

METROPOLITAN TRANSPORTATION COMMISSION

Bay Area Metro Center 375 Beale Street San Francisco, CA 94105 TEL 415.778.6700 WEB www.intc.ca.gov

Memorandum

TO: Commission

DATE: July 21, 2017

FR: Executive Director

RE: SB 595 (Beall) – Regional Measure 3

Background

At the June 28 Commission meeting, staff was requested to provide additional information on a number of Regional Measure 3-related items and to place Senate Bill 595 (Beall) on the agenda for official Commission action. This agenda item includes the following elements:

- 1. A presentation highlighting the SB 595 expenditure plan adopted by the Assembly Transportation Committee and recommending a number of amendments to the bill.
- 2. A summary of the top-line results of the RM 3 poll conducted by the Bay Area Council.
- 3. A brief white paper on the congestion relief impact of transit-oriented affordable housing and options for how RM 3 funds could be leveraged to address the region's affordable housing shortage.
- 4. Information on the trip destination of Bay Area state-owned bridge users. We had provided trip origin data of bridge users at your June meeting.

Bill Update

On July 13, the Assembly Transportation Committee approved the Regional Measure 3 authorizing bill, SB 595 (Beall) by a vote of 10-2. This was a key milestone for the bill and took a great deal of effort by many Bay Area legislators and stakeholders. All but one Bay Area member on the committee voted in favor; Assembly Member Baker abstained. The bill has been referred to the Assembly Appropriations Committee, where it is expected to be voted on in late August. Currently, SB 595 simply lists project names and dollar amounts. Over the next few weeks, amendments will be drafted to provide project descriptions and identify project sponsors, a critical component of the legislation.

With respect to the toll increase amount, the bill authorizes an increase of up to \$3, allowing the commission to select the amount to place on the ballot, as well as the phase-in period. After the toll increase is fully phased in, the bill authorizes the Bay Area Toll Authority to adjust the toll increase amount (i.e. up to \$3) by inflation. At this time there is no other detail in the legislation with respect to the use of revenue generated by indexing, but discussions with Senator Beall and others suggest that the intent is to limit this to projects and programs authorized in the bill and bridge maintenance and rehabilitation.

In addition, at the request of Senator Beall, BATA's financial team has reevaluated the amount of revenue that could be generated by a \$3 toll increase – without indexing – under a reasonable set of assumptions about future interest rates, traffic projections, and the like. Our BATA team has concluded that up to an additional \$200 million could be generated under a slightly revised set of financial assumptions. We have communicated this information to Senator Beall.

Recommendation

Staff recommends the Commission adopt a "support and seek amendment" position on SB 595 as follows:

- 1. **FasTrak**® **Discount**. Authorize a financial incentive for more people to pay tolls via FasTrak to reduce delay at toll plazas and toll collection administrative costs. This is standard business practice at most toll authorities across the nation.
- 2. **Use of Toll Revenue**. Specify that any funds generated from the toll revenue increase are eligible for bridge rehabilitation/maintenance.
- 3. **Election Date**. Delete reference to November 2018 to provide flexibility on when a vote is held, as long as it is consolidated with a statewide election.
- 4. **Enable a Back-up Plan**. To avoid leaving funds unallocated with no option to be spent, allow toll revenue assigned to a specific project to be reduced or reassigned to a project within the same bridge corridor if the project has savings or cannot be competed, similar to RM 2. This provides needed flexibility to continue to improve mobility in a bridge corridor if the original project encounters insurmountable delivery obstacles. Any change would only be made after consultation with the project sponsor, a public hearing and Commission approval.
- 5. **Clipper 2.0 Funding**. The expenditure plan does not currently provide any funding for Clipper 2.0, the next generation of the region's transit fare collection system. We recommend the inclusion of Clipper 2.0 funding in RM 3.
- 6. **Additional Project Capacity**. In allocating the \$200 million described above, priority should be given to bridge corridors where current investment levels are lower on a per toll payer basis.
- 7. **Pro Rata Expenditure Plan Adjustment.** In the event that a \$3 toll increase is determined to be infeasible at the ballot, the bill should allow for a pro rata adjustment to the expenditure plan to account for a \$2 or \$1 toll request in the ballot measure.

Steve Heminger





Regional Measure 3 Follow-Up

Metropolitan Transportation Commission
July 26, 2017



Follow-Up Items from June Commission Meeting

- Polling results (attached)
- Bridge user destination data (attached)
- Housing policy discussion (attached)
- Update on development of an RM 3 expenditure plan
- Recommendation for action on SB 595



RM3 Status Update

- Senate Bill 595 (Beall) passed the Assembly Transportation Committee on July 14 with an amendment to incorporate an agreed-upon expenditure plan.
- The bill has been amended to include project names and amounts, but no detailed descriptions or other policy items yet.
- Subsequent and final amendments are anticipated to be made prior to the bill's vote in the Assembly Appropriations Committee, anticipated to be held in late August.



RM3 Expenditure Plan as Amended by Assembly Transportation Committee

PROGRAM CATEGORY	\$3 Toll Funding (in millions)	Percent of Capital Funding
Operating Program	\$60/year	
Regional Capital Program	\$1,930	46%
Corridor-Based Capital Program	\$2,270	54%
Grand Total Capital Program	\$4,200	100%



Annual Operating Funding

OPERATING PROGRAM	Annual Amount \$60 million
ALL CORRIDORS	
Transbay Terminal	5
Ferries	35
Regional Express Bus	20



REGIONAL	\$3 Toll Project Amount (\$ millions)
Bridge Rehabilitation (SFOBB & Richmond-San Rafael deck replacement, San Mateo-Hayward & Dumbarton deck overlays, paint Carquinez, miscellaneous projects on Richmond-San Rafael, SFOBB and San Mateo Hayward)	Top Priority of Indexing
BART Expansion Cars (all BART-reliant counties)	500
Corridor Express Lanes (Eligible: Alameda/Contra Costa I-80, Alameda I-880, Alameda-Contra Costa I-680, San Francisco 101, San Mateo 101, SR 84, SR 92, Solano I-80 Express Lanes (Red Top Road to I-505)	300
Goods Movement and Mitigation (I-580 and I-880 in Alameda County, Port of Oakland, Freight Rail Improvements)	125
Bay Trail / Safe Routes to Transit (all bridges corridors eligible)	150
Ferries (New vessels to add frequency to existing routes and service expansions in the counties of Alameda, Contra Costa, San Mateo, San Francisco, Solano; Antioch terminal)	325
BART to Silicon Valley, Phase 2	400
SMART	40
Capitol Corridor Connection	90
Subtotal	1,930

CENTRAL CORRIDOR (SF-Oakland Bay Bridge)	\$3 Toll Project Amount (\$ millions)
Caltrain Downtown Extension (Transbay Terminal, Phase 2)	350
Muni Expansion Vehicles	140
Core Capacity Transit Improvements serving the Bay Bridge corridor	140
AC Transit - Rapid Bus Improvements	50
New Transbay BART Tube & Approaches	50
Subtotal	730

SOUTH CORRIDOR (San Mateo-Hayward, Dumbarton)	\$3 Toll Project Amount (\$ millions)
Tri-Valley Transit Access Improvements	100
Eastridge to BART Regional Connector	130
San Jose Diridon Station	120
Dumbarton Rail/ACE/BART/Shinn Station	130
San Mateo 101/92 Interchange	50
Subtotal	530

NORTH CORRIDOR (Richmond-San Rafael, Benicia-Martinez, Carquinez, Antioch)	\$3 Toll Project Amount (\$ millions)
Contra Costa 680/4 Interchange Improvements & Transit Enhancements	150
Marin-Sonoma Narrows	125
Solano I-80/680/SR 12 Interchange Improvements	175
Solano West-Bound I-80 Truck Scales	125
Highway 37 Corridor Access Improvements from Highway 101 to I-80 and Sea Level Rise Adaptation	150
San Rafael Transit Center / SMART	30
Marin 101/580 Interchange	135
North Bay Transit Improvements (Contra Costa, Marin, Napa, Solano Sonoma)	100
SR 29 (South Napa County)	20
Subtotal	1,010

■ Bridge, 70%



Voter Approved Bridge Toll Investments: By Mode

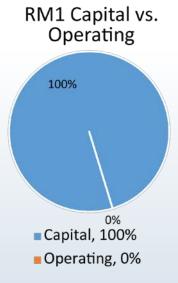
RM1 Capital Projects **RM2 Capital Projects** RM3 Capital Projects by Category by Category by Category 75% 19% 64% 32% 18% 70% 4% Transit, 11% Transit, 75% Transit, 64% Roads/Highway, 19% Roads/Highway, 18% Roads/Highway, 32% Bike/Ped, 0% Bike/Ped, 4% Bike/Ped, 4%

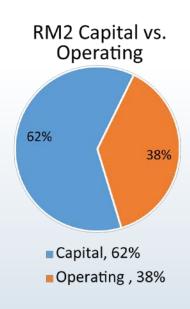
■ Bridge, 3%

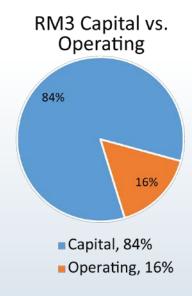
■ Bridge, 0%



Voter Approved Bridge Toll Investments: Operating vs Capital



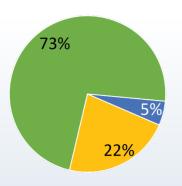






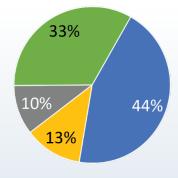
Voter Approved Bridge Toll Investments: By Corridor

RM1 Capital Program -By Corridor*



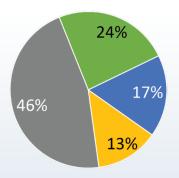
- North, 73%
- Central, 5%
- South, 22%
- Regional, 0%

RM2 Capital Program -By Corridor



- North, 33%
- Central, 44%
- South, 12%
- Regional, 10%





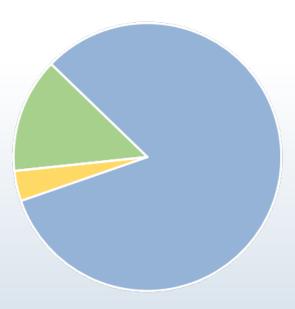
- North, 24%
- Central, 17%
- South, 13%
- Regional, 46%*

^{*}Includes RM1 Program & Rail Reserves

^{*}BART to San Jose is classified as regional



Toll Bridge Seismic Retrofit by Corridor



NORTH: 14%

Richmond-San Rafael Carquinez Benicia-Martinez Antioch

CENTRAL: 82%

SF-Oakland Bay Bridge

SOUTH: 4%

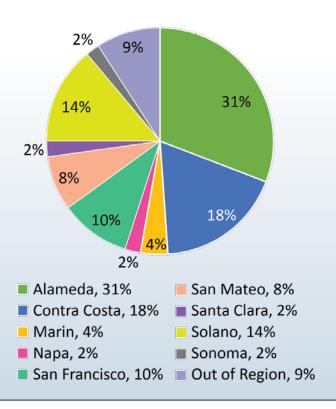
San Mateo-Hayward Dumbarton

REGIONAL: 0%

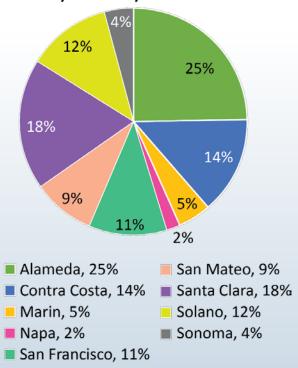


Tale of the Tape

Bridge Traffic by County



RM3 Capital Projects by County Benefit





Proposed Amendments to SB 595

- 1. FasTrak® Discount. Authorize a financial incentive for more people to pay tolls via FasTrak to reduce delay at toll plazas and toll collection administrative costs.
- 2. **Use of Toll Revenue**. Specify that any funds generated from the toll revenue increase are eligible for bridge rehabilitation/maintenance.
- **3. Election Date**. Delete reference to November 2018 to provide flexibility on when vote is held.
- **4. Enable a Back-up Plan**. To avoid leaving funds unallocated if a project has savings or encounters insurmountable obstacles, allow toll revenue assigned to a specific project to be reduced or reassigned within the same bridge corridor, similar to RM 2.

MT

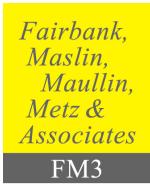
Proposed Amendments to SB 595 (cont'd)

- 5. **Clipper 2.0 Funding**. The expenditure plan should provide funding for Clipper 2.0, the next generation of the region's transit fare collection system.
- 6. Additional Project Capacity. In allocating the \$200 million, priority should be given to bridge corridors where current proposed investment levels are lower on a per toll payer basis.
- 7. Pro Rata Expenditure Plan Adjustment. In the event that a \$3 toll increase is determined to be infeasible at the ballot, the bill should allow for a pro rata adjustment to the expenditure plan to account for a \$2 or \$1 toll request in the ballot measure.



Recommendation

 Adopt a "support and seek amendment" position on SB 595 based on the amendments described on slides 15 and 16.



Public Opinion Research & Strategy

TO: Interested Parties

FROM: Dave Metz, Curtis Below and Miranda Everitt

Fairbank, Maslin, Maullin, Metz & Associates

RE: Bay Area Voter Attitudes Toward Regional Measure 3

DATE: June 20, 2017

Fairbank, Maslin, Maullin, Metz & Associates (FM3) recently completed a survey of likely voters in the nine-county Bay Area to assess opinions of a potential Regional Measure 3 (RM3) and its components. The study found that a \$3 bridge toll measure has a 13-point margin of support, on an initial ask. Voters overwhelmingly believe Bay Area traffic has gotten worse over the last year, and strongly support prioritizing new funding for large, regional transportation projects that often get overlooked. An alternative measure which would only raise tolls by \$2 gains support from an additional three percent of voters (for 59% support). Pegging the increase to inflation has a mild *positive* impact on support, with one-third of voters saying they would be more likely to support a measure that made small adjustments to keep pace with inflation.

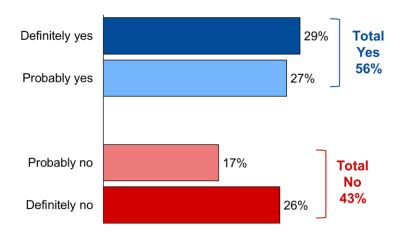
Detailed findings of the survey include:

• A potential measure to increase by \$3 tolls for Bay Area bridges (except the Golden Gate Bridge) to fund transportation improvements in the region has a 13-point margin of support. As shown in Figure 1 on the next page, more than half (56%) of voters support the measure phasing in the \$3 toll over six years, with nearly three in ten (29%) who say they would "definitely" vote "yes" on the measure. Roughly one-quarter (26%) of voters expressed strong opposition.

¹ **Methodology:** From June 14-18, 2017, FM3 completed 9,369 online interviews with registered voters in the nine-county Bay Area (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma counties) who are likely to participate in the June 2018 election. The margin of sampling error is +/-2.2%. For complete Assembly Districts, the margin of sampling error is +/- 4.5% or lower. Data were weighted to reflect the demographic composition of the electorate in each assembly district within the nine-county Bay Area. Overall data were weighted to reflect the true geographic distribution of voters across assembly districts in the Bay Area. Due to rounding, not all totals will sum to 100%.

Figure 1: Support for RM3

BAY AREA REGIONAL TRAFFIC RELIEF PLAN. Shall voters authorize a plan that relieves traffic, improves transit and makes commutes faster and more reliable by clearing freeway bottlenecks by increasing capacity and closing carpool lane gaps; expanding and improving integration of BART, buses, ferries and commuter rail systems by gradually phasing in a \$3 toll increase by 2022, raising \$5 billion over 25 years, effective July 1, 2018, on all toll bridges in the Bay Area except the Golden Gate Bridge?

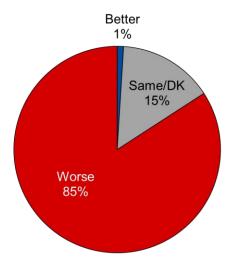


A measure that would raise tolls by 2 – phased in over four years – is backed by three percent of the voters who did not favor a 3 toll, raising support to 59%.

• Support for the measure is driven by an overwhelming perception that Bay Area traffic has gotten worse in the last year. Fully 85 percent say that traffic has gotten worse, while just 1 percent say it has improved (Figure 2). Fifteen percent say it has stayed the same, or didn't know enough to say.

Figure 2: Trend in Bay Area Traffic

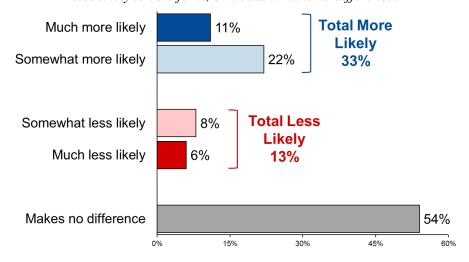
Thinking back over the last year, would you say the traffic in the Bay Area has gotten better or gotten worse?



• For most, inflation adjustments make no difference in support – and one-third say tying the tolls to the cost of living would make them <u>more</u> likely to support RM3. A majority (54%) says that including an adjustment for inflation makes no difference in their potential vote on RM3 (Figure 3). Among the remainder, a plurality say that this would make them *more likely* to support it – with just 13 percent even "somewhat less likely" to back the measure as a result.

Figure 3: Impact of Including Inflation Adjustment on Vote

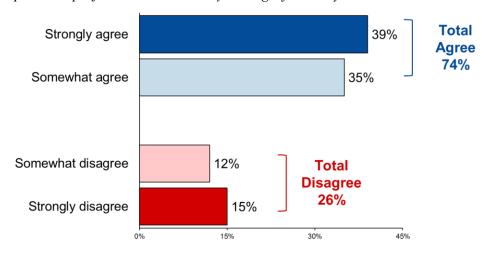
Next, suppose this measure were written to include small adjustments to the toll to keep pace with inflation. Would that make you more likely to vote for a measure, less likely to vote for it, or would it make no difference?



• Voters clearly prefer that the measure fund large-scale transportation projects. As shown in Figure 4, nearly three-quarters (74%) agree that this measure should prioritize big regional projects that traditionally don't get funded by local revenue measures, and two in five (39%) "strongly agree." Only about one-quarter (26%) disagree with the statement.

Figure 4: Preference for Regional Transportation Spending

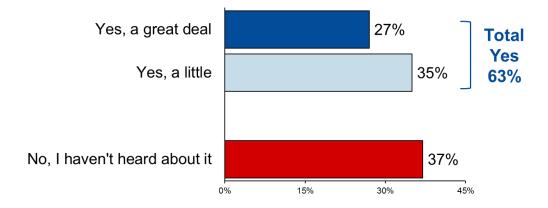
Next, whatever your position on the ballot measure you were just asked about, please indicate whether you agree or disagree with the following statement: "This measure should prioritize big regional transportation projects that traditionally don't get funded by local revenue measures."



• Nearly two-thirds (63%) of voters say they are familiar with SB 1, which raised the gas tax by 12 cents per gallon. Among voters who have heard at least a little about the gas tax, half (50%) nevertheless support RM3, with 26% saying they would "definitely" vote yes on the bridge toll measure.

Figure 5: Awareness of Senate Bill 1
Next, have you heard, seen or read anything about a state

Next, have you heard, seen or read anything about a state law that will increase the gas tax by 12 cents per gallon?



In sum, voters in the nine-county Bay Area clearly perceive traffic has worsened over the last year, and they favor large-scale, regional projects for new transportation funding streams. Additionally, voters appear comfortable indexing local tolls to keep pace with inflation, and their support for a smaller \$2 toll increase was only marginally higher.

Traffic Congestion Impacts of Transit-Oriented Development and RM 3 Options Related to Affordable Housing

July 21, 2017

Background

For the last two decades, MTC has implemented a variety of funding and policy strategies to encourage transit-oriented development (TOD) and walkable communities. This approach recognizes that sometimes the best solutions to transportation challenges are actually changes in land-use, such as new housing closer to jobs and within walking distance of public transit. Indeed, the nexus between vehicle-miles traveled (VMT) and the availability of housing close to public transit and jobs is the foundation on which our draft sustainable communities strategy, *Plan Bay Area 2040 (PBA 2040)*, is built.

But how does transit-oriented housing, and specifically affordable housing, affect traffic congestion in specific locations, such as bridge corridors? The answer partly depends on whether we are talking about reducing congestion from today's levels versus a point in the future. By comparison to today, if the region's growth is primarily decentralized development far away from jobs and public transit, traffic congestion on roadways connecting that housing to jobs would undoubtedly be worse than under a more focused TOD approach. But given forecast population and job growth, even an aggressive TOD approach to new housing is unlikely to significantly reduce traffic congestion from its current levels given the built environment that exists today. To have a significant impact on the current level of traffic congestion in the San Francisco-Bay Bridge corridor, for instance, the scale of the new housing close to jobs would need to be very large, with most of it concentrated in San Francisco.

This paper provides some background on the relationship between transit-oriented affordable housing and traffic congestion and offers some options for how Regional Measure 3 (RM 3) funds could be used to help address the region's housing crisis.

Transit-Oriented Affordable Housing and Traffic Congestion Impacts

Regional Mobility and Economic Benefits of TOD

As noted above, many of the benefits of TOD occur at a regional scale. TOD can reduce VMT per capita by encouraging transit use and provides housing opportunities that reduce the share of income residents spend on transportation. This can lead transit operators to operate service more frequently, thereby making transit an even more attractive option. Reduced household spending on transportation can also help boost the economy, including spurring retail development near TOD. Enhanced local shopping options helps reduce the VMT associated with discretionary trips and shifts them away from drive-alone as more trips can be taken on foot. While this virtuous cycle helps reduce regional VMT and improves the local and regional economy, at the local or specific bridge corridor level, traffic congestion can still increase, especially if the residents of TOD do not rely more on public transit than the average Bay Area resident.

Would Transit-Oriented Affordable Housing Reduce Transbay Traffic?

While TOD encourages a shift away from driving alone, in many parts of the Bay Area the impact of this change on overall traffic congestion and travel times is typically modest because the existing traffic volumes are so large. Taking Oakland and the San Francisco-Oakland Bay Bridge corridor (transbay corridor) as an example, a major increase in transit-oriented affordable housing in Oakland could result in thousands of additional housing units within an easy walk of the city's numerous train stations and high-quality bus lines. Relative to building this housing further east in the East Bay, new housing in Oakland could shorten commute times and reduce the growth of traffic congestion on the I-80, I-580, I-680 and SR

24 corridors leading to the Bay Bridge and regional VMT overall. But relative to *current* traffic levels on the bridge and bridge approach, new TOD affordable housing in Oakland would still result in some additional auto commuters in the transbay corridor and therefore would not be expected to reduce Bay Bridge traffic congestion from current levels.

Building Significant New TOD Housing in Job Rich Areas Could Reduce Growth in Traffic Congestion

However, MTC analysis has shown that substantial increases in transit-oriented affordable housing in job rich areas could reduce congestion on major bridge corridors. Placing additional TOD housing in San Francisco would significantly shift commutes toward transit, biking, and walking since all of these modes are much more viable in its dense urban environment. Additionally, the new auto commutes associated with these locations should not appreciably exacerbate congestion on the Bay Bridge. This type of joboriented affordable TOD could be fruitful in the South Bay as well. For PBA 2040, staff analyzed a scenario forecasting an additional 130,000 TOD housing units (above the PBA 2040-adopted scenario) within select low-density employment areas of Silicon Valley. The analysis resulted in two major takeaways. First, this development pattern would help improve non-auto mode share in nearby corridors – in fact, future VTA light rail ridership would triple. Second, compared to PBA 2040, it would decrease auto travel in some East and South Bay bridge corridors. Specifically, this forecasted development pattern corresponds with a roughly 16 percent decrease in morning car commuters traveling southbound on the I-880 corridor just north of the Dumbarton Bridge and a 13 percent decrease in morning southbound commuters just north of the San Mateo-Hayward Bridge.

Housing Alternative Examined in 2002 Bay Crossing Study

Similarly, the 2002, the MTC Bay Crossing Study found that significantly increasing affordable housing supply in the Bay Area's job centers could reduce bridge congestion and improve mobility. The study included a land use "sensitivity" analysis, simulating the impact of constructing more housing to better match job growth in Alameda, Santa Clara, San Mateo and San Francisco counties. The study assumed a *substantial* departure from baseline trends, increasing housing growth by two-thirds above base case and nearly doubling the number of units affordable to low- to moderate-income households – with major job centers absorbing nearly all of the shifted growth. Notably, this assumed housing increased by 597 percent above baseline in San Francisco, 119 percent in the inner East Bay and 56 percent in San Jose. ¹ The results were significant — 50,000 fewer daily transbay vehicle-trips (8 percent decrease) and 17,000 more daily transit riders (6 percent increase) than the Baseline 2025 scenario. This translated into a 37 percent decrease in peak-period vehicle hours of delay on the bridges covered by the study area – the San Francisco-Oakland Bay Bridge, the San Mateo-Hayward Bridge, and the Dumbarton Bridge. ²

 $^{^{1}\,\}underline{http://www.abag.ca.gov/planning/smartgrowth/AltsReport/SmartGrowthStrategy.pdf}$

² http://files.mtc.ca.gov/library/pub/7441.pdf

Regional Measure 3 Housing Policy Options

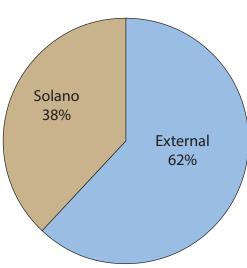
RM 3 offers a unique opportunity to address critical transportation challenges facing the Bay Area. The question debated by the commission over the past several months is whether the region's housing crisis should be accorded some policy status in RM 3 as well. Bay Area affordable housing advocates have expressed support for leveraging RM 3 funds to make progress on this issue. For example, the Non-Profit Housing Association of Northern California has proposed a \$300 million transit-oriented affordable housing and related infrastructure program for RM 3. The proposal notes that it would be tailored to "sites that will accommodate the production of new affordable housing and significantly decrease bridge traffic congestion."

Should the Commission choose to incorporate a housing focus in the RM 3 program, there are a variety of ways in which RM 3 could help play a role in the region's efforts to boost housing production (especially affordable), while also reducing congestion. Listed below are four concepts ranging from rewarding jurisdictions for permitting new housing with transportation incentive funds to providing transportation grants for transit-oriented development infrastructure.

- 1. TOD Funding Conditions Condition funding for transit expansion projects (e.g. BART to Silicon Valley, Tri Valley Transit Access Improvements, Eastridge to BART, new ferry terminals) on housing-supportive land use policies. This could include minimum transit-supportive housing, transit-supportive parking policy, performance in permitting new units, or completing upfront zoning and environmental review (see Option 4). An early prototype for this approach was MTC's Transit Oriented Development (TOD) policy for Resolution 3434.
- 2. Transit-Oriented Development Grants Dedicate a portion of RM 3 funds to pay for housing-supportive infrastructure that encourages greater development and lowers the cost of building affordable housing near public transit. Similar to MTC's Transportation for Livable Communities (TLC) program, eligible expenditures could be limited to transportation infrastructure, such as transit vehicles, station expansion and improvements and bicycle/pedestrian access improvements. These community-based transportation projects could bring vibrancy to downtown areas, commercial cores, neighborhoods, and transit corridors.
- **3. Reward Local Housing Production** Award "Bay Trail/Safe Routes to Transit" funding to cities and counties that produce the most low- and moderate-income housing in Priority Development Areas. This program could either condition funding on housing-related performance metrics or limit funds to those jurisdictions producing (i.e. permitting) the most housing.
- **4. Incentive Funding for Streamlining** Reserve a portion of "Bay Trail/Safe Routes to Transit" funding for jurisdictions that limit hurdles to new housing development near jobs and transit by completing upfront zoning and environmental review. This area planning approach could reduce delays and uncertainty by identifying and addressing local planning and environmental mitigation early in the development process. Housing developments that are consistent with locally-approved area plans should be able to take advantage of California Environmental Quality Act (CEQA) streamlining provisions already in place pursuant to SB 743 (Steinberg, 2013).

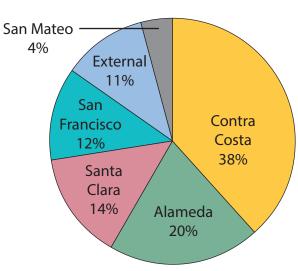
Antioch Bridge





County	Total	% Total
Grand Total	7K	100%
External	4K	62%
Solano	3K	38%

Southbound Destinations

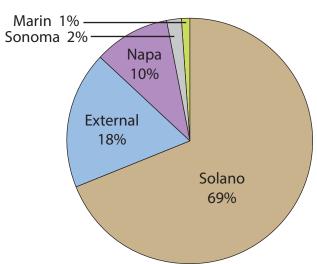


County	Total	% Total
Grand Total	7K	100%
Contra Costa	3K	38%
Alameda	1K	20%
Santa Clara	1K	14%
San Francisco	1K	12%
External	1K	11%
San Mateo	0K	4%

Source: MTC travel model run for Plan Bay Area 2040, 2015

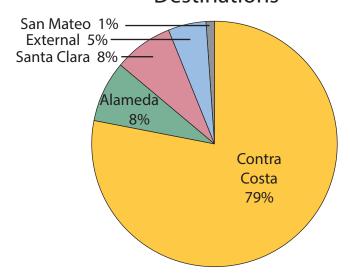
Benicia-Martinez Bridge





County	Total	% Total	
Grand Total	67K	100%	
Solano	46K	69%	
External	12K	18%	
Napa	6K	10%	
Sonoma	2K	2%	
Marin	0K	1%	

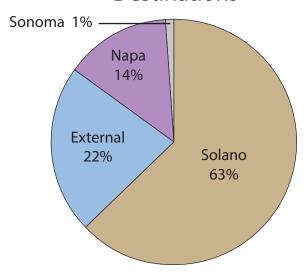
Southbound Destinations



County	Total	% Tota
Grand Total	70K	100%
Contra Costa	55K	79%
Alameda	6K	8%
Santa Clara	5K	8%
External	3K	5%
San Mateo	0K	1%

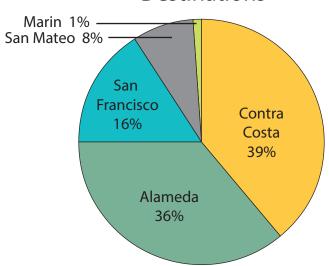
Carquinez Bridge

Northbound Destinations



County	Total	% Total
Grand Total	65K	100%
Solano	41K	63%
External	14K	22%
Napa	9K	14%
Sonoma	ΟK	1%

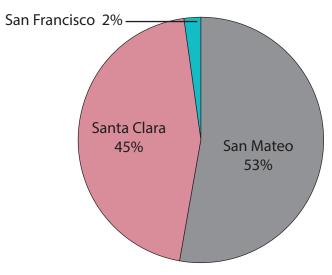
Southbound Destinations



County	Total	% Tota
Grand Total	67K	100%
Contra Costa	26K	39%
Alameda	24K	36%
San Francisco	11K	16%
San Mateo	5K	8%
Marin	1K	1%

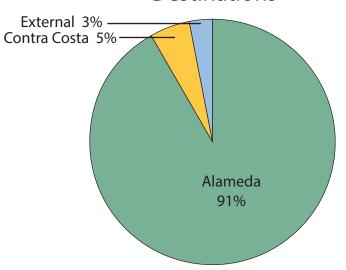
Dumbarton Bridge





County	Total	% Total	
Grand Total	27K	100%	
San Mateo	15K	53%	
Santa Clara	12K	45%	
San Francisco	0K	2%	

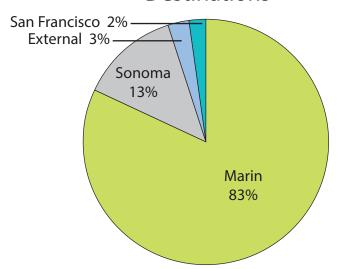
Eastbound Destinations



County	Total	% Total	
Grand Total	66K	100%	
Alameda	60K	91%	
Contra Costa	4K	5%	
External	2K	3%	

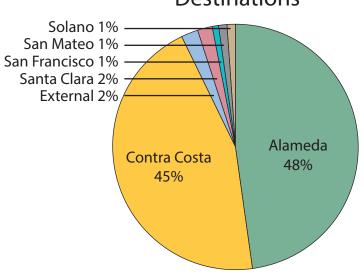
Richmond-San Rafael Bridge





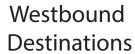
County	Total	% Total	
Grand Total	45K	100%	
Marin	37K	83%	
Sonoma	6K	13%	
External	1K	3%	
San Francisco	1K	2%	

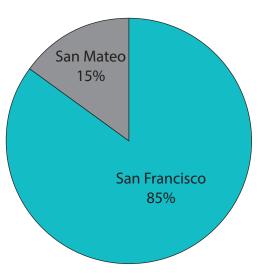
Eastbound Destinations



Total	% Total
49K	100%
23K	48%
22K	45%
1K	2%
1K	2%
1K	1%
0K	1%
0K	1%
	49K 23K 22K 1K 1K 1K 0K

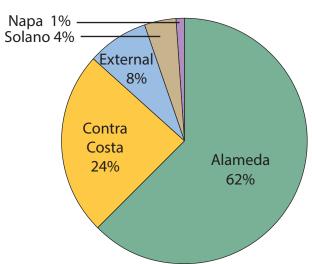
Bay Bridge





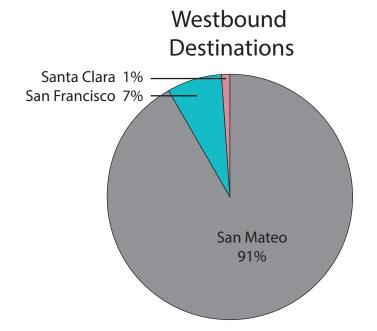
County	Total	% Total	
Grand Total	133K	100%	
San Francisco	112K	85%	
San Mateo	20K	15%	

Eastbound Destinations

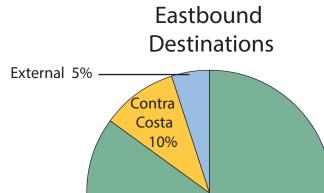


County Grand Total	Total	% Total	
	146K	100%	
Alameda	91K	62%	
Contra Costa	36K	24%	
External	11K	8%	
Solano	6K	4%	
Napa	1K	1%	

San Mateo-Hayward Bridge



County	Total	% Total
Grand Total	59K	100%
San Mateo	54K	91%
San Francisco	4K	7%
Santa Clara	1K	1%



County	Total	% Tota	
Grand Total	54K	100%	
Alameda	46K	85%	
Contra Costa	6K	10%	
External	3K	5%	

Alameda

85%