Congestion on arterials has led to a 15% decline in peak arterial speeds in the last four years, which negatively affects bus speeds and reliability.
- People frequently travel between jurisdictions along arterials yet traffic signal operations, infrastructure quality and street design are not connected and coordinated.
- Arterials across the county serve a large variety of functions that require local context sensitive solutions.
- Competition for roadway and curb space are forcing hard trade off discussions within cities.

To address these needs, Table 3 presents an initial set of potential strategies the Commission may consider as part of the 2020 CTP. These strategies will be refined throughout the first half of 2020 via discussions with ACTAC, smaller planning area meetings with agency staff and Commissioners, and public engagement.

Table 3. Potential Strategies to Consider Including in CTP for Arterials

Potential Strategy	Brief Description
Multimodal Corridor Projects	Work with partner agencies to identify the next set of corridors to address as countywide multimodal projects and initiate a game plan through the CTP.
Pilot “Quick Build” Projects	Pilot quick-build projects to make improvements on a segment-by-segment basis and demonstrate the effects of the improvements. This may be particularly effective on transformative projects where consensus around a final design may be difficult to reach quickly in all locations.
First/Last Mile Transit Access	Consider transit first/last mile access needs in street design for multimodal corridor improvements.
Reducing Conflict through Design	Improve safety by reducing conflicts between cars, trucks, transit vehicles and active modes on arterials through the adoption of updated Complete Streets design standards.
Vision Zero on Arterials	Include street design elements that reduce vehicle speeds, such as tightening curb radii and narrowing and/or reducing automobile travel lanes to provide high-quality bicycle and pedestrian facilities. Improve bicycle and pedestrian safety at intersections by providing protected intersections, extending curbs, installing high-visibility crosswalks, providing pedestrian-friendly signal timings, and improving pedestrian-scale lighting, among others.
Curbspace Management	Facilitate the adoption of best practices in curb space management by local jurisdictions by organizing learning sessions on how to use curbside use designations, pricing, and enforcement to optimize use of valuable curb space.
Advanced Technologies	Use ITS technologies to improve the operational efficiency of roadways while also supporting active transportation modes and vulnerable users.
Transportation Demand Management	Encourage local agencies to implement or expand TDM programs and policies to incentivize and encourage travel via transit, carpooling, and active transportation to reduce single-occupancy vehicle mode share.
Economic Development	Assess the impact of transportation improvements on the economic vitality of corridors and focus investments where they will have substantial positive impacts. Partner with economic development agencies and the private sector to jointly implement infrastructure projects.
Placemaking	Enhance the pedestrian experience along major arterials to create inviting, attractive spaces for all by widening sidewalks and providing pedestrian amenities like plazas and street trees.

Needs Assessment – Goods Movement

Alameda County is the goods movement hub of the Bay Area and Northern California Megaregion including the Port of Oakland, Oakland International Airport, and a robust network of rail, roads, and highways. The Port of Oakland handles 99% of container volume in Northern California and is the eight busiest port in the nation by volume.

From a review of previous plans and agency performance monitoring reports, the key challenges for goods movement in the county include:

- Current truck and freight rail networks are constrained. There are existing congestion, reliability and safety issues on shared-use interregional highway and rail corridors with limited ability for expansion.
- Truck route continuity across jurisdictions is fragmented and there are minimal heavy weight truck routes in the county.
- Increasing freight demand exists on a finite rail network that travels through many communities.
- Changing local land use development patterns increase modal conflicts on local truck routes and lead to increased conflicts with industrial uses.
- Emissions and noise exposure from goods movement can create significant health risks and negatively affect the well-being of residents, especially in the region's Communities of Concern that are located near high-intensity industrial areas and truck corridors.

To address these needs, Table 4 presents an initial set of potential strategies the Commission may consider as part of the 2020 CTP. These strategies will be refined throughout the first half of 2020 via discussions with ACTAC, smaller planning area meetings with agency staff and Commissioners, and public engagement.

Table 4. Potential Strategies to Consider Including in CTP for Goods Movement

Potential Strategy	Brief Description
Targeted Infrastructure Investments	Scope new projects on regionally significant freight routes and facilities to address identified truck delay, truck reliability, and truck safety issues on routes including I-880, I-580, I-680, and I-80, as well as multi-modal projects improving access and efficiency at the Port of Oakland.
Freight Guidelines for Complete Streets	Develop toolkits, guidelines, and best practices for incorporating freight into Complete Streets design to reduce conflicts between goods movement and transit, bicycles, and pedestrians on arterial routes.
Near-Zero and Zero-Emission Technology	Fund and demonstrate Near-Zero and Zero-Emission goods movement technologies, potentially including incentives for engine retrofits to low-emission and ZEV technology. Target freight corridors and facilities in communities with greatest adverse impacts from freight emissions.
Land use guidelines and incentive programs	Coordinate with regional and state efforts to address industrial land use planning and preservation for industrial uses and priority production areas. This could include technical assistance to update zoning, guidance on setting up buffer zones, incentives to preserve buffers, identification of funding for assembling of fragmented parcels, and reduction of negative impacts on communities from freight operations.
Truck Access Management	Work with Caltrans and local jurisdictions to update truck routes through communities and design recommendations for intersections. Evaluate direct truck access between the Port and I-880 and lift the exemption of overweight trucks on I-880 to minimize impacts on local surface streets.

Potential Strategy	Brief Description
At-Grade Crossing Safety and Grade Separation Policy and Program	Develop an at-grade crossing safety and grade separation policy and implement a countywide priority list of grade-crossing improvements in partnership with local jurisdictions.
Vehicle Safety Technology	Encourage the adoption of vehicle safety technologies that would specifically be used on medium and heavy-duty trucks such as blind spot detection and side guards.
Resilient Airport and Seaport	Protect existing critical infrastructure by investing in airport and seaport infrastructure that is resilient to the forecasted effects of climate change. This infrastructure may include flood protection, shoreline protection, power sources protection, and airport perimeter dyke expansion, among others.

CTP Next Steps

Table 5 reflects a high-level schedule of CTP development topics through fall 2020. Staff will reflect Commissioner and ACTAC comments on draft strategies in a revised Needs Assessment document and in prioritization work on projects submitted to the CTP. To develop the draft plan, staff will conduct meetings with Commissioners and ACTAC members for each planning area with focused discussions on 10-year priorities and findings from a gaps analysis. In addition, two outreach efforts are planned: targeted outreach in the spring including focus groups, intercept surveys and pop up events throughout the county, and broad public outreach in the summer when the draft CTP is released.

Table 5. Draft Milestone Schedule for 2020 CTP

Jan 2020	<ul style="list-style-type: none"> Performance Report and Needs Assessment Part 1
March – April	<ul style="list-style-type: none"> Needs Assessment Part 2: arterials, transit, goods movement Planning area meetings with ACTAC on 10-year priorities Targeted public outreach: Focus group meeting, intercept surveys and pop up events
May – June	<ul style="list-style-type: none"> Update on outreach and community-based transportation planning Planning area meetings with Commissioners on 10-year priorities Targeted public outreach: Focus group meeting, intercept surveys and pop up events
July	<ul style="list-style-type: none"> Presentation on the draft 2020 CTP
Summer	<ul style="list-style-type: none"> Broad public outreach on draft Plan
Fall	<ul style="list-style-type: none"> Review and adoption of the final 2020 CTP

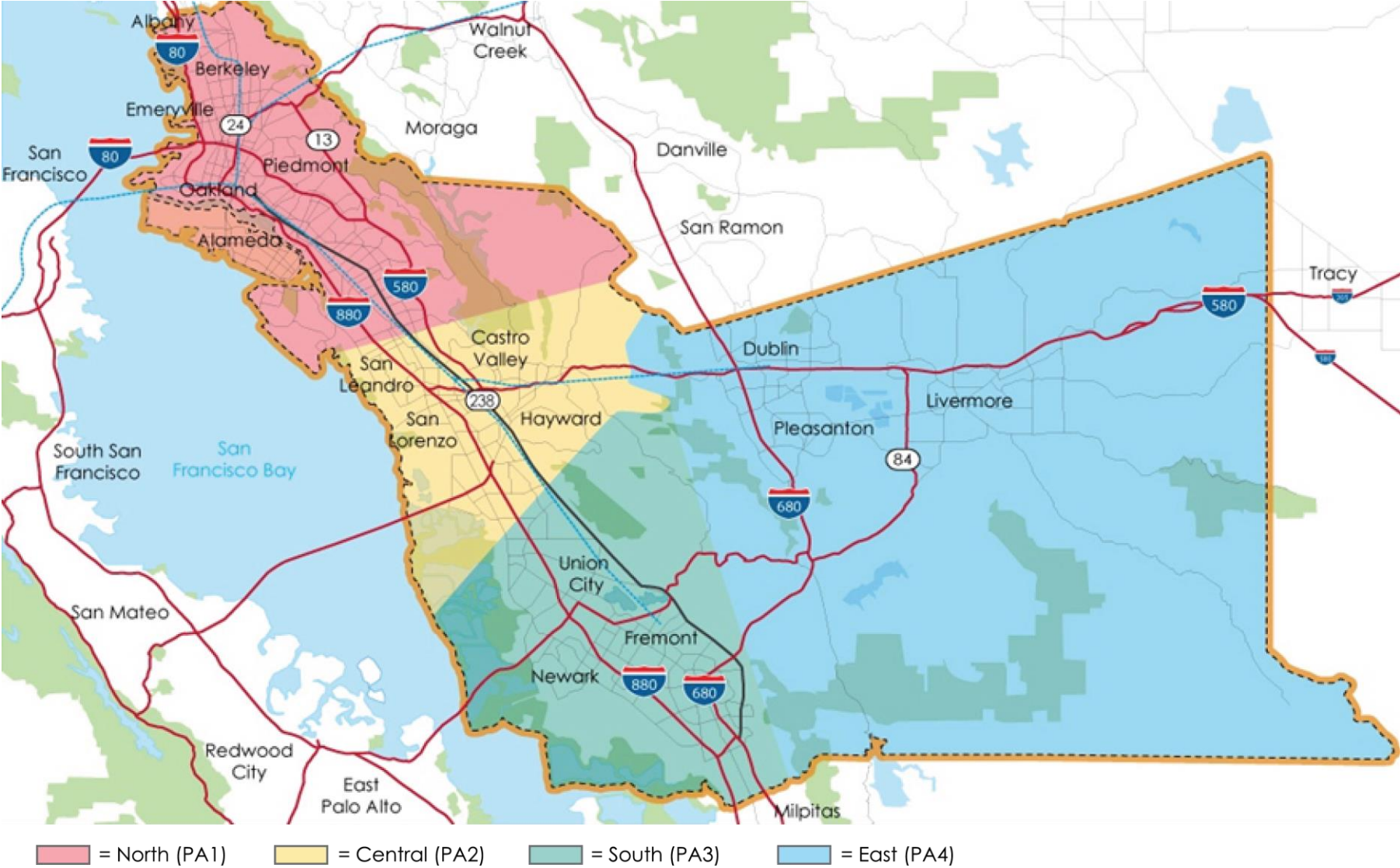
Fiscal Impact: There is no fiscal impact. This is an information item only.

Attachment:

- A. Four Planning Areas of Alameda County

This page intentionally left blank

Attachment A: Four Planning Areas of Alameda County



This page intentionally left blank