



**The 2016–2017 Santa Cruz County Civil Grand Jury
Requires that the
Santa Cruz Metropolitan Transit District CEO
Respond to the Findings and Recommendations
Specified in the Report Titled
Santa Cruz Metropolitan Transit District
by August 28, 2017**

When the response is complete, please

1. Email the completed Response Packet as a file attachment to grandjury@scgrandjury.org, and
2. Print and send a hard copy of the completed Response Packet to

The Honorable Judge John Gallagher
Santa Cruz Courthouse
701 Ocean St.
Santa Cruz, CA 95060

Instructions for Respondents

California law PC § 933.05 (included [below](#)) requires the respondent to a Grand Jury report to comment on each finding and recommendation within a report. Explanations for disagreements and timeframes for further implementation or analysis must be provided. Please follow the format below when preparing the responses.

Response Format

1. For the Findings included in this Response Packet, select one of the following responses and provide the required additional information:
 - a. **AGREE** with the Finding, or
 - b. **PARTIALLY DISAGREE** with the Finding and specify the portion of the Finding that is disputed and include an explanation of the reasons therefor, or
 - c. **DISAGREE** with the Finding and provide an explanation of the reasons therefor.
2. For the Recommendations included in this Response Packet, select one of the following actions and provide the required additional information:
 - a. **HAS BEEN IMPLEMENTED**, with a summary regarding the implemented action, or
 - b. **HAS NOT YET BEEN IMPLEMENTED BUT WILL BE IMPLEMENTED IN THE FUTURE**, with a timeframe or expected date for implementation, or
 - c. **REQUIRES FURTHER ANALYSIS**, with an explanation and the scope and parameters of an analysis or study, and a timeframe for that analysis or study; this timeframe shall not exceed six months from the date of publication of the grand jury report, or
 - d. **WILL NOT BE IMPLEMENTED** because it is not warranted or is not reasonable, with an explanation therefor.

If you have questions about this response form, please contact the Grand Jury by calling 831-454-2099 or by sending an email to grandjury@scgrandjury.org.

Penal Code §933.05

1. For Purposes of subdivision (b) of §933, as to each Grand Jury finding, the responding person or entity shall indicate one of the following:
 - a. the respondent agrees with the finding,
 - b. the respondent disagrees wholly or partially with the finding, in which case the response shall specify the portion of the finding that is disputed and shall include an explanation of the reasons therefor.
2. For purpose of subdivision (b) of §933, as to each Grand Jury recommendation, the responding person shall report one of the following actions:
 - a. the recommendation has been implemented, with a summary regarding the implemented action,
 - b. the recommendation has not yet been implemented but will be implemented in the future, with a timeframe for implementation,
 - c. the recommendation requires further analysis, with an explanation and the scope and parameters of an analysis or study, and a timeframe for the matter to be prepared for discussion by the officer or director of the agency or department being investigated or reviewed, including the governing body of the public agency when applicable. This timeframe shall not exceed six months from the date of the publication of the Grand Jury report, or
 - d. the recommendation will not be implemented because it is not warranted or is not reasonable, with an explanation therefor.
3. However, if a finding or recommendation of the Grand Jury addresses budgetary or personnel matters of a County department headed by an elected officer, both the department head and the Board of Supervisors shall respond if requested by the Grand Jury, but the response of the Board of Supervisors shall address only those budgetary or personnel matters over which it has some decision-making authority. The response of the elected department head shall address all aspects of the findings or recommendations affecting his or her department.
4. A Grand Jury may request a subject person or entity to come before the Grand Jury for the purpose of reading and discussing the findings of the Grand Jury report that relates to that person or entity in order to verify the accuracy of the findings prior to their release.
5. During an investigation, the Grand Jury shall meet with the subject of that investigation regarding that investigation unless the court, either on its own determination or upon request of the foreperson of the Grand Jury, determines that such a meeting would be detrimental.
6. A Grand Jury shall provide to the affected agency a copy of the portion of the Grand Jury report relating to that person or entity two working days prior to its public release and after the approval of the presiding judge. **No officer, agency, department, or governing body of a public agency shall disclose any contents of the report prior to the public release of the final report.**

*Santa Cruz Metropolitan
Transit District*

August 25, 2017



Santa Cruz County Grand Jury
701 Ocean Street, Room 318-I
Santa Cruz, CA 95060

Re: Santa Cruz Metropolitan Transit District CEO and Board Responses to 2016-2017 Grand Jury Report

To whom it may concern:

The Santa Cruz Metropolitan Transit District (METRO) has received the above referenced Grand Jury Report, specifically that section entitled, "The Bus Stops Here", which was published on June 29, 2017. The METRO Board of Directors reviewed the report and responses at our August 25, 2017 Board Meeting.

On behalf of myself, METRO's CEO/General Manager, and the Board of Directors I have enclosed both the CEO and Board of Directors responses.

Thank you,

A handwritten signature in blue ink, appearing to read "Alex Clifford", with a long horizontal flourish extending to the right.

Alex Clifford
CEO/General Manager

Enclosures: CEO Response
Board of Directors Response

METRO CEO Response to the Grand Jury Report

Findings

F1. Metro experienced an anticipated revenue reduction of \$26 million from 2008–2014 and had to use its reserves to fill the shortfall. This is not sustainable.

AGREE

PARTIALLY DISAGREE – explain the disputed portion

DISAGREE – explain why

Response explanation (required for a response other than **Agree**):

Metro agrees with the finding, with the exception of the statement “Metro experienced an anticipated revenue reduction of \$26 million from 2008–2014...”

The Grand Jury misunderstood this reference in the Board structural deficit workshop materials. Metro did not experience an anticipated revenue reduction of \$26 million from 2008 - 2014. Rather, Metro suffered a decline in sales tax revenues as a result of the 2008 recession.

The intent of the slide in the Board workshop presentation was to provide an example of what sales tax revenues could have been between 2008 and 2014 had there been no prolonged recession and a modest 3% year-over-year growth in sales tax revenues. The data was intended to display that had the recession not hit, and for illustrative purposes only, had Metro's sales tax instead grown at a modest 3% year-over-year growth through FY14, Metro would have received approximately \$26 million more in sales tax revenue over the same period of time studied than was actually received.

Finally, no one could have predicted how severe and prolonged the recession would be. In 2008, and for several years thereafter, the Metro Board chose to use its reserves to sustain the level of service provided to its customers. The Board can choose to use its reserves for a rainy day or for capital expenditures. The Board chose to use its reserves to cover the rainy day impacts of the recession on bus operations. Unfortunately, the rainy day was longer than a day.

F2. Metro grant writing has been insufficient and ineffective.

AGREE

PARTIALLY DISAGREE – explain the disputed portion

DISAGREE – explain why

Response explanation (required for a response other than **Agree**):

Metro strongly disagrees with this Finding. This Finding was presented to the CEO three days before the release of the Grand Jury report and without an opportunity to respond in writing. The Grand Jury provided no supporting documentation or information from interviews with staff or others that would substantiate this Finding. At

the Grand Jury exit meeting, the CEO verbally provided the Grand Jury members background and examples as to why this Finding is incorrect; unfortunately the Grand Jury chose to disregard this information.

It appears that the Grand Jury members did not properly comprehend the grants process, particularly differences between Capital Grants and Operating Grants and the differences between Formula Grants and Discretionary (Competitive) Grants.

Operating Grants vs. Capital Grants

Think of the operating budget as “running buses” and the capital budget as “buying buses.” Metro’s structural deficit, as referred to in the Grand Jury report, is in the operating budget. State and federal discretionary (competitive) grants typically do not provide revenue for the operating budget, and local grants that might provide operating funds are few and far between. Nearly all state and federal grant opportunities are for capital improvements and bolster Metro’s ability to buy buses. Regardless, METRO applies for all discretionary grant opportunities for which it is eligible.

Formula Grants

State and federal formula grants come to Metro as a result of legislation, usually require an annual application, and always require follow-up information on how Metro used the money. While this is a cumbersome and time-consuming process, which also demands attention from the grants-writing staff, Metro always follows the dictated processes and never risks or jeopardizes its state and federal formula grant allocations. These state and federal formula dollars are typically used for operations, are sometimes flexible for use in both operations or capital, and are often restricted to capital only.

Discretionary (Competitive) Grants

In any given year, there are a number of state and federal discretionary grant programs offered. Metro always submits highly competitive grant applications for programs for which it qualifies. Unfortunately, the Grand Jury report does not reflect Metro’s highly successful discretionary capital grant awards in 2016. In 2016, Metro competed successfully at the state, federal and local levels for the following grants:

- State Low Carbon Transit Operations Program (LCTOP) – Awarded \$709,292 to purchase one zero emissions electric bus that will run as a circulator in Watsonville.
- Federal Low or No Emission Vehicle Program (LoNo) - \$3,810,348 to purchase three zero emissions electric over-the-road coaches to run on the Highway 17 commuter service. The grant includes recharging facilities. Of the 20 nationwide awards, Metro received the 5th highest award in the nation, receiving a larger grant than the Chicago Transit Authority.
- Santa Cruz County Regional Transportation Commission: Surface Transportation Block Grant (STBG) - \$500,000 to purchase one Compressed Natural Gas (CNG) bus to run on Metro’s fixed-route services.

When grants become available for competition, they are always way oversubscribed. Typically, there are nine to ten times as many applications as actual grant awards, and the amount awarded is a fraction of the amount requested. For example, in 2016 the federal Bus and Bus Facilities grant program received \$1.647 billion in applications for a program with only \$213 million available for distribution. In the 2016 federal Low and No Emission Bus Program, applicants requested \$446 million from a pot of only \$55 million.

Again, these grants are for capital improvements only and do not provide operating revenue.

The Changing Landscape of Grants Availability

Finally, the grant funding landscape has changed dramatically over the past five years, which the CEO explained to the Grand Jury members. Here are just a few examples:

- Up until 2012, the federal transportation authorization included a Bus and Bus Facilities Program, a discretionary capital grant program. Up until then, Metro had competed successfully for some of this funding. With the enactment of Map21 in 2012, the Bus and Bus Facilities discretionary grant program was eliminated. It was not until the FAST Act reauthorization last year that the Bus and Bus Facilities program was reestablished, albeit at a substantially reduced funding level.
- In 2006, the California voters created a capital funding source through Proposition 1B. This ten-year capital program, which expired last year, funded numerous Metro security, facilities and bus procurements, which were all capital projects. Fortunately, the Governor signed the Road Repair and Accountability Act this past April to partially replace Proposition 1B and to provide additional State Transit Assistance (STA) to Metro. Again, this legislation favors capital projects for the use of this money, although some of it can be used for operating assistance if METRO meets specific performance criteria.
- The American Recovery and Reinvestment Act of 2009 (ARRA), signed into law by President Barack Obama on February 17, 2009, was an economic stimulus package that provided Metro valuable capital dollars. ARRA was a one-time program and did not provide recurring resources.
- In 2012, the US Congress eliminated federal “earmarks,” a process that provided legislative appropriations to specific projects in a congressperson’s district. Metro had frequently secured federal earmarks to fund multiple capital projects. Each year federal subsidies for public transit are threatened. The result of this constant threat is often flat or nominal growth in federal transportation funding,

and in an environment where operational costs typically grow at a rate equal to or greater than the Consumer Price Index (CPI).

With the loss of several substantial capital funding programs since 2012, Metro's challenge in the coming years will be one of trying to find the resources with which to replace 61 buses that are currently obsolete and in need of replacement at an estimated cost of \$38 million to \$60 million, depending on whether Metro purchases CNG or electric buses.

F6. Metro does not have joint meetings that include the Board, Metro management, and the Metro Advisory Committee. Better and more frequent communication and coordination between these bodies could improve decision making.

AGREE

PARTIALLY DISAGREE – explain the disputed portion

DISAGREE – explain why

Response explanation (required for a response other than **Agree**):

Metro is unclear as to what the Grand Jury members intended with the following statement: "...joint meetings that include the Board, Metro management, and the Metro Advisory Committee." This statement appears out of place when attempting to reconcile it against the text of the report. Metro would appreciate any clarification the Grand Jury members could provide.

In the way of background, Metro staff does regularly attend and provide staff support to the Metro Advisory Committee (MAC) and the MAC Chair attends two Metro Board meetings a year, providing the Board with an update of the MAC activities and MAC recommendations on various transportation topics.

Additionally, Metro questions the wisdom and value of joint staff and Board meetings. All staff report to the CEO. The joint meetings suggested in the report would have the potential to blur the lines of reporting relationships or create an opportunity for the Board (policy makers) to interfere with the administrative functions they have contractually delegated to the CEO. Nevertheless, Metro Board members do regularly interface with staff at Committee and full Board meetings and the CEO provides an interactive working environment in which staff members are responsible for presenting their department's Board reports to the full Board and answering Board member questions.

F7. Manual collection of route performance data does not allow for optimal use of the HASTUS system.

AGREE

PARTIALLY DISAGREE – explain the disputed portion

DISAGREE – explain why

Response explanation (required for a response other than **Agree**):

F8. Metro partnerships with UCSC and Cabrillo College have contributed significantly to Metro revenues, and Metro would benefit from additional community partnerships.

AGREE

PARTIALLY DISAGREE – explain the disputed portion

DISAGREE – explain why

Response explanation (required for a response other than **Agree**):

F9. Metro marketing functions are handled inefficiently, in significant part due to an unfilled marketing manager position. Marketing must be more than just selling advertising on buses.

AGREE

PARTIALLY DISAGREE – explain the disputed portion

DISAGREE – explain why

Response explanation (required for a response other than **Agree**):

F10. Metro lacks a business development manager. Currently, business development responsibilities are distributed across the organization, and are not implemented or effective.

AGREE

PARTIALLY DISAGREE – explain the disputed portion

DISAGREE – explain why

Response explanation (required for a response other than **Agree**):

The CEO agrees that the business development duties and responsibilities described in the Grand Jury report should be encompassed within one position, irrespective of the position being called a "Marketing Manager" or "Business Development Manager." Although currently implicit in the Marketing Manager Job Description, the job description will be strengthened in the future to provide additional business development functions.

Finally, business development will always be a shared responsibility between a Marketing Manager and the Planning and Development Manager. The Planning and Development Manager is responsible for obtaining and monitoring data relative to new and existing transit nodes, transit catchment areas, transit friendly developments and employment centers, and for making recommendations for service adjustments that will maximize the potential of retaining and attracting new ridership.

F11. Metro design standards for bus stops and shelters have not been consistently implemented, which may negatively impact ridership.

AGREE

PARTIALLY DISAGREE – explain the disputed portion

DISAGREE – explain why

Response explanation (required for a response other than **Agree**):

This challenge has been on Metro's radar screen for some time. As acknowledged in the Grand Jury report, Metro does have a Bus Stop Guide. This guide was adopted by the Metro Board on August 28, 2015 and has been followed since then. The text of the Grand Jury report states - "There is little consistency in the design, construction, or location of bus stops, and they often do not conform to the criteria stated in the Metro Bus Stop Guide." While this statement is somewhat true, it does not acknowledge that Metro has been operating for nearly 50 years and the Bus Stop Guide was only recently adopted.

The challenge for Metro in the coming years will be identifying funding with which to modify and update all **847** active bus stops in the Metro system to achieve the goals set forth in the Bus Stop Guide. Ideally, these dollars will come from capital grants in which the funding source is unique and won't compete with the higher priority capital dollars needed to purchase new buses. Also, on the operating side of the business, an overly aggressive use of operating dollars to upgrade bus stops may not be wise when operating dollars are needed to fund improved service frequency.

Notably missing from the Grand Jury report is the fiscally creative accomplishment this past year in which the Metro bus stop customer experience has been vastly improved by the rollout of the Schedule By Stop program. This in-house developed program provides the opportunity for customers standing at a bus stop to quickly retrieve scheduled bus information for their stop via their cell or Smartphone. This new program is seen as an interim step in the journey toward real-time bus arrival information, or a Predictive Arrival and Departure System (PADS). At some point in the future, Metro staff envisions being able to remove the confusing and aesthetically displeasing bus stop maps and schedules currently posted at bus stops.

F12. Metro bus seats are difficult to clean and sanitize, which may negatively impact ridership.

AGREE

PARTIALLY DISAGREE – explain the disputed portion

DISAGREE – explain why

Response explanation (required for a response other than **Agree**):

Over the past two years, Metro staff has discussed the sanitary and maintenance challenges of padded seats and are considering that future bus procurements should be ordered without padded seats. Metro will purchase all future fixed-route buses without padded seats or seat inserts. However, Metro staff believes that all future Highway 17 commuter bus procurements will continue to include padded seats.

F13. The lack of overnight parking at bus facilities may be a deterrent to potential riders.

AGREE

PARTIALLY DISAGREE – explain the disputed portion

DISAGREE – explain why

Response explanation (required for a response other than **Agree**):

F14. Metro's CNG bus engines break down sooner than expected, resulting in accelerated expenses.

AGREE

PARTIALLY DISAGREE – explain the disputed portion

DISAGREE – explain why

Response explanation (required for a response other than **Agree**):

The statement is somewhat correct. Diesel engines typically run 225K – 250K miles before experiencing a major failure. Compressed Natural Gas (CNG) engines run about 125K – 150K miles before experiencing a major failure, and in some cases, less than 100K miles. CNG engines run very hot and one of the most common failures is a dropped valve that then breaks the piston head. CNG engines also require more frequent maintenance than do diesel engines.

Current developments in CNG engine technology have resulted in engineering design changes that are being implemented to try and improve engine longevity. Additionally, CNG engine technology has evolved into the design of a “Near Zero Emission” engine that significantly reduces NoX emissions for future bus purchases.

F15. Metro transit centers are deteriorating and in disrepair, which may negatively impact ridership.

AGREE

PARTIALLY DISAGREE – explain the disputed portion

DISAGREE – explain why

Response explanation (required for a response other than **Agree**):

If METRO continues to properly maintain these facilities, they should provide benefit to Metro and its customers for many years to come. The facilities are not “deteriorating.” While in need of some upgrades, both structures are sound.

Nearly three years ago, soon after the arrival of the new CEO, a complete assessment of both facilities was performed and a list of needed investments was identified. Over the past three years, as the budget would allow, tens of thousands of dollars have been invested in these facilities, as described below:

Watsonville Transit Center

- Santa Cruz Metro signs installed on exterior

- Restrooms rehabilitation
- Exterior repainting - All buildings, clock tower and other exterior structures
- New bus loop signage
- Full exterior lighting upgrades
- Design and construction of Customer Service Information Booth
- New staffed customer service center
- Added stop sign inside the bus loop
- Installed two new bus benches outside
- Removal of several kiosks to improve visibility, safety, and customer Experience
- Refinishing of all wooden interior benches

Next series of upgrades being considered or in work

- Possible main building floor replacement
- New community mural
- Public spaces art
- Vegetation upgrades
- Conversion of one out-building to another leasable space

Pacific Station

- All new carpet throughout second floor
- Complete interior repainting
- Refinishing of all the interior wood benches
- Rebuild the upstairs customer service area (currently in design)
- Targeted exterior repainting of various ironworks and Metro logo
- Major tree trimming
- Power washing of all concrete areas
- A/C cooling unit for server room
- Major repairs to the public restrooms
- Interior floor stripping and deep cleaning
- Clean overhead lamp shades

Next series of upgrades being considered or in work

- Emergency generator replacement
- Replacement of curved plexi-glass windows that leak
- Lease remaining leasable space

There is no question that Metro can and should do more frequent **custodial** work at these two facilities. Metro's fiscal challenges limit operations resources with which to hire the additional custodian or two that is needed if Metro wants to increase the frequency of cleanings. Metro agrees that doing so would improve the customer experience at these two locations. Additionally, vandalism of the public restrooms is a recurring and costly challenge to keep up with. That said, Metro has and will continue to make every attempt possible to keep up with vandalism remediation.

F16. Metro transit centers are not clean, which may negatively impact ridership.

AGREE

PARTIALLY DISAGREE – explain the disputed portion

DISAGREE – explain why

Response explanation (required for a response other than **Agree**):

Response included in answer to Finding 15

Recommendations

R1. Metro should conduct a limited study to determine if reduced fares would generate additional revenue through increased ridership. (F1, F4, F7)

HAS BEEN IMPLEMENTED – summarize what has been done

HAS NOT BEEN IMPLEMENTED BUT WILL BE IMPLEMENTED IN THE FUTURE – summarize what will be done and the timeframe

REQUIRES FURTHER ANALYSIS – explain scope and timeframe (not to exceed six months)

WILL NOT BE IMPLEMENTED – explain why

Response explanation, summary, and timeframe:

This Recommendation will not be implemented because it is not warranted or is unreasonable. Metro fares are already reduced given that the public subsidizes the service by about 77%. Additionally, the Metro Board Adopted Fare Policy includes provisions for further discounts if Metro passes are purchased in bulk by qualified entities. There are also inter-agency agreements that allow riders to ride services in Santa Clara County and Monterey County.

Metro has recently resolved the structural deficit and gambling with public resources and risking a drop in farebox revenues seems inconsistent with the Board's goal of fiscal responsibility.

Today, METRO's farebox recovery is about 23%, one of the highest in the state. Farebox recovery represents the percentage of total operating costs recovered through the farebox. However, approximately 77% of the costs of running the system are subsidized by the taxpayers via local sales tax initiatives and state and federal subsidies. Reducing bus fares risks dropping overall fare revenue. Doing so could also negatively impact bus routes that are running at capacity in the peak hour today. Further impacting a full bus in the peak hours could result in a need to add additional buses. Since only twenty-three cents on an operating dollar for additional buses is recovered through the farebox, the operating budget would be negatively impacted by an increase of seventy-seven cents on a dollar of the cost to run the additional buses.

Metro has, and will continue to emphasize and work towards ridership growth. In reality, increasing ridership must be an outcome of a more surgical and strategic exercise as opposed to a conceptual thought that reduced fares will grow ridership.

Target marketing seeks to identify existing excess capacity, both in the peak and off-peak hours, and to attract new customers to fill the empty seats. Doing so successfully will result in increased revenues and no new operating costs.

Finally, Metro's Transportation Development Act (TDA) funding requires that Metro achieve certain performance standards, including a minimum farebox recovery. Metro should not place this formula funding source (\$6.7 million/year) at risk by experimenting with such a hypothesis.

R2. Metro should redefine the Marketing Manager position as Director of Business Development and fund it. (F9, F10)

HAS BEEN IMPLEMENTED – summarize what has been done

HAS NOT BEEN IMPLEMENTED BUT WILL BE IMPLEMENTED IN THE FUTURE – summarize what will be done and the timeframe

REQUIRES FURTHER ANALYSIS – explain scope and timeframe (not to exceed six months)

WILL NOT BE IMPLEMENTED – explain why

Response explanation, summary, and timeframe:

This Recommendation will not be implemented because it is not warranted or is unreasonable. At the CEO's request, the Board created the Marketing, Communications and Customer Service Manager position on February 13, 2015. Since 2014, the Board has been working to resolve the \$6.3 million fiscal structural deficit. The fiscal structural deficit was not resolved until July 2016. During this fiscally challenged period of time, Metro was proposing to reduce service as much as 33% and layoff as many as 1/3 of the bus operators to resolve the structural deficit. Given these difficult times, it would not have been prudent policy to fund a new manager position. The CEO will revisit asking the Metro Board to fund the Marketing, Communications and Customer Service Manager position sometime in the next year or two.

Finally, at the current time, the CEO sees no tangible value in renaming the Marketing, Communications and Customer Service Manager position to the Director of Business Development. The Recommendation is not a documented industry-wide common practice.

Also, see response to Finding 10.

R4. The Metro Board, Metro management, and the Metro Advisory Committee should meet jointly on a regular basis. (F5, F6)

- HAS BEEN IMPLEMENTED** – summarize what has been done
 HAS NOT BEEN IMPLEMENTED BUT WILL BE IMPLEMENTED IN THE FUTURE – summarize what will be done and the timeframe
 REQUIRES FURTHER ANALYSIS – explain scope and timeframe (not to exceed six months)
 WILL NOT BE IMPLEMENTED – explain why

Response explanation, summary, and timeframe:

See response to Finding 6.

R5. Metro should identify and secure additional funding sources. (F2, F8, F9, F10)

- HAS BEEN IMPLEMENTED** – summarize what has been done
 HAS NOT BEEN IMPLEMENTED BUT WILL BE IMPLEMENTED IN THE FUTURE – summarize what will be done and the timeframe
 REQUIRES FURTHER ANALYSIS – explain scope and timeframe (not to exceed six months)
 WILL NOT BE IMPLEMENTED – explain why

Response explanation, summary, and timeframe:

Metro has been and plans to continue to seek additional funding sources. In addition, Metro must continue to allocate substantial time and resources to protecting existing state and federal funding streams.

Recent Increased Funding Sources Outcomes

- The voters of Santa Cruz County supported Measure D, in which 16% of net revenues come to Metro
- Metro strongly supported SB-1, which has been signed into law by the Governor
- Metro worked with UCSC to increase UCSC's financial support to sustain service on important lines serving the college
- Metro worked with the Cabrillo College student Senate to encourage the Senate to place a measure on the student ballot for a student program similar to UCSC. That Measure passed which produces a funding source that helps to sustain service levels on lines serving the college.
- Metro initiated a discussion with the San Lorenzo Valley School District about shared transportation interests and partnerships
- Annual Washington, DC trips with Board members to advocate for Metro funding of various capital grants programs

Ongoing and Potential Future Funding Growth Strategies

- Advocating at the federal level for the increase of the Small Transit Intensive Cities (STIC) program to be increased from 1.5% to 3%

- Advocating at the federal level for the Alternative Fuels Credit to be made a permanent annual credit instead of an annual renewal with the annual Extenders process.
- Continue annual Washington, DC trips with Board members to advocate for funding of various Metro capital grants
- Once the Marketing Manager is hired, improve the bus advertising program and develop a bus stop and transit terminal advertising program.
- Continue evaluating strategic surgical approaches to increasing ridership that will fill excess capacity, both peak and off-peak hours of service
- Increase service frequency on key lines, which will result in an increase in ridership
- Seek funding for a Predictive Arrival And Departure System (PADS) that will provide customers with real-time bus arrival information and result in an increase in ridership
- Analyze and present to the Board a fare restructuring proposal in CY2018
- Continue working with the City of Santa Cruz on a Transportation Demand Management (TDM) partnership that will reduce the parking needs of the downtown and increase ridership for Metro
- Continue to develop strategies to encourage students to ride the bus to school
- Develop a target marking strategy for growing Highway 17 commuter service ridership
- Grow ridership on the Highway 17 commuter service by purchasing over-the-road coaches
- Grow systemwide ridership by appealing to the environmental, sustainability and Green House Gas (GHG) oriented potential customers by purchasing zero emissions electric buses

- R6.** Metro should expand their grant writing program. (F2)
- HAS BEEN IMPLEMENTED** – summarize what has been done
- HAS NOT BEEN IMPLEMENTED BUT WILL BE IMPLEMENTED IN THE FUTURE** – summarize what will be done and the timeframe
- REQUIRES FURTHER ANALYSIS** – explain scope and timeframe (not to exceed six months)
- WILL NOT BE IMPLEMENTED** – explain why

Response explanation, summary, and timeframe:

See response to Finding 2

R7. Metro should adopt and adhere to a budget that does not deplete reserves for operating expenses. (F1)

- HAS BEEN IMPLEMENTED** – summarize what has been done
- HAS NOT BEEN IMPLEMENTED BUT WILL BE IMPLEMENTED IN THE FUTURE** – summarize what will be done and the timeframe
- REQUIRES FURTHER ANALYSIS** – explain scope and timeframe (not to exceed six months)
- WILL NOT BE IMPLEMENTED** – explain why

Response explanation, summary, and timeframe:

The Grand Jury was provided very positive information about the Board's attention to and the resolution of the fiscal structural deficit; the elimination of the use of Reserves in the operating fund; and the positive outlook for budgetary stability over the next five years.

The Board actions of June 2016, over a year ago, resolved the most immediate challenge, which was the \$6.3 million fiscal structural deficit. Also, thanks to the voters of Santa Cruz County for Measure D and the state legislators for SB-1. As a result of the aforementioned actions, Metro does not anticipate the return of the structural deficit in the five-year budget look-ahead.

In the June 2017 budget adoption, the Board also adopted a strategy to replenish key Reserves by 6/30/22 and to provide \$15 million over the next five years to be leveraged for state and federal capital grants.

R8. Metro should consider pursuing additional private and government partnership programs, such as those with UCSC and Cabrillo College. (F8)

- HAS BEEN IMPLEMENTED** – summarize what has been done
- HAS NOT BEEN IMPLEMENTED BUT WILL BE IMPLEMENTED IN THE FUTURE** – summarize what will be done and the timeframe
- REQUIRES FURTHER ANALYSIS** – explain scope and timeframe (not to exceed six months)
- WILL NOT BE IMPLEMENTED** – explain why

Response explanation, summary, and timeframe:

Metro is and will continue to implement this recommendation. Recently, Metro staff met with San Lorenzo Valley School District officials to explore potential partnerships. Last year, Metro accomplished the two new and improved partnerships referenced by the Grand Jury, and Metro plans to continue to seek other funding partnerships in the future.

- R9.** Metro should create a bus stop sponsorship program that underwrites construction of bus stops in accordance with Metro's design standards. (F11)
- HAS BEEN IMPLEMENTED** – summarize what has been done
 - HAS NOT BEEN IMPLEMENTED BUT WILL BE IMPLEMENTED IN THE FUTURE** – summarize what will be done and the timeframe
 - REQUIRES FURTHER ANALYSIS** – explain scope and timeframe (not to exceed six months)
 - WILL NOT BE IMPLEMENTED** – explain why
- Response explanation, summary, and timeframe:**

This Recommendation requires further analysis.

Metro is and has been considering the creation of a bus bench and bus shelter advertising program in the future, much like many transit properties around the country do today. One approach might be to secure a contract with an advertising company that includes the provision of new bus shelters in the deal.

The ability to sell advertising space and the valuation of that space is most often driven by the number of potential visual impressions. Impressions are the number of people who actually see the advertisement, based on the size of the advertisement, visibility, and the speed at which people are passing by. While some may characterize the Santa Cruz County roadway corridors as heavily congested, from a marketing advertisement space perspective, the corridors don't have the kinds of car counts most high-dollar perspective advertisers seek and who are willing to pay high rental rates.

Nonetheless, Metro believes there is a new revenue stream and/or new bus shelters that can be obtained by the addition of bus bench and bus shelter advertising. However, cities sensitive to the escalation of outdoor advertising, sometimes called visual pollution, may have concerns about the addition of potentially 847 new public advertising spaces along Santa Cruz County roadway corridors. Metro will need to work with the County and the four cities within Metro's service area to attempt to find common ground in the creation of aesthetically pleasing advertising spaces. Two years ago the Board gave the CEO such direction. Now that Metro's fiscal structural deficit has been resolved, the CEO plans to turn his attention to this matter.

- R10.** Metro should improve cleanliness at transit facilities. (F12, F16)
- HAS BEEN IMPLEMENTED** – summarize what has been done
 - HAS NOT BEEN IMPLEMENTED BUT WILL BE IMPLEMENTED IN THE FUTURE** – summarize what will be done and the timeframe
 - REQUIRES FURTHER ANALYSIS** – explain scope and timeframe (not to exceed six months)
 - WILL NOT BE IMPLEMENTED** – explain why
- Response explanation, summary, and timeframe:**

See responses to Findings F15 and F16.

- R11. Metro should improve maintenance at transit facilities. (F12, F15, F16)
- HAS BEEN IMPLEMENTED** – summarize what has been done
 - HAS NOT BEEN IMPLEMENTED BUT WILL BE IMPLEMENTED IN THE FUTURE** – summarize what will be done and the timeframe
 - REQUIRES FURTHER ANALYSIS** – explain scope and timeframe (not to exceed six months)
 - WILL NOT BE IMPLEMENTED** – explain why
- Response explanation, summary, and timeframe:**

See responses to Findings F15 and F16.

- R12. Metro should establish overnight parking at the Scotts Valley Cavallaro Transit Center for riders. (F13)
- HAS BEEN IMPLEMENTED** – summarize what has been done
 - HAS NOT BEEN IMPLEMENTED BUT WILL BE IMPLEMENTED IN THE FUTURE** – summarize what will be done and the timeframe
 - REQUIRES FURTHER ANALYSIS** – explain scope and timeframe (not to exceed six months)
 - WILL NOT BE IMPLEMENTED** – explain why
- Response explanation, summary, and timeframe:**

The CEO concurs with this recommendation; however, establishing overnight parking at the Scotts Valley Cavallaro Transit Center will require further analysis to mitigate some operational challenges.

About a year ago, Metro posted “No Overnight Parking” signs at the transit center. At that time, the parking lot was surveyed and found to have only a small handful of vacant parking spaces (excess capacity) at the end of the weekday peak hour. A lack of parking was identified as being an impediment to marketing efforts to grow Highway 17 commuter service ridership.

Upon further analysis, it was discovered that several spaces were being taken up nightly by some homeowners residing at the Blue Bonnet condominium complex, adjacent to the parking facility. Unfortunately, the owners of these cars typically do not move them prior to the start and end of Metro’s peak hour transit need. Complicating matters further, Metro discovered that Apple, among other tech firms, was using the facility for their tech bus riders without Metro authorization.

In order to deter the Blue Bonnet condominium homeowners from their unauthorized overnight parking, Metro installed the no overnight parking signs and Metro plans to enforce the no overnight parking ban in the near-future. Metro has also been working with the City of Scotts Valley to identify alternate tech bus parking spaces. At Metro’s urging, Google recently negotiated a lease with the Scotts Valley Boys and Girls Club to

utilize their excess daily parking. Also, the City is currently negotiating with Apple for Apple to lease off-site spaces on City-owned property.

Metro does acknowledge the need for legitimate transit overnight parking. For example, it might be common for someone to park at the transit center and take the Highway 17 commuter service to San Jose Diridon Station and catch CALTRAIN to San Francisco for an overnight business or pleasure stay, or, to take Amtrak from San Jose Diridon Station to a vacation destination.

As time and resources permit, Metro staff has been, and will continue, to investigate possible solutions to the overnight parking, permitting and enforcement challenges and the unauthorized tech bus and Blue Bonnet homeowners' usage of the transit center parking lot. While tech buses provide a similar service as the Highway 17 commuter service, that is, taking cars off the highway, it is not prudent to use public resources to provide tech companies with free parking. At some point in the near future, Metro will start citing and towing those who park at this facility and board tech buses and the cars of the Blue Bonnet homeowners. Metro staff will also investigate opportunities to permit transit-oriented overnight parking. Such a program might involve the purchase of one or two parking ticket machines that would dispense overnight permits for a cost.

Metro will continue to study, analyze and evaluate solutions to these challenges.

R13. Metro should evaluate cost-effective alternatives to the CNG bus powertrain.
(F14)

- HAS BEEN IMPLEMENTED** – summarize what has been done
- HAS NOT BEEN IMPLEMENTED BUT WILL BE IMPLEMENTED IN THE FUTURE** – summarize what will be done and the timeframe
- REQUIRES FURTHER ANALYSIS** – explain scope and timeframe
(not to exceed six months)
- WILL NOT BE IMPLEMENTED** – explain why

Response explanation, summary, and timeframe:

As per the fleet plan adopted by the Metro Board on May 19, 2017, Metro will continue to purchase CNG powered buses through about 2030, and then phase-out CNG buses from the fleet by about 2040, at which time Metro aspires to have a 100% zero emissions fleet.

Metro is well informed on the evolving electric bus technology and participates regularly in various forums, briefings and seminars on the topic. Metro's CEO represents Metro on the Zero Emission Bus Resource Alliance (ZEBRA) and Metro has a contract with the Center for Transportation and the Environment (CTE) to assist with Zero Emission Bus (ZEB) analysis, procurement and the deployment of electric buses at Metro. As the California Air Resources Board (CARB) continues to progress towards mandating zero emissions bus fleets in the future, METRO must continue to perform due diligence in reviewing new and evolving low or no emissions technologies.

Currently, there are three types of cleaner emissions buses being produced: All electric, hydrogen fuel cell and hybrid electric. In addition, Cummins has been communicating that they will be producing near zero emissions diesel engines in the near future. As these newer technologies evolve, one must be mindful that there is virtually no life cycle experienced with any of these technologies. Aggressive early adopters may suffer the consequences of high costs and service disruptions associated with helping the industry perfect the technology.

The most significant challenge for electric buses today is one of range. If a bus charged overnight cannot run the entire day on one charge, the result will be significant additional costs for in-route recharging (opportunity charging). Battery charging capacity and bus range has been slowly improving over the last few years and is expected to continue to improve in the coming years.

The suggestion that Metro convert CNG buses to electric buses would result in far fewer batteries being installed than a factory electric bus, a very low overall range and the need to install very expensive in-route recharging facilities. In contrast, buses built at the factory as electric buses are constructed in such a way as to accommodate far more batteries and greater range. Also, it would not be a prudent expenditure of public resources to invest in an electric battery retrofit of a bus body and frame that may have over 500K miles and twelve years of life.

As stated above, on May 19, 2017, the Metro Board adopted Metro's goal to attain a fully zero-emission fleet by 2040 and phasing out CNG bus purchases by 2030. With this strategy, Metro will continue to buy a mix of CNG and electric buses through 2030, and then all electric buses thereafter. The last CNG bus would then be retired in 2040. This strategy will allow Metro to achieve the full life expectancy and fully depreciated value of the multi-million investment made in 2002 in the liquefied natural gas fueling station. However, the challenge in fulfilling this goal is one of capital resources. CNG buses today cost about \$580K/each and electric buses with associated infrastructure cost nearly \$1 million/each.

- R14.** Metro should use easily cleanable materials for bus seats. (F12)
- HAS BEEN IMPLEMENTED** – summarize what has been done
 - HAS NOT BEEN IMPLEMENTED BUT WILL BE IMPLEMENTED IN THE FUTURE** – summarize what will be done and the timeframe
 - REQUIRES FURTHER ANALYSIS** – explain scope and timeframe (not to exceed six months)
 - WILL NOT BE IMPLEMENTED** – explain why

Response explanation, summary, and timeframe:

See Metro's response to Finding 12

R15. Metro should conduct a limited trial using AVL and HASTUS to explore bus route efficiency. (F7)

- HAS BEEN IMPLEMENTED** – summarize what has been done
- HAS NOT BEEN IMPLEMENTED BUT WILL BE IMPLEMENTED IN THE FUTURE** – summarize what will be done and the timeframe
- REQUIRES FURTHER ANALYSIS** – explain scope and timeframe (not to exceed six months)
- WILL NOT BE IMPLEMENTED** – explain why

Response explanation, summary, and timeframe:

This Recommendation will not be implemented because it is not warranted or is unreasonable. Implementing a “trial” of an Automatic Vehicle Location (AVL) system would be a costly and time-consuming undertaking and would yield no new information. Metro staff and the Board understand the value and benefits of AVL, which is widely used today at transit properties across the nation.

Metro has been working on the development of an AVL project for nearly three years, which unfortunately was not acknowledged by the Grand Jury. Over the past three years, Metro staff has received numerous presentations from vendors in the Predictive Arrival and Departure Systems (PADS) technology space. Over this same period of time, Metro staff has developed a scope of work for a future procurement that reflects the PADS needs of Metro. At the same time, Metro has been actively seeking funding for such a project. Once the capital funding is identified, staff will propose to the Board that it authorize a procurement for such a system.

R16. Metro should provide WiFi connection on more buses. (F4)

- HAS BEEN IMPLEMENTED** – summarize what has been done
- HAS NOT BEEN IMPLEMENTED BUT WILL BE IMPLEMENTED IN THE FUTURE** – summarize what will be done and the timeframe
- REQUIRES FURTHER ANALYSIS** – explain scope and timeframe (not to exceed six months)
- WILL NOT BE IMPLEMENTED** – explain why

Response explanation, summary, and timeframe:

This Recommendation will not be implemented because it is not warranted or is unreasonable. We note that Finding 4, as referenced in R16 above, is an opinion about Bus Rapid Transit (BRT) and not Wi-Fi. The text of the Grand Jury report does not address a Wi-Fi observation or an industry practice. Please provide a clarification with regard to this recommendation.

Currently, the Highway 17 commuter bus fleet is outfitted with Wi-Fi. This is a dedicated fleet in which these buses run only on the Highway 17 commuter service.

In the future, as funding resources are identified, Metro may add Wi-Fi to the routes that run between Watsonville and Santa Cruz, and possibly the routes that run between

downtown Santa Cruz and UCSC. The challenge of doing so is not limited to the capital required to purchase the on-board Wi-Fi equipment, and the recurring operations cost of maintenance and cellular service, but also the operational challenges created when the bus fleet is further segregated in dedicated fleets, that is, buses that are limited to running on certain routes.

Metro's experience with installing Wi-Fi on Highway 17 buses goes back to a period of time between 2007 and 2013 in which Wi-Fi was installed on some buses, then expanded and then upgraded. Over that period of time it appears that Metro expended over \$165,000 in capital dollars for the installation, monitoring, maintenance and upgrades required for the 21 buses. Since then, ongoing operational expenses (recurring) amount to about \$26K/year for a monitoring and maintenance contract and \$23K/year for the AT&T and Verizon cellular service providers (dual providers are necessary due to topographical challenges encountered in signalization is weak or lost while traversing Highway 17). Expansion of Wi-Fi could be expensive if the cost model does not change. In the future, Metro hopes to explore expanded Wi-Fi service business models in which most, if not all, of the costs are absorbed by a vendor who would profit from advertisements viewers are required to see when using the Wi-Fi system.