

TRANSPLAN Technical Advisory Committee

30 Muir Road, Martinez, CA 94553

Participating entities: Cities of Antioch, Brentwood, Oakley and Pittsburg • Contra Costa County
Tri Delta Transit • 511 Contra Costa • Contra Costa Transportation Authority (CCTA) • Caltrans District 4 • BART
TRANSPLAN • State Route 4 Bypass Authority • East Contra Costa Regional Fee & Financing Authority (ECCRFFA)

Meeting Location:

Antioch City Hall, Third Floor Conference Room

Tuesday, May 15, 2018, 1:30 to 3:30 p.m.

AGENDA

*NOTE: The Technical Advisory Committee (“TAC”) agenda/packet is only distributed digitally, **no paper copies will be sent.** If you need a printed copy please contact TRANSPLAN staff.*

Action/Discussion Items (see attachments where noted [♦])

Item 1: STANDING ITEM: Concord Community Reuse Project (former Concord Naval Weapons Station) Update. *The Concord Reuse Project consists of approximately 5,000 acres of the Inland portion of the former Concord Naval Weapons Station. The City of Concord is Specific Planning 2,300 acres of development under the 2012 Concord Reuse Project Area Plan. The Area Plan and its related environmental documents were adopted in 2012 and envision, over the next 30 years, the creation of 12,200 housing units (25% affordable), 6.1 million square feet of commercial space, 120 acres of Campus District, 175 acres of Tournament Sports Complex, and the restoration of Mt. Diablo Creek. The East Bay Regional Park District is planning the 2,600 acres of conservation area and regional park lands and Contra Costa County is planning the 75 acres in the old administration area as a First Responders Training Facility. City of Concord staff will provide a status report on this project including a review of the project schedule. Additional information will be available at the meeting.*

Item 2: Review of Draft 2017 MTSO Monitoring Report. *TRANSPLAN Action Plan MTSO monitoring report with draft East County MTSO monitoring results. ♦ Page 2*

Item 3: Draft Fiscal Year 2018/2019 TRANSPLAN Work Plan and Budget: *The TAC will review and discuss the proposed Draft FY 2018/19 Work Plan and Budget. ♦ Page 38*

Item 4: Other Business

Item 5: Adjourn to Tuesday, June 19, 2018 at 1:30 p.m.

The TAC meets on the third Tuesday of each month, 1:30 p.m., third floor conference room at Antioch City Hall. The TAC serves the TRANSPLAN Committee, the East Contra Costa Regional Fee & Financing Authority, and the State Route 4 Bypass Authority.

Persons needing a disability-related accommodation should contact Jamar Stamps, TRANSPLAN staff person, at least 48 hours prior to the starting time of the meeting. Mr. Stamps can be reached at (925) 674-7832 or at jamar.stamps@dcd.cccounty.us.

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ITEM 2
MTSO MONITORING REPORT

Subject	Review Draft 2017 Multimodal Transportation Service Objective (MTSO) Monitoring Report
Summary of Issues	As part of the 2017 transportation system monitoring, which includes monitoring of the Congestion Management Program (CMP) network, the MTSOs are monitored every four years in coordination with the Action Plan updates. The Authority’s on-call transportation monitoring consultant, Iteris Inc. (Iteris) has prepared a draft report, which shows the 2017 monitoring results and describes the methodologies used. The draft report will be circulated to the Regional Transportation Planning Committees (RTPCs) for local review and comment. Following Authority Board approval, the final monitoring reports will be published.
Recommendations	Staff seeks approval to release the Draft 2017 MTSO Monitoring Report to the RTPCs for review and comment.
Financial Implications	N/A
Options	Revise the report.
Attachments	<p>A. Preliminary Draft 2017 MTSO Monitoring Report Executive Summary</p> <p>B. Preliminary Draft 2017 MTSO Monitoring Report (available at www.ccta.net)</p>
Changes from Committee	

Background

In March 2017, Iteris began the MTSO monitoring effort. Vehicular traffic was monitored at a total of 229 intersections, 20 arterial segments, and 24 freeway segments. Transit data was obtained from transit providers, and walking and bicycle user counts were conducted on the Iron Horse Trail.

The 2017 MTSO Monitoring Report describes the MTSOs adopted in the various sub-county Action Plans for Routes of Regional Significance and reports on their performance.

The following MTSOs are being used across the five subregions:

- Intersection Level of Service
- Delay Index: State Route 4 (SR4), SR24, SR84, SR242, Interstate 80 (I-80), I-580, I-680, Pleasant Hill Road, San Pablo Dam Road/Camino Pablo
- Average Side Street Signal Cycle Delay: Treat Boulevard, Ygnacio Valley/Kirker Pass Road, Pleasant Hill Road, San Pablo Dam Road/Camino Pablo
- Peak Loading Factor: BART (Lamorinda)
- Average Speed: Alhambra Boulevard, Clayton Road, Contra Costa Boulevard, Pacheco Boulevard, Pleasant Hill Road, Taylor Boulevard
- High Occupancy Vehicle (HOV) Lane Usage: SR-4 (East County), I-80
- Average Vehicle Occupancy: I-580 and I-680 (Tri-Valley), Camino Pablo/San Pablo Dam Road, Pleasant Hill Road (Lamorinda)
- Duration of Congestion: I-680 (Tri-Valley)
- Volume-to-Capacity (V/C) Ratio: Most arterials in Central County and Tri-Valley
- Transit Boardings: Tri-Delta Service Area, Bay Area Rapid Transit (BART) (East County), BART (Tri-Valley)
- Collision Frequency: Pleasant Hill Road, San Pablo Dam Road (Lamorinda) and Iron Horse Trail (Tri-Valley)
- Pedestrian and Bicycle Volumes: Iron Horse Trail Arterial Crossings (5 locations in Tri-Valley)
- Pavement Condition: Major Arterials, Iron Horse Trail (Tri-Valley)
- Average Trail User Delay at Major Road Crossings: Iron Horse Trail (Tri-Valley)

Monitoring Procedures

Data collection at sites was primarily conducted from late February through May 2017, in parallel with the CMP biennial monitoring. Collection was performed only on days which met the following criteria, as defined in Appendix B of Technical Procedures:

- Non-Holiday Week
- Day of Week: Tuesday to Thursday
- School in session
- Dry weather
- No major traffic incidents

Level-of-Service (LOS) is one of the most traditional measures of the performance of transportation systems and, as required by CMP legislation, is currently the primary measure used in the Action Plans. Staff expects changes in CMP legislation due to the passage of Senate

Bill 743 (SB 743), which removes vehicle delay as a finding of significance in the California Environmental Quality Act of 1970 (CEQA), to be replaced by Vehicle Miles Travelled (VMT). This change would not preclude the Action Plans from continuing to use LOS, but will encourage use of non-vehicle delay-based measures, some of which the RTPCs have already begun considering or have added as part of the 2017 Action Plans update.

The LOS methodology is described below. Methodologies for all other MTSOs are described in the Draft 2017 MTSO Monitoring Report (Attachment A).

Intersection LOS: Under LOS, traffic conditions, as perceived by the driver, are assigned a letter value – A thru F, wherein “A” corresponds to excellent (no delay) conditions and “F” corresponds to poor (excessive delay) conditions. The LOS was calculated at MTSO monitoring intersections using the LOS methodology for automobiles as described in the Authority’s Technical Procedures document, and found in the latest Highway Capacity Manual. Table 1 below describes the conditions found at each LOS, and its relationship to the corresponding volume-over-capacity (V/C) ratio.

Table 1: Description of Level of Service

Level-of-Service	Type of Flow	Delay	Maneuverability	V/C Ratio
A	Stable Flow	Very slight or no delay. If signalized, conditions are such that no approach phase is fully utilized by traffic and no vehicle waits longer than one red indication.	Turning movements are easily made, and nearly all drivers find freedom of operation.	0.00 – 0.60
B	Stable Flow	Slight delay. If signalized, an occasional approach phase is fully utilized.	Vehicle platoons are formed. Many drivers begin to feel somewhat restricted within groups of vehicles.	0.61 – 0.70
C	Stable Flow	Acceptable delay. If signalized, a few drivers arriving at the end of a queue may occasionally have to wait through one signal cycle.	Back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	0.71 – 0.80
D	Approaching Unstable Flow	Tolerable delay. Delays may be substantial during short periods, but excessive back-	Maneuverability is severely limited during short periods due to	0.81 – 0.90

		ups do not occur.	temporary back-ups.	
E	Unstable Flow	Intolerable delay. Delay may be great – up to several signal cycles.	There are typically long queues of vehicles waiting upstream of the intersection.	0.91 – 1.00
F	Forced Flow	Excessive delay.	Jammed conditions. Back-ups from other locations restrict or prevent movement. Volumes may vary widely, depending principally on the downstream back-up conditions.	Varies ¹
<p>(1) In general, volume-to-capacity ratios cannot be greater than 1.00, unless the lane capacity assumptions are too low. Also, if future demand projections are considered for analytical purposes, a ratio greater than 1.00 might be obtained, indicating that the projected demand would exceed the capacity.</p>				

MTSO Monitoring Results

Complete results for all of the MTSOs can be found in Attachment A. Additional “information only” results are available for MTSOs for which standards have not yet been developed by the RTPCs. Authority staff will present the monitoring data to each of the RTPCs in February and March.

Staff Recommendation

Staff recommends the release of the Draft 2017 MTSO Monitoring Report for review by local staff through the RTPCs. Any comments received will be incorporated into the final reports. Monitoring data, including detailed intersection count and LOS analysis count sheets will be included in the full appendices, which will be available for local staff and consultants to use in traffic studies or other traffic-related analyses.



**Contra Costa
Sub-regional Action Plans for
the Routes of Regional Significance
Multimodal Traffic Service Objectives (MTSO)
Draft 2017 Monitoring Report**

Prepared by Iteris, Inc.
February 2018

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This report documents the 2017 monitoring results of Contra Costa County's multi-modal traffic service objectives (MTSOs). The MTSOs are applied to the roads of significance as designated by each Regional Transportation Planning Committee (RTPC) within the County. The MTSO monitoring efforts evaluate whether the transportation system achieves the MTSO standards adopted in the RTPC's 2014 Action Plan. The majority of MTSOs were monitored using the combination of (INRIX Analytics or Caltrans PeMS) commercial speed data, the manual turning movement counts, and in-field observations.

The 2017 MTSO monitoring results are summarized below:

- **Intersection Level of Service:** A total of 231 intersections were monitored in 2017. 6% (15) locations operated at LOS lower than MTSO standards during the AM or PM peak period
- **Roadway Segment Level of Service:** A total of 20 roadway segments in the East County were analyzed. Ten segments (in the AM peak) and eleven segments (in the PM peak) didn't achieve the MTSO standards
- **Average Speed:** All 16 monitored roadway segment in the Central County met the MTSO standards
- **Delay Index:** A total of 34 roadway segment were monitored using delay index. 1% (5) segments didn't achieve the MTSO standards
- **Duration of Congestion:** One roadway segment was analyzed; it met the MTSO standard
- **HOV Lane Utilization:** A total of four roadway segments were monitored; all met the MTSO standards, except for the I-80 WB segment in the West County during the AM peak period
- **Vehicle Ridership:** A total of three roadway segments were monitored; none met the MTSO standards
- **Vehicle Occupancy:** A total of two roadway segments were monitored; neither met their MTSO standard

- **Transit Ridership:** BART loading factors were monitored in Lamorinda; all monitored loading factors met the MTSO standard
- **Maximum Side Street Wait Time:** three out of the total of 13 roadway segments exceeded MTSO standards

Several additional measures were monitored and reported this MTSO report at CCTA's request. Since no specific MTSO standards are defined in the Action Plans for these MTSOs, they are reported as informational only MTSOs:

- vehicle volumes,
- pedestrian or bicycle volumes,
- frequency of collision,
- bus ridership,
- pedestrian delay at the signalized intersection, and
- pavement condition.

(Go to <http://www.ccta.net/sources/detail/7/1> for full report)

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As part of Contra Costa County's transportation planning and growth management responsibilities, Contra Costa County Transportation Authority (CCTA) regularly monitors the performance of the transportation system in Contra Costa. Two of the main components of this transportation performance monitoring effort are the Countywide Comprehensive Transportation Plan (CTP), and the monitoring of the Multimodal Transportation Service Objectives (MTSOs) as part of updates of the Action Plan for Routes of Regional Significance.

The CCTA Action Plan designates and defines the County's transportation performance measures (for performance monitoring purposes) and the service objective for each of the designated intersections and roadway segments.

On a quadrennial basis (i.e., once every four years) through the CCTA's Multi-Modal Monitoring program, CCTA evaluates the performance of the County's transportation system and identifies those monitored locations which operated below the predetermined MTSO standards (which were last updated in 2014) and highlights long-term transportation utilization, growth and congestion trends.

CCTA has monitored the achievement of the level-of-service standards established in the County's Congestion Management Program since the first CMP in 1991; and CCTA has regularly maintained and updated this MTSO monitoring report since 2009.

This 2017 MTSO monitoring report is divided into four chapters:

- **Chapter 1 – Introduction:** provides an introduction and describes the background for the 2017 MTSO monitoring efforts
- **Chapter 2 – Methodology:** documents the performance evaluation (analytical) methodologies and describes the underlying data sources
- **Chapter 3 – Results:** presents the MTSO results—the study's findings, divided into three parts including intersection analysis, roadway segment analysis and other MTSO reporting elements (e.g., pedestrian, bicycle and transit)
- **Chapter 4 – Summary of Findings:** summarizes the monitoring results and highlights the locations that failed to meet the designated 2014 MTSO standards

1.1 Changes to Transportation System

Since the last MTSO monitoring in 2013, there were some significant changes made to the County's transportation system, including:

- State Route 4 / State Route 160 Connector Ramps
- State Route 4 East Widening: Loveridge Road to Somersville Road
- Interstate 680 Express Lane Conversion(s)
- Interstate 80 / San Pablo Dam Road Interchange Improvements

1.2 Additional MTSO Measures

The following MTSO measurements are new in this MTSO monitoring, which are subject to the MTSOs identified in each Action Plan.

- Duration of congestion
- Average trail user delay
- Frequency of collision
- Pavement condition

This chapter describes the methodology and underlying assumptions used to quantify the performance on the MTSO intersections, roadway segments and transportation elements. This chapter of the MTSO report is divided into three sections by the type of monitored locations (roadway intersections, roadway segments and other transportation elements or facilities).

2.1 Intersection Analysis

This section summarizes the two-step methodology of calculating the MTSO measures for the designated MTSO reported roadway intersections. The first step in the reporting process is to collect intersection turning movement count data, in accordance with CCTA's Technical Procedures. For reporting side street wait times, the number of signal cycles required for "back of queue" vehicles to clear the intersection was recorded during the AM and PM peak hours for 60 minutes (7:00 AM to 8:00 AM and 5:00 PM to 6:00 PM) at each intersection.

The second step in the evaluation process is to evaluate the performance of the roadway intersection and report the mandated MTSO measures – and compare the current performance of the roadway intersections to the performance thresholds in the CCTA Action Plan.

2.1.1 Data Collection

The project team selected the data collection days to ensure that all count data were collected on Tuesdays, Wednesdays and Thursdays during AM and PM peak hours in April 2017. The days in the following categories were removed or excluded from the data collection period:

- Public Holidays and School Vacations (including Spring Breaks);
- Special Events (no special events were observed to impact traffic conditions during the 2017 monitoring period); and
- Road Closures and Construction Activities.

2.1.2 Intersection Level of Service, V/C and Average Stopped Delay

The intersection Level of Service (LOS) measures were estimated using the Transportation Research Board's Highway Capacity Manual (HCM) 2000 and HCM 2010 methodologies. The

MTSO analyses were performed using the Synchro intersection analysis software. The evaluation input data prepared by the project team included the turning movement volume (i.e., count) data, intersection geometry and roadway network data, and intersection signal-timing plans. The team consulted with CCTA staff to resolve conflicts when inconsistencies were identified between current timing plans and the Contra Costa member agency provided signal timing information. The Synchro intersection analysis software generated the vehicular delays (in seconds) and LOS for the AM and PM peak hours of operation.

The HCM’s LOS thresholds were established as a function of the intersection’s vehicular delay values, as shown in Table 1. A LOS value of “A” describes a state of very low traffic volumes and no significant traffic delays. This means that most of vehicles arrive during the signal’s green time. On the other hand, a LOS of “F” represents an intersection with high levels of congestion, over saturated traffic conditions, and long queues upstream of the intersection. For MTSO reporting, the average stopped delays were expressed in units of signal cycles – the number of signal cycles needed to clear the intersection. The MTSO reported delays (in units of signal cycles) was estimated by dividing the average stopped delay (in seconds) by the signal’s cycle length (in seconds per cycle).

The previously described MTSO evaluation was performed for:

- 82 locations in the Tri Valley sub area (LOS);
- 56 locations in the West County (LOS);
- 41 locations in the East County (LOS);
- 50 locations in the Central County (LOS, V/C and Average Stopped Delay).

Table 1: HCM 2010 & 2000 Level of Service Criteria for Signalized Intersections

Level of Service	Average Control Delay (seconds/vehicle)	General Description
A	0 - 10	Free Flow
B	>10 - 20	Stable Flow (slight delays)
C	>20 - 35	Stable flow (acceptable delays)
D	>35 - 55	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	>55 - 80	Unstable flow (intolerable delay)
F	> 80	Forced flow (congested and queues fail to clear)

2.1.3 Maximum Side Street Wait Time

The Lamorinda Action Plan contains a MTSO for “Side Street Wait Time”. The maximum side street wait time is reported directly from field observations at each of the designated roadway intersections. The locations where side street wait time analyses were performed are:

- Pleasant Hill Road - Maintain a maximum wait time for drivers on side streets wishing to access Pleasant Hill Road or Taylor Boulevard of one signal cycle or less; and
- Camino Pablo/ San Pablo Dam Road- The maximum wait time for drivers on side streets wishing to access San Pablo Dam Road or Camino Pablo should be no greater than one signal cycle.

2.2 Roadway Segment Analysis

This section summarizes the methods for data collection and data analyses for freeway and arterial roadway segment MTSO reporting. The vast majority of the roadway segment evaluations were performed using commercially available vehicular speed data (i.e., INRIX Analytics speed data). Roadway travel time data were collected via floating car runs (sometimes called probe vehicles or tach runs) for roadway segments where the commercial speed data were unavailable or deemed insufficient because of sample size limitations.

2.2.1 Speed, LOS, Delay Index

The average vehicular speeds, Level of Service (LOS), and delay index estimation use similar inputs and data processing and evaluation techniques. Peak hour average vehicular speeds is the most influential variable (input) in the roadway segment LOS estimation process. Further, the LOS estimation and reporting processes are consistent with previous reporting periods.

2.2.1.1 Data Collection

The roadway segment travel time data were collected (i.e., downloaded) from the INRIX Analytics website, or were obtained via floating car runs for segments where the INRIX data were not available.

A) INRIX Data

The downloaded segment-based INRIX data were filtered to remove:

- Holidays during the monitoring period;

- Times outside the morning and afternoon peak periods (times outside the 6:00 - 10:00 A.M. and 3:00 -7:00 P.M. windows);
- Days other than Tuesdays – Thursdays;
- Data points impacted by construction and special events, as applicable; and
- Data points with low INRIX quality scores (INRIX data quality scores of 10 and 20)¹.

Similar to CMP Monitoring, roadways undergoing short-term construction and/or with ongoing incidents were reviewed for anomalies in the reported vehicular speeds. To be conservative, the data collected on the MTSO segments which might have been impacted on those identified construction/incident days were excluded. This filtration process insures that the speeds data used in the MTSO monitoring is reflective of the traffic conditions experienced on an average workday by commuters. Additionally, data collected on days with significant weather events were removed. While there were some public holidays during the spring of 2017, none occurred on Tuesdays, Wednesdays or Thursdays. Local schools were also in session during the data collection period.

B) Floating Car Data

The speed data for the Pleasant Hill Road MTSO segment between Geary Road and Taylor Boulevard was supplemented with floating car runs, due to the insufficient sample size from INRIX data. In accordance with Technical Procedures², the floating data were collected on Tuesday, September 26, 2017.

2.2.1.2 Data Processing

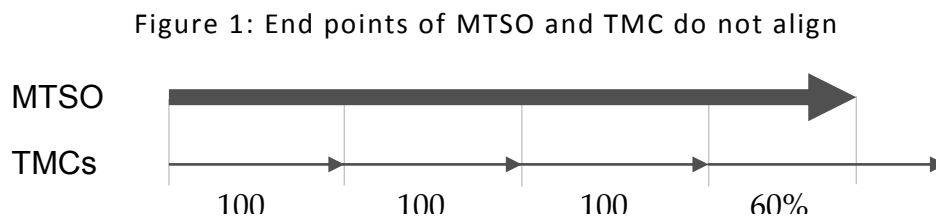
The (MTSO) performance measure computation is a four-step process that entails: 1) spatial conflation; 2) spatial coverage check; 3) temporal aggregation; and 4) computation of required performance measure. The following sections provide additional detail. Note that the floating car data were collected on the designated MTSO segment during the peak periods. Therefore, the steps one through three do not apply to the floating car data.

¹ INRIX includes a data quality score that accompanies every INRIX data point. A score of 30 indicates data are exclusively generated from real-time sources; a mix of historical and real-time sources are used (indicated by a score of 20); and data are exclusively generated from historical data (indicated by a score of 10).

² Technical Procedures, CCTA, January 16 2013

1) Spatial Conflation

Raw INRIX data provides travel time data along each Traffic Message Channels (TMC) in one-minute intervals. A TMC is a relatively short section of a roadway, generally in the range of a half-mile or so. The first step of analysis includes mapping the INRIX TMCs (and the raw speed data to the County's MTSO segments. The INRIX-TMC→CCTA-Segment mapping file completed for the County's CMP efforts was used as a starting point for MTSO Monitoring spatial conflation efforts. A thorough review of TMC links over each MTSO segment was performed. Figure 1 shows a schematic example of mapping or combining four TMC links to one MTSO reporting segment. Note that the end of the last TMC link does not align with the end of the MTSO Segment. In these instances, only the overlapping portion of the TMC is used in subsequent steps in the evaluation process.



2) Coverage Check

Prior to the temporal aggregation, a reality check was performed to assure that small sample estimation errors did not negatively impact the reliability of the reported MTSOs. The project team performed a check to ensure that time-periods with excess TMCs removals were not included in the further analysis. To do this, the team removed all one-minute time periods where the total mapped TMC data available was less than 99%. Using the 99% threshold, only a small minority of the time periods were flagged as having inadequate sample size. In these cases, the threshold was lowered to 70% to ensure adequate sample size. The number of one-minute data points for MTSO segment varies as a result of removing data points during this filtering process. The team selected a minimum sample size threshold for sample sizes of 100 observations (i.e., data points). Locally collected floating car surveys were performed where the MTSO segment failed the minimum sample size criteria. In the 2017 MTSO monitoring, this occurred at only one location - Pleasant Hill Road between Geary Road and Taylor Boulevard.

3) Temporal Aggregation

In this step, the one-minute intervals for each MTSO segment were aggregated to peak periods. The peak hour speeds were estimated in 15-minute moving average time-periods, e.g., from 6:00 to 7:00 A.M., then from 6:15 to 7:15 A.M., etc. Next, the lowest peak hour speed (during the peak period) was used as an input to the LOS and delay estimation process, which is described in the next section.

4) Compute Required Performance Measure (Speed, LOS, and Delay Index)

The procedure of calculating LOS and delay index is in conformance with CCTA's Technical Procedures.

- For floating car runs, the speeds were averaged to estimate the peak hour speed.
- The LOS assignment process is consistent with previous MTSO reporting efforts and consistent with legislative requirements from the California Government Code – as shown in Table 2 for freeway segments, and Table 3 for arterial street segments.

Table 2: Freeway Level of Service Standards (HCM 1985)

Level of Service	Traffic Speed (miles/hour)
A	≥ 60
B	≥ 57
C	≥ 54
D	≥ 46
E	≥ 30
F	< 30

Table 3: Arterial Level of Service Standards (HCM 1985)

Level of Service	Traffic Speed (miles/hour)
A	≥ 55
B	≥ 50
C	≥ 45
D	≥ 40
E	< 40

- The Delay Index is an expression of the amount of time required to travel between two points during the peak hour as compared to a baseline. The numerator of the delay index formula, the free flow travel time is defined as “the time it takes to traverse a roadway segment at the posted speed limit”. The denominator of the delay index formula measured or actual peak hour travel time experienced by motorists, which was the peak hour speed identified in the third step as mentioned above.

2.2.2 Duration of Congestion, HOV Lane Utilization

The Tri-valley Action Plan includes MTSOs for duration of congestion for the mixed-flow or general-purpose lanes on I-680 south of SR-84. The duration of congestion captures or measures the number of congested hours per average workday.

MTSO standards for HOV lane utilization (in vehicles per hour) were established in the East County and West County.

2.2.2.1 Data Collection

Vehicular speed data were downloaded from the Caltrans PeMS website for the vehicle detector station (VDS) locations along the freeway’s MTSO segments during non-holiday Tuesdays, Wednesdays and Thursdays for the months of February, March, and April of 2017.

2.2.2.2 Data Processing

Duration of congestion is defined as the number of congested hours during a normal or average non-holiday workday. The MTSO standard of no more than five (5.0) hours was established for I-680 south of SR-84 in the Tri-valley. First, the five-minute speeds were aggregated to each half-hour periods for each PeMS detector location. Second, a congested half-hour period was flagged if it performed at a speed below 35 miles per hour. Finally, the number of congested half-hour periods were summed and reported as total (daily) hours of congestion.

HOV lane usage is measured by the number of vehicles using the HOV lane at the highest HOV volume along the MTSO reporting section. The East County established MTSO standard for freeways with HOV lane utilization exceeding 600 vehicles per lane in the peak direction during the peak hour. The maximum volume was identified by aggregating five-minute traffic volumes (obtained from the Caltrans PeMS website) to peak hour volume.

2.2.3 Average Vehicle Ridership

The Tri-valley Action Plan contains a MTSO for I-580 and I-680 that specifies the ratio of total person commute trips to vehicles used for commuting on I-580 and I-680 increased by 10% from 1.1 to 1.2.

2.2.3.1 Data Collection

Average vehicle ridership was estimated using data from the Bay Area Manage Lane Report published by Caltrans in 2013 and 2015.

2.2.4 Average Vehicle Occupancy

The MTSO standard for average vehicle occupancy is included in the Lamorinda Action Plan. It is a measure of the average number of passengers (including the driver) per vehicle on Pleasant Hill Road and Camino Pablo/ San Pablo Dam Road. The MTSO standards include:

- Increase the average vehicle occupancy on Pleasant Hill Road/Taylor Boulevard to at least 1.3 during the peak commute hours by 2018; and
- Increase the average vehicle occupancy on Camino Pablo/San Pablo Dam Road to at least 1.3 during the peak commute hours by 2018.

2.2.4.1 Data Collection

Vehicle occupancy data were collected from a stationary position along Pleasant Hill Road and Camino Pablo/ San Pablo Dam Road. Video data captured traffic flow during AM and PM peak periods on May 23rd and May 25th, 2017. In accordance with the Technical Procedures, the data were collected on mid-week workdays (i.e., Tuesdays, Wednesdays and Thursdays) on non-holiday days while local area schools were in session.

2.2.4.2 Data Processing

The field data were reported in 15-minute intervals during AM and PM peak periods. The occupancy counts were then aggregated to estimate the average per peak period vehicle occupancy.

2.3 Transit Ridership

The usage of public transit was monitored in the East County and the Lamorinda. There is no specified goal in the East County Action Plan.

- Lamorinda
 - Maintain an hourly average transit load factor (ratio of passengers to seats) of 1.5 or less when approaching Lafayette Station westbound and Orinda Station eastbound during each and every hour of service.
- East County
 - A measure of the average number of riders boarding a fixed-route bus during an hour of scheduled bus service when persons may board with a fare or pass.
 - A measure of the average number of weekday riders on all BART trains between the Bay Point and North Concord Stations.

2.3.1 Data Collection

The transit ridership data were obtained directly from Tri Delta Transit, LAVTA and BART.

2.3.2 Description and Method of Calculation

For East County, the average ridership per service hour was derived from the ridership for Tri Delta Transit fixed-route buses in a sample month (May 2017); BART passenger counts between the Bay Point and North Concord Stations (April 2017) were averaged to obtain the average number of weekday riders. For Lamorinda, BART ridership approaching the Lafayette Station westbound and Orinda Station eastbound was tallied and then averaged per service hour.

2.4 Additional Performance Measures

The Tri-valley and Lamorinda Action Plans now contains MTSOs not reported in the previous monitoring cycles.

- **Pedestrian and Bicycle Volumes:** The Tri-valley Action Plans includes a MTSO for pedestrian and bicycle volumes using Iron Horse Trail (directly measured from field observations).

- **Crash frequency:** The Tri-valley and Lamorinda Action Plan includes MTSOs for vehicle crash frequency and/or pedestrian or bicycle injury crash frequency. The collision data were obtained from the Caltrans Statewide Integrated Traffic Records System (SWITRS) for the calendar year 2013-2016.
- **Average Trail User Delay at Major Road Crossings:** The Tri-valley Action Plans includes a MTSO for pedestrian delay at the signaled intersection. The delays (in units of seconds) were determined by the cycle length and the green times for vehicles when pedestrians are prohibited to enter crosswalk with an assumption of uniform pedestrian arrival rate.
- **Pavement Condition:** The Tri-valley Action Plans includes a MTSO for Iron Horse Trail that measures the relative comfort of the trail for its users using the pavement condition. This MTSO was reported using Pavement Condition Index.
- **Frequency of Lane Closure:** The Lamorinda Action Plan includes a MTSO for the frequency of lane closure.
- **Inventory of pedestrian and bicycle facilities:** The Lamorinda Action Plan includes a MTSO for the inventory of pedestrian and bicycle facilities.

This chapter summarizes the results from the 2017 MTSO monitoring at the designated MTSO roadway intersections and segments.

3.1 Intersection Analysis

This section on roadway intersection analysis is divided into two sub-sections:

- 1) Intersection Level of Service (LOS) and Volume-to-Capacity ratio (V/C), and
- 2) Average Stopped Delay and Maximum Side Street Wait Time.

The intersection analysis MTSO monitoring results are summarized in Table 4 for Tri-valley County, Table 5 for the East County, Table 6 for the West County and in Table 7 for the Central County sub-region.

3.1.1 Intersection LOS and V/C

The LOS and/or V/C ratios were analyzed for 231 MTSO locations: 82 locations in the Tri Valley sub area, 56 locations in the West County, 41 locations in the East County, and 50 locations in the Central County. Of these 231 locations, 13 locations currently exceed the standard threshold either in the AM and/or PM peak periods.

The following MTSO locations are reported for each sub-region:

Tri Valley: two (2) locations operate at a lower LOS:

- T9: San Ramon Valley Boulevard/Alcosta Boulevard; (HCM 2010 AM Peak); and
- T60: Stanley Boulevard/Murrieta Boulevard. (HCM 2000 AM and PM Peak)

West County: five (5) locations operate at a lower LOS:

- W1: San Pablo Avenue/John Muir Parkway; (HCM 2010 AM and PM Peak, HCM 2000 PM Peak)
- W5: San Pablo Avenue/Rumrill Boulevard; (HCM 2010 and 2000 PM Peak)
- W30: San Pablo Avenue/Richmond Parkway; (HCM 2010 and 2000 PM Peak)
- W49: Richmond Parkway/Westbound I-80 Ramps/Blume Drive; (HCM 2010 AM and PM Peak) and
- W55: Richmond Parkway/Pittsburgh Avenue. (HCM 2010 and 2000 PM Peak)

East County: four (4) locations operate at a lower LOS:

- E12: Main Street/Delta Road; (HCM 2010 and 2000 AM and PM Peak) Stop Control
- E23: Bailey Road/Leland Road; (HCM 2010 AM Peak)
- E24: Railroad Avenue/Leland Road; (HCM 2010 AM Peak) and
- E31: Lone Tree Way/West Tregallas Road. (HCM 2010 PM Peak)

Central County: all locations operate at an acceptable level for LOS and/or V/C standards.

- The V/C standard threshold of 1.5 for Central County intersections on Pacheco Blvd, Pleasant Hill Rd, Taylor Blvd, Treat Blvd, and Ygnacio Valley Blvd reflect the level of congestion on a given roadway.
- All intersections analyzed with V/C are at an acceptable level.

Table 6: 2017 MTSO Intersection Draft LOS Results – East County Sub Area

Intersection			MTSO	HCM Method	AM			PM		
ID	Facility	Cross Street			Delay (sec)	2017 LOS	2013 LOS	Delay (sec)	2017 LOS	2013 LOS
E1	Railroad Avenue	Westbound SR-4 Ramps /California Avenue	E	2010	27.4	C		16.1	B	
E2	Railroad Avenue	Eastbound SR-4 Ramps	E	2000	29.7	C		39.8	D	
E3	Railroad Avenue	Buchanan Road	E	2000	48.5	D		23.1	C	
E4	Main Street	Neroly Road	E	2000	23.3	C	C	26.8	C	C
E5	Main Street	Big Break Road	E	2010	19.7	B	C	48.5	D	D
E6	Main Street	Oakley Road /Empire Road	E	2010	13.7	B	C	18.3	B	B
E7	Main Street	Cypress Road	E	2010	28.5	C	C	43.1	D	C
E8	Brentwood Boulevard	Balfour Road	E	2010	47.8	D	D	51.3	D	D
E10	18th Street-Main Street	Southbound SR-160 Ramps	D	2010	31.5	C	B	29.5	C	B
E11	Main Street	Northbound SR-160 Ramps	D	2010	13.4	B	B	13.0	B	B
E12	Main Street	Delta Road	D	2010	63.6	F		51.3	F	
E13	Brentwood Boulevard	Lone Tree Way	D	2010	27.8	C	C	33.6	C	C
E14	Brentwood Boulevard	Sand Creek Road	D	2010	25.0	C	C	28.5	C	C
E15	Brentwood Boulevard	Central Blvd-Sycamore Road	D	2010	18.3	B	B	17.2	B	B
E16	Brentwood Boulevard	Oak Street	D	2000	25.7	C	C	25.4	C	C
E17	Walnut Boulevard	Oak Street	D	2000	20.5	C	B	22.6	C	B
E18	Walnut Boulevard	Balfour Road	D	2010	33.7	C	D	34.4	C	C

Intersection			MTSO	HCM Method	AM			PM		
ID	Facility	Cross Street			Delay (sec)	2017 LOS	2013 LOS	Delay (sec)	2017 LOS	2013 LOS
E19	Walnut Boulevard	Marsh Creek Road	D	2010	25.2	C	C	36.2	D	D
E20	Bailey Road	Willow Pass Road	E	2010	29.9	C	C	32.7	C	C
E21	Bailey Road	Westbound SR-4 Ramps	E	2010	27.1	C	C	17.6	B	B
E22	Bailey Road	Eastbound SR-4 Ramps	E	2000	21.3	C	C	28.7	C	C
E23	Bailey Road	Leland Road	E	2010	92.1	F	D	53.0	D	C
E24	Railroad Avenue	Leland Road	D	2010	79.0	E	E	47.0	D	F
E25	Somersville Road	Westbound SR-4 Ramps	D	2000	32.4	C	C	24.7	C	C
E26	Somersville Road	Eastbound SR-4 Ramps	D	2000	20.1	C	B	33.9	C	B
E27	Somersville Road	Delta Fair Boulevard	D	2000	34.3	C	C	40.5	D	D
E28	Somersville Road	Buchanan Road	D	2010	28.9	C	D	27.4	C	D
E29	Lone Tree Way-A Street	Westbound SR-4 Ramps	D	2000	29.1	C	C	21.4	C	C
E30	Lone Tree Way	Eastbound SR-4 Ramps	D	2010	24.7	C	C	28.2	C	C
E31	Lone Tree Way	West Tregallas Road	D	2010	54.1	D	B	137.2	F	C
E32	Lone Tree Way	James Donlon Boulevard	D	2010	27.9	C	D	28.0	C	D
E33	Lone Tree Way	Deer Valley Road	D	2010	28.6	C	D	28.6	C	D
E34	Lone Tree Way	Hillcrest Avenue	D	2010	27.5	C	C	29.8	C	C
E35	Lone Tree Way	Empire Avenue	D	2010	33.1	C	D	34.3	C	D
E36	Lone Tree Way	Fairview Avenue	D	2000	45.0	D	D	49.8	D	D
E37	Lone Tree Way	O'Hara Avenue	D	2010	43.1	D	D	42.6	D	D

Intersection			MTSO	HCM Method	AM			PM		
ID	Facility	Cross Street			Delay (sec)	2017 LOS	2013 LOS	Delay (sec)	2017 LOS	2013 LOS
E38	Hillcrest Avenue	Westbound SR-4 Ramps	D	2010	4.2	A	C	4.5	A	C
E39	Hillcrest Avenue	Eastbound SR-4 Ramps	D	2000	23.6	C	C	37.2	D	C
E40	Hillcrest Avenue	Deer Valley Road	D	2000	31.1	C	C	32.1	C	C
E41	Leland Road	Loveridge Road	D	2010	32.5	C	D	30.9	C	C
E42	Buchanan Road	Loveridge Road	D	2010	23.2	C	C	17.9	B	C

~~Table 10-2: Roadway Segment Analysis– Central County (Delay Index)~~

Route	Limits	Dir	Length (mile)	MTSO	AM		PM	
					2017 Observed	2013 Observed	2017 Observed	2013 Observed
SR-242	I-680 to State Route 4	NB	3.07	3	1.0	1.3	3.6	1.3
SR-242	I-680 to State Route 4	SB	3.07	3	1.6	1.4	1.0	1.3
SR-4	Between Central County sub-area boundaries	EB	11.93	5	1.0	1.0	3.0	1.4
SR-4	Between Central County sub-area boundaries	WB	11.87	5	1.3	1.2	1.1	1.0
I-680	Between central sub-area boundaries	NB	14.23	4	1.0	1.4	2.0	1.5
I-680	Between central sub-area boundaries	SB	14.2	4	1.9	1.6	1.1	1.2

Table 11-1: Roadway Segment Analysis– East County (LOS)

[MTSO = LOS D]

Route	Limits	Dir	Length (mile)	AM 2017 Observed	PM 2017 Observed
Deer Valley Road	Prewett Ranch Road to Sand Creek Road	NB	0.6	E	E
Deer Valley Road	Prewett Ranch Road to Sand Creek Road	SB	0.6	D	E
Walnut Boulevard	Camino Diablo to Vasco Road	NB	0.89	E	E
Walnut Boulevard	Camino Diablo to Vasco Road	SB	0.89	E	E
Cypress Road	Sellers Avenue to Bethel Island Road	EB	1.96	E	E
Cypress Road	Sellers Avenue to Bethel Island Road	WB	1.96	E	E

Route	Limits	Dir	Length (mile)	AM 2017 Observed	PM 2017 Observed
Deer Valley Road	Antioch limit / Marsh Creek	NB	4.87	D	D
Deer Valley Road	Antioch limit / Marsh Creek	SB	4.87	D	D
Sellers Avenue	Laurel Road Extension to Cypress Road	NB	0.5	E	E
Sellers Avenue	Laurel Road Extension to Cypress Road	SB	0.5	D	E
Balfour Road	Deer Valley to Brentwood	NB	4.78	E	E
Balfour Road	Deer Valley to Brentwood	SB	4.78	E	E
Vasco Road	Marsh Creek Road to Alameda County Line	NB	12.13	B	E
Vasco Road	Marsh Creek Road to Alameda County Line	SB	12.13	E	B
Byron Highway	Brentwood Boulevard to Alameda County Line	NB	8.04	D	D
Byron Highway	Brentwood Boulevard to Alameda County Line	SB	8.04	C	C
Marsh Creek Road	Deer Valley Road to SR-4	EB	5.03	D	C
Marsh Creek Road	Deer Valley Road to SR-4	WB	5.03	C	C
Camino Diablo Road	Marsh Creek Road to Vasco Road	EB	3.58	E	D
Camino Diablo Road	Marsh Creek Road to Vasco Road	WB	3.58	D	D

Table 11-2: Roadway Segment Analysis– East County (Delay Index)

[MTSO = 2.5]

Route	Limits	Dir	Length (mile)	AM 2017 Observed	PM 2017 Observed
SR-160	Between State Route 4 and the Sacramento County line	NB	2.6	1.2	1.2
SR-160	Between State Route 4 and the Sacramento County line	SB	2.6	1.2	1.1
SR-4	Between East County sub-area boundaries	EB	17.99	1.0	1.1
SR-4	Between East County sub-area boundaries	WB	17.99	2.5	1.0
SR-4	Between East County sub-area boundaries	EB	17.99	1.1	1.4
SR-4	Between East County sub-area boundaries	WB	17.99	1.4	1.3

3.2.2 Duration of Congestion and HOV Lane Utilization

The duration of congestion and HOV lane utilization are determined from Caltrans PeMS peak hour speed and volume data. One location in the West County that did not meet the MTSO standard.

The results of 2017 MTSO monitoring are shown in Table 16 through Table 18.

Table 16: HOV Utilization – East County

Route	MTSO	Dir	Peak Hour	2017 Observed (Max Volume)
SR-4	600 vehicles per lane	WB	AM (7:00-8:00)	1,755
		EB	PM (5:45-6:54)	1,810

~~Table 17: Duration of congestion – Tri-valley County~~

Route	Limits	Dir	MTSO (hour)	2017 Observed
I-680	SR-84 to County Line	SB	5.0	4.5

~~Table 18: HOV Lane Utilization – West County~~

~~[MTSO = 10%]~~

Route	Dir	Peak Hour	2013 Observed	2017 Observed	2017 Observed	2013 Observed
			Max Volume	Max Volume	% Change	% Change
I-80	EB	6:00 - 7:00 AM	945	1,399	48%	43%±
		5:00 - 6:00 PM	1,169	1,349	15%	
	WB	7:30 - 8:30 AM	1,401	1,430	2%	
		3:00 - 4:00 PM	1,130	1,511	34%	

		PM	1.2
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3.3 Transit Ridership

This transit ridership section is divided into two parts: 1) BART Ridership; 2) Bus Ridership. Overall, there is no specific standards defined in the Action Plans.

3.3.1 BART Ridership

The East County Action Plan contains a MTSO that is measure of the average number of weekday riders on all BART trains between Bay Point and North Concord Stations.

Table 21 shows the monitoring results.

Table 21: BART Ridership – East County (weekday)

Origin Station	Destination Station	Total Weekday Ridership*	Average Weekday Ridership (both directions)
Bay Point	**	6,329	12,739
**	Bay Point	6,410	

* Source: BART Ridership Report, April 2017

** Other stations in the BART system

~~The Lamorinda County Action Plan contains a MTSO that establishes an hourly average loading factor (ratio of passengers to seats) of 1.5 or less approaching Lafayette Station westbound and Orinda Station eastbound during each and every hour of service.~~

~~Table 22 shows the monitoring results.~~

~~Table 23: BART Ridership – Tri-Valley County (weekday)~~

Station	To	From	Average
Dublin / Pleasanton	8,110	8,210	8,160

~~* Source: BART ridership in April 2017~~

3.3.2 Bus Ridership

The East County Action Plan contains a MTSO that is a measure of the average number of riders boarding a fixed-route bus during an hour of scheduled bus service when persons may board with a fare or pass.

Table 24 shows the monitoring results.

Table 24: Tri-delta Bus Ridership – East County

Route Number	Ridership per revenue service hour
200	8.4
201	16.6
300	43.4
379	15.8
380	52.3
383	8.8
385	9.1
386	0.4
387	23.5
388	31.9
389	4.7
390	9.0
391	30.2

~~The monthly ridership counts for LAVTA transit services in the Tri-valley were reported in consultation with CCTA.~~

~~Table 25 presents the results.~~

4

Summary of Findings/Recommendations

A summary of results of the 2017 MTSO analysis for the five sub-areas within the Contra Costa County is shown in Table 33. The table lists the number of locations that do not meet the designated MTSO standards.

Table 33: Summary of Monitoring Results

Sub Area	MTSO Measure	Locations	AM Peak		PM Peak	
			Not Achieving MTSOs		Not Achieving MTSOs	
			No	%	No	%
East	Delay Index	4	0	0.0%	0	0.0%
	Intersection LOS	41	3	7.3%	2	4.9%
	Roadway Segment LOS	20	10	50.0%	11	55.0%
	HOV Lane Usage	2	0	0.0%	0	0.0%
Central	Delay Index	6	0	0.0%	1	16.7%
	Average Speed	12	0	0.0%	0	0.0%
	Average Stopped Delay	8	0	0.0%	0	0.0%
	Intersection LOS V/C	50	0	0.0%	0	0.0%
Lamorinda	Delay Index	12	3	25.0%	3	25.0%
	Side Street Wait Time	13	3	23.1%	0	0.0%
	Average Vehicle Occupancy	2	2	100.0%	2	100.0%
Tri-valley	Delay Index	6	0	0.0%	0	0.0%
	Intersection LOS	82	2	2.4%	1	1.2%
	Average Speed	4	0	0.0%	0	0.0%
	Duration of Congestion	1	0	0.0%	0	0.0%
	Average Vehicle Ridership	3	0	0.0%	3	100.0%
West	Delay Index	6	1	16.7%	0	0.0%
	Intersection LOS	56	2	3.6%	5	8.9%
	HOV Lane Usage	2	1	50.0%	0	0.0%
Total - Countywide		330	27	8.2%	28	8.5%

ITEM 3
DRAFT FISCAL YEAR 2018/19 WORK PLAN AND BUDGET

TRANSPLAN COMMITTEE

EAST COUNTY TRANSPORTATION PLANNING

Antioch • Brentwood • Oakley • Pittsburg • Contra Costa County
30 Muir Road, Martinez, CA 94553-0095

TO: TRANSPLAN Committee
FROM: TRANSPLAN Technical Advisory Committee (“TAC”)
DATE: June 14, 2018
SUBJECT: FY 2018/2019 Proposed TRANSPLAN Work Program and Budget

Recommendation

ADOPT the Fiscal Year 2018/2019 (“FY 2018/19”) TRANSPLAN Work Program and Budget, and **DIRECT** staff to deliver member dues invoices to the member agencies.

Background

The TRANSPLAN Committee adopts a budget and work program annually. Some of the tasks from the previous work program will carry over. Current budget and proposed budget and work plan activities for the impending fiscal year are detailed in the following discussion.

FY 2017/18 Budget Report

For FY 2017/18, each TRANSPLAN member agency was required to remit dues payments of \$2,494.93 to cover projected budget expenditures totaling \$23,000. Total revenue received to cover said expenditures amounted to \$13,300.62. Additionally, TRANSPLAN carried over a revenue surplus of \$10,525.33 from the FY 2016/17 budget. Thus, total revenues were \$23,825.95. Total expenditures thus far in FY 2017/18 (July '17 –May '18) are \$23,797.52.

Revenue less actual and projected expenditures for the remainder of FY 2017/18 (\$1,500) results in an overrun of approximately (-\$1,469.57)¹. ($\$23,825.95 - \$23,797.52 - \$1,500 = -\$1,469.57$)

Activities

The attached work program proposes the set of tasks to be undertaken during the 2018/19 fiscal year. As is typical, some of the items are continuing items with a few modifications noted below:

- **State Route 4 Planning Activities/Operational Improvements/Integrated Corridor Mobility (“ICM”) Project:** CCTA has begun development of the State Route 4

¹ Amount will change after final accounting for FY 17/18 4th quarter activity.

Integrated Corridor Mobility project. TRANSPLAN staff will assist in facilitating inter-agency collaboration, including evaluation and monitoring of ramp metering, project management and implementation. Ongoing collaborative activities such as this are defined in Task 4.

- **Countywide Transportation Plan/East County Action Plan/Senate Bill (“SB”) 743²:** TRANSPLAN staff will work with the TAC and CCTA on completing adoption of the CCTA Countywide Transportation Plan (“CTP”). This is likely to occur in late 2017. CCTA will be working with the TAC on developing next-step implementation strategies for incorporating SB 743 into the Action Plan during the next update.
- **Concord Community Reuse Project:** TRANSPLAN staff will continue to monitor and report to the TAC and Committee on activities related to the subject project.

Proposed FY 2018/2019 Budget

This budget includes approximately ten hours of a Transportation Planner per month, two hours of secretarial time per month, and eight hours of the minutes-taker’s time per month. The budget also includes a small amount for office supplies and mailing costs, and a reserve for contingencies.

Individual TAC members assume liaison duties for various CCTA committees (e.g. Technical Coordinating Committee, Technical Model Working Group and Priority Development Area (“PDA”) Working Group) and report any relevant activities to the full TAC. Essentially, the TAC’s participation also helps to minimize TRANSPLAN’s budget. Consistent with Committee direction from past years, staff will bill the jurisdictions for the difference in this year’s actual cost (any overrun will be added to the 2017/18 invoice, or surplus will be deducted).

FY 2018/19’s projected total budget (Table 1) is \$31,000. That amounts to contributions (dues) of \$6,200 from each of the five member jurisdictions.

att: Work Plan
Table 1

cc: TRANSPLAN TAC

² SB 743, Steinberg. Amends the CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts.

Draft Work Program for FY 2018/2019

Task 1: Participate in project implementation of the Brentwood-Tracy Expressway ("Tri-Link"/SR 239) Interregional Corridor Study. The Contra Costa Transportation Authority ("CCTA") is the project manager and identified TRANSPLAN as a primary stakeholder. The public/external planning process for this effort began in 2011/12 and is now complete. CCTA is now working with Caltrans on implementation.

Task 2: Review major land use proposals *within* East County for compliance with East County Action Plan for Routes of Regional Significance. This task will continue as an ongoing activity, required by Measure J and by TRANSPLAN's own procedures. It is part of the Measure J Growth Management Program.

Task 3: Review land use proposals *outside* of East County that meet the Measure J threshold requirements (100 or more new peak-period vehicle trips) for potential traffic impacts on East County routes of regional significance. This task will continue as an ongoing activity, similar to Task 2 above. It is part of the Measure J Growth Management Program.

Task 4: Facilitate collaboration between member jurisdictions and the Contra Costa Transportation Authority in conducting planning activities requiring sub-regional consultation. TRANSPLAN will provide ongoing assistance and local facilitation with CCTA, at a minimum for the State Route 4 Operational Improvements, the Congestion Management Program, the Measure J Strategic Plan, Measure J Growth Management Program ("GMP") (e.g. Countywide Transportation Plan/Action Plan for Routes of Regional Significance), the Countywide Bicycle and Pedestrian Plan, and various federal, state, regional and local funding programs. These efforts, while administered primarily by other agencies, require and benefit from local facilitation.

Task 5: Represent TRANSPLAN at meetings of CCTA as needed, including the monthly CCTA Board meetings and the monthly meetings of its two committees (the Administration and Projects Committee, and the Planning Committee). This task will continue.

Task 6: Participate as needed in refining the East County portion of the countywide travel demand forecasting model and/or in adapting the model for local application. CCTA completed the model update and combined the four sub-regional models into one countywide version in '10. Ongoing refinements or consultation may be needed. The Measure J GMP requires local jurisdictions to consult with the Technical Advisory Committee ("TAC") when they use or adapt the model for local general plan amendments or CEQA review of large development proposals.

Task 7: Ferry Planning: Coordinate ferry service planning activities with member agencies, the Contra Costa Transportation Authority, the Water Emergency Transportation Authority, and other affected entities.

Task 8: Growth Management Program Compliance: Assist in administering the resolution of growth management compliance issues between member jurisdictions in cooperation with Contra Costa Transportation Authority staff per *TRANSPLAN Committee Administrative Procedures, Article III*.

Task 9: Oversee State Route 4 Projects: With CCTA taking on responsibility for certain State Route 4 Bypass Authority projects, TRANSPLAN has agreed to take on additional obligations. These obligations will be defined in memoranda of understandings on a project by project basis. This will require oversight and involvement of TRANSPLAN staff.

Table 1: Proposed TRANSPLAN Budget for FY 2018/19

<i>Item</i>	<i>Proposed FY 2018/19 Budget*</i>	<i>% of Proposed Budget**</i>
Transportation Planner (10 hours/month)	\$22,000.00	71%
Secretary (2 hours/month)	\$2,000.00	6%
Minutes Taking (8 hours/month)	\$3,500.00	11%
Subtotal for Personnel Costs	\$27,500.00	
Office Supplies and Services	\$500.00	2%
Contingency	\$3,000.00	10%
Total FY 2018/19 Budget	\$31,000.00	100%
Per Jurisdiction Contribution	\$6,200	