# SANTA CRUZ METROPOLITAN TRANSIT DISTRICT (METRO) BOARD OF DIRECTORS AGENDA REGULAR MEETING FEBRUARY 23, 2018-9:00 AM WATSONVILLE CITY 275 MAIN STREET, WATSONVILLE, CA 

MISSION STATEMENT: "To provide a public transportation service that enhances personal mobility and creates a sustainable transportation option in Santa Cruz County through a costeffective, reliable, accessible, safe, clean and courteous transit service."

The Board Meeting Agenda Packet can be found online at www.SCMTD.com and is available for inspection at METRO's Administrative offices at 110 Vernon Street, Santa Cruz, California.
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| Director Ed Bottorff | City of Capitola |
| :--- | :--- |
| Director Cynthia Chase | City of Santa Cruz |
| Director Jimmy Dutra | City of Watsonville |
| Director Norm Hagen | County of Santa Cruz |
| Director John Leopold | County of Santa Cruz |
| Director Donna Lind | City of Scotts Valley |
| Director Cynthia Mathews | City of Santa Cruz |
| Director Bruce McPherson | County of Santa Cruz |
| Director Oscar Rios | City of Watsonville |
| Director Dan Rothwell | County of Santa Cruz |
| Director Mike Rotkin | County of Santa Cruz |
| Ex-Officio Director Davon Thomas | UC Santa Cruz |
| Ex-Officio Director Liber McKee | Cabrillo College |
|  |  |
| Alex Clifford | METRO CEO/General Manager |
| Julie Sherman | METRO General Counsel |

TITLE 6 - INTERPRETATION SERVICES I TÍTULO 6 - SERVICIOS DE TRADUCCIÓN
Spanish language interpretation and Spanish language copies of the agenda packet are available on an as-needed basis. Please make advance arrangements with the Executive Assistant at 831-426-6080. Interpretación en español y traducciones en español del paquete de la agenda están disponibles sobre una base como-necesaria. Por favor, hacer arreglos por adelantado con Coordinador de Servicios Administrativos al numero 831-426-6080.

AMERICANS WITH DISABILITIES ACT
The Board of Directors meets in an accessible facility. Any person who requires an accommodation or an auxiliary aid or service to participate in the meeting, or to access the
agenda and the agenda packet (including a Spanish language copy of the agenda packet), should contact the Executive Assistant, at 831-426-6080 as soon as possible in advance of the Board of Directors meeting. Hearing impaired individuals should call 711 for assistance in contacting Santa Cruz METRO regarding special requirements to participate in the Board meeting. For information regarding this agenda or interpretation services, please call Santa Cruz METRO at 831-426-6080.

SECTION I: OPEN SESSION<br>NOTE: THE BOARD CHAIR MAY TAKE ITEMS OUT OF ORDER

## 1 CALL TO ORDER

## 2 SWEAR IN NEW DIRECTOR

## 3 ROLL CALL

4 ELECT NEW CHAIR AND VICE CHAIR OF THE BOARD OF DIRECTORS
5 CONSIDERATION OF ELECTING DIRECTORS TO SERVE AS BOARD OFFICERS, ELECTING DIRECTORS TO CONFIRM POSITIONS ON VARIOUS BOARD COMMITTEES, ELECTING ONE DIRECTOR TO FILL ONE EXPIRED POSITION ON THE SANTA CRUZ CIVIC IMPROVEMENT CORPORATION (SCCIC) AND ELECTING REPRESENTATIVES AND ALTERNATES TO THE SANTA CRUZ COUNTY REGIONAL TRANSPORTATION COMMISSION (SCCRTC)

## 6 ANNOUNCEMENTS

6-1 Spanish language interpretation will be available during "Oral Communications" and for any other agenda item for which these services are needed.

6-2 Today's meeting is being broadcast by Community Television of Santa Cruz County.

6-3 Today's City of Watsonville Technician is Doug Mattos.

## 7 BOARD OF DIRECTORS COMMENTS

8 COMMUNICATIONS TO THE BOARD OF DIRECTORS
This time is set aside for Directors and members of the general public to address any item not on the Agenda which is within the subject matter jurisdiction of the Board. No action or discussion shall be taken on any item presented except that any Director may respond to statements made or questions asked, or may ask questions for clarification. All matters of an administrative nature will be referred to staff. All matters relating to Santa Cruz METRO will be noted in the minutes and may be scheduled for discussion at a future meeting or referred to staff for clarification and report. Any Director may place matters brought up under Communications to the Board of Directors on a future agenda. In accordance with District Resolution, speakers appearing at a Board meeting shall be limited to three minutes in his or her presentation. Any person addressing the Board may submit written statements, petitions or other documents to complement his or her presentation. When addressing the Board, the individual may, but is not required to, provide his/her name and address in an audible tone for the record.

## 9 WRITTEN COMMUNICATIONS FROM MAC (if applicable)

10 LABOR ORGANIZATION COMMUNICATIONS
11 ADDITIONAL DOCUMENTATION TO SUPPORT EXISTING AGENDA ITEMS

## CONSENT AGENDA

All items appearing on the Consent Agenda are recommended actions which are considered to be routine and will be acted upon as one motion. All items removed will be considered later in the agenda. The Board Chair will allow public input prior to the approval of the Consent Agenda items.

12-01 RECOMMENDED ACTION ON TORT CLAIMS
Alex Cliftord, CEO/General Manager
12-02 ACCEPT AND FILE: PRELIMINARY APPROVED CHECK JOURNAL DETAIL FOR THE MONTH OF JANUARY 2018
Angela Aitken, Finance Manager
12-03 ACCEPT AND FILE: MINUTES OF THE JANUARY 26, 2018 BOARD OF DIRECTORS MEETING
Alex Cliftord, CEO/General Manager
12-04 ACCEPT AND FILE: MINUTES OF THE SANTA CRUZ METRO FINANCE, BUDGET AND AUDIT STANDING COMMITTEE MEETING OF FEBRUARY 8, 2018
Alex Cliftord, CEO/General Manager
12-05 ACCEPT AND FILE: QUARTERLY STATUS REPORT OF GRANT APPLICATIONS, ACTIVE GRANTS AND FUTURE OPPORTUNITIES OCTOBER - DECEMBER 2017
Thomas Hiltner, Grants/Legislative Analyst
12-06 ACCEPT AND FILE: THE METRO PARACRUZ OPERATIONS STATUS REPORT FOR OCTOBER, NOVEMBER AND DECEMBER 2017
April Warnock, Paratransit Superintendent
12-07 ACCEPT AND FILE: PROJECT CLOSEOUT: THE HUMAN RESOURCES INFORMATION SYSTEM (HRIS) SOFTWARE UPGRADE Isaac Holly, IT Manager

12-08 APPROVE: CONSIDER A RESOLUTION DESIGNATING THE CEO AS THE AUTHORIZED AGENT TO SUBMIT A GRANT APPLICATION AND EXECUTE ACTIONS NECESSARY TO RECEIVE FORMULA FUNDS FROM THE FY18 LOW CARBON TRANSIT OPERATIONS PROGRAM Thomas Hiltner, Grants/Legislative Analyst

12-09 ACCEPT: CONSIDERATION OF DECLARING VEHICLES AND/OR EQUIPMENT AS EXCESS FOR PURPOSES OF DISPOSAL OR AUCTION Angela Aitken, Finance Manager

12-10 APPROVE: CONSIDERATION OF RESOLUTION APPROVING THE FY18 REVISED CAPITAL BUDGET Angela Aitken, Finance Manager

REGULAR AGENDA
13 PRESENTATION OF EMPLOYEE LONGEVITY AWARDS FOR PETE LEGORETTA Board Chair

14 ACCEPT AND FILE: THE YEAR TO DATE MONTHLY FINANCIAL REPORT AS OF NOVEMBER 30, 2017
Angela Aitken, Finance Manager
15 APPROVE: CONSIDERATION OF ISSUING FORMAL INVITATIONS FOR BIDS FOR ROOF AND WINDOWS REPLACEMENT AT PACIFIC STATION Erron Alvey, Purchasing Manager

16 APPROVE: CONSIDERATION OF AWARD OF CONTRACT TO PROTERRA, INC. FOR PURCHASE AND DELIVERY OF A ZERO EMISSION ELECTRIC BUS AND RELATED EQUIPMENT NOT TO EXCEED \$1,066,508 Erron Alvey, Purchasing Manager

17 APPROVAL TO ADD A SECOND CUSTOMER SERVICE COORDINATOR POSITION AND ACCEPT REVISIONS TO THE CURRENT JOB DESCRIPTION Jolene Church, HR Manager

18 APPROVAL OF RECLASSIFICATION OF LEAD CUSTODIAN TO A WORKING TITLE OF CUSTODIAL COORDINATOR Jolene Church, HR Manager

19 ACCEPT AND FILE: METRO SYSTEM RIDERSHIP REPORTS FOR THE SECOND QUARTER OF FY18
Barrow Emerson, Planning and Development Manager
20 APPROVE: CONSIDERATION OF AWARD OF CONTRACT TO DAN BOYLE \& ASSOCIATES, INC. FOR A DOWNTOWN SANTA CRUZ TRANSIT OPERATIONS ANALYSIS NOT TO EXCEED \$49,890
Barrow Emerson, Planning and Development Manager
21 APPROVE: ACCEPT INITIAL FARE RESTRUCTURING ANALYSIS AND CONCEPTS AND DIRECT STAFF TO INITIATE PUBLIC OUTREACH Barrow Emerson, Planning and Development Manager

## 22 APPROVE: CONSIDER A RESOLUTION IN SUPPORT OF PROPOSITION 69 ON THE STATEWIDE JUNE 2018 BALLOT AND IN OPPOSITION TO EFFORTS TO REPEAL THE "ROAD REPAIR AND ACCOUNTABILITY ACT" (SB 1)

Thomas Hiltner, Grants/Legislative Analyst
23 ACCEPT: ORAL ARTICULATED BUSES UPDATE
Barrow Emerson, Planning and Development Manager
24 ACCEPT: ORAL APTA UNIVERSITY UPDATE
Barrow Emerson, Planning and Development Manager
25 CEO ORAL REPORT
Alex Cliftord, CEO/General Manager
26 ANNOUNCEMENT OF NEXT MEETING: FRIDAY, MARCH 23, 2018 AT 9:00 AM, AT THE SANTA CRUZ CITY COUNCIL CHAMBERS, 809 CENTER STREET, SANTA CRUZ, CA
Board Chair
27 ADJOURNMENT
Board Chair

Pursuant to Section 54954.2(a)(1) of the Government Code of the State of California, this agenda was posted at least 72 hours in advance of the scheduled meeting at a public place freely accessible to the public 24 hours a day. The agenda packet and materials related to an item on this Agenda submitted to the Board of Directors after distribution of the agenda packet are available for public inspection in the Santa Cruz METRO Administrative Office (110 Vernon Street, Santa Cruz) during normal business hours. Such documents are also available on the Santa Cruz METRO website at www.scmtd.com subject to staff's ability to post the document before the meeting.

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DATE: February 23, 2018
TO: Board of Directors

FROM: Jimmy Dutra, Chair


#### Abstract

SUBJECT: CONSIDERATION OF ELECTING DIRECTORS TO SERVE AS BOARD OFFICERS, ELECTING DIRECTORS TO CONFIRM POSITIONS ON VARIOUS BOARD COMMITTEES, ELECTING ONE DIRECTOR TO FILL ONE EXPIRED POSITION ON THE SANTA CRUZ CIVIC IMPROVEMENT CORPORATION (SCCIC), AND ELECTING REPRESENTATIVES AND ALTERNATES TO THE SANTA CRUZ COUNTY REGIONAL TRANSPORTATION COMMISSION (SCCRTC)


## I. RECOMMENDED ACTION

That the Board of Directors Elect Directors to the following positions:

1) Santa Cruz Metropolitan Transit District (METRO) Board Chair and Vice Chair;
2) Various METRO Board Committees;
3) One (1) Expired Director Position on the Santa Cruz Civic Improvement Corporation (SCCIC) Board; and,
4) Representatives and Alternates for the Santa Cruz County Regional Transportation Commission (SCCRTC)

## II. SUMMARY

- Article 6 of the Santa Cruz Metropolitan Transit District (METRO) Board of Director Bylaws (METRO Bylaws) provides that the Board of Directors shall annually elect individuals to the positions of Chair and Vice Chair.
- In 2017, the Board of Directors nominated individuals to stand for election to the Standing Committee positions referenced in this staff report.
- Article III, Section 3.03 of the Santa Cruz Civic Improvement Corporation (SCCIC) Bylaws provides that the Board of Directors shall appoint METRO Directors to the SCCIC Board.
- In order to maintain representation on the Santa Cruz County Regional Transportation Commission (SCCRTC), it is necessary that the Board of Directors elect individuals to the three positions and three alternate positions that are designated for METRO Board Members.
- Nominations for the positions referenced in this Staff Report were opened at the January 26, 2018 Board of Directors meeting.


## III. DISCUSSION/BACKGROUND

The terms of the officers and appointees of the Board of Directors in the positions of Chair, Vice Chair and SCCRTC appointees expire in February 2018. One (1) of the five SCCIC Directors' terms expired in January 2018. The METRO Bylaws provide that the Board of Directors shall identify nominees to be considered for election to the positions herein referenced.

Staff recommends that the Board of Directors provide slates to:

1) Elect Directors to the positions of Chair and Vice Chair
2) Reconfirm Directors to positions on the current Standing Committees:
a. Standing Capital Projects Committee
b. Standing Finance, Budget and Audit Committee
c. Standing Personnel/Human Resources Committee, with the understanding that the Board Chair will appoint members to positions on the following Ad Hoc Committees:
a. Ad Hoc CEO Committee
b. Ad Hoc MAC Committee
c. Ad Hoc Legislative Committee
3) Fill one (1) expired position on the SCCIC
4) Elect three (3) representatives and three (3) alternates to the SCCRTC.

In accordance with the METRO Bylaws, nominations remain open until the positions are filled through election.

SCCIC is a non-profit public benefit corporation organized under the non-profit benefit corporation law in the State of California to provide financial assistance to METRO by acquiring, constructing and financing various public facilities, land and equipment and the leasing of facilities, land and equipment for use, benefit and enjoyment of the public served by METRO.

Article III, Section 3.03 of the SCCIC Bylaws provides that METRO's Board of Directors shall appoint METRO Directors to the SCCIC Board.
Staff recommends that the METRO Board of Directors appoint METRO Directors to serve on the SCCIC Board. At this time, one (1) appointee is needed for one (1) expired position. The appointed Director will hold the office for a term of two (2) years.

## IV. FINANCIAL CONSIDERATIONSIIMPACT

Funding support for the positions identified in this Staff Report is contained under Admin in the FY18 and FY19 Final Budget adopted June 23, 2017 and in the FY19 and FY20 yet to be finalized.

## v. ALTERNATIVES CONSIDERED

None.

## VI. ATTACHMENTS

Attachment A: Current METRO Board Officers and Appointees
Attachment B: Current SCCIC Board Roster
Attachment C: Board Slate(s) Worksheet

Prepared by: Gina Pye, Executive Assistant

## VII. APPROVALS:

Approved as to fiscal impact: Angela Aitken, Finance Manager


Alex Clifford, CEO/General Manager


# BOARD OFFICERS AND APPOINTMENTS 

Attachment A

## 2017 Committees

Chair JIMMY DUTRA

Vice Chair BRUCE McPHERSON

Capital Projects Standing Committee
Committee Established 8/26/16
ED BOTTORFF
CYNTHIA CHASE
BRUCE McPHERSON
CEO Goals and Objectives Ad Hoc Committee
Committee Established 5/19/17
NORM HAGEN
CYNTHIA MATHEWS
MIKE ROTKIN
Finance, Budget and Audit Standing Committee
(4-5 Board Members, as a ground rule)
Committee Established 8/26/16
JOHN LEOPOLD
DONNA LIND
CYNTHIA MATHEWS
OSCAR RIOS
MAC Ad Hoc Committee
Committee Established 3/24/17
ED BOTTORFF
NORM HAGEN
BRUCE McPHERSON
MIKE ROTKIN
Personnel/Human Resources Standing Committee
Committee Established 8/26/16
JIMMY DUTRA, Current Chair
BRUCE McPHERSON, Current Vice Chair
MIKE ROTKIN, Immediate Past Chair
NORM HAGEN
JOHN LEOPOLD

## Attachment A

SCCIC Representatives CYNTHIA CHASE NORM HAGEN
JOHN LEOPOLD
BRUCE McPHERSON OSCAR RIOS

SCCRTC Representatives
ED BOTTORFF
CYNTHIA CHASE
NORM HAGEN
SCCRTC Alternates (in order)
MIKE ROTKIN
DONNA LIND
TBD at a later date

5A. 2


# SANTA CRUZ CIVIC IMPROVEMENT CORPORATION (SCCIC) 

## BOARD OF DIRECTORS <br> 2017-2018

Cynthia Chase, President<br>John Leopold, Vice President<br>Bruce McPherson, Secretary<br>Oscar Rios, Treasurer<br>Norm Hagen, Director<br>Norm Hagen, Director<br>Alex Clifford, Chief Executive Officer

YEAR TERM BEGAN
YEAR TERM ENDS
2017
2019
2017
2019
2017
2019
2017
2019

Each Director holds office for a term of two (2) years from the date of appointment. The Board of Directors holds an annual meeting for the purpose of organization, selection of Directors and officers, and the transaction of other business. Annual meetings of the Board are held on the fourth Friday of February. The meetings are held in the same venue as the Santa Cruz METRO Board of Directors meeting.

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## Attachment C - REVISED

## BOARD OFFICERS AND APPOINTMENTS



Attachment C-REVISED

|  |  |
| :---: | :---: |
|  |  |
| SCCRTC Alternates (in order) | SCCRTC Alternates (in order) |
| MIKE ROTKIN | JIMMY DUTRA |
| DONNA LIND | DONNA LIND |
| TBD at a later date | DAN ROTHWELL |
|  |  |
| AD HOC | COMMITTEES |
| CEO Goals and Objectives Ad Hoc Committee | CEO Goals and Objectives Ad Hoc Committee |
| Committee Established 5/19/17 | Committee Established 5/19/17 |
| NORM HAGEN |  |
| CYNTHIA MATHEWS | Chair will appoint |
| MIKE ROTKIN |  |
|  |  |
| Legislative Ad Hoc Committee | Legislative Ad Hoc Committee |
| Committee approved at 1/26/18 BOD Mtg Established 2/23/18 | Committee approved at 1/26/18 BOD Mtg Established 2/23/18 |
|  |  |
|  | Chair will appoint |
|  |  |
|  |  |
| MAC Ad Hoc Committee | MAC Ad Hoc Committee |
| Committee Established 3/24/17 | Committee Established 3/24/17 |
| ED BOTTORFF |  |
| NORM HAGEN |  |
| BRUCE McPHERSON | Chair will appoint |
| MIKE ROTKIN |  |

5C. 2

DATE: February 23, 2018
TO: Board of Directors
FROM: Alex Clifford, CEO/General Manager
SUBJECT: RECOMMENDED ACTION ON TORT CLAIMS

## I. RECOMMENDED ACTION

## That the Board of Directors Approve Staff Recommendations for Claims for the Month of February 2018

## II. SUMMARY

This staff report provides the Board of Directors with recommendations on claims submitted to the Santa Cruz Metropolitan Transit District (METRO).

## III. DISCUSSION/BACKGROUND

METRO's Risk Department received one claim for the month of February 2018 for money or damages. As a public entity, METRO must act "within 45 days after the claim has been presented" (Govt C §912.4(a)). See staff recommendations in paragraph VI.

## IV. FINANCIAL CONSIDERATIONSIIMPACT

None

## V. ALTERNATIVES CONSIDERED

Within the 45-day period, the Board of Directors may take the following actions:

- Reject the claim entirely;
- Allow it in full;
- Allow it in part and reject the balance;
- Compromise it, if the liability or amount due is disputed (Govt C §912.4(a)); or
- Do nothing, and allow the claim to be denied by operation of law (Govt C §912.4 (c)).


## VI. DESCRIPTION OF CLAIMS

| Claimant | Claim \# | Description | Recommended <br> Action |
| :---: | :---: | :--- | :---: |
| Dyal, Navkiran | $18-0003$ | Claimant alleges that the <br> front license plate frame of <br> their SUV was damaged <br> by a METRO Paratransit <br> vehicle. Amount of claim: <br> $\$ 1,326.56$ | Reject |

Prepared by: Tom Szestowicki, Safety Specialist

## VII. APPROVAL:

Alex Clifford, CEO/General Manager


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FROM: Angela Aitken, Finance Manager

## SUBJECT: ACCEPT AND FILE PRELIMINARY APPROVED CHECK JOURNAL DETAIL FOR THE MONTH OF JANUARY 2018

## I. RECOMMENDED ACTION

That the Board of Directors accept and file the preliminary approved Check Journal Detail for the month of January 2018

## II. SUMMARY

- This staff report provides the Board with a preliminary approved Check Journal Detail for the month of January 2018.
- The Finance Department is submitting the check journals for Board acceptance and filing.


## III. DISCUSSION/BACKGROUND

This preliminary approved Check Journal Detail provides the Board with a listing of the vendors and amounts paid out on a monthly cash flow basis (Operating and Capital expenses).

All invoices submitted for the month of January 2018 have been processed, checks issued and signed by the Finance Manager.

## IV. FINANCIAL CONSIDERATIONSIIMPACT

None. The check journal is a presentation of invoices paid in January 2018 for purposes of Board review, agency disclosure, accountability and transparency.

## V. ALTERNATIVES CONSIDERED

N/A

## VI. ATTACHMENTS

Attachment A: Check Journal Detail for the Month of January 2018

Prepared By: Holly Alcorn, Senior Accounting Technician

## VII. APPROVALS:

Angela Aitken, Finance Manager


Alex Clifford, CEO/General Manager


## Attachment A

DATE 02/02/18 11:05

| DATE 02/02/18 11:05 | SANTA CRUZ METROPOLITAN TRANSIT DISTRICT CHECK JOURNAL DETAIL BY CHECK NUMBER ALL CHECKS FOR ACCOUNTS PAYABLE |  |  |  |  | 01/01/18 THRU | $\text { PAGE } \quad 1$01/31/18 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | DATE: |  |  |
| CHECK CHECK <br> NUMBER  | CHECK VENDOR AMOUNT | VENDOR NAME | VENDOR TYPE | TRANS. NUMBER | TRANSACTION DESCRIPTION | TRANSACTION AMOUNT | COMMENT |
| 60965 01/03/18 | -834.88 003357 | CONTROL CABLES INC |  | 82036 | INVENTORY ORDER 504191-004100 | $\begin{array}{r} -834.88 \\ 834.88 \end{array}$ | **VOID |
| 61085 01/04/18 | 99.38 E 1008 | WILLIS, ROB |  | 82418 | WATER TESTING SUPPLI | $99.38$ |  |
| 61086 01/08/18 | 535.49002941 | AA SAFE \& SECURITY CO |  | 82360 | GATE KEYS $504409-002200$ | $\begin{aligned} & 174.40 \\ & 174.40 \end{aligned}$ |  |
|  |  |  |  | 82361 | TECH TIME SVT | 130.00 130.00 |  |
|  |  |  |  | 82365 | RPR DOOR HANDLE 504409-002200 | $\begin{aligned} & 231.09 \\ & 231.09 \end{aligned}$ |  |
| 61087 01/08/18 | 2,911.92 003151 | ABC BUS INC |  | 82388 | INVENTORY ORDER 504191-004100 | $\begin{aligned} & 645.08 \\ & 645.08 \end{aligned}$ |  |
|  |  |  |  | 82401 | INVENTORY ORDER 504191-004100 | 717.47 717.47 |  |
|  |  |  |  | 82404 | INVENTORY ORDER $504191-004100$ | $\begin{aligned} & 896.21 \\ & 896.21 \end{aligned}$ |  |
|  |  |  |  | 82405 | INVENTORY ORDER 504191-004100 | $\begin{aligned} & 653.16 \\ & 653.16 \end{aligned}$ |  |
| 61088 01/08/18 | 93.23 E437 | AITKEN, ANGELA |  | 82420 | $\begin{aligned} & \text { OFFICE SUPPLIES } \\ & 504311-001300 \end{aligned}$ | $\begin{aligned} & 93.23 \\ & 93.23 \end{aligned}$ |  |
| 61089 01/08/18 | 592.64192 | ALWAYS UNDER PRESSURE |  | 82308 | RPR POWER WASHER | 592.64 |  |
| 61090 01/08/18 |  |  |  |  | 11/13-504409-002200 | 592.64 |  |
|  | 3,197.77 001D |  |  | 82318 | 11/13-12/12 PT2PT | $1,818.80$ $1,818.80$ |  |
|  |  |  |  | 82363 | 11/10-12/9 INTERNET | $\begin{aligned} & 934.79 \\ & 934.79 \end{aligned}$ |  |
|  |  |  |  | 82370 | 11/19-12/18 CEMENT | 164.24 |  |
|  |  |  |  |  | 505031-003200 | 164.24 |  |
|  |  |  |  | 82371 | $\begin{array}{r} \text { 11/19-12/18 SKYLINE } \\ 505031-003200 \end{array}$ | $\begin{aligned} & 279.94 \\ & 279.94 \end{aligned}$ |  |
| 61091 01/08/18 | 190.53002689 | $B$ \& B SMALL ENGINE CORP |  | 82358 | TOOLS FOR SHOP | 190.53 |  |
| 61092 01/08/18 | 2,147.00 478 | bee Clene Inc | 0 | 82354 | CARPET $504409-002200$ | 190.53 874.00 |  |
|  |  |  |  |  | 503161-002200 | 874.00 |  |
|  |  |  |  | 82355 | CARPET CLEANING | $\begin{aligned} & 874.00 \\ & 874.00 \end{aligned}$ |  |
|  |  |  |  | 82356 | CARPET CLEANING | 399.00 |  |
|  |  | CALTRONICS BUSINESS SYSTEMS |  | 82304 | OFFICE $503161-002200$ | 399.00 $1,001.27$ |  |
| 61093 01/08/18 | 1,474.33 914 |  |  |  | 504311-001500 | 1, 001.27 |  |
|  |  |  |  | 82305 | OFFICE SUPPLIES | $\begin{aligned} & 53.41 \\ & 53.41 \end{aligned}$ |  |
|  |  |  |  | 82306 | OFFICE SUPPLIES | 419.65 |  |
|  |  |  |  |  | 504311-001500 | 419.65 |  |
| 61094 01/08/18 | 2,451.43 001324 | CAPITALEDGE ADVOCACY, INC. |  | 82286 | EXPENSES FOR 2017 $503032-001100$ | $\begin{aligned} & 2,451.43 \\ & 2,451.43 \end{aligned}$ |  |

## Attachment A

DATE 02/02/18 11:05

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|  |  |


| 82419 | RELOCATION EXPENSES $503031-001400$ |
| :---: | :---: |
| 82364 | $\begin{aligned} & 11 / 14-12 / 12 \text { WTC } \\ & 505021-002200 \end{aligned}$ |
| 82335 | MIDLIFE VEH \#2305 <br> 503353-004100 |
|  | 514030-410030 |
| 82357 | DEC 17 MAINTENANCE |
| 82392 | LNG 11/28/17 |
|  | 504012-004100 |
| 82393 | LNG 11/24/17 $504012-004100$ |
| 82394 | LNG 11/22/17 |
|  | 504012-004100 |
| 82395 | LNG 11/20/17 |
|  | 504012-004100 |
| 82396 | LNG $\begin{aligned} & 11 / 16 / 17 \\ & 504012-004100\end{aligned}$ |
| 82397 | LNG 11/14/17 |
|  | 504012-004100 |
| 82398 | LNG $11 / 10 / 17$ 504012-004100 |
| 82399 | LNG 11/8/17 |
|  | 504012-004100 |
| 82400 | LNG 11/6/17 |
|  | 504012-004100 |
| 82402 | LNG $\begin{aligned} & 11 / 30 / 17 \\ & 504012-004100\end{aligned}$ |
| 82403 | LNG 11/2/17 |
|  | 504012-004100 |
| 82410 | NVENTORY ORDER |
|  | 201030-000100 |
|  | 504191-004100 |
| 82344 | TRAVEL REIMBURSEMEN |
| 82307 | VENTORY ORDER |
|  | 504317-002200 |
| 82359 | CUSTODIAL SUPPLIES |
| 82362 | DEC 17 MAINTENANCE |
|  | 503351-002200 |
| 82406 | CREDIT |
|  | 504191-004100 |
| 82407 | INVENTORY ORDER 504191-004106 |


| 61095 | $01 / 08 / 18$ |
| :--- | :--- |
| 61096 | $01 / 08 / 18$ |
| 61097 | $01 / 08 / 18$ |
| 61098 | $01 / 08 / 18$ |

61099 01/08/18

| $6109901 / 08 / 18$ |
| :--- |
| 61100 |
| 61101 |

CUMMINS PACIFIC LLP

| 709.00003102 |
| ---: |
| 137.81 E 957 |
| $1,240.20075$ |
| $2,890.00$ |
| $1,179.0603034$ |

$\begin{array}{rl}558.54 & \mathrm{C} 104 \\ 52.65 & 130 \\ 6,311.05 & 909\end{array} \quad \begin{array}{rl} \\ 90,175.92 & 001124\end{array}$ $6109501 / 08 / 18$
$6109601 / 08 / 18$
$6109701 / 08 / 18$
$6109801 / 08 / 18$
LE UTILITIES

## CHURCH, JOLENE

 CLASSIC GRAPHICSCLEAN ENERGY -

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## Attachment A

DATE 02/02/18 11:05

| 82408 | CYLINDER HEAD $503353-004100$ |
| :---: | :---: |
| 82409 | INJECTORS |
|  | 503353-004100 |
| 82291 | RPR VEH \#1115 PC $503353-004125$ |
| 82296 | RPR VEH \#1114 PC |
| 82289 | TIRES |
|  | 504021-004100 |
| 82292 | RPR VEH \#1101 PC $504021-004125$ |
| 82298 | TIRES |
|  | 504021-004100 |
| 8230 | TIRES 504021-004125 |
|  | 504021-004125 |
| 82347 | TIRES 50 |
| 82413 | TIRES |
|  | 504021-004125 |
| 82309 | BING MATERIALS 504409-002200 |
| 82333 | BING REPAIR |
|  | 504409-002200 |
| 82421 | NOV 17 MERCHANT FEES $503012-001200$ $509172-001200$ |
| 82414 | 12/1-12/15 FUEL |
|  | 504011-004100 |
| 82350 | FALL HEADWAYS |
|  | 504215-001600 |
| 82334 | 12/16-1/15 SKY-RIVER $505031-002200$ |
| 82369 | $\begin{gathered} 12 / 13-1 / 12 \text { SKY-OCEAN } \\ 505031-003200 \end{gathered}$ |
| 82352 | JAN 18 SERVICES |
|  | JaN 503012-001200 |
| 82353 | JAN 18 VAULT SERVICE |
| 82302 | INVENTORY ORDER |
|  | 504191-004100 |
|  | 504191-004125 |
| 82314 | INVENTORY ORDER 504191-0041 |
| 82336 | REFLECTIVE LABELS |
|  | 504409-002200 |

$\begin{array}{ll}\text { CHECK } & \text { CHECK } \\ \text { CUMBER } & \text { DATE }\end{array}$

## $3,268.78002949$ 678.40001329 $3,063.10003274$

61104 01/08/18
61105 01/08/18
61106 01/08/18
61107 01/08/18
46.72001172


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DEANE INDUSTRIAL MACHINING
DOC AUTO LLC
EAST BAY TIRE CO.

EAST BAY TIRE CO

L0LI9
61108 01/08/18
61109 01/08/18 61110 01/08/18 61111 01/08/18

61112 01/08/18
61113 01/08/18
61114 01/08/18

## Attachment A

DATE 02/02/18 11:05
DATE: 01/01/18 THRU 01/31/18

| CHECK | CHECK | CHECK VENDOR | VENDOR | VENDOR | TRANS. | TRANSACTION | TRANSACTION | COMMENT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NUMBER | DATE | AMOUNT | NAME | TYPE | NUMBER | DESCRIPTION | NT |  |



| 82339 | ABSORBENT 504421-004100 |
| :---: | :---: |
| 82340 | ABSORBENT |
|  | 504421-004100 |
| 82341 | ABSORBENT <br> 504191-004100 |
| 82375 | NOV 17 RETAINER |
|  | 503033-001 |
| 82376 | M\# $\begin{aligned} & 032117.006001 \\ & 503033-001700\end{aligned}$ |
| 82377 | M \#032117.006003 |
|  | 503033-001700 |
| 82378 | M \#032117.006004 $503033-001700$ |
| 82379 | M \#032117.008001 |
|  | 503033-001700 |
| 82390 | M \#032117.000003 <br> 514010-120003 |
| 82300 | RPR VEH \#1401 |
|  | 503354-004100 |
| 82412 | BUS WASH SUPPLIES |
|  | 504317-004100 |
| 82294 | NVENTORY ORDER <br> 504191-004100 |
| 82342 | NTORY ORDER |
|  | 504191-004100 |
| 82346 | HOLIDAY CARDS |
|  | 504215-001100 |
| 82380 | OCHURES |
|  | 503031-001100 |
| 82288 | BILINGUAL SERVICES |
| 82373 | $\text { CL }{ }^{\text {515003031-001400 }}$ |
|  | 502081-004100 |
| 82374 | CL \#16008784 |
|  | 502081-003100 |
| 82303 | RPR HYDRAULIC JACK |
|  | 503352-004100 |
| 82345 | 12/28-1/27 LEASE ADM |
|  | LEASE 512061-001100 |
| 82283 | LEASE VEH \#1610 |
|  | 514030-410000 |
| 82284 | LEASE VEH \#1612 |
| 82285 | LEASE VEH \#1611 |
|  | 514030-41 |

HANSON BRIDGETT LLP
IO, RODNEY H
KAADY CHEMICAL LLC
KELLEY'S SERVICE INC. KINKO'S INC.
LANDAVERRY, CARLOS G.
LAW OFFICES OF MARIE F. SANG
~
LAW OFFICES OF MARIE F. SANG
LOBNER, DON
MAILFINANCE INC
MARK W PLATT \& ASSOCIATES INC
36,521.05 003109


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61115 01/08/18

61117 01/08/18
61118 01/08/18
61119 01/08/18
61120 01/08/18
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$\stackrel{\rightharpoonup}{\circ}$
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$\stackrel{7}{0}$
61122 01/08/18



## Attachment A

DATE 02/02/18 11:05




2,601.09 023
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61130 01/08/18
61131 01/08/18 8โ/80/โ0 乙とโโ9 $\stackrel{\infty}{1}$
$\stackrel{\infty}{\circ}$
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$\stackrel{\rightharpoonup}{\circ}$
$\stackrel{\rightharpoonup}{7}$
$\stackrel{7}{6}$ 61134 01/08/18
 61136 01/08/18



## Attachment A



## Attachment A

DATE 02/02/18 11:05

 82382 DMV EXAM 82383 DMV EXAM 502251-003300 82384 DMV EXAM 82385 DMV EXAM $502251-003300$ 82386 DMV EXAM 502251-003300 82349 FIRST AID KIT 82520 INVENTORY ORDER 82521 INVENTORY ORDER 82522 INVENTORY ORDER 82523 INVENTORY ORDER 82524 INVENTORY ORDER 82488 RPR BUS SIGN 004100 82424 11/19-12/18 MAIN ACC


 OFFICE SUPPLIES BATTERIES
 VERNON FIRE ALARM



SERVICE CO. ABC BUS INC
 82557 82481 82482 82515 82564
82555 $\stackrel{\llcorner }{\stackrel{\circ}{\infty}}$

| $\begin{array}{r} 18.10 \\ 3,067.65 \end{array}$ | $\begin{aligned} & 147 \\ & 003151 \end{aligned}$ | ZEE MEDICAL SERVICE CO. ABC BUS INC |
| :---: | :---: | :---: |
| 65.00 | 003089 | ACTION AUTO GLASS DBA FOR |
| 3,745.97 | 001D | AT\&T |
| 968.73 | 003105 | AT\&T MOBILITY |
| 950.58 | 003199 | B \& H FOTO \& ELECTRONICS CORP |
| 164.59 | 002363 | BATTERIES PLUS \#314 |
| 226.92 | 003248 | BAY ALARM COMPANY |
| 388.72 | 588 | CALTIP |
| 125.35 | 914 | CALTRONICS BUSINESS SYSTEMS |
| 5,250.00 | 001324 | CAPITALEDGE ADVOCACY, inc. | 61147 01/08/18

61148 01/15/18
$6114901 / 15 / 18$
$6115001 / 15 / 18$ 8L/GI/T0 TSIT9
61152 01/15/18
8T/GI/T0 \&SIT9 61154 01/15/18 61155 01/15/18 $\stackrel{\infty}{1}$
$\stackrel{1}{1}$
$\stackrel{1}{7}$
$\stackrel{1}{0}$
$\stackrel{0}{7}$
$\stackrel{7}{7}$ $\infty$
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$\stackrel{1}{7}$
$\stackrel{1}{6}$
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$\stackrel{7}{7}$

## Attachment A

DATE 02/02/18 11:05




| 82459 | HYDROSTATIC TESTING 503352-002200 |
| :---: | :---: |
| 82489 | INVENTORY ORDER |
|  | 504191-004100 |
| 82558 | OFFICE SUPPLIES |
|  | - 504311-001500 |
| 82559 | OFFICE SUPPLIES |
| 82469 | COOP RETAIL MGMT |
|  | 507999-002200 |
| 82464 | $\begin{aligned} & 11 / 20-12 / 18 \text { WATER IR } \\ & 505021-002200 \end{aligned}$ |
| 82465 | 11/20-12/18 WATER WT |
| 82466 | 11/20-12/18 WATER |
| 82467 | 12/20 WASTE WTC |
|  | 505021-002200 |
| 82549 | VENTORY ORDER |
|  | 201030-0001 |
|  | 504191-004100 |
| 82551 | CUSTODIAL SUPPLIES |
|  | 504317-0022 |
| 82541 | NTORY ORDER |
|  | 504191-004100 |
| 82542 | VENTORY ORDER |
|  | 504191-004100 |
| 82543 | VENTORY ORDER |
|  | 504191-004100 |
| 82438 | DEC 17 MAINTENANCE |
|  | 503352-004100 |
| 82480 | 10/6-11/22 DOT TEST |
|  | 503031-001400 |
| 82439 | TIRES |
|  | 504021-004100 |
| 82440 | TIRES |
|  | 504021-004100 |
| 82507 | TIRES |
|  | 504021-004125 |
|  | 504021-004100 |
| 82509 | TIRES |
|  | 504021-004125 |
| 82510 | TIRES |
| 82511 | TIRES ${ }^{\text {504021-004125 }}$ |

## Attachment A

DATE 02／02／18 11：05


5041-004125
TEMP W/E 12/24/17
TEMP W/E 12/17/17
TEMP W/E 12/24/17
TEMP W/E 12/17/17
TEMP W/E 12/17/17
 12／1－12／15 FUEL PC







 82474 NATURAL GAS ALARM SヨIIITIJVヨ yoコ S700」 9んtて8
 00โち00－โZちゃ0
 82517 RPR VEH \＃2813 504421－004100
INVENTORY ORDER

－JNI SヨコI＾yヨs ssヨydx 82512
82491 82492 82493 82494 82563 82436 82437 82547 82548 $\stackrel{\substack{\stackrel{1}{N} \\ \infty \\ \infty}}{ }$ 8245 82473
82474 8247
82477

## LLC



GENFARE A DIV OF SPX CORP GILLIG LLC
GRAINGER
234.39647
304.43117
$5,259.05 \quad 282$
61169 01／15／18

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2,973.69432
$$


8T／ST／T0 TLIT9


61174 01／15／18
61175 01／15／18
61171
650.32166

12－02A． 9

## Attachment A



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\begin{aligned}
& 82470 \text { INVENTORY ORDER } \begin{array}{r}
504421-004100 \\
\text { SOR }
\end{array} \\
& 82471 \text { CREDIT }{ }^{504191-004100} \\
& 82498 \text { INVENTORY ORDER } \\
& 82499 \text { RPR VEH \#2800 PC } \\
& 82500 \text { INVENTORY ORDR } \\
& 82501 \text { A/C CARTRIDGE } \\
& 82502 \text { CREDIT }{ }^{504191-004100} \\
& 82503 \text { INVENTORY ORDER } \\
& 82505 \text { INVENTORY ORDER } \\
& 82565 \quad 4 / 1-3 / 30 / 19 \text { SUBSCRIP }
\end{aligned}
$$

$$
\begin{aligned}
& \text { RPR LED BOARD } 504191-004100 \\
& \text { WASTE 504012-004100 }
\end{aligned}
$$

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\begin{aligned}
& \begin{array}{l}
\text { 509101-003300 } \\
\text { INVENTORY ORDER }
\end{array}
\end{aligned}
$$

$$
\begin{aligned}
& \text { 12/4-1/2 SVTC }
\end{aligned}
$$

$$
\begin{aligned}
& 82457
\end{aligned}
$$

61176 01/15/18
61177 01/15/18 61178 01/15/18 61179 01/15/18 61180 01/15/18
 61182 01/15/18 61183 01/15/18 61184 01/15/18 61185 01/15/18
61186 01/15/18
8L/GI/T0 L8IT9

## Attachment A

DATE 02/02/18 11:05
DATE: 01/01/18 THRU 01/31/18

 $504311-001100$
OFFICE SPPLIES
$504311-001100$
OFFICE SUPLIES
$504311-001300$ 82478
82483 OFFICE SO4P11-001300 82485 OFFICE 504311-001300 FFICE 504311-003100
 82516 RPR ELECTRICAL BOX
 82568 12/26-1/25 LEASE C/S 82447 INVENTORY ORDER 82487 INVENTORY ORDER 82504 INVENTORY ORDER 82506 INVENTORY ORDER 82455 11/10-12/11 PARACRUZ 82550 REPLENISHMENT



 SMOG VEH \#1105 PC



PROBUILD COMPANY LLC
RAYNE OF SANTA CRUZ, INC.
RICOH USA, INC. TX
ROMAINE ELECTRIC CORP
SANTA CRUZ AUTO PARTS, INC.
SANTA CRUZ MUNICIPAL UTILITIES
SCMTD PETTY CASH - OPS
SCOTTS VALLEY WATER DISTRICT


| 14.77 | 107A |
| :---: | :---: |
| 150.00 | 019 |
| 267.05 | 215 |
| 1,586.91 | 003154 |
| 248.01 | 135 |
| 567.28 | 079 |
| 122.20 | 122 |
| 308.73 | 002459 |

 61188 01/15/18 61189 01/15/18 $\stackrel{\infty}{1}$
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$\stackrel{1}{\circ}$
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$\stackrel{\rightharpoonup}{1}$ 61191 01/15/18
61192 01/15/18
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$\stackrel{1}{7}$
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$\stackrel{3}{7}$
$\stackrel{7}{7}$

61195 01/15/18
61196 01/15/18

## Attachment A

DATE 02/02/18 11:05




INVENTORY 0RD-004100 INVENTORY ORDER





 INVENTM $504191-004100$
INVENTORY ORDER
 504191-004100
MATS OPS



 INVENTORY ORDER
$504191-004100$
61197 01/15/18 61198 01/15/18 61199 01/15/18
RRANSIT HOLDINGS INC

5,180.44 003285


|  |
| :--- |
| 61198 01/15/18 |
| $6119901 / 15 / 18$ |
| $61200 \quad 01 / 15 / 18$ |

## Attachment A



| 82428 | CREDIT $^{\text {504191-004100 }}$ |
| :---: | :---: |
| 82429 | CREDIT |
|  | 504191-004100 |
| 82430 | CREDIT |
|  | 504191-004100 |
| 82431 | INVENTORY ORDER |
|  | 504191-004100 |
| 82432 | INVENTORY ORDER |
|  | 504191-004100 |
| 82433 | INVENTORY ORDER |
|  | 504191-004100 |
| 82434 | INVENTORY ORDER |
|  | 504191-004100 |
| 82435 | INVENTORY ORDER |
|  | 504191-004100 |
| 82448 | DMV EXAM |
|  | 502251-004100 |
| 82449 | DMV EXAM |
|  | 502251-004100 |
| 82450 | DMV EXAM |
|  | 502251-004100 |
| 82451 | DMV EXAM |
|  | 502251-004100 |
| 82454 | DMV EXAM 502251-003100 |
| 82571 | TOWING VEH \#1005 |
|  | 503353-004100 |
| 82573 | EV CHARGING STATION |
|  | 514030-121101 |
| 82572 | RPR VEH \#9818 |
|  | 503353-004100 |
| 82570 | RPR VEH \#804 |
|  | 503354-004100 |
| 82575 | 12/2-1/1 PARACRUZ |
|  | 505031-003100 |
| 82576 | WIN-PAK SOFWARE |
|  | 205040-000100 |
|  | 514010-120003 |
| 82577 | RELEASE OF RETENTION |
|  | 205040-000100 |
| 82642 | INVENTORY ORDER |
|  | 504191-004100 |
| 82643 | ENTORY ORDER |
|  | 504191-004100 |
| 82674 | INVENTORY ORDER |


ACTION TOWING \& ROAD SVC CORP BOWMAN \& WILLIAMS INC
CLASSIC GRAPHICS
IO, RODNEY H
VERIZON WIRELESS
DYNAMIC SECURITY TECH INC
-
VU, THANH DR. MD
375.00001165 877.55003330 581.25002035 $2,803.85909$

$1,854.5600332$ |  |  |
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61202 01/15/18
 61204 01/15/18

 61207 01/15/18

## Attachment A

SANTA CRUZ METROPOLITAN TRANSIT DISTRICT
CHECK JOURNAL DETAIL BY CHECK NUMBER
ALL CHECKS FOR ACCOUNTS PAYABLE
PAGE 14
DATE: 01/01/18 THRU 01/31/18
 AMOUNT
------154.02

 $\wedge$ $\begin{aligned} 375.00001016 & \text { ALLARD'S SEPTIC SERVICE } \\ 15.33002861 & \text { AMERICAN MESSAGING SVCS, LLC } \\ 141,788.29003362 & \text { APOLLO VIDEO TECHNOLOGY LLC }\end{aligned}$
BRENCO OPERATING-TEXAS, LP BROWN ARMSTRONG
CALIFORNIA DEPARTMENT OF TAX
CALIFORNIA DEPARTMENT OF TAX
CALTRONICS BUSINESS SYSTEMS
CAPITOL CLUTCH \& BRAKE, INC.
CASTILLO, ANTONIO
CITY OF SANTA CRUZ-FINANCE
CITY OF SANTA CRUZ FINANCE RRF
CLEAN ENERGY COAST PAPER \& SUPPLY INC.
COASTAL LANDSCAPING INC. DBA
2,341.79 001356 7,250.00 616
 64.31914

472.14 E441
$1,297.84001346$ $\begin{array}{rr}173.50 & 003373 \\ 45,576.46 & 001124\end{array}$ 951.29075
2,890.00 003034

61209 01/22/18 61210 01/22/18 61211 01/22/18

61212 01/22/18
61213 01/22/18
 61215 01/22/18 61216 01/22/18 61217 01/22/18 61218 01/22/18 61219 01/22/18 61220 01/22/18 61221 01/22/18

61222 01/22/18
61223 01/22/18

## Attachment A

DATE 02/02/18 11:05


| 82661 | $1 / 5$ BOARD MEETING $509125-001100$ |
| :---: | :---: |
| 82663 | RPR VEH \#1201 |
|  | 503353-004100 |
| 82651 | RPR VEH \#1126 PC $503353-004125$ |
| 82637 | TIRES |
|  | 504021-004100 |
| 82638 | TIRES |
|  | 504021-004100 |
| 939 | 504021-004100 |
| 82640 | TIRES |
|  | NON 504021-004125 |
| 82669 | NON HAZARDOUS WASTE |
| 82670 | NON HAZARDOUS WASTE |
| 82600 | RPR DOOR WTC $504409-002200$ |
| 82655 | DEC 17 SECURITY OPS |
| 82617 | $\begin{aligned} & 12 / 16-12 / 31 \text { FUEL PC } \\ & 504012-004125 \end{aligned}$ |
| 82664 | $\begin{aligned} & 12 / 16-12 / 31 \text { FUEL } \\ & 504011-004100 \end{aligned}$ |
| 82660 | INVENTORY ORDER 504191-004100 |
| 82594 | INVENTORY ORDER 504191-004125 |
| 82667 | INVENTORY ORDER 504409-002200 |
| 82668 | INVENTORY ORDER 504409-002200 |
| 82619 | DEC 17 WASTE MT HERM <br> 505021-002200 |
| 82620 | DEC 17 WASTE SVTC |
|  | 505021-002200 |
| 82597 | INVENTORY ORDER $201030-000100$ |
|  | 504191-004100 |
| 82581 | JAN 19 LIFE AD\&D |
|  | 502051-001100 |
|  | 502051-001200 |
|  | 502051-001300 |

$\begin{array}{ll}\text { CHECK } & \text { CHECK } \\ \text { NUMBER } & \text { DATE }\end{array}$

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\begin{array}{ll}
61224 & 01 / 22 / 18 \\
61225 & 01 / 22 / 18 \\
61226 & 01 / 22 / 18 \\
61227 & 01 / 22 / 18
\end{array}
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61231 01/22/18
61232 01/22/18 ~~~
61234 01/22/18
61235 01/22/18
$6123601 / 22 / 18$
$6123701 / 22 / 18$

GREENWASTE RECOVERY, INC.
HANDI-MAN MARINE
HARTFORD LIFE AND ACCIDENT INS CHECK VENDOR
AMOUNT

$$
\begin{array}{rrr}
8.11 & 002063 \\
14,087.37 & 003116 \\
951.37 & 001329 \\
2,671.91 & 003274
\end{array}
$$

5,042.75 003153 183.40001172
 8,340.92 002952 308.69647
 GENFARE A DIV OF SPX CORP
GILLIG LLC
GRAINGER
GREENWASTE RECOVERY, INC.
HANDI-MAN MARINE
HARTFORD LIFE AND ACCIDENT INS
JNI SכIISIפOา ᄀ $\forall \perp N \exists W N O Y I \Lambda N \exists$

$$
15,664.96001745
$$ 290.84001097

178.26981
$15,664.96001745$ GENFARE A DIV OF SPX CORP
GILLIG LLC
GRAINGER
GREENWASTE RECOVERY, INC. GENFARE A DIV OF SPX CORP
GILLIG LLC
GRAINGER
GREENWASTE RECOVERY, INC.
FERGUSON ENTERPRISES INC. \#795
FIRST ALARM
FLYERS ENERGY LLC GENFARE A DIV OF SPX CORP
GILLIG LLC
GRAINGER
GREENWASTE RECOVERY, INC. GENFARE A DIV OF SPX CORP
GILLIG LLC
GRAINGER
GREENWASTE RECOVERY, INC. HANDI-MAN MARINE


## Attachment A




| 544.06166 | HOSE SHOP, THE INC |
| :--- | :--- |
| 404.25003284 | KEISH ENVIRONMENTAL PC CORP |
| 297.441117 | KELLEY'S SERVICE INC. |
| $23,627.38003366$ | KEY GOVERNMENT FINANCE INC |
| 468.00003271 | KJRB INC |
| 690.75001145 | MANAGED HEALTH NETWORK |


| 61238 | $01 / 22 / 18$ |
| :--- | :--- |
| 61239 | $01 / 22 / 18$ |
| 61240 | $01 / 22 / 18$ |
|  |  |
| 61241 | $01 / 22 / 18$ |
| 61242 | $01 / 22 / 18$ |
| 61243 | $01 / 22 / 18$ |

## Attachment A





| 61244 | $01 / 22 / 18$ |
| :--- | :--- |
| 61245 | $01 / 22 / 18$ |
| 61246 | $01 / 22 / 18$ |
| 61247 | $01 / 22 / 18$ |
| 61248 | $01 / 22 / 18$ |
| 61249 | $01 / 22 / 18$ |
| 61250 | $01 / 22 / 18$ |
| 61251 | $01 / 22 / 18$ |

61252 01/22/18

## Attachment A



874.92 003024 206.90135 $\begin{array}{rr}15,843.83 & 001075 \\ 87.95 & 001232 \\ 959.50 & 003231 \\ 1,308.00 & 003242 \\ 2,065.21 & 001800\end{array}$ 127.00003010
$7,199.84003285$ RICOH USA, INC CA

SANTA CRUZ AUTO PARTS, INC. SOQUEL III ASSOCIATES SPECIALIZED AUTO AND the hon company llc dBa athc THE JANEK CORPORATION
thermo king of salinas, INC
INC TOYOTA MATERIAL HANDLING
TRANSIT HOLDINGS INC CHECK VENDOR
AMOUNT . 61253 01/22/18 61254 01/22/18 61255 01/22/18 61257 01/22/18 61258 01/22/18 61259 01/22/18

[^0]
## Attachment A

DATE 02/02/18 11:05


| 82602 | $\begin{array}{r} 504191-004100 \\ 2 / 1-4 / 30 \text { GOL CLUB } \\ 503171-002200 \end{array}$ |
| :---: | :---: |
| 82665 | MATS OPS <br> 503162-002200 |
| 82598 | FREIGHT |
|  | 504205-004100 |
| 82644 | INVENTORY ORDER $504191-004100$ |
| 82645 | INVENTORY ORDER 504191-004100 |
| 82646 | INVENTORY ORDER 504191-004100 |
| 82647 | INVENTORY ORDER 504191-004100 |
| 82623 | OFFICE SUPPLIES $504311-002200$ |
| 82583 | DMV EXAM |
|  | 502251-004100 |
| 82641 | INVENTORY ORDER $504191-004100$ |
| 82603 | 12/2-1/1 PUSH2TALK |
|  | 505031-002200 |
| 82580 | JAN 18 VISION |
|  | 502045-001100 |
|  | 502045-001200 |
|  | 502045-001300 |
|  | 502045-001500 |
|  | 502045-001600 |
|  | 502045-001800 |
|  | 502045-001900 |
|  | 502045-002200 |
|  | 502045-003100 |
|  | 502045-003200 |
|  | 502045-003300 |
|  | 502045-004100 |
|  | 502045-009001 |
|  | 502045-009005 |
| 82621 | DEC 17 CHEM TEST OPS |
|  | 503352-002200 |
| 82712 | KEYS FOR BOX 055B |
|  | 504409-002200 |
| 82804 | RPR HVAC OPS 503352-002200 |
| 82722 | INVENTORY ORDER |


| 61262 | 01/22/18 | 433.83 | 003037 | TYCO INTEGRATED SECURITY |
| :---: | :---: | :---: | :---: | :---: |
| 61263 | 01/22/18 | 6.48 | 003152 | UNIFIRST CORPORATION |
| 61264 | 01/22/18 | 29.87 | 007 | UNITED PARCEL SERVICE |
| 61265 | 01/22/18 | 2,756.62 | 002829 | VALLEY POWER SYSTEMS, INC. |
| 61266 | 01/22/18 | 490.51 | 003294 | VARIDESK LLC |
| 61267 | 01/22/18 | 95.00 | E442 | VASQUEZ, CATALINO |
| 61268 | 01/22/18 | 30.28 | 221 | VEHICLE MAINTENANCE PROG INC |
| 61269 | 01/22/18 | 224.73 | 434 | VERIZON WIRELESS |
| 61270 | 01/22/18 | 9,936.68 | 001043 | VISION SERVICE PLAN |
| 61271 | 01/22/18 | 275.00 | 003316 | WATER TECH SPECIALTIES INC |
| 61272 | 01/29/18 | 35.53 | 002941 | AA SAFE \& SECURITY CO |
| 61273 | 01/29/18 | 198.00 | 382 | AIRTEC SERVICE INC. |
| 61274 | 01/29/18 | 389.89 | 001934 | ALDRAN CHEMICAL, INC |

## Attachment A

DATE 02／02／18 11：05


[^1]ATHENS INSURANCE SERVICE，INC． BOWMAN \＆WILLIAMS INC
BUDGET BLINDS OF SANTA CRUZ
CALIFORNIA CHAMBER OF COMMERCE
CALTRONICS BUSINESS SYSTEMS
CAPELLA，KATHLEEN
CATTO＇S GRAPHICS，INC．
CENTER FOR TRANSPORTATION AND
CLASSIC GRAPHICS
CLEAN ENERGY


422.50002035 $\begin{array}{cl}286.49 & 001268 \\ 108.06 & 001471 \\ 147.15 & 914 \\ 88.90 & \text { M022 }\end{array}$ 81.75001159


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61286 01／29／18

## Attachment A



## Attachment A



## Attachment A

DATE 02/02/18 11:05

| 82757 | INVENTORY ORDER 504421-004100 | $\begin{aligned} & 452.62 \\ & 452.62 \end{aligned}$ |
| :---: | :---: | :---: |
| 82789 | CL 11033882103414 | 627.00 |
|  | 502081-003300 | 627.00 |
| 82790 | CL 17001199 | 771.60 |
|  | 502081-003100 | 771.60 |
| 82791 | CL 1999103213 | 1,122.00 |
|  | 502081-003200 | 1,122.00 |
| 82792 | CL 92101499218396 | 412.50 |
|  | 502081-003100 | 412.50 |
| 82793 | CL 113626976778 | 429.00 |
|  | 502081-002200 | 429.00 |
| 82794 | CL 2010226708 | 247.50 |
|  | 502081-003300 | 247.50 |
| 82795 | CL 15007787 | 830.25 |
|  | 502081-003100 | 830.25 |
| 82796 | CL 1100045211001281 | 759.00 |
|  | 502081-003300 | 759.00 |
| 82688 | DEC 17 SERVICES | 195.00 |
|  | 503353-003100 | 195.00 |
| 82689 | MINI BROCHURE | 2,238.12 |
|  | 503031-001100 | 2,238.12 |
| 82764 | INVENTORY ORDER | 2,781.36 |
|  | 201030-000100 | -243.65 |
|  | 504409-002200 | 3,025.01 |
| 82692 | NAME PLATES | 63.60 |
|  | 504215-001100 | 63.60 |
| 82693 | ENGRAVED PLATE | 10.90 |
|  | 504215-001100 | 10.90 |
| 82696 | NAME PLATE | 21.80 |
|  | 504311-001300 | 21.80 |
| 82734 | RPR VEH \#1101 PC | 3,591.03 |
|  | 503353-004125 | 3,591.03 |
| 82695 | OFFICE SUPPLIES | 147.04 |
|  | 504311-001300 | 147.04 |
| 82773 | FEB 18 SUPP RETIREE | 44.45 |
|  | 502999-009005 | 44.45 |
| 82701 | WIRING PROJECT | 32.53 |
|  | 504409-002200 | 32.53 |
| 82702 | BREAKROOM WTC | 28.30 |
|  | 504409-002200 | 28.30 |
| 82715 | BUS BENCHES | 86.11 |
|  | 504409-002200 | 86.11 |
| 82716 | DOOR STOP | 5.33 |
|  | 504409-002200 | 5.33 |
| 82717 | RPLC CEILING TILES | 5.44 |

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61313 01/29/18 61314 01/29/18

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LAW OFFICES OF MARIE F. SANG
NIDAL HALABI \& NADA ALGHARIB
NORTH BAY FORD LINC-MERCURY
PALACE ART \& OFFICE SUPPLY PEREZ, CHERYL
PROBUILD COMPANY LLC

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| ---: | ---: |
| $2,238.12$ | 003361 |
| $2,781.36$ | 001627 |
| 96.30 | 003326 |
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| 61314 | $01 / 29 / 18$ |
| 61315 | $01 / 29 / 18$ |
| 61316 | $01 / 29 / 18$ |
| 61317 | $01 / 29 / 18$ |

## Attachment A



## Attachment A

DATE 02／02／18 11：05
SANTA CRUZ METROPOLITAN TRANSIT DISTRICT
CHECK JOURNAL DETAIL BY CHECK NUMBER
ALL CHECKS FOR ACCOUNTS PAYABLE
PAGE 25
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 61335 01／29／18
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TOTAL

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TO: $\quad$ Board of Directors
FROM: Alex Clifford, CEO/General Manager
SUBJECT: ACCEPT AND FILE MINUTES OF THE JANUARY 26, 2018 BOARD OF DIRECTORS MEETING

## I. RECOMMENDED ACTION

That the Board of Directors Accept and File the Minutes of the January 26, 2018 Santa Cruz Metropolitan Transit District (METRO) Board of Directors
II. SUMMARY

- Staff is providing minutes from the Santa Cruz Metropolitan Transit District (METRO) Board of Directors Regular Meeting of January 26, 2018.
- Each meeting, the Executive Assistant will provide minutes from the previous METRO Board of Directors meeting.


## III. DISCUSSION/BACKGROUND

The Board requested that staff include, in the Board Packet, minutes for previous METRO Board of Directors meetings. Staff is enclosing the minutes from this meeting.

## IV. FINANCIAL CONSIDERATIONSIIMPACT

None.

## V. ALTERNATIVES CONSIDERED

None.

## VI. ATTACHMENTS

Attachment A: Draft minutes for the Board of Directors Regular Meeting of January 26, 2018

Prepared by: Gina Pye, Executive Assistant

February 23, 2018
Page 2 of 2

## VII. APPROVALS:

Alex Clifford, CEO/General Manager


# SANTA CRUZ METROPOLITAN TRANSIT DISTRICT (METRO) BOARD OF DIRECTORS AGENDA MEETING MINUTES* JANUARY 26, 2018 - 9:00 AM METRO ADMIN OFFICES 110 VERNON STREET, SANTA CRUZ, CA 

A regular meeting of the Board of Directors of the Santa Cruz Metropolitan Transit District (METRO) was convened on Friday, January 26, 2018 at the METRO Admin offices, 110 Vernon Street, Santa Cruz, CA.

The Board Meeting Agenda Packet can be found online at www.SCMTD.com and is available for inspection at Santa Cruz METRO's Administrative offices at 110 Vernon Street, Santa Cruz, California. *Minutes are "summary" minutes, not verbatim minutes. Audio recordings of Board meeting open sessions are available to the public upon request.

This document has been created with accessibility in mind. With the exception of certain 3rd party and other attachments, it passes the Adobe Acrobat XI Accessibility Full Check. If you have any questions about the accessibility of this document, please email your inquiry to accessibility@scmtd.com

## SECTION I: OPEN SESSION

CALL TO ORDER at 9:02 AM by Chair Dutra.

Director Dutra, Director Leopold and Ex-Officio Director Thomas were sworn in by Julie Sherman, General Counsel.

ROLL CALL: The following Directors were present, representing a quorum:

Director Ed Bottorff<br>Director Cynthia Chase<br>Director Jimmy Dutra<br>Director Norm Hagen<br>Director John Leopold<br>Director Donna Lind<br>Director Cynthia Mathews<br>Director Bruce McPherson<br>Director Mike Rotkin<br>Ex-Officio Director Davon Thomas<br>City of Capitola<br>City of Santa Cruz<br>City of Watsonville<br>County of Santa Cruz<br>County of Santa Cruz<br>City of Scotts Valley<br>City of Santa Cruz<br>County of Santa Cruz<br>County of Santa Cruz<br>UC Santa Cruz

Ex-Officio Director McKee, Director Rios and Director Rothwell were absent.

STAFF PRESENT:
Alex Clifford
METRO CEO/General Manager
Julie Sherman METRO General Counsel

# Attachment A 

# METRO EMPLOYEES AND MEMBERS OF THE PUBLIC WHO VOLUNTARILY INDICATED THEY WERE PRESENT (IN ALPHABETICAL ORDER) WERE: 

Heather Adamson, AMBAG
Angela Aitken, METRO
Lorraine Bayer, METRO

Ginger Dykar, SCCRTC Larry Pageler, UCSC
Daniel Zaragoza, METRO

## ANNOUNCEMENTS

Chair Dutra introduced Carlos Landaverry and his Spanish Language interpretation services. He announced that the meeting is being televised by Community Television of Santa Cruz County with technician, Mr. Lynnn Dunton.

Chair Dutra welcomed Ex-Officio Director Thomas and shared a letter from Alice Malmberg, UCSC Vice President of Internal Affairs, UCSC Student Union Assembly, and Noah Thomas, Representative, UCSC Advisory Committee on Campus Transportation and Parking. (See Attachment)

## YOUTH ART POSTER CONTEST WINNERS

Chair Dutra, Vice Chair McPherson and Paratransit Súperintendent April Warnock announced the following Art Contest winners, congratulated and provided each of them with gift bags. ParaCruz ADA Eligibility Coordinator, Eileen Wagley thanked the generous sponsors.

Art Contest Winners:

- $1^{\text {st }}$ Place: Ryu Cirillo - Art to be featured on the "Headways" cover
- $2^{\text {nd }}$ Place: Anais Antolin Bearns \& Olivia Cole - Their art will be on the exterior of 8 buses \& interior of all buses
- $3^{\text {rd }}$ Place: Eliot Higgins-Axton, Isabella Ruvacalba, Sienna Encizo, Jayden Stormes - Their art will be displayed inside the buses
- Honorable Mention: Gabriella Italia, Johnathan Vasquez Naughton and Malakai Barbosa - Their art will be posted at Pacific Station \& inside buses:


## BOARD OF DIRECTORS COMMENTS

Chair Dutra, Directors Rotkin and Hagen thanked METRO staff for the tour and hospitality during Representative Jimmy Panetta's recent visit to METRO and the opportunity it provided to highlight the needs of METRO, the importance of federal funding for capital expenditures and the connection with our Congress.
At Director Mathews' suggestion, CEO Clifford will send a letter to the editor, thanking Representative Panetta for his visit.

Vice Chair McPherson read Congresswoman Anna Eschoo's letter (see attached) and thanked Senator Feinstein for her continued support of METRO.
Hearing no further comments, Chair Dutra moved to the next agenda item.

## COMMUNICATIONS TO THE BOARD OF DIRECTORS

Ms. Ofelia Gomez requested additional service on behalf of the community and provided a copy of her letter addressed to the SCCRTC. (See attached.) CEO Clifford responded that METRO has broken down her requests into 3 categories: 1) City related and notified the respective cities of the issues; 2) Bus stop issues, which are being evaluated for potential future upgrades where warranted; 3) Service related concerns, if warranted, which will be added to METRO's unmet needs list. Additionally, a letter has been sent to Ms. Gomez.

## Attachment A

## COMMUNICATIONS FROM MAC

Having none, Chair Dutra moved to the next item.

## LABOR ORGANIZATION COMMUNICATIONS

Eduardo Montesino spoke briefly of past issues with management and communication and his hopes for a good year.
Michael Rios thanked CEO Clifford for the invitation to participate in Representative Panetta's visit and welcomed Ex-Officio Thomas to the board.

Olivia Martinez, staff for SEIU, thanked Ms. Aitken and Ms. Church for their efforts with agenda item 11.12. She noted that SEIU was not in agreement but agreed to move forward to finalize the classification. She remains hopeful that compaction issues will be addressed in the class and comp study.
Hearing no further comments, Chair Dutra moved to the next agenda item.

## CONSENT AGENDA

## 11-01 RECOMMENDED ACTION ON TORT CLAIMS

11-02 ACCEPT AND FILE: PRELIMINARY APPROVED CHECK JOURNAL DETAIL FOR THE MONTHS OF NOVEMBER AND DECEMBER 2017

11-03 ACCEPT AND FILE: MINUTES OF THE SANTA CRUZ METRO BOARD OF DIRECTORS MEETING OF NOVEMBER 17, 2017

11-04 ACCEPT AND FILE: MINUTES OF THE SANTA CRUZ METRO FINANCE, BUDGET AND AUDIT STANDING COMMITTEE MEETING OF JANUARY 5, 2018

11-05 ACCEPT AND FILE: MINUTES OF THE SANTA CRUZ METRO PERSONNEL/HR STANDING COMMITTEE MEETING OF JANUARY 16, 2018

11-06 ACCEPT AND FILE: MINUTES FOR THE METRO ADVISORY COMMITTEE (MAC) MEETING OF AUGUST 16, 2017

11-07 ACCEPT AND FILE: QUARTERLY PROCUREMENT REPORT FOR 3RD QUARTER OF FY18

11-08 ACCEPT AND FILE: QUARTERLY ELECTRIC BUS PURCHASE REPORT FOR 3RD QUARTER OF FY18

11-09 APPROVE: CONSIDERATION OF AWARD OF CONTRACT TO ELERT \& ASSOCIATES FOR CONSULTANT SERVICES TO DEVELOP SPECIFICATIONS FOR METRO'S VIDEO SURVEILLANCE SYSTEM NOT TO EXCEED \$ 20,300

11-10 APPROVE: CONSIDERATION OF AWARD OF CONTRACT TO CASEY PRINTING, INC. FOR PRINTING OF HEADWAYS BUS RIDER'S GUIDE NOT TO EXCEED \$235,783

## Attachment A

## 11-11 APPROVE: A SEMI-ANNUAL REPORT ON THE STATUS OF METRO'S DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

11-12 APPROVE: APPROVAL OF SEIU MECHANIC SERIES WAGE SURVEY RESULTS
11-13 APPROVE: CONSIDERATION OF AUTHORIZING THE CEO TO EXECUTE A 5th AMENDMENT EXTENDING THE CONTRACT WITH KIMBALL MIDWEST FOR FASTENERS, ELECTRICAL TERMINALS AND MAINTENANCE ITEMS,

11-14 APPROVE: CONSIDERATION OF AWARD OF CONTRACT TO TECHNOLOGY INTERNATIONAL, INC. FOR PURCHASE AND DELIVERY OF ONE (1) TOW TRACTOR NOT TO EXCEED \$53,415

11-15 APPROVE: CONSIDERATION OF AWARD OF CONTRACT TO COASTAL LANDSCAPING, INC. FOR LANDSCAPING MAINTENANCE SERVICES NOT TO EXCEED \$ 186,040

There was no public comment.
ACTION: MOTION TO ACCEPT THE CONSENT AGENDA AS PRESENTED
MOTION: DIRECTOR ROTKIN
SECOND: DIRECTOR LIND
MOTION PASSED WITH 9 AYES (Directors Bottorff, Chase, Dutra, Hagen, Leopold, Lind, Mathews, McPherson and Rotkin). Directors Rios and Rothwell were absent.

## REGULAR AGENDA

## PRESENTATION OF EMPLOYEE LONGEVITY AWARDS FOR JUAN FLORES, MICHAEL MILLER AND PETE LEGORRETA

In their absence, Chair Dutra thanked METRO employees Juan Flores \& Michael Miller for their service. It was noted that Mr. Legorreta would return to the March meeting to be recognized.

RESOLUTION OF APPRECIATION, RETIREE: ARLAN COLWELL
In his absence, Chair Dutra thanked Mr. Colwell for his years of service.
ACTION: MOTION TO APPROVE THE RESOLUTION AS PRESENTED
MOTION: DIRECTOR LEOPOLD SECOND: DIRECTOR ROTKIN
MOTION PASSED WITH 9 AYES (Directors Bottorff, Chase, Dutra, Hagen, Leopold, Lind, Mathews, McPherson and Rotkin). Directors Rios and Rothwell were absent.

## STATE OF DOWNTOWN SANTA CRUZ PRESENTATION

Martin Bernal, City Manager for the City of Santa Cruz, spoke to the presentation. He clarified that the drawings within the presentation are conceptual at this point; however, they are working towards finalizing the Farmers' Market. The City Council has approved the project in concept.

Director Leopold addressed the absence of buses in the presentation drawings and inquired as to the transit center vision. Mr. Bernal and Ms. Claire Fliesler, Transportation Planner with the City of Santa Cruz, spoke of one option wherein the transit center would face Front Street with mixed-use on Pacific Avenue and added the City has been working with METRO to locate a consultant to identify transportation needs in the downtown area.

## Attachment A

Board of Directors Meeting Minutes
January 26, 2018
Page 5 of 10
Discussion between the City representatives and METRO board members regarding bicycle use ensued.

Director McPherson and Mr. Bernal discussed the dissolution of redevelopment agencies and the effect on funding, private partnerships, etc.

Hearing no further comment, Chair Dutra moved to the next agenda item.
ACCEPT AND FILE: THE YEAR TO DATE MONTHLY FINANCIAL REPORTS AS OF SEPTEMBER 30, 2017 AND OCTOBER 31, 2017
With the Chair's approval, Finance Manager Aitken combined agenda items 15 and 16, and spoke briefly of METRO's finances.

Hearing no further comment, Chair Dutra moved to the next agenda item.
ACTION: MOTION TO ACCEPT AND FILE THE YEAR TO DATE MONTHLY FINANCIAL REPORTS AS OF SEPTEMBER 30, 2017 AND OCTOBER 31, 2017 AS PRESENTED

MOTION: DIRECTOR LEOPOLD SECOND: DIRECTOR ROTKIN
MOTION PASSED WITH 9 AYES (Directors Bottorff, Chase, Dutra, Hagen, Leopold, Lind, Mathews, McPherson and Rotkin). Directors Rios and Rothwell were absent.

ACCEPTANCE OF FINANCIAL STATEMENTS WITH INDEPENDENT AUDITOR'S REPORT FOR THE YEAR ENDED JUNE 30, 2017
Lorraine Bayer, Accountant, spoke to the Auditor's lack of findings and the two current year conditions and recommendations detailed in the financial reporting letter. She will return in March with an update to the recommendations.

Hearing no further comment, Chair Dutra moved to the next agenda item.
ACTION: MOTION TO ACCEPT FINANCIAL STATEMENTS WITH INDEPENDENT AUDITOR'S REPORTFOR THE YEAR ENDED JUNE 30, 2017 AS PRESENTED

MOTION: DIRECTOR ROTKIN
SECOND: DIRECTOR LEOPOLD
MOTION PASSED WITH 9 AYES (Directors Bottorff, Chase, Dutra, Hagen, Leopold, Lind, Mathews, McPherson and Rotkin). Directors Rios and Rothwell were absent.

## APPROVE THE PROPOSED REVISED JOB DESCRIPTION FOR THE ASSISTANT

 HUMAN RESOURCES MANAGERJolene Church, Human Resources Manager, spoke briefly of the changes to the job description and how the cost of living in our local region is being addressed. She added that any compaction issues will be addressed in the SEIU class and comp study.

Public comment:
Eduardo Montesino noted that, historically, compaction issues have been addressed on a case-bycase basis.

ACTION: MOTION TO APPROVE THE PROPOSED REVISED JOB DESCRIPTION FOR THE ASSISTANT HUMAN RESOURCES MANAGER AS PRESENTED

# Attachment A 

Board of Directors Meeting Minutes
January 26, 2018
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MOTION PASSED WITH 9 AYES (Directors Bottorff, Chase, Dutra, Hagen, Leopold, Lind, Mathews, McPherson and Rotkin). Directors Rios and Rothwell were absent.

REVISED JOB DESCRIPTION FOR THE SAFETY, SECURITY AND RISK MANAGER Jolene Church, Human Resources Manager, stressed the importance of safety to METRO and the community.

There was no public comment.
ACTION: MOTION TO APPROVE THE REVISED JOB DESCRIPTION FOR THE SAFETY, SECURITY AND RISK MANAGER R AS PRESENTED

MOTION: DIRECTOR ROTKIN
SECOND: DIRECTOR MATHEWS
MOTION PASSED WITH 9 AYES (Directors Bottorff, Chase, Dutra, Hagen, Leopold, Lind, Mathews, McPherson and Rotkin). Directors Rios and Rothwell were absent.

## THE FINAL CPS HR CONSULTING MANAGEMENT CLASSIFICATION STUDY AND COMPENSATION STUDY STRATEGY

Jolene Church, Human Resources Manager, provided status of the study to date; e.g., job descriptions updated, proposed title changes, etc. CPS will return to the Personnel/HR Standing Committee with an analysis of all positions against peer agencies at three levels: $5 \%$ below median, median and $5 \%$ above median and inform METRO of the financial impact. Given the current timeline, the analysis should be completed prior to the end of FY18.

General discussion regarding total compensation, salary and fringe benefits and regional affordability followed. The impact of upcoming union negotiations is being considered as it will affect all employees.

Public comments:
Mr. Montesino expressed his concern about future hardship(s).
Dan Stevenson inquired as to how the peer agencies relate to the cost of living in Santa Cruz.
Chair Dutra reminded the assembly that the unions and management have agreed to the peer agencies being used in this study.

## ACTION: MOTION TO APPROVE THE FINAL CPS HR CONSULTING MANAGEMENT CLASSIFICATION STUDY AND COMPENSATION STUDY STRATEGY AS PRESENTED

## MOTION: DIRECTOR McPHERSON

SECOND: DIRECTOR MATHEWS
MOTION PASSED WITH 9 AYES (Directors Bottorff, Chase, Dutra, Hagen, Leopold, Lind, Mathews, McPherson and Rotkin). Directors Rios and Rothwell were absent.

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ESTABLISHMENT OF PASSENGER CODE OF CONDUCT AND SERVICE
SUSPENSION/EXCLUSION POLICIES FOR FIXED ROUTE SERVICES, TRANSIT
FACILITIES AND PARACRUZ
```

Alex Clifford, CEO/General Manager, noted METRO does not currently have a code of conduct, adding that he met with unions and incorporated their feedback. A brochure will be developed for the riders' reference.

Julie Sherman, General Counsel, explained the process and importance of the safety of our Operators and passengers. Behaviors are not always the type that law enforcement can help with,

## Attachment A

Board of Directors Meeting Minutes
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but may rise to the level where the passenger should not be allowed on the bus, depending on the nature of the behavior. The proposed Policies are in compliance with FTA and DOT civil rights guidance and regulations and include important due process procedures.
Referencing Mr. Gubash's letter, page 7.1 of the agenda packet, Director Leopold started a discussion pertaining to comfort animals versus service animals and recommended METRO reach out to METRO advisory organizations to obtain feedback on the proposed policies.

In response to Director Mathews' request, CEO Clifford will present a recommendation on how best to present a regular incident report to the Board in the near future.
Public comment:
Mr. Montesino expressed his support of the Code as written.
ACTION: MOTION TO APPROVE THE PROPOSED PASSENGER CODE OF CONDUCT AND SERVICE SUSPENSION/EXCLUSION POLICIES FOR FIXED ROUTE SERVICES, TRANSIT FACILITIES AND PARACRUZ, WITH THE UNDERSTANDING THAT STAFF WILL RETURN IN SIX MONTHS WITH INPUT FROM RIDERS, STUDENTS AND ADVISORY COMMITTEES, AT WHICH TIME THE BOARD WILL CONSIDER ANY RECOMMENDED REVISIONS TO SAID POLICIES

## MOTION: DIRECTOR MATHEWS SECOND: DIRECTOR LEOPOLD

MOTION PASSED WITH 9 AYES (Directors Bottorff, Chase, Dutra, Hagen, Leopold, Lind, Mathews, McPherson and Rotkin). Directors Rios and Rothwell were absent.

## UNIFIED CORRIDOR INVESTMENT STUDY ORAL REPORT

Barrow Emerson, Planning and Development Manager, provided a color version of page 22A. 1 for easier reference. Many Directors expressed their opinions and support of the position taken, noting it positions METRO well as a partner to solve regional transportation issues. METRO will provide bus feeders to the rail when/if implemented.

REQUEST THE BOARD OF DIRECTORS DIRECT STAFF TO INITIATE A FARE RESTRUCTURING ANALYSIS PROCESS
Mr. Emerson spoke to the item and noted the Finance Committee referred this item to the full board for their consideration.

Public comment:
Mr. Montesino noted that not everyone uses a SmartCard, citing the longer load times on Saturdays and Sundays due to the lower card usage

Board comments
Board members shared their own experiences with other transit systems and the advantages of technology to METRO and our riders.

ACTION: MOTION TO APPROVE THE REQUEST THAT THE BOARD OF DIRECTORS DIRECT STAFF TO INITIATE A FARE RESTRUCTURING ANALYSIS PROCESS AS PRESENTED

MOTION: DIRECTOR MATHEWS
SECOND: DIRECTOR DUTRA

# Attachment A 

Board of Directors Meeting Minutes
January 26, 2018
Page 8 of 10
MOTION PASSED WITH 9 AYES (Directors Bottorff, Chase, Dutra, Hagen, Leopold, Lind, Mathews, McPherson and Rotkin). Directors Rios and Rothwell were absent.

RECOMMENDATION TO APPROVE REVISIONS TO THE BYLAWS OF THE SANTA CRUZ METROPOLITAN TRANSIT DISTRICT'S BOARD OF DIRECTORS
Ms. Sherman spoke to the revisions noting that the majority of changes were to incorporate current titles, meeting frequency, and accurately reflect METRO's enabling legislation. The travel policy section was updated to provide an opportunity to claim GSA per diem reimbursement.
Director Leopold suggested staff provide a redline version in the future for ease of evaluating changes.

ACTION: MOTION TO APPROVE THE REVISIONS TO THE BYLAWS OF THE SANTA CRUZ METROPOLITAN TRANSIT DISTRICT'S BOARD OF DIRECTORS AS PRESENTED

MOTION: DIRECTOR ROTKIN
SECOND: DIRECTOR MATHEWS
MOTION PASSED WITH 9 AYES (Directors Bottorff, Chase, Dutra, Hagen, Leopold, Lind, Mathews, McPherson and Rotkin). Directors Rios and Rothwell were absent.

## BOARD WORK SESSION

CEO Clifford outlined the goal of the work session: Develop METRO's first strategic business plan. Chair Dutra requested a mid-county location.

ACTION: MOTION TO APPROVE THE BOARD WORK SESSION AS PRESENTED
MOTION: DIRECTOR ROTKIN
SECOND: DIRECTOR MATHEWS
MOTION PASSED WITH 9 AYES (Directors Bottorff, Chase, Dutra, Hagen, Leopold, Lind, Mathews, McPherson and Rotkin). Directors Rios and Rothwell were absent.

## CEO'S LETTER TO THE CALIFORNIA AIR RESOURCES BOARD (CARB)

CEO Clifford noted the letter to CARB was filed in time to meet the deadline and that he would be testifying before CARB on January $29^{\text {th }}$.

Discussion among the Board pertaining to the pros and cons of electric buses, electric infrastructure, CNG buses and the economic resources required to permit a successful transition to an all-electric fleet.

## ACTION: MOTION TO ACCEPT AND FILE THE CEO'S LETTER TO THE CALIFORNIA AIR RESOURCES BOARD (CARB) AS PRESENTED

## MOTION: DIRECTOR ROTKIN

SECOND: DIRECTOR MATHEWS
MOTION PASSED WITH 9 AYES (Directors Bottorff, Chase, Dutra, Hagen, Leopold, Lind, Mathews, McPherson and Rotkin). Directors Rios and Rothwell were absent.

## CY18 STATE AND FEDERAL LEGISLATIVE AGENDA

CEO Clifford provided commentary to the agenda item. He asked that the Directors consider the following weeks for the next Washington, DC trip to meet with the FTA and discuss \$3M LoNo Grant and alternate strategies: April 9, April 16, May 7 and May 14. Directors, Bottorff, Chase, Dutra, Leopold, McPherson and Rotkin expressed interest in participating.

Vice Chair McPherson suggested METRO officially join the SB1 statewide campaign.

ACTION: MOTION TO APPROVE THE CY18 STATE AND FEDERAL LEGISLATIVE AGENDA AS PRESENTED

MOTION: DIRECTOR MATHEWS SECOND: DIRECTOR ROTKIN
MOTION PASSED WITH 9 AYES (Directors Bottorff, Chase, Dutra, Hagen, Leopold, Lind, Mathews, McPherson and Rotkin). Directors Rios and Rothwell were absent.

NOMINATING DIRECTORS TO SERVE AS BOARD OFFICERS, NOMINATING DIRECTORS TO CONFIRM POSITIONS ON VARIOUS BOARD COMMITTEES, NOMINATE DIRECTORS TO FILL ONE (1) EXPIRED POSITION ON THE SANTA CRUZ CIVIC IMPROVEMENT CORPORATION (SCCIC) AND NOMINATING REPRESENTATIVES AND ALTERNATES TO THE SANTA CRUZ COUNTY REGIONAL TRANSPORTATION COMMISSION (SCCRTC)
Chair Dutra requested Directors provide him with their proposed slates. He will consolidate and provide at the March Board meeting.

ACTION: MOTION TO OPEN THE NOMINATION PERIOD TO DIRECTORS TO SERVE AS BOARD OFFICERS, NOMINATING DIRECTORS TO CONFIRM POSITIONS ON VARIOUS BOARD COMMITTEES, NOMINATE DIRECTORS TO FILL ONE (1) EXPIRED POSITION ON THE SANTA CRUZ CIVIC IMPROVEMENT CORPORATION (SCCIC) AND NOMINATING REPRESENTATIVES AND ALTERNATES TO THE SANTA CRUZ COUNTY REGIONAL TRANSPORTATION COMMISSION (SCCRTC) AS PRESENTED

MOTION: DIRECTOR ROTKIN
SECOND: DIRECTOR LEOPOLD
MOTION PASSED WITH 9 AYES (Directors Bottorff, Chase, Dutra, Hagen, Leopold, Lind, Mathews, McPherson and Rotkin). Directors Rios and Rothwell were absent.

APPOINTMENT OF KEVIN ANDREWS AND REAPPOINTMENT OF VERONICA ELSEA TO THE METRO ADVISORY COMMITTEE (MAC) FOR FOUR-YEAR TERMS ENDING DECEMBER 31, 2021; CONSIDERATION TO EXTEND THE NOMINATION PERIOD UNTIL VACANT SEAT IS FILLED; AND, CONSIDERATION OF APPROVAL OF REVISED MAC BYLAWS
CEO Clifford spoke briefly to the agenda item.
ACTION: MOTION TO APPROVE THE APPOINTMENT OF KEVIN ANDREWS AND REAPPOINTMENT OF VERONICA ELSEA TO THE METRO ADVISORY COMMITTEE (MAC) FOR FOUR-YEAR TERMS ENDING DECEMBER 31, 2021; CONSIDERATION TO EXTEND THE NOMINATION PERIOD UNTIL VACANT SEAT IS FILLED; AND, CONSIDERATION OF APPROVAL OF REVISED MAC BYLAWS AS PRESENTED

MOTION: DIRECTOR ROTKIN SECOND: DIRECTOR CHASE
MOTION PASSED WITH 9 AYES (Directors Bottorff, Chase, Dutra, Hagen, Leopold, Lind, Mathews, McPherson and Rotkin). Directors Rios and Rothwell were absent.

CONSIDERATION OF REVISING THE SANTA CRUZ CIVIC IMPROVEMENT CORPORATION (SCCIC) BYLAWS TO CHANGE THE ANNUAL MEETING DATE AND APPOINTING ONE (1) DIRECTOR TO SERVE AS SCCIC BOARD MEMBER
CEO Clifford provided a brief background of the agenda item.

## Attachment A

ACTION: MOTION TO APPROVE REVISING THE SANTA CRUZ CIVIC IMPROVEMENT CORPORATION (SCCIC) BYLAWS TO CHANGE THE ANNUAL MEETING DATE AND APPOINTING ONE (1) DIRECTOR TO SERVE AS SCCIC BOARD MEMBER AS PRESENTED

MOTION: DIRECTOR MATHEWS SECOND: DIRECTOR ROTKIN
MOTION PASSED WITH 9 AYES (Directors Bottorff, Chase, Dutra, Hagen, Leopold, Lind, Mathews, McPherson and Rotkin). Directors Rios and Rothwell were absent.

## CEO ORAL REPORT

Alex Clifford, CEO/General Manager, commented on a variety of topics:
METRO will be hosting an APTA University Conference at the Scotts Valley Hilton, June 23 - 26, 2018 and invited the Directors to participate. He thanked Larry Pageler for his assistance.

There were no public comments.

## REVIEW OF ITEMS TO BE DISCUSSED IN CLOSED SESSION

CEO Clifford noted that the closed session topic is the Public Employee Performance Evaluation pursuant to Government Code Section 54957(B)(1).
There were no public comments.

## RECESS TO CLOSED SESSION AT 11:58AM

RECONVENE TO OPEN SESSION AND ANNOUNCEMENT OF THE NEXT MEETING: FRIDAY, FEBRUARY 23, 2018, AT 9:00AM AT WATSONVILLE CITY COUNCIL CHAMBERS, 275 MAIN STREET, WATSONVILLE, CA

CHAIR DUTRA ADJOURNED THE MEETING AT 12:20PM

Respectfully submitted,

## Gina Pye

Executive Assistant

## Attachment

## January 26th, 2018

Dear Santa Cruz County Regional Transportation Commission.
"My wish is that everybody could say, 'That has never happened to me'." - Ofelia Gomez The premise is that people with Walkers can be considered disabled.

In Watsonville, some concerns are:
The bus stop across from Ramsey park at Pennsylvania Avenue and Main Street, by I a Princesa market there is a sidewalk and ramp needed. The piece of sidewalk needs to be around 150 feet. The ramp behind the gas station is too far away. The reason is that the bus 69 W on Main Street and the 91 Express don't stop by the Community Credit Union, Grocery Outlet, nor El Ranchito. If the 69 W would stop at El Ranchito, it would help. The 91 and 61 W could also stop at the 590 Auto Center Drive on Main st. where there is an existing bus stop, but buses are not allowed to stop. We ask you to consider strollers, wheelchairs, walkers and how people with ABA needs may have access to these \%oncs.

Santa Cruz:
As a senior, and disabled student of Cabrillo College, making this many trips per week, I recommend that Metro prioritize the following services. Based on the new $\$ 40 / \mathrm{sem}$ ester fee imposed on Cabrillo students. I recommend that more than one bus be assigned from Santa Cruz to the Dominican Hospital. As it stands, the 71 bus is the only one that goes to the Dominican Hospital. It needs to come earlier than 6:45am, at least at 6:20am, to be at the Dominican Hospital for the patients carly appointments. With the current schedulc. the bus does not arrive at Dominican by 7:00am. If patients miss appointments, they are charged a late fee. ParaCruz is much too expensive for a long trip. It is important that the 71 bus come early on weekends because many people work early or have early appointments at the hospital on the weekends.

## Capitola:

On $41^{\text {st }}$ Avenue, a half block from the Capitola Diner Sports Bar at the traffic light, across the street, going into Capitola Mall, there is no sidewalk entering into the mall parking lot. There is stretch of grass. A small sidewalk piece and a ramp is needed for strollers. wheel chairs. and walkers. Not much sidewalk is needed, just the minimal amount necessary to make it safe. $41^{\text {st }}$ Avenue and Capitola is a dangerous corner. It is a commercial center and we are requesting that it be made accessible and safe for citizens with disabilities, seniors, children, and families with strollers by installing proper ramps and sidewalks where necessary. $\Lambda$ ramp installed at the previously mentioned corner at the entrance to the Capitola Mall will make it safe and accessible for customers to access UPS, DollarTree, Capitola Sports Bar, CVS, and other businesses.

# Attachment <br> UC Santa Cruz Student Union Assembly <br> Office of Internal Affairs 

Alice Malmberg • suavpi@ucsc.edu

Thursday, January 25, 2018

Dear Chair Dutra and the Santa Cruz Metro Board of Directors:

We wanted to thank you for supporting our efforts to make UCSC's ex-officio seat on the Santa Cruz Metro Board of Directors a student position. While we are unable to make it to this morning's meeting due to academic conflicts, we wanted to wish Davon the best in this position and say that we are looking forward to a future where students are more closely integrated with the governance of the Santa Cruz Metro.

We believe this new partnership between the Board and UCSC students is a great step forward for both organizations, and we are excited to work together to ensure that Metro remains a convenient and accessible option for everyone. Going forward, we suggest the Board continue to seek out opportunities for student engagement and involvement.

We are very excited to see what the Board and students can accomplish together.

Sincerely,
Alice Malmberg, Vice President of Internal Affairs, UCSC Student Union Assembly Noah Thoron, Representative, UCSC Advisory Committee on Campus Transportation and Parking


Congress of the United States House of Representatives
Anna G. Echo
Eighteenth District Washington, D. C. 20515

CalIfornia

January II, 2018
The Honorable Jimmy Dutra, Board Chairman
Santa Cruz Metropolitan Transit District
in o Vernon Street
Santa Cruz, California 95060
Dear Chairman Dutra,
I've written to the Secretary of the California State Transportation Agency, Brian Kelly, in support of the Santa Cruz Metropolitan Transit District's application for funding under the Transit and Intercity Rail Capital Program, and a copy of my letter is enclosed for you.

I hope this will be helpful to METRO, and should you have any questions or comments, you can contact Eric Henshall in my Washington, D.C. office at (202) 225-8104.

All my best,


Anna G. Eshoo
Member of Congress

## Enclosure

cc: Members, Santa Cruz Metropolitan Transit District Board of Directors Mr. Alex Clifford, General Manager \& CEO, Santa Cruz Metropolitan Transit District
Attachment


> Congress of the Whited SPtates $\mathscr{H o u s e}$ of Requesentatives
Snna E. EShoo Gightienth District

## Calfornia

January II, 2018
The Honorable Brian P. Kelly, Secretary
California State Transportation Agency
915 Capitol Mall, Suite 350B
Sacramento, California 95814
Dear Secretary Kelly,

I write in support of the Santa Cruz Metropolitan Transit District's (METRO) application for grant funding under the Transit and Intercity Rail Capital Program (TIRCP) which will support the purchase of six new buses to serve my constituents.

Santa Cruz METRO is seeking a $\$ 5.5$ million grant to support solutions to increase capacity for its Highway 17 Express Service between Santa Cruz and San Jose Diridon Train Station. This includes the purchase of six new compressed natural gas (CNG) buses that have been designated as "near-zero emissions" vehicles and will help METRO reach its goal of a fully zero-emissions fleet by 2040. Due to technological advances, these buses not only produce fewer emissions than older CNG vehicles, they also have more seats per bus, allowing METRO to serve more riders without putting more vehicles on the road. The grant will also allow METRO to update its fare collection system using new technologies such as mobile ticketing and off-board payment to expedite boarding.

Santa Cruz METRO is supported by local sales tax revenues, and in November of 2016 voters in the County approved an additional half-cent sales tax measure to support local transit and transportation investment. However, deferred capital investments during the recession have left over so buses in METRO's fleet due for replacement. Access to state funding through the TIRCP would ensure that METRO can continue to update its fleet and offer important transit service throughout Santa Cruz County.

I thank you in advance for your consideration of my important request.


Anna C. Eshoo
Member of Congress

TO: Board of Directors
FROM: Alex Clifford, CEO/General Manager
SUBJECT: ACCEPT AND FILE MINUTES OF THE SANTA CRUZ METRO FINANCE, BUDGET AND AUDIT STANDING COMMITTEE MEETING OF FEBRUARY 8, 2018

## I. RECOMMENDED ACTION

That the Board of Directors Accept and File the Minutes for the Santa Cruz Metropolitan Transit District (METRO) Finance, Budget and Audit Standing Committee Meeting of February 8, 2018

## II. SUMMARY

- Staff is providing minutes from the Santa Cruz Metropolitan Transit District (METRO) Finance, Budget and Audit Standing Committee Meeting of February 8, 2018.
- Each meeting, the Executive Assistant will provide minutes from the previous METRO Committee meeting.


## III. DISCUSSION/BACKGROUND

The Board requested that staff include, in the Board Packet, minutes for previous METRO Committee meetings. Staff is enclosing the minutes from these meetings.

## IV. FINANCIAL CONSIDERATIONSIIMPACT

None.

## V. ALTERNATIVES CONSIDERED

None

## VI. ATTACHMENTS

Attachment A: Draft minutes for the Finance, Budget and Audit Standing Committee Meeting of February 8, 2018

Prepared by: Donna Bauer, Administrative Assistant

## VII. APPROVALS:

Alex Clifford, CEO/General Manager


# SANTA CRUZ METROPOLITAN TRANSIT DISTRICT (METRO) FINANCE, BUDGET AND AUDIT STANDING COMMITTEE AGENDA MEETING MINUTES* 

FEBRUARY 8, 2018 -10:00 AM METRO ADMIN OFFICES 110 VERNON STREET SANTA CRUZ, CA 95060

A Finance, Budget and Audit Standing Committee Meeting was convened on Thursday, February 8, 2018 at METRO's Admin offices at 110 Vernon Street, Santa Cruz, California. The Meeting Agenda Packet can be found online at www.SCMTD.com and is available for inspection at METRO's Administrative offices at 110 Vernon Street, Santa Cruz, California. *Minutes are "summary" minutes, not verbatim minutes. Audio recordings of Board meeting open sessions are available to the public upon request.

This document has been created with accessibility in mind. With the exception of certain 3rd party and other attachments, it passes the Adobe Acrobat XI Accessibility Full Check. If you have any questions about the accessibility of this document, please email your inquiry to accessibility@scmtd.com

## COMMITTEE ROSTER

Director John Leopold, Committee Chair Director Donna Lind Director Cynthia Mathews Director Oscar Rios

Julie Sherman

County of Santa Cruz
City of Scotts Valley
City of Santa Cruz
City of Watsonville
METRO District Counsel

MEETING TIME: 10:00AM
NOTE: THE COMMITTEE CHAIR MAY TAKE ITEMS OUT OF ORDER

## CALL TO ORDER

Meeting was called to order at 10:05 AM by Committee Chair Leopold
ROLL CALL: The following Directors were present, representing a quorum:

| Director Cynthia Mathews | City of Santa Cruz |
| :--- | :--- |
| Director Leopold | County of Santa Cruz |
| Director Oscar Rios | City of Watsonville |

Director Donna Lind, City of Scotts Valley, was absent.

METRO EMPLOYEES AND MEMBERS OF THE PUBLIC WHO VOLUNTARILY INDICATED THEY WERE PRESENT (IN ALPHABETICAL ORDER) THROUGH A SIGN IN SHEET OR VERBAL INTRODUCTION WERE:

Ciro Aguirre, METRO
Donna Bauer, METRO
Wes Guild, VMU
Pete Rasmussen, METRO

Angela Aitken, METRO
Mario Torres, UTU
Matt Marquez, METRO
Julie Sherman, METRO District Counsel

## COMMUNICATIONS TO THE FINANCE, BUDGET \& AUDIT STANDING COMMITTEE

Hearing none, the Committee Chair moved to the next agenda item.

## ADDITIONS OR DELETIONS FROM AGENDA / ADDITIONAL DOCUMENTATION TO SUPPORT EXISTING AGENDA ITEMS

Hearing none, the Committee Chair moved to the next agenda item.

## DIRECT STAFF TO PRESENT AN INITIAL PASSENGER FARE RESTRUCTURING ANALYSIS AND CONCEPTS TO THE BOARD OF DIRECTORS AT ITS FEBRUARY 23, 2018 MEETING <br> Barrow Emerson, Planning and Development Manager

Barrow Emerson, Planning and Development Manager, gave an overview of the analysis on fare restructuring presented to the Board of Directors on January 26, 2018. He provided the attached "FY19 Fare Increase Scenarios" to discuss two concepts.

The first concept compares a 25 cent versus a 50 cent base fare increase. Gross revenue created would be approximately $\$ 1 \mathrm{M}$ and $\$ 2 \mathrm{M}$, respectively. Associated costs on Fixed Route service could reduce those revenues by $5 \%$ for the 25 cent scenario and $10 \%$ for the 50 cent scenario. Directors Leopold and Rios recommended reviewing data from previous METRO rate increases to yield a more accurate adjustment to METRO's ridership loss. Director Rios raised the concern that in the past, METRO raised fares but then cut service. Mr. Emerson replied that while other agencies have raised fares and cut service on the same day, METRO avoided doing that.

The second concept provides strategies that can provide financial savings for various sub-segments of METRO's ridership.

- Increase base fare but decrease the multiplier on the day pass to provide a break in the cost to the rider. This would encourage ridership and provide relief to riders who need to make multiple connections.
- The next three options on the chart are intended to reduce the number of riders paying with cash by providing discounts for using passes, SMARTCARDS, and/or Cruz Cash Card. Reductions in cash payments could help METRO reduce its operating costs.
- Create a 20-trip youth pass at a lower price than the monthly pass to attract younger riders and meet their use patterns.
Create revenue to fund increased service. The current Hwy. 17 Express 31-day pass is priced at a $50 \%$ discount (comparable commuter bus operations provide only $25-33 \%$ discounts). We suggest lowering the discount to a comparable rate and pricing it at 25 or 30 trips. That increase in revenue would be enough to provide three to six one-way trips a day in the Hwy. 17 corridor. Director Leopold inquired if there was data on where Hwy. 17 riders go after riding the Express. Mr. Emerson replied that Planning can review the surveys from Hwy. 17 riders and provide that data at the upcoming Board meeting.

Mr. Emerson emphasized that additional funding is needed to maintain the current level of bus service provided today. However, there is an opportunity to improve customer convenience, amenity and experience through modernizing fare payment products and methods. An advantage to moving away

Finance, Budget and Audit Standing Committee Meeting Minutes
February 8, 2018
Page 3 of 3
from paying cash will improve the overall experience for all riders-decreasing boarding times; meeting timelines; and implementing more service. Director Leopold suggested the new brochure distributed at the January Board meeting should include "METRO added service" to emphasize that was a positive action.
On the technology side, METRO is looking at a one-way Hwy. 17 fare set up, change card, mobile ticketing, and an account based system. We're also pursuing Automatic Vehicle Locator (AVL) which will give real time arrival information and allow more efficient service planning and operations.

Mr. Emerson laid out a rough timeline of events in order to achieve the fare restructuring and introduction of the technology. Discussion ensued on whether the technology should be introduced at the same time the fares are increased as a package deal or at a subsequent time. Mr. Emerson reminded everyone that the ideas being proposed could be implemented without any technology advances but would be reviewed again once we receive feedback in the Fall on the pricing of the technology and how long it will take to implement.

Concern was expressed on the effect this process will have on the budget. Angela Aitken, Finance Manager, responded that if the fare restructure is approved in May, the changes to the fare structure would not start until at least January 2019. Therefore there could be limited assumptions about increased fare revenue in FY19.

Director Rios liked the incentives being discussed. He inquired about messaging to the public-when and how will that take place so the public knows in advance a change is coming and how it will benefit them. Ms. Aitken said we can start advertising and communicating to customers that improvements will be coming once we have selected technology improvements. Ciro Aguirre, Chief Operating Officer, responded that AVL will make a positive impact on our community by allowing riders a better tool in scheduling their trips.

Mr. Emerson added we are currently doing surveys on what people need given their use patterns and desires as well as technological capacity. An informal public outreach will begin after the February Board of Directors meeting through open houses, speaking engagements with stakeholder groups, and disseminating information on the buses.. In March staff will deliver to the Board fare restructuring recommendations. Staff will then start the formal public comment period including four public meetings prior to returning to the Board on May $18^{\text {th }}$ with a final recommendation of fare restructuring.

The Directors recommended that in addition to getting information from patrons, the public needs to understand the system faces a growing deficit and needs to increase its resources so there is long term sustainability. Mr. Emerson suggested the information presented to the Board of Directors in January on this topic will be the basis of the presentations as well as the introduction for online and written materials.

There were no public comments.
By mutual consent of members present a recommendation was made to direct staff to present an initial passenger fare restructuring analysis and concepts to the Board of Directors at its February 23, 2018 meeting.

Committee Chair Leopold adjourned the meeting at 10:55 AM.
Respectfully submitted,
Donna Bauer
Administrative Assistant


## TO: Board of Directors

FROM: Thomas Hiltner, Grants/Legislative Analyst

# SUBJECT: ACCEPT AND FILE QUARTERLY STATUS REPORT OF GRANT APPLICATIONS, ACTIVE GRANTS AND FUTURE OPPORTUNITIES OCTOBER - DECEMBER 2017 

## I. RECOMMENDED ACTION

That the Board of Directors receives and files the quarterly report on grant applications and active grants. This is for information only. No action is required.

## II. SUMMARY

- Santa Cruz Metropolitan Transit District (METRO) received one discretionary and one formula operating assistance grant in the previous quarter.
- Staff prepared numerous formula and discretionary grant applications for new programs funded by the Road Maintenance and Rehabilitation Act of 2017 (SB 1).
- METRO has pending grant applications requesting $\$ 24,560,598$
- A list of METRO's applications (Attachment A), active grants (Attachment B) and a grant-funding outlook (Attachment C) are provided quarterly to apprise the Board of grant funding status.
- No action is required; this report is for information only.


## III. DISCUSSION/BACKGROUND

During the previous quarter, METRO received a discretionary grant award from Arts Council Santa Cruz for funding assistance to repaint the mural at the Watsonville Transit Center and Caltrans awarded a formula grant for FY17 rural operating assistance. The Federal Transit Administration (FTA) has not yet announced awards for the FY17 Bus and Bus Facilities Infrastructure program from applications submitted in July 2017.
Staff prepared discretionary and formula grant applications during the quarter for new programs funded by SB 1. Guidelines for the new programs were finalized in October with applications due in mid-January. Staff submitted applications for replacing and refurbishing buses and to implement an advanced fare payment solution for the Highway 17 Express. Awards will be announced in spring 2018.

Among the grant applications submitted were three discretionary grant applications to the Santa Cruz County Regional Transportation Commission’s
(RTC) 2018 Regional Transportation Improvement Program for combined state and federal funding apportioned by the California Transportation Commission. The RTC recommended the following projects for funding from the California Transportation Commission:

- Two zero-emission replacement buses, $\$ 1.7$ million;
- Refurbish three CNG buses, $\$ 900,000$;
- Automatic Vehicle Locator (AVL) system, $\$ 1.4$ million.

Pending grant applications request a total of $\$ 24,560,598$ in new formula and discretionary funds. Of this amount, $\$ 14,795,804$ is to replace and refurbish buses. The remaining applications request funs for operating assistance, planning studies and ITS projects.
This staff report apprises the Board of grant applications in progress (Attachment A), the awarded grants that fund METRO's operations and capital improvements (Attachment B) and foreseeable opportunities for new grant solicitations (Attachment C) based upon grant funding cycles.

## IV. FINANCIAL CONSIDERATIONS/IMPACT

Current grant applications (Attachment A) request $\$ 24,560,598$ for new projects. The Operating and Capital Budgets will be amended as necessary when grants are awarded.

## V. ALTERNATIVES CONSIDERED

This is for information only and there are no alternatives to consider.

## VI. ATTACHMENTS

Attachment A: Grant Applications as of February 2018
Attachment B: Active Grants as of February 2018
Attachment C: Future Grant Opportunities as seen in February 2018

Prepared By: Thomas Hiltner, Grants/Legislative Analyst

Board of Directors
February 23, 2018
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## VII. APPROVALS:

Barrow Emerson, Planning and Development Manager

Approved as to fiscal impact:
Angela Aitken, Finance Manager


Alex Clifford, CEO/General Manager


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Attachment A
Santa Cruz METRO
Grant Applications February 2018


## Attachment A



Attachment A


## Attachment A

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## Attachment A



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## Attachment B



## Attachment B



## Attachment B



## Attachment B



## Attachment B



## Attachment B



Attachment C


Attachment C

| Future Grant Opportunities as seen February 2018 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Formula Grant |  |  |  |  |  |
| \# | Project Description | Funding Source | \$ Budget Grant | \$ Budget Local Match | Program / Status | Stakeholders |
| CAPITAL Projects |  |  |  |  |  |  |
| 2 | TBD | VW Settlement | TBD | TBD | CTA ZEB working group; | BOD; Finance; CEO |
| 3 | 2019 Active Transportation projects bus, walking bicycling upgrades; Safe Routes to School | CTC 2019 ATP 5/16/18 Call for projects Apps due 731/18 | TBD | $\$$ <br> None | \$440 million statewide includes funds for FY19, GY23 | BOD; Finance; CEO |
| 4 | Discounts for electric bus purchase | CALSTAART Heavy-duty zeroemission Vehicle Incentive Program (HVIP) <br> Application: Continuous | ~\$100,000 per new electric bus | $\$$ <br> None | Continuous application process. Requires contract for zeb bus purchase. | SCCRTC; AMBAG; <br> Legislative Coalition |
| 5 | Affordable housing, Pacific Station or Watsonville; Expanded transit service w/electric buses | Affordable Housing and Sustainable Communities Program (AHSC); <br> \$150 Million Statewide Proposal:Jan '18; <br> Application:Jun '18 | $\begin{array}{\|l\|} \hline \$ 1,000,000- \\ \$ 8,000,000 \end{array}$ | $\$$ | Form partnership w/affordable housing non-profit. Requires new/expanded transit service. | Watsonville City Council; Santa Cruz Economic Development Department; Planning; METRO BOD; AMBAG; RTC; County Economic Development |
|  |  |  |  | None |  |  |

Attachment C


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## TO: Board of Directors

FROM: April Warnock, Paratransit Superintendent

## SUBJECT: ACCEPT AND FILE THE METRO PARACRUZ OPERATIONS STATUS REPORT FOR OCTOBER, NOVEMBER AND DECEMBER 2017

## I. RECOMMENDED ACTION

## That METRO's Board of Directors accept and file the quarterly METRO ParaCruz Operations Status Report for October, November, and December 2017.

## II. SUMMARY OF ISSUES

- Summary review of monthly operational statistics for ParaCruz
- Summary of monthly operational information about ParaCruz


## III. DISCUSSION/BACKGROUND

Comparing September 2017 statistics to October 2017, ParaCruz rides increased by 455 rides. Comparing October 2017 statistics to November 2017, ParaCruz rides decreased by 695 rides. Comparing November 2017 statistics to December 2017, rides decreased by 843 rides.

Comparing the monthly statistics of FY17 to the monthly statistics of FY18:

- In October, the number of ParaCruz rides increased by 140.
- In November, the number of ParaCruz rides decreased by 151.
- In December, the number of ParaCruz rides decreased by 179.

These month-to-month increases and decreases are consistent with annual monthly cyclical trends. METRO ParaCruz is the federally mandated ADA complementary Paratransit program of the Santa Cruz Metropolitan Transit District (METRO), providing shared ride, door-to-door demand-response transportation to customers certified as having disabilities that prevent them from independently using the fixed route bus.

## IV. ALTERNATIVES

Not applicable.

## V. COORDINATION

This staff report has been coordinated with statistics provided by the Finance and Fleet Departments. Additional data was provided by the Eligibility Coordinator.

## VI. FINANCIAL CONSIDERATIONS

There are no financial considerations for this report.

## VII. ATTACHMENTS

Attachment A: ParaCruz On-time Performance Charts for October, November, and December 2017

Attachment B: Comparative Operating Statistics Tables for October, November, and December 2017

Attachment C: Number of Rides Comparison Chart
Attachment D: Shared vs. Total Rides Chart
Attachment E: Mileage Comparison Chart
Attachment F: Monthly Assessment

Prepared By: April Warnock, Paratransit Superintendent

Board of Directors
February 23, 2018
Page 3 of 3

## VIII. APPROVALS:

Giro Aguirre, COO


Approved as to fiscal impact: Angela Aitken, Finance Manager


Alex Clifford, CEO/General Manager


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## Attachment A

## ParaCruz On-time Performance Report for October 2017.

|  | October 2016 | October 2017 |
| :--- | :---: | :---: |
| Total pick ups | 6,856 | 6,996 |
| Percent in "ready window" | $\mathbf{8 2 . 4 1 \%}$ | $\mathbf{8 2 . 2 5 \%}$ |
| 1 to 5 minutes late | $5.73 \%$ | $6.23 \%$ |
| 6 to 10 minutes late | $4.30 \%$ | $4.23 \%$ |
| 11 to 15 minutes late | $2.83 \%$ | $2.47 \%$ |
| 16 to 20 minutes late | $1.76 \%$ | $1.77 \%$ |
| 21 to 25 minutes late | $1.15 \%$ | $1.24 \%$ |
| 26 to 30 minutes late | $.64 \%$ | $.63 \%$ |
| 31 to 35 minutes late | $.50 \%$ | $.59 \%$ |
| 36 to 40 minutes late | $.26 \%$ | $.41 \%$ |
| 41 or more minutes late <br> (excessively late/missed trips) | $.36 \%$ | $.17 \%$ |
| Total beyond "ready window" | $\mathbf{1 7 . 5 5 \%}$ | $\mathbf{1 7 . 7 5 \%}$ |

*Target: 95\%

## On-time Performance

During October, ParaCruz' on-time performance (OTP) has risen slightly. However, OTP was slightly below the October 2016 OTP. Last month, on-time performance was at $81.87 \%$, due to lack of staffing. The latest ParaCruz Operators (3), hired June 5, 2017, are now operating in revenue service. In compliance with the ParaCruz UTU MOU (13.02 Scheduling of Annual Leave), the fall bid decreased annual leave slots from four to three. The month of October does not contain any observed holidays, employees were available for work every day. At this time, ParaCruz has two Operators absent on long term disability. This put the number of available working ParaCruz Operators at twenty-two per weekday, not including pre-approved medical time off.

## A Customer Service Report is either a compliment, comment or a complaint.

During the month of October 2017, ParaCruz received eight (8) Customer Service Reports. Four (4) of the reports were valid; one late pick-up, a booking error, a rude dispatcher, and an Operator being impatient with a client. Three (3) of the reports were not valid; a Operator did not show up for ride, a client who attempted to book a ride after the phone were cleared at 5 pm , a client who claimed the vehicle was too bumpy and she could not elevate her lag. One (1) of the reports was unverifiable, client claimed an Operator was rude.

## Attachment A

Board Meeting February 23, 2018

ParaCruz On-time Performance Report for November 2017.

|  | November 2016 | November 2017 |
| :--- | :---: | :---: |
| Total pick ups | 6,452 | 6,301 |
| Percent in "ready window" | $\mathbf{8 2 . 6 9 \%}$ | $\mathbf{8 5 . 1 0 \%}$ |
| 1 to 5 minutes late | $6.20 \%$ | $5.24 \%$ |
| 6 to 10 minutes late | $4.09 \%$ | $4.08 \%$ |
| 11 to 15 minutes late | $2.88 \%$ | $2.41 \%$ |
| 16 to 20 minutes late | $1.69 \%$ | $1.46 \%$ |
| 21 to 25 minutes late | $.88 \%$ | $.76 \%$ |
| 26 to 30 minutes late | $.51 \%$ | $.32 \%$ |
| 31 to 35 minutes late | $.29 \%$ | $.22 \%$ |
| 36 to 40 minutes late | $.22 \%$ | $.27 \%$ |
| 41 or more minutes late <br> (excessively late/missed trips) | $.54 \%$ | $.14 \%$ |
| Total beyond "ready window" | $\mathbf{1 7 . 3 1 \%}$ | $\mathbf{1 4 . 9 0 \%}$ |

*Target: 95\%

## On-time Performance

During November, ParaCruz' on-time performance improved $2.75 \%$ from last month. OTP was higher than November 2016. September 18, 2017 a new Operator was hired. He will be in training for approximately 5 weeks. ParaCruz continues to have two Operators absent on long term disability. The number of available working ParaCruz Operators continued to be twenty-two Operators available for week-days.

A Customer Service Report is either a compliment, comment, or a complaint.
During the month of November 2017, ParaCruz received four (4) Customer Service Reports. One (1) report was valid, a rude Operator. Three (3) of the reports were not valid, client claims an Operator did not come to lobby, another Operator noshowed a client, and a member of the general public claimed an Operator was speeding. ParaCruz' monitoring system (via Mobile Data Computer) did not support the claim.

## Attachment A

Board Meeting February 23, 2018

## ParaCruz On-time Performance Report for December 2017.

|  | December 2016 | December 2017 |
| :--- | :---: | :---: |
| Total pick ups | 5,637 | 5,458 |
| Percent in "ready window" | $\mathbf{8 5 . 7 9 \%}$ | $\mathbf{8 6 . 0 6 \%}$ |
| 1 to 5 minutes late | $4.52 \%$ | $5.06 \%$ |
| 6 to 10 minutes late | $3.48 \%$ | $3.59 \%$ |
| 11 to 15 minutes late | $2.18 \%$ | $2.03 \%$ |
| 16 to 20 minutes late | $1.53 \%$ | $1.30 \%$ |
| 21 to 25 minutes late | $.89 \%$ | $.82 \%$ |
| 26 to 30 minutes late | $.76 \%$ | $.60 \%$ |
| 31 to 35 minutes late | $.35 \%$ | $.31 \%$ |
| 36 to 40 minutes late | $.30 \%$ | $.09 \%$ |
| 41 or more minutes late <br> (excessively late/missed trips) | $.20 \%$ | $.13 \%$ |
| Total beyond "ready window" | $\mathbf{1 4 . 2 1 \%}$ | $\mathbf{1 3 . 9 4 \%}$ |

*Target: 95\%

## On-time Performance

During December, ParaCruz' on-time performance increased for the third month in a row. December has a modest $.96 \%$ increase from last month; an improvement over December 2016. The Operator hired in September continues training and is not in revenue service. ParaCruz continues to have two Operators absent on long term disability. This put the number of available working ParaCruz Operators at twenty-two per weekday.
A Customer Service Report is either a compliment, comment, or a complaint.
During the month of December 2017, ParaCruz received two (2) Customer Service Reports. One (1) of the reports was not valid; a member of the general public could not get past a ParaCruz vehicle that was deboarding a client, and had to wait. The other report (1) was a compliment for a ParaCruz Operator.

## Attachment A

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## Attachment B

Board Meeting February 23, 2018
Comparative Operating Statistics through October 2017.

|  | $\begin{array}{\|c} \hline \text { October } \\ 2016 \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \text { October } \\ 2017 \\ \hline \end{array}$ | FY 17 | FY 18 | Performance Averages | Performance Goals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Requested | 7,624 | 7,795 | 28,488 | 28,002 | 7,795 |  |
| Performed | 6,856 | 6,996 | 25,664 | 25,106 | 6,213 |  |
| Cancels | 19.7\% | 18.95\% | 20.16\% | 20.67\% | 21.82\% |  |
| No Shows | 3.50\% | 3.52\% | 3.42\% | 3.31\% | 3.34\% | Less than 3\% |
| Total miles | 54,257 | 58,776 | 154,111 | 208,902 | 50,950 |  |
| Av trip miles | 5.99 | 6.23 | 6.0 | 6.21 | 6.00 |  |
| Within ready window | 82.45\% | 82.25\% | 85.88\% | 81.56\% | 82.32\% | 92.00\% or better |
| Call center volume | N/A | 5411 | N/A | 116,055 | N/A |  |
| Hold times less than 2 minutes | N/A | 92.24\% | N/A | N/A | N/A | Greater than $90 \%$ |
| Distinct riders | 757 | 594 | 1206 | 975 | 594 |  |
| Most frequent rider | 54 rides | 50 rides | 162 rides | 188 rides | 52 rides |  |
| Shared rides | 67.7\% | 58.0\% | 67.7\% | 58.0\% | 65.90\% | Greater than 60\% |
| Passengers per rev hour | 1.97 | 1.95 | 1.97 | 1.96 | 1.96 | Greater than 1.6 passengers/hour |
| $\qquad$ | 9.16\% | N/A | 7.55\% | N/A | N/A | No more than $25 \%$ |
| Vendor cost per ride | \$21.35 | N/A | \$23.63 | N/A | N/A |  |
| $\begin{gathered} \text { Rides }<10 \\ \text { miles } \end{gathered}$ | 63.51\% | 62.91\% | 63.87\% | 63.69\% | 64.05\% |  |
| Rides > 10 | 34.49\% | 37.09\% | 36.13\% | 36.31\% | 35.95\% |  |
| Denied Rides | 0 | 0 | 0 | 0 | 0 | Zero |
| Missed Trips | 25 | 12 | 48 | 143 | 31 |  |
| Excessively Long Trips | 3 | 4 | 3 | 8 | N/A | New Stat Jan 2017 |
| \# Trips at Base Fare | 4,325 | 4,368 | 15,967 | 15,657 | N/A |  |
| \# Trips > Base Fare | 1,317 | 1,476 | 4,945 | 4,887 | N/A |  |

[^2]
## Attachment B

Board Meeting February 23, 2018
Comparative Operating Statistics through November 2017.

|  | November 2016 | $\begin{array}{\|c\|} \hline \text { November } \\ 2017 \\ \hline \end{array}$ | FY 17 | FY 18 | $\begin{array}{\|\|c\|} \hline \text { Performance } \\ \text { Averages } \\ \hline \end{array}$ | Performance Goals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Requested | 7,545 | 7,493 | 36,033 | 35,495 | 6,500 |  |
| Performed | 6,452 | 6,301 | 32,116 | 31,407 | 6,201 |  |
| Cancels | 24.04\% | 22.25\% | 20.97\% | 21.01\% | 21.67\% |  |
| No Shows | 3.29\% | 4.42\% | 3.39\% | 3.54\% | 3.43\% | Less than 3\% |
| Total miles | 52,009 | 52,811 | 261,916 | 261,714 | 50,018 |  |
| Av trip miles | 6.07 | 6.16 | 6.02 | 6.20 | 6.12 |  |
| Within ready window | 82.69\% | 85.10\% | 85.23\% | 82.27\% | 82.52\% | 92.00\% or better |
| Call center volume | 4957 | 4961 | N/A | 21,016 | N/A |  |
| Hold times less than 2 minutes | N/A | 90.69\% | N/A | N/A | N/A | Greater than $90 \%$ |
| Distinct riders | 727 | 585 | 1285 | 1061 | 679 |  |
| Most frequent rider | 50 rides | 45 rides | 213 rides | 220 rides | 53 rides |  |
| Shared rides | 67.4\% | 57.6\% | 64.7\% | 57.9\% | 65.08\% | Greater than 60\% |
| Passengers per rev hour | 1.96 | 1.88 | 1.96 | 1.94 | 1.92 | Greater than 1.6 passengers/hour |
| Rides by <br> supplemental <br> providers | 7.68\% | N/A | 7.58\% | N/A | N/A | No more than $25 \%$ |
| Vendor cost per ride | \$22.27 | N/A | \$23.34 | N/A | N/A |  |
| $\begin{gathered} \text { Rides }<10 \\ \text { miles } \\ \hline \end{gathered}$ | 61.98\% | 63.66\% | 63.49\% | 63.68\% | 64.19\% |  |
| Rides > 10 | 36.13\% | 36.34\% | 36.51\% | 36.32\% | 35.81\% |  |
| Denied Rides | 0 | 0 | 0 | 0 | 0 | Zero |
| Missed Trips | 35 | 9 | 83 | 152 | 29 | N/A |
| Excessively Long Trips | 5 | 3 | 8 | 11 | N/A | $\begin{aligned} & \text { New Stat } \\ & \text { Jan } 2017 \end{aligned}$ |
| \# Trips Base Fare | 3,976 | 4,021 | 19,943 | 19,678 | N/A |  |
| \# Trips > Base Fare | 1,304 | 1,293 | 6,249 | 6,180 | N/A |  |

[^3]
## Attachment B

Board Meeting February 23, 2018
Comparative Operating Statistics through December 2017.

|  | $\begin{array}{\|c\|} \hline \text { December } \\ 2016 \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \text { December } \\ 2017 \\ \hline \end{array}$ | FY 17 | FY 18 | Performance Averages | Performance Goals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Requested | 6,680 | 6,564 | 42,713 | 42,059 | 6,996 |  |
| Performed | 5,637 | 5,458 | 37,753 | 36,865 | 6,121 |  |
| Cancels | 24.15\% | 24.28\% | 21.47\% | 21.52\% | 22.21\% |  |
| No Shows | 3.47\% | 4.19\% | 3.40\% | 3.23\% | 3.36\% | Less than 3\% |
| Total miles | 47,522 | 47,551 | 309,438 | 309,265 | 50,208 |  |
| Av trip miles | 6.02 | 6.36 | 6.04 | 6.22 | 6.10 |  |
| Within ready window | 85.79\% | 86.06\% | 85.32\% | 82.83\% | 82.88\% | 92.00\% or better |
| Call center volume | N/A | 4553 | N/A | 25,569 | N/A |  |
| Hold times less than 2 minutes | N/A | 94.47\% | N/A | N/A | N/A | Greater than 90\% |
| Distinct riders | 701 | 591 | 1348 | 1141 | 700 |  |
| Most frequent rider | 45 rides | 43 rides | 240 rides | 246 rides | 51 rides |  |
| Shared rides | 64.2\% | 52.5\% | 64.6\% | 57.1\% | 65.68\% | Greater than 60\% |
| Passengers per rev hour | 1.86 | 1.84 | 1.86 | 1.93 | 1.92 | Greater than 1.6 passengers/hour |
| Rides by <br> supplemental <br> providers <br> Veni | 6.38\% | N/A | 7.38\% | N/A | N/A | No more than $25 \%$ |
| Vendor cost per ride | \$24.52 | N/A | \$23.51 | N/A | N/A |  |
| $\begin{gathered} \text { Rides }<10 \\ \text { miles } \end{gathered}$ | 64.70\% | 65.30\% | 63.67\% | 63.92\% | 64.35\% |  |
| Rides > 10 | 35.40\% | 34.70\% | 36.33\% | 36.08\% | 35.65\% |  |
| Denied Rides | 0 | 0 | 0 | 0 | 0 | Zero |
| Missed Trips | 11 | 7 | 94 | 159 | 29 | N/A |
| Excessively Long Trips | 5 | 1 | 13 | 12 | N/A | New Stat Jan 2017 |
| \# Trips Base Fare | 3,604 | 3,493 | 23,547 | 23,171 |  |  |
| \# Trips > Base Fare | 1,061 | 1,053 | 7,310 | 7,233 |  |  |

[^4]
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## Attachment C



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## Attachment D



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## Attachment E

## Annual Miles Comparison



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## Attachment F

Board Meeting February 23, 2018

## Monthly Assessments

|  | UNRESTRICTED | RESTRICTED CONDITIONAL | RESTRICTED TRIP BY TRIP | TEMPORARY | DENIED | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| JANUARY 2017 | 50 | 0 | 1 | 1 | 0 | 52 |
| FEBRUARY 2017 | 27 | 0 | 0 | 2 | 0 | 29 |
| MARCH 2017 | 50 | 0 | 0 | 1 | 0 | 51 |
| APRIL 2017 | 22 | 0 | 0 | 3 | 0 | 25 |
| MAY 2017 | 22 | 0 | 0 | 2 | 1 | 25 |
| JUNE 2017 | 36 | 0 | 1 | 1 | 0 | 38 |
| JULY 2017 | 37 | 0 | 0 | 3 | 0 | 40 |
| AUGUST 2017 | 37 | 0 | 0 | 2 | 0 | 39 |
| SEPTEMBER 2017 | 42 | 0 | 1 | 1 | 0 | 44 |
| OCTOBER 2017 | 30 | 0 | 2 | 2 | 0 | 34 |
| NOVEMBER 2017 | 21 | 0 | 0 | 0 | 0 | 21 |
| DECEMBER 2017 | 29 | 0 | 0 | 1 | 0 | 30 |

Number of Eligible Riders for the month of October $2017=3,629$
Number of Eligible Riders for the month of November $2017=3,646$
Number of Eligible Riders for the month of December $2017=3,704$

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DATE: February 23, 2018

## TO: Board of Directors

FROM: Isaac Holly, IT Manager

## SUBJECT: PROJECT CLOSEOUT: THE HUMAN RESOURCES INFORMATION SYSTEM (HRIS) SOFTWARE UPGRADE

## I. RECOMMENDED ACTION

Accept this report on the project closeout of the Human Resources Information System (HRIS) software upgrade

## II. SUMMARY

- February 13, 2015 the Board Approved Human Resources (HR) Software Upgrade
- There were 3 amendments to the contract:
- The First Amendment to our existing contract with Epicor (No. 10-17) authorized the upgrade of our HRIS with a budget not to exceed \$80,000
- The Second and Third Amendments to this contract were extensions with no budgetary impact
- The project was successfully completed within budget


## III. DISCUSSION/BACKGROUND

Santa Cruz Metropolitan Transit District (METRO had an existing contract (No. 10-17) with Epicor for the previous version of HRIS called iVantage. Epicor iVantage was the HRIS that METRO purchased in 2010 to replace the legacy UNIX based HR database, and was a significant improvement over the previous system at that time. The initial contract included 5 years of maintenance. As we approached the end of the 5 year term, we made the determination that the vendor's updated system met our criteria for features. Additionally, the cost for the upgrade approach was lower than going out to bid for a completely new system. This led to presenting the First Amendment to our existing contract with Epicor (No. 10-17) to the Board for approval on February 13, 2015.

Epicor iVantage provided the following basic HRIS functions:

- Tracking of all recruitment applicants, employee hires, terminations, and retirements.
- Enabled METRO to provide mandatory Equal Employment Opportunity (EEO) reporting to the Federal Transit Administration (FTA).
- Tracking of employee information, METRO employment history, and pay history.
- The export of employee pay rate updates to the Payroll system.
- Tracking of benefits and total employment cost for all active employees and retirees and their dependents.
Epicor iVantage had been redesigned and rebranded to Epicor HCM and was designed to interoperate as one module within Epicor's Enterprise Resource Management ("ERP") software suite.

The Epicor HCM upgrade offered the following essential features unavailable in Epicor iVantage:

- Completely redesigned and reorganized user interface that is individually customizable.
- Allowance for agency growth planning and restructuring through superior employee tracking tools.
- Automated workflow to expedite the approval queue from recruitment to hiring, and reduce redundant signature paperwork currently in place.
- Workflow punch-lists and required fields to ensure all required data gets entered and in the right order.
- Superior reporting suite and ad-hoc reporting environment based on Microsoft Report Builder (with no additional licensing fees).
- Candidate Connect add-on module allows applicants for METRO employment openings to apply directly through the METRO website (instead of requiring that paper applications be submitted in person at METRO Administrative Offices), extends outreach to the major job listing websites, and reduces data entry burden for Metro staff.

Epicor HCM is compatible on all major browsers. The previous version of Epicor iVantage was only compatible with Microsoft Internet Explorer browser.

During the course of this project there were three (3) contract amendments:

- The First Amendment to Contract No. 10-17 approved by the Board on February 13, 2015
o The initial amendment of our existing contract with Epicor (No. 10-17) authorizing the HRIS upgrade with a budget not to exceed \$80,000
- The Second Amendment to Contract No. 10-17 executed on May 4, 2016
o This was a contract extension with no budgetary impact. The reason for this extension was:
- A new federal mandate on the reporting of health insurance information ( 1094 C and 1095 C) forced IT and the vendor to shift their focus to patching the HRIS system to accommodate this reporting requirement. This unforeseen issue delayed the integration of the remaining software components.
- The Third Amendment to Contract No. 10-17 executed on April 11, 2017
o This was a contract extension with no budgetary impact. The reason for this extension was:
- The retirement of the HR Manager and the resignation of the Assistant HR Manager stalled the integration of the remaining Candidate and Manager modules.
- The success of this project required the joint effort of the IT and HR departments. The Acting HR Manager and the Provisional Assistant HR Manager rose to the occasion to partner with IT on the completion of the project.


## IV. FINANCIAL CONSIDERATIONSIIMPACT

The project budget was $\$ 80,000$; actual expenditures came in at $\$ 67,217$. The remaining funds (STA) will be redistributed to another capital project.

## V. ALTERNATIVES CONSIDERED

None

## VI. ATTACHMENTS

None

Prepared By: Isaac Holly, IT Manager

## VII. APPROVALS:

Isaac Holly, IT Manager

Approved as to fiscal impact: Angela Aitken, Finance Manager

Alex Clifford, CEO/General Manager


DATE: February 23, 2018
TO: Board of Directors
FROM: Thomas Hiltner, Grants/Legislative Analyst
$\begin{array}{ll}\text { SUBJECT: } & \text { CONSIDER A RESOLUTION DESIGNATING THE CEO AS THE } \\ & \text { AUTHORIZED AGENT TO SUBMIT A GRANT APPLICATION AND } \\ & \text { EXECUTE ACTIONS NECESSARY TO RECEIVE FORMULA FUNDS } \\ & \text { FROM THE FY18 LOW CARBON TRANSIT OPERATIONS PROGRAM }\end{array}$
I. RECOMMENDED ACTION

That the Board adopt a resolution designating the CEO as the Authorized
Agent to submit a grant application and execute all agreements and actions necessary to receive funds from the FY18 Low Carbon Transit Operations Program

## II. SUMMARY

- The California State Controller's Office has allocated funds from the Greenhouse Gas Reduction Fund to the Low Carbon Transit Operations Program (LCTOP) for transit projects that reduce greenhouse gas emissions.
- For FY18, the State Controller's Office allocated \$619,812 to Santa Cruz County: $\$ 339,348$ to the Santa Cruz County Regional Transportation Commission (RTC) and \$280,464 to the Santa Cruz Metropolitan Transit District (METRO) to implement an LCTOP project.
- This year's allocation is significantly higher than last year's and will enable METRO to advance purchase of a zero-emission bus two years earlier than planned, from 2020 to 2018.
- METRO will request that the RTC sub-allocate its $\$ 339,348$ LCTOP share to METRO as it has done in the previous three years.
- Staff recommends that the Board adopt a resolution designating the CEO as the Authorized Agent to submit an application and to execute all actions necessary to receive the LCTOP funds.


## III. DISCUSSION/BACKGROUND

In 2006, Governor Swartzenegger executed the California Global Warming Solutions Act of 2006 (AB 32), landmark legislation that set targets to reduce greenhouse gas emissions to 1990 levels by 2020. AB32 spawned trailing legislation which created new programs and designated various state agencies to administer them. In 2014, Governor Brown signed the Transit, Affordable

Housing and Sustainable Communities Program (SB 862), which distributed revenue from the sale of carbon emission credits to various programs that would increase transit ridership and reduce overall emissions from transportation sources. SB 862 established the Low Carbon Transit Operations Program (LCTOP) to distribute Cap-and-Trade revenue to regional transportation planning agencies and to public transit operators for new services and infrastructure that expand transit service, increase ridership and reduce emissions.

The LCTOP is a formula grant program that receives annually 5\% of Greenhouse Gas Reduction Funds generated from the sale of carbon credits in the Cap and Trade program. The State Controller's Office (SCO) then allocates the LCTOP funds to Regional Transportation Planning Agencies (the RTC in Santa Cruz County) and to public transit agencies by the same formula used to allocate State Transit Assistance (STA) funds. For the FY18 program, the SCO allocated $\$ 339,348$ to the RTC and $\$ 280,464$ to METRO for a total of $\$ 619,812$ to Santa Cruz County. In the three previous years of the program, RTC sponsored METRO's LCTOP projects and contributed its allocation to METRO to implement the projects. Following Board approval, METRO will request that the RTC contribute its LCTOP share to METRO again this year.

The LCTOP guidelines restrict where METRO can deploy an eligible project. Senate Bill 535 of 2012 requires that $50 \%$ of LCTOP funds must be spent to benefit Disadvantaged Communities (DAC) as defined by the California Environmental Protection Agency. METRO's service area includes only one DAC, which is in the City of Watsonville. The Watsonville Transit Center lies within this DAC, and any project serving the Watsonville Transit Center benefits this community. In its first program year (FY16), the Board approved a project to purchase a battery-electric bus to operate a new downtown Watsonville circulator service.

Last year (FY17), the Board approved an LCTOP project to purchase a second battery-electric bus for Watsonville. Because of declining revenue into the Greenhouse Gas Reduction Fund, however, Santa Cruz County's allocation totaled only $\$ 243,290$. In order to purchase the bus, METRO would have had to accumulate several years' allocations in order to reach the battery-electric bus purchase price of approximately $\$ 1$ million. Senate Bill 824 (SB 824) of 2016 allows an LCTOP recipient to accumulate annual LCTOP allocations for up to four years to implement a more substantial project than would otherwise be possible. The current FY18 LCTOP allocation is the second year of this LCTOP accumulation, and was anticipated to be committed, along with FY19 and FY20 allocations, to a 2020 bus purchase.

Due to robust carbon credit sales this year, Santa Cruz County will receive more than two and one-half times the amount received last year. Thus, rather than waiting to purchase a battery-electric bus in 2020, METRO will have
enough funds to purchase the battery-electric bus this year as shown in the following table, assuming that RTC continue its past practice of contributing its LCTOP share to METRO this year.

## 2018 LCTOP Battery-Electric Bus Purchase

Revenue

| FY18 LCTOP | $\$$ | 619,812 |
| :--- | :--- | ---: |
| FY17 LCTOP | $\$$ | 243,290 |
| HVIP Discount | $\$$ | 150,000 |
| Total $\$ 1 \mathbf{1 , 0 1 3 , 1 0 2}$ |  |  |

Expense

| 2018 Battery-Electric Bus | $\$$ | 937,000 |
| :--- | ---: | ---: |
| Charging Infrastructure | $\$$ | 76,102 |
|  | Total | $\$$ |

The deadline to submit the FY18 application is March 31, 2018. The application requires a Board Resolution to approve the project and authorize the CEO as the Authorized Agent to submit an application, execute agreements and receive funds. Caltrans will pay the funds in advance of project implementation.

Staff recommends that the Board of Directors adopt a resolution (Attachment A) to:

1. Authorize the CEO to request that the SCCRTC pass its allocation of FY18 LCTOP funds to METRO (Attachment B);
2. Designate the CEO as the Authorized Agent (Attachment C) to submit an application and execute all agreements necessary to receive LCTOP funds from Caltrans; and
3. Authorize the CEO to execute Certifications and Assurances required to participate in the Low Carbon Transit Operating Program (Attachment D).

## IV. FINANCIAL CONSIDERATIONSIIMPACT

METRO would receive a total of \$619,812 from the FY18 LCTOP allocation to Santa Cruz County. METRO will deposit these funds into a segregated, interestbearing account until they are expended on a battery-electric replacement bus.

## V. ALTERNATIVES CONSIDERED

- Do not receive the FY18 LCTOP allocation. LCTOP funds allocated by the SCO but not claimed are lost to the agency.
- Choose a different LCTOP project. METRO needs all available grant revenue to purchased replacement buses which have exceeded their useful life. Staff does not recommend this alternative


## VI. ATTACHMENTS

Attachment A: Resolution designating the CEO as the Authorized Agent and authorizing execution of Certifications and Assurances for the Low Carbon Transit Operating Program

Attachment B: Letter to RTC requesting its LCTOP transfer to METRO
Attachment C: Authorized Agent Form
Attachment D: Certifications and Assurance

Prepared by: Thomas Hiltner, Grants/Legislative Analyst

## VII. APPROVALS:

Barrow Emerson, Planning and Development Manager



Approved as to fiscal impact: Angela Aitken, Finance Manager


Alex Clifford, CEO/General Manager


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# BEFORE THE BOARD OF DIRECTORS OF THE SANTA CRUZ METROPOLITAN TRANSIT DISTRICT 

Resolution No.<br>On the Motion of Director: Duly Seconded by Director: The Following Resolution is Adopted:


#### Abstract

RESOLUTION OF THE BOARD OF DIRECTORS OF THE SANTA CRUZ METROPOLITAN TRANSIT DISTRICT AUTHORIZING THE EXECUTION OF CERTIFICATIONS AND ASSURANCES AND DESIGNATING ALEX CLIFFORD, CEO/GENERAL MANAGER AS THE AUTHORIZED AGENT TO EXECUTE ALL ACTIONS NECESSARY TO RECEIVE FY2017-2018 FUNDS FROM THE LOW CARBON TRANSIT OPERATIONS PROGRAM


WHEREAS, California Governor Brown executed the Transit, Affordable Housing and Sustainable Communities Program (SB 862) in 2014 to reduce greenhouse gas emissions from the transportation sector; and

WHEREAS, SB 862 established the Low Carbon Transit Operations Program (LCTOP) to receive revenue from the sale of emission allowances in California's Cap-and-Trade program and distribute these funds to transit operators and regional transportation planning agencies for projects that increase transit ridership; and

WHEREAS, SB 862 designated the California Department of Transportation (Caltrans) as the administrative agency to implement, monitor and establish Guidelines for the LCTOP; and

WHEREAS, the Santa Cruz Metropolitan Transit District is an eligible LCTOP recipient that can receive funds directly from the LCTOP and from other sponsors to which the LCTOP also allocates funds; and

WHEREAS, the Santa Cruz Metropolitan Transit District staff proposes Board authorization to claim the FY2017 - 2018 LCTOP funds allocated by the State Controller's Office to Santa Cruz County to purchase a new zero-emission bus serving Watsonville; and

WHEREAS, the Santa Cruz Metropolitan Transit District staff proposes Board authorization to request that the Santa Cruz County Regional Transportation Commission sponsor METRO's project and contribute its FY2017 - 2018 LCTOP allocation to METRO; and

WHEREAS, the Santa Cruz Metropolitan Transit District staff request Board authorization of submittal of the following allocation request to the California Department of Transportation for Santa Cruz County's FY2017-2018 LCTOP funds:

## Attachment A

Resolution No. $\qquad$
Page 2
Project Name: FY2017-2018 Watsonville Zero-Emission Bus
LCTOP Funds Requested: FY2017 - 2018 allocation: \$619,812
Short Description: Purchase a new battery-electric, zero-emission bus with FY2016 - 2017 and FY2017 - 2018 LCTOP funds to benefit a Disadvantaged Community in Watsonville.
Contributing Sponsor: Santa Cruz County Regional Transportation
NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of the Santa Cruz Metropolitan Transit District hereby authorizes Alex Clifford, CEO/General Manager, or designee, to request that the RTC pass its allocation of FY18 LCTOP funds to the Santa Cruz Metropolitan Transit District; and

THEREFORE, BE IT FURTHER RESOLVED, that the Board of Directors of the Santa Cruz Metropolitan Transit District hereby agrees to comply with all conditions and requirements set forth in the Certification and Assurances document and the applicable statutes, regulations and guidelines for the LCTOP; and

THEREFORE, BE IT FURTHER RESOLVED, that the Board of Directors of the Santa Cruz Metropolitan Transit District hereby designates Alex Clifford, CEO/General Manager, or designee, as the Authorized Agent to execute all actions necessary to receive funds from the LCTOP and to give effect to this resolution.

PASSED AND ADOPTED this $23^{\text {rd }}$ Day of February 2018 by the following vote:
AYES: Directors -
NOES: Directors -
ABSTAIN: Directors -
ABSENT: Directors -

## APPROVED

$\qquad$

## ATTEST

ALEX CLIFFORD
CEO/General Manager

## APPROVED AS TO FORM:

General Counsel

Santa Cruz Metropolitan Transit District<br>

February 23, 2018

Mr. George Dondero, Executive Director
Santa Cruz County Regional Transportation Commission
1523 Pacific Avenue
Santa Cruz, CA 95060-3911

## RE: Request for SCCRTC to Sponsor METRO's FY 2017-2018 Low Carbon Transit Operations Allocation Request

Dear George:
METRO requests that the Santa Cruz County Regional Transportation Commission (RTC) delegate its FY 2017 - 2018 allocation of Low Carbon Transit Operations Program (LCTOP) funds to Santa Cruz METRO for a public transit project to reduce greenhouse gas emissions in the Watsonville Disadvantaged Community. The LCTOP guidelines allow a recipient to contribute its allocation to another eligible recipient, which would then be responsible for project implementation in accordance with all guidelines.

The State Controller’s Office allocated FY 2017 - 2018 LCTOP funds to regional transportation planning agencies and transit operators using the same distribution formula specified for STA funds under Public Utilities Code 99313 and 99314 (§99313 and §99314). Accordingly, the SCCRTC will receive $\$ 339,348$ and METRO will receive $\$ 280,464$ in FY 2017-2018 LCTOP funds. If the SCCRTC concurs, METRO will submit an allocation request for the combined total of \$619,812 allocated to Santa Cruz County for FY 2017-2018.

METRO proposes to purchase a new battery-electric, zero-emission bus to benefit the Watsonville Disadvantaged Community. In addition to \$619,812 in LCTOP FY 2017 - 2018 funds, METRO will use $\$ 243,290$ in FY 2016 - 2017 LCTOP funds carried over from last year and a $\$ 150,000$ Heavy-Duty Vehicle Incentive Program voucher to meet the cost of a new battery-electric bus.

The METRO Board of Directors will consider a resolution authorizing this project at their $2 / 23 / 18$ meeting. The application is due to Caltrans by $3 / 31 / 18$; therefore, I would request that the RTC consider authorizing the sponsored project at its $3 / 1 / 18$ meeting.

If the RTC authorizes sponsorship of METRO’s FY 2017 - 2018 LCTOP project, please provide a letter to METRO which specifies that RTC is a contributing sponsor of \$339,348 in FY 2017 2018 LCTOP $\S 99313$ funds for the project. The RTC Executive Director will then be asked to sign the application as a contributing sponsor.

## Attachment B

Please call me if you would like to discuss any part of this proposal.
Thank you.
Sincerely,

## Alex Clifford

CEO/General Manager

## Authorized Agent

AS THE
Board Chair
(Chief Executive Officer/Director/President/Secretary)

## OF THE

(Name of County/City/Transit Organization)

I hereby authorize the following individual(s) to execute for and on behalf of the named Regional Entity/Transit Operator, any actions necessary for the purpose of obtaining Low Carbon Transit Operations Program (LCTOP) funds provided by the California Department of Transportation, Division of Rail and Mass Transportation. I understand that if there is a change in the authorized agent, the project sponsor must submit a new form. This form is required even when the authorized agent is the executive authority himself. I understand the Board must provide a resolution approving the Authorized Agent. The Board Resolution appointing the Authorized Agent is attached.

| Alex Clifford, CEO/General Manager | OR |
| :--- | :--- |
| (Name and Title of Authorized Agent) | OR |
| Angela Aitken, Finance Manager OR <br> (Name and Title of Authorized Agent) OR <br> (Name and Title of Authorized Agent)  <br> Click here to enter text. Board Chair  <br> Jimame and Title of Authorized Agent) (Title) |  |

## (Signature)

Approved this $\qquad$ day of February $\qquad$ , 2018

# Certifications and Assurances 

Lead Agency:
Santa Cruz Metropolitan Transit District
Project Title: FY2017-2018 Watsonville Zero-Emission Bus
Prepared by:
Thomas Hiltner, Grants/Legislative Analyst
The California Department of Transportation (Caltrans) has adopted the following Certifications and Assurances for the Low Carbon Transit Operations Program (LCTOP). As a condition of the receipt of LCTOP funds, Lead Agency must comply with these terms and conditions.

## A. General

1. The Lead Agency agrees to abide by the current LCTOP Guidelines and applicable legal requirements.
2. The Lead Agency must submit to Caltrans a signed Authorized Agent form designating the representative who can submit documents on behalf of the project sponsor and a copy of the board resolution appointing the Authorized Agent.

## B. Project Administration

1. The Lead Agency certifies that required environmental documentation is complete before requesting an allocation of LCTOP funds. The Lead Agency assures that projects approved for LCTOP funding comply with Public Resources Code § 21100 and § 21150.
2. The Lead Agency certifies that a dedicated bank account for LCTOP funds only will be established within 30 days of receipt of LCTOP funds.
3. The Lead Agency certifies that when LCTOP funds are used for a transit capital project, that the project will be completed and remain in operation for its useful life.
4. The Lead Agency certifies that it has the legal, financial, and technical capacity to carry out the project, including the safety and security aspects of that project.
5. The Lead Agency certifies that they will notify Caltrans of pending litigation, dispute, or negative audit findings related to the project, before receiving an allocation of funds.
6. The Lead Agency must maintain satisfactory continuing control over the use of project equipment and facilities and will adequately maintain project equipment and facilities for the useful life of the project.
7. Any interest the Lead Agency earns on LCTOP funds must be used only on approved LCTOP projects.
8. The Lead Agency must notify Caltrans of any changes to the approved project with a Corrective Action Plan (CAP).
9. Under extraordinary circumstances, a Lead Agency may terminate a project prior to completion. In the event the Lead Agency terminates a project prior to completion, the Lead Agency must (1) contact Caltrans in writing and follow-up with a phone call verifying receipt of such notice; (2) pursuant to verification, submit a final report indicating the reason for the termination and demonstrating the expended funds were used on the intended purpose; (3) submit a request to reassign the funds to a new project within 180 days of termination.

## Certifications and Assurances

## C. Reporting

1. The Lead Agency must submit the following LCTOP reports:
a. Semi-Annual Progress Reports by May 15th and November 15th each year.
b. A Final Report within six months of project completion.
c. The annual audit required under the Transportation Development Act (TDA), to verify receipt and appropriate expenditure of LCTOP funds. A copy of the audit report must be submitted to Caltrans within six months of the close of the year (December 31) each year in which LCTOP funds have been received or expended.
2. Other Reporting Requirements: ARB is developing funding guidelines that will include reporting requirements for all State agencies that receive appropriations from the Greenhouse Gas Reduction Fund. Caltrans and project sponsors will need to submit reporting information in accordance with ARB's funding guidelines, including reporting on greenhouse gas reductions and benefits to disadvantaged communities.

## D. Cost Principles

1. The Lead Agency agrees to comply with Title 2 of the Code of Federal Regulations 225 (2 CFR 225), Cost Principles for State and Local Government, and 2 CFR, Part 200, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments.
2. The Lead Agency agrees, and will assure that its contractors and subcontractors will be obligated to agree, that:
a. Contract Cost Principles and Procedures, 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31, et seq., shall be used to determine the allow ability of individual project cost items and
b. Those parties shall comply with Federal administrative procedures in accordance with 2 CFR, Part 200, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments. Every sub-recipient receiving LCTOP funds as a contractor or subcontractor shall comply with Federal administrative procedures in accordance with 2 CFR, Part 200, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments.
3. Any project cost for which the Lead Agency has received funds that are determined by subsequent audit to be unallowable under 2 CFR 225, 48 CFR, Chapter 1, Part 31 or 2 CFR, Part 200, are subject to repayment by the Lead Agency to the State of California (State). All projects must reduce greenhouse gas emissions, as required under Public Resources Code section 75230, and any project that fails to reduce greenhouse gases shall also have its project costs submit to repayment by the Lead Agency to the State. Should the Lead Agency fail to reimburse moneys due to the State within thirty (30) days of demand, or within such other period as may be agreed in writing between the Parties hereto, the State is authorized to intercept and withhold future payments due the Lead Agency from the State or any thirdparty source, including but not limited to, the State Treasurer and the State Controller.

## Certifications and Assurances

## A. Record Retention

1. The Lead Agency agrees, and will assure that its contractors and subcontractors shall establish and maintain an accounting system and records that properly accumulate and segregate incurred project costs and matching funds by line item for the project. The accounting system of the Lead Agency, its contractors and all subcontractors shall conform to Generally Accepted Accounting Principles (GAAP), and enable the determination of incurred costs at interim points of completion. All accounting records and other supporting papers of the Lead Agency, its contractors and subcontractors connected with LCTOP funding shall be maintained for a minimum of three (3) years after the "Project Closeout" report or final Phase 2 report is submitted (per ARB Funding Guidelines, Vol. 3, page 3.A-16), and shall be held open to inspection, copying, and audit by representatives of the State and the California State Auditor. Copies thereof will be furnished by the Lead Agency, its contractors, and subcontractors upon receipt of any request made by the State or its agents. In conducting an audit of the costs claimed, the State will rely to the maximum extent possible on any prior audit of the Lead Agency pursuant to the provisions of federal and State law. In the absence of such an audit, any acceptable audit work performed by the Lead Agency's external and internal auditors may be relied upon and used by the State when planning and conducting additional audits.
2. For the purpose of determining compliance with Title 21, California Code of Regulations, Section 2500 et seq., when applicable, and other matters connected with the performance of the Lead Agency's contracts with third parties pursuant to Government Code § 8546.7, the project sponsor, its contractors and subcontractors and the State shall each maintain and make available for inspection all books, documents, papers, accounting records, and other evidence pertaining to the performance of such contracts, including, but not limited to, the costs of administering those various contracts. All of the above referenced parties shall make such materials available at their respective offices at all reasonable times during the entire project period and for three (3) years from the date of final payment. The State, the California State Auditor, or any duly authorized representative of the State, shall each have access to any books, records, and documents that are pertinent to a project for audits, examinations, excerpts, and transactions, and the Lead Agency shall furnish copies thereof if requested.
3. The Lead Agency, its contractors and subcontractors will permit access to all records of employment, employment advertisements, employment application forms, and other pertinent data and records by the State Fair Employment Practices and Housing Commission, or any other agency of the State of California designated by the State, for the purpose of any investigation to ascertain compliance with this document.

## F. Special Situations

Caltrans may perform an audit and/or request detailed project information of the project sponsor's LCTOP funded projects at Caltrans' discretion at any time prior to the completion of the LCTOP.

I certify all of these conditions will be met.

Alex Clifford
(Print Authorized Agent)
(Signature)

CEO/General Manager
(Title)
(Date)

DATE: February 23, 2018

## TO: Board of Directors

FROM: Angela Aitken, Finance Manager

## SUBJECT: CONSIDERATION OF DECLARING VEHICLES AND/OR EQUIPMENT AS EXCESS FOR PURPOSES OF DISPOSAL OR AUCTION

## I. RECOMMENDED ACTION

That the Board of Directors approve a resolution declaring vehicles and/or obsolete equipment as ready for disposal or auction and direct the CEO to dispose of the surplus items in conformance with METRO's Administrative Policy Number AP-2020 - Fixed Assets and Inventoried Items.

## II. SUMMARY

- In accordance with Santa Cruz Metropolitan Transit District's (METRO) policy on disposal of fixed assets, at least once per year the Finance Manager shall recommend to the Board of Directors a list of items to be declared excess with appropriate action for disposal.
- Several vehicles have exceeded their useful life and are no longer needed by METRO.
- Staff recommends that the Board of Directors approve the resolution for the disposal or auction of excess property (Attachment A) and declare the item(s) listed in Exhibit A as excess and direct staff to use appropriate action for disposal.


## III. DISCUSSION/BACKGROUND

The following equipment identified in the Excess Vehicle \& Equipment Listing (Exhibit A) has become obsolete and surpassed its useful life expectancy:

- The two (2) vans (Chevy Venture and Ford E250) and the one (1) Ford Explorer SUV are more than 16 years old and are in poor condition. The cost to repair these vehicles outweighs their value; therefore, these vehicles are recommended for disposal.
- The five (5) 2007 Ford Focus are 10 years old. The cost to repair these vehicles outweighs their value; therefore, these vehicles are recommended for disposal.
- The one (1) New Flyer Bus is 20 years old and is at the end of its life. The estimated depreciable life of a bus is 12 years; this bus should have been considered for disposal at least 8 years ago.
- All vehicles recommended for disposal are fully depreciated, so there is no financial obligation to a granting agency with regard to the recommended disposal.

Disposal of these assets has been coordinated with management and staff in processing them for disposal and auction if appropriate.

Staff recommends that the Board of Directors approve a resolution (Attachment A) and declare the items listed in Exhibit A as excess and direct staff to use appropriate action for disposal.

## IV. FINANCIAL CONSIDERATIONS/IMPACT

The estimated gross market value of these vehicles is approximately $\$ 9,000$; they have all reached the end of their useful lives and are obsolete. There is no financial impact as a result of this disposal.

Any revenue generated from the sale of these vehicles will be recorded as income in the current fiscal year's operating budget to 'Gain / Loss Disposal on Assets' budget account 407090-100.

## V. ALTERNATIVES CONSIDERED

- Store the vehicles - This alternative is not recommended because the vehicles have exceeded their useful life, and are cost prohibitive to repair.


## VI. ATTACHMENTS

Attachment A: Resolution to Approve for the Disposal or Auction of Excess Property
Exhibit A: Excess Vehicle \& Equipment Listing-as of February 23, 2018

Prepared By: Debbie Kinslow, Assistant Finance Manager

## VII. APPROVALS:

Approved as to fiscal impact: Angela Aitken, Finance Manager


Alex Clifford, CEO/General Manager


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# BEFORE THE BOARD OF DIRECTORS OF THE SANTA CRUZ METROPOLITAN TRANSIT DISTRICT 

Resolution No.
On the Motion of Director:
Duly Seconded by Director:
The Following Resolution is Adopted:

## RESOLUTION TO APPROVE THE DISPOSAL OR AUCTION OF EXCESS ASSETS

WHEREAS, the Santa Cruz Metropolitan Transit District (District), receives federal financial assistance from the Federal Transit Administration (FTA) to acquire real property, equipment and supplies, and rolling stock; and

WHEREAS, all such assets must be managed, used, and disposed of in accordance with applicable laws and regulations; and

WHEREAS, the FTA prescribes the method and delivers guidance to public transit operators to comply with grant management requirements in accordance with the regulations in Title 49 Code of Federal Regulations, part 24 (49CFR 24) and FTA Circular 5010.1E; and

WHEREAS, the acquisition cost of each item identified as excess is greater than \$5,000; and

WHEREAS, the District has determined that it is necessary to either dispose of the property, and/or to place the items up for auction.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE SANTA CRUZ METROPOLITAN TRANSIT DISTRICT, that it hereby resolves, determines and orders as follows:

1. The following assets are declared excess property on the Excess Vehicle \& Equipment Listing as of 02/23/18, "Exhibit A" and may be disposed of or auctioned as such:
a. "One (1) 1998 CNG-New Flyer Bus, vehicle no. 9825";
b. "One (1) 1999 Ford E250 Cargo Van no. 9951";
c. "Five (5) 2007 Ford Focus Sedans nos. 705, 709, 710, 711,712";
d. "One (1) 2002 Chevrolet Venture Van no. 206";

Resolution No. $\qquad$
Page 2 of 3
e. "One (1) 2002 Ford Explorer SUV no. 202";

PASSED AND ADOPTED by the Board of Directors of the Santa Cruz Metropolitan Transit District on February 23, 2018, by the following vote:

```
AYES: DIRECTORS -
```

NOES: DIRECTORS -
ABSENT: DIRECTORS -
ABSTAIN: DIRECTORS -

Board Chair

ATTEST:

ALEX CLIFFORD
CEO/General Manager

APPROVED AS TO FORM:

JULIE SHERMAN
General Counsel

## EXHIBIT A, SANTA CRUZ METROPOLITAN TRANSIT DISTRICT

 RESOLUTION NO. $\qquad$SANTA CRUZ METROPOLITAN TRANSIT DISTRIRCT EXCESS VEHICLE \& EQUIPMENT LISTING AS OF 032/23/18
(Attached)


FROM: Angela Aitken, Finance Manager

## SUBJECT: CONSIDERATION OF RESOLUTION APPROVING THE FY18 REVISED CAPITAL BUDGET

## I. RECOMMENDED ACTION

That the Board of Directors adopt a resolution approving the FY18 Revised Capital Budget, as presented in Attachment B

## II. SUMMARY

- The Board of Directors (Board) adopted the FY18 Capital Budget on June 23, 2017.
- Periodic capital budget revisions may be required due to new grant awards, new projects, changes to the scope of existing projects, spending and removal of projects that are no longer needed.
- Revisions to an adopted capital budget require Board approval and the adoption of a resolution.


## III. DISCUSSION/BACKGROUND

The Board must adopt an Operating and Capital Budget by June $30^{\text {th }}$ each year. The Board adopted the FY18 \& FY19 Operating and FY18 Capital Budget on June 23, 2017.

This will be the second revision to the FY18 Capital Budget since it was adopted.
Staff requests that the Board adopt a resolution (Attachment A) to approve the FY18 Revised Capital Budget (Attachment B)

A Reconciliation by Project as of February 23, 2018 (Attachment C) is provided; this reconciles the (current) FY18 Revised Capital Budget against the (original) Final FY18 Capital Budget adopted on June 23, 2017.

This revision impacts fifteen (15) capital projects.

## IV. FINANCIAL CONSIDERATIONS/IMPACT

The original FY18 Capital Budget adopted June 23, 2017 totals \$18,634,373.

- Revision 1 - October 27, 2017 - This revision added eight (8) capital projects and adjusted the funding for three (3). This revision resulted in a net increase of $\$ 1,138,605$, for an FY18 Revised Capital Budget balance of $\$ 19,772,978$.
- Revision 2-February 23, 2018 - This revision impacts fifteen (15) capital projects with project details listed on Attachment C for a net increase of $\$ 717,017$ and an FY18 Revised Capital Budget balance of \$20,489,995.

The Reconciliation by Project as of February 23, 2018 (Attachment C) lists the detail of all changes by project since adoption on June 23, 2017, and includes an explanation for the action. The year to date change is a net increase of \$1,855,622.

Additional Information Regarding Cash Reserves aka Operating and Capital Reserve Fund: The estimated balance of the Operating and Capital Reserve Fund before this action was $\$ 924 \mathrm{~K}$. This action allocates $\$ 565 \mathrm{~K}$ of Operating and Capital Reserve Funds; therefore, the new estimated balance of the Operating and Capital Reserve Fund is $\$ 359 \mathrm{~K}$. Please note, the estimates provided here include deductions for approved capital projects and commitments (the required local match) against grants that have not yet been awarded; those un-awarded projects are not included in the attached revised budget.

## V. ALTERNATIVES CONSIDERED

- There are no recommended alternatives at this time. If the revised budget is not approved, important capital improvements and capital projects may be delayed or cancelled.


## VI. ATTACHMENTS

## Attachment A: FY18 Capital Budget Resolution

Attachment B: FY18 Revised Capital Budget as of February 23, 2018
Attachment C: FY18 Revised Capital Budget - Reconciliation by Project as of February 23, 2018

Prepared By: Debbie Kinslow, Assistant Finance Manager

## VII. APPROVALS:

Approved as to fiscal impact: Angela Aitken, Finance Manager


Alex Clifford, CEO/General Manager


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# BEFORE THE BOARD OF DIRECTORS OF THE SANTA CRUZ METROPOLITAN TRANSIT DISTRICT 

Resolution No. $\qquad$
On the Motion of Director $\qquad$ Duly Seconded by Director
The following Resolution is adopted:

## A RESOLUTION OF THE SANTA CRUZ METROPOLITAN TRANSIT DISTRICT AUTHORIZING A REVISION TO THE FY18 CAPITAL BUDGET

WHEREAS, the Board of Directors approved the FY18 Capital Budget on June 23, 2017 with a total budget of $\$ 18,634,373$; and

WHEREAS, it is necessary to revise the adopted FY18 Capital Budget by $\$ 1,855,622$ to add funds for various capital projects;

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of the Santa Cruz Metropolitan Transit District hereby amends the FY18 Capital Budget per Attachment B to this resolution for a total FY18 Revised Capital Budget of \$20,489,995.

PASSED AND ADOPTED this $23^{\text {rd }}$ day of February 2018, by the following vote:
AYES: Directors -
NOES: Directors -

ABSENT: Directors -
ABSTAIN: Directors -

Approved $\qquad$
Board Chair

## ATTEST

ALEX CLIFFORD
CEO, General Manager
APPROVED AS TO FORM

JULIE A. SHERMAN
General Counsel

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Attachment B

| SANTA CRUZ METROPOLITAN TRANSIT DISTRICT |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AS OF FEBRUARY 23, 20182 2ND REVISION |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Projectiactivit | RESTRICTED | RESTRICTED |  | RESTRICTED | RESTRCTED | $\underbrace{\text { RESTRICTED }}$ | ${ }_{\substack{\text { a }}}^{\text {RESTRICTED }}$ | RESTRICTED | UNRESTRICTED |  | total |
|  |  | PTMISEA (18) |  | cal-oes ${ }^{\text {PROP IB. }}$ SECURITY |  |  |  | CAPITAL RESTRICTED STA | STA (XFR FROM OPER BUDGET) | OPERATING \& CAPITAL RESERVE FUND |  |
| FY17 STA ( Xft trom Oper. Budget) - Funds Committed |  |  |  |  |  |  |  |  | \$ 370,000 |  |  |
| FY18 STA-SB1 (Xff foom Oper. Budget) |  |  |  |  |  |  |  |  | \$ 2,263,000 |  |  |
| STA-SGR - (New SB 1) |  |  |  |  |  |  | \$ 737,000 |  |  |  |  |
| Estimated Cash Balance on Hand (ff applicable) | N/A | 266,000 | \$ 5.976,128 | \$ 1,705,950 | N/A | 709,292 | \$ | 29,000 | 304,422 | \$ 1,824,152 | \$ 10,814,944 |
| Amount Available i f not Cash on Hand | \$ 6,786,994 |  |  |  | 246,953 |  | 737,000 |  | \$ 2,263,000 |  | \$ 10,033,947 |
| Construction Related Projects |  |  |  |  |  |  |  |  |  |  |  |
| 1 Pacific StationMetro Center - Conceptual Design / MOU | \$ 168,822 |  | \$ 1,901, 333 |  |  |  |  |  | \$ 42,205 |  | \$ 2, 112,360 |
| 2 Metrobase Project- - Judy K S Souza- Operations Bldg. |  | \$ 266,000 | \$ 3,086, 247 |  |  |  |  |  |  | \$ 207,154 | \$ 3,559,401 |
| Access Control- JKS |  |  |  | \$ 224,018 |  |  |  |  |  |  | ${ }^{224,018}$ |
| Mechanical Platorm Upgrade - JKS |  |  |  | \$ 120,000 |  |  |  |  |  |  | 120,000 |
| Transit Security Projects cameas |  |  |  |  |  |  |  |  |  |  |  |
| Cameras on Buses |  |  |  | \$ 967,181 |  |  |  |  |  |  | $\$$ 967,181 <br> $\$$ 29.183 |
| Emergency Generators - Equip. |  |  |  | \$ 299,183 <br> $\$$ 52.421 |  |  |  |  |  |  | \$ 299,183 |
| Security Cameras Consultant |  |  |  | \$ 25,000 |  |  |  |  |  |  | 25,000 |
| Emergency Generators - Consultant |  |  |  | \$ 18.147 |  |  |  |  |  |  |  |
| Subtoal | 168,822 | \$ 266,000 | \$ 4,987,580 | ${ }^{\text {S }}$ \$ 1,705,950 | \$ | s | \$ | \$ | \$ 42,205 | \$ 207,154 | 7,377,711 |
| IProiects |  |  |  |  |  |  |  |  |  |  |  |
| 4 Replace Aging Servers <br> 5  |  |  |  |  |  |  |  | 18.000 |  | 50,000 | \$\$0,000 |
| 6 Phone System |  |  |  |  |  |  |  |  |  | \$ 10,000 | 10.0000 |
| Wireless Microphone System-Vemon PA | \$ | \$ | \$ | s | \$ | S | s | 18,000 | \$ |  | ${ }^{3.0000}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Facilities Repair \& Improvements | 180,000 |  |  |  |  |  |  |  |  |  | 180.0 |
| 9 138 Golf Club Fire Egress (FTA 5339a FY17) | ${ }^{97,523}$ |  |  |  |  |  |  |  |  |  | 97,523 |
| 10 Bus Stop \& Fac Improve.(FTA 5339a FY 15116 ) | 59.082 |  |  |  |  |  |  |  |  |  |  |
| $\frac{11}{12}$ Maintenance Eldg. Structura Upgrade |  |  |  |  |  |  |  |  | 30,000 | \$ 20,000 | 30,000 20,000 |
| ${ }_{13} 12$ Repaiir Roof at at pacificic Station ( (TTA 5339a FY13) | 12,000 |  |  |  |  |  |  | \$ 3.000 |  |  | 15,000 |
| ${ }_{15} 14$ Relocate Mechanics S Sink-Golf Club (FTA 5339a FY 14 ) | 7,638 |  |  |  |  |  |  |  | 1.910 |  |  |
|  |  |  |  |  |  |  |  |  | ${ }^{\frac{1}{33,500}}$ | 20.000 | $\begin{array}{r}\text { 8,000 } \\ 419,153 \\ \hline\end{array}$ |
|  |  |  |  |  |  |  |  | 3.000 |  | 20.000 |  |
| Revenue Vehicle Replacement \& Campaigns |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{16}$ Electric eus (3) + Infra \& Prol Mgmt. (FTA 5339c FY16) | \$ 3,732,074 |  | 561,332 |  |  |  | 737.000 |  | 2,263,000 | 551,136 | $4,844,542$ <br> $3,000,000$ |
| ${ }_{18} 18$ Eleetric Bus (1)- Watsonville ZEB Circulator (FYY1516) |  |  | \$ 357, 216 |  |  | \$ 709,292 |  |  |  |  | ${ }^{1.066,508}$ |
| 19 Paractuz Van Replacements (11) (FTA 5339a FY 15116) | \$ 816,000 |  |  |  |  |  |  |  |  | \$ 111,585 | 827,585 |
| 20 CNG Bus (1) -(STBG FY17-via SCCRTC) | \$ 500,000 |  | \$ 70,000 |  |  |  |  |  |  |  |  |
| ${ }_{21}^{21}$ CNG Bus (1)- -(FTA 53339 Rural FY16) | 456,957 |  |  |  |  |  |  |  |  | 80,639 | $\begin{array}{r}537,596 \\ \hline 2094 \\ \hline\end{array}$ |
| ${ }^{22}$ Paracruz Van Replacements (3) ${ }_{23}$ Year 1 - Capitilized Lease + tax - 3 New Flyer Buses |  |  |  |  | \$ 246,954 |  |  |  | 87,786 | 7,954 | $\begin{array}{r}342,694 \\ \hline 28559 \\ \hline\end{array}$ |
|  |  |  |  |  |  |  |  |  |  |  | ${ }^{2832,52}$ |
| 25 Mid-LIfite Bus Engine Overhaul (7) (FTA 5339a Y Y 14) | ${ }^{132,451}$ |  |  |  |  |  |  |  | 33,113 |  | 165.564 |
| 26 Mid-Lite Bus Engine Overhaul (4) (fTA E339a FY17) 27 Bus Repaint Campaign (36) (FTA 5339a FY14) | ${ }^{160,000} 105$ |  |  |  |  |  |  |  | 26,367 |  |  |
|  | \$ 63,000 |  |  |  |  |  |  |  | \$ | 3.000 | 66,000 |
| 29 Bus Repain Campaign (20) (FTA 5339a FY13) 8 left |  |  |  |  |  |  |  |  |  |  | ${ }_{12,20,5380}^{290}$ |
| Subtotal | \$ 5.989,572 |  | 988,548 | \$ | 246,954 | 709,292 | 737,000 | \$ | 2.416,171 | \$ 1,119,843 | 12,207,380 |
| Non-Revenue Vehicle Replacement |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{30}$ Replace 11 Non-Revenue Venicles (FTA 5339a ${ }^{\text {a }}$ (13) | $\begin{array}{ll}\$ & 144,037 \\ \$ & 75,318\end{array}$ |  |  |  |  |  |  |  | 36,009 <br> 18.830 | ${ }_{3.666}$ |  |
| 32 Propane Fueled Tow Motor (FTA 5339a FY14) | 46,602 |  |  |  |  |  |  |  | \$ 11,651 | \$ 1.747 | 9,014 |
| Subtotal | \$ 265,957 | ¢ | \$ | s | \$ | ¢ | 5 | \$ | 66,490 | \$ 5.413 | 337.860 |
| 2122018 |  |  |  | 1 |  |  |  |  | 022318 FY18 R | evisec Capial Budget | воо |

Attachment B $\square \square \nabla_{0}$



# FY18 CAPITAL BUDGET RECONCILIATION BY PROJECT AS OF FEBRUARY 23, 2018-2ND REVISION 

FY18 FINAL CAPITAL BUDGET ADOPTED JUNE 23, 2017 :

| CAPITAL PROJECT | SOURCE |  | AMOUNT | TOTAL |
| :---: | :---: | :---: | :---: | :---: |
| Add: Replace Aging Servers | RESERVES | \$ | 50,000 |  |
| Reason: Original funding source was designated as FTA 5339(a) but those funds were exhausted due to other high priority projects (mid-life bus engine overhauls and a fuel management system.) |  |  |  |  |
| Add: FY17 Allocation - FTA 5339(a) Bus \& Bus Facilities Grant | FTA 5339(a) FY17 | \$ | 437,523 |  |
| Reason: Add projects submitted under the FY17 FTA 5339(a) Bus \& Bus |  |  |  |  |
| Facilities Grant. Toll credits will be used as the local match. |  |  |  |  |
| Fuel Management System | \$ 180,000 |  |  |  |
| Golf Club Fire Egress | \$ 97,523 |  |  |  |
| 4 Midlife Overhauls @ \$40K each | 160,000 |  |  |  |

Add / Reduce: Parking Lot Reconfiguration / Bus Stop \& Facilities Improvements

| FTA 5339(a) FY15\&16 | $\$$ | 9,206 |
| :--- | :--- | :---: |
| FTA 5339(a) FY15\&16 | $\$$ | $(9,206)$ |

Reason: Add Parking Lot Reconfiguration Project at Vernon and -
Reduce funds available in Bus Stop \& Facilities Improvements Project

| Adjust Funding Sources: Paratransit Vehicle (1) (FTA Section 5310) | STA | $\$$ | $(12,600)$ |
| :--- | :--- | :--- | :--- |
|  | FTA 5310 | $\$$ | 12,600 |

Reason: Project originally entered with a local match of $20 \%$ using STA funds; local match of $20 \%$ not needed

Add: Bus Engine Replacement and Installation (3)
RESERVES
\$ 110,000

Reason: Bus engine replacements needed for service delivery; approved at the 9/22/17 Board Meeting - 3 @ \$35K - not to exceed \$110K

# FY18 CAPITAL BUDGET RECONCILIATION BY PROJECT AS OF FEBRUARY 23, 2018-2ND REVISION 

| CAPITAL PROJECT | SOURCE | AMOUNT | TOTAL |
| :--- | :--- | :--- | :--- | :--- |
| Adjust: Replace High Lift Bucket Truck | RESERVES | $\$$ | 1,390 |

Adjust: Purchase 1 additional AED
RESERVES
\$ 2,096
Reason: Add funds to purchase one (1) additional AED - for a total of seven (7)

Add: Purchase 1 40' CNG Bus

| Add: Purchase 140 ' CNG Bus | FTA 5339 FY16 - Rural | $\$ 456,957$ |
| :--- | :--- | :--- |
|  | RESERVES | $\$ 80,639$ |

Reason: Add funds to purchase one (1) 40' CNG Bus-via Caltrans
-

|  |  |  |
| :--- | :--- | :--- |
| Transfer funds between projects: Pacific Station \& Metrobase Proj | PTMISEA | $\$(1,675,000)$ |
|  | PTMISEA | $\$ 1,675,000$ |

Add: Metrobase Project
RESERVES
\$ 207,154

Reason: Add funding for FY18 Legal Expense (Legal expenses are not an eligible PTMISEA or Cal-OES expenditure)

Remove: Repaint Watsonville Transit Center
FTA 5339(a) FY13 \$

STA
\$
Reason: Project completed in FY17

| Remove: Reseal, Resurface Parking Lots | FTA 5339(a) FY13 | $\$(60,000)$ |
| :--- | :--- | :--- | :--- | :--- |
| Reason: Project completed in FY17 | STA |  |

Remove: Parking Lot Reconfiguration
FTA 5339(a) FY16 \$
$(9,206)$
Reason: Project completed in FY17

# FY18 CAPITAL BUDGET RECONCILIATION BY PROJECT AS OF FEBRUARY 23, 2018-2ND REVISION 

| CAPITAL PROJECT | SOURCE | AMOUNT |  | TOTAL |
| :---: | :---: | :---: | :---: | :---: |
| Adjust: Paracruz Van Replacements | STIP <br> RESERVES | \$ | $\begin{aligned} & (997) \\ & (249) \end{aligned}$ |  |
| Reason: Adjust for spending in FY17 |  |  |  |  |
| Add: Year 1 - Capitalized Lease - 3 New Flyer Buses | RESERVES | \$ | 283,529 |  |
| Reason: Add funding for 1st year of 6-year capitalized lease for 3 New Flyer Buses per Board action at 11/17/17 BOD meeting |  |  |  |  |
| Add: Bus Engine Replacement \& Installation (3) (now 5) | RESERVES | \$ | 72,000 |  |
| Reason: Add funds for 2 additional emergency engine replacements, including installation. Total of 5 bus engines per Board action at 9/22/17 BOD meeting |  |  |  |  |
| Adjust: Replace 11 Non-Revenue Vehicles | $\begin{aligned} & \text { FTA 5339(a) FY13 } \\ & \text { STA } \end{aligned}$ | \$ | $\begin{array}{r} (26,986) \\ (6,747) \end{array}$ |  |
| Reason: Adjust for spending in FY17 |  |  |  |  |
| Adjust: Bus Repaints - 20 @ \$3,628.10 each | FTA 5339(a) FY13 STA | \$ | $\begin{array}{r} (34,830) \\ (8,707) \end{array}$ |  |
| Reason: Adjust for spending in FY17-12 completed |  |  |  |  |
| Adjust: Mid-Life Bus Engine Overhauls | FTA 5339(a) FY14 STA | \$ | $\begin{aligned} & (88,826) \\ & (22,206) \end{aligned}$ |  |
| Reason: Adjust for spending in FY17 |  |  |  |  |
| Adjust: Electric Bus (3) + Infrastructure and Project Mgmt. | FTA 5339(c) LoNo PTMISEA | \$ | $\begin{aligned} & (78,274) \\ & (13,696) \end{aligned}$ |  |
| Reason: Adjust for spending in FY17 |  |  |  |  |
| Add: Transit Security Projects - (Cal-OES funded) <br> Reason: Add the FY16 and FY17 final allocation receipts - \$440,505, and $\$ 352,404$, and adjust for FY17 spending | Cal-OES | \$ \$ | $\begin{gathered} 792,909 \\ (67,959) \end{gathered}$ |  |
| Reduce: Metrobase Project JKS Ops Bldg. | PTMISEA | \$ | $(124,000)$ |  |
| Reason: Adjust for spending at the end of FY17 |  |  |  |  |

# FY18 CAPITAL BUDGET <br> RECONCILIATION BY PROJECT AS OF FEBRUARY 23, 2018-2ND REVISION 

| CAPITAL PROJECT | SOURCE | AMOUNT | TOTAL |
| :--- | :---: | :---: | :---: | :---: |
| Add: Watsonville Transit Center Mural | RESERVES | $\$$ | 3,000 |
| Reason: Add Watsonville Transit Center Mural project; \$3K from Arts |  |  |  |
| Council Santa Cruz matched with \$3K in Reserves |  |  |  |


| CAPITAL PROJECT | SOURCE | AMOUNT | TOTAL |
| :--- | :--- | :--- | :--- |
| FUNDING SUMMARY: |  |  |  |
|  |  |  |  |

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DATE: February 23, 2018

## TO: Board of Directors

FROM: Angela Aitken, Finance Manager

## SUBJECT: ACCEPT AND FILE THE YEAR TO DATE MONTHLY FINANCIAL REPORT AS OF NOVEMBER 30, 2017

## I. RECOMMENDED ACTION

That the Board of Directors accept and file the Year to Date Monthly Financial Report as of November 30, 2017

## II. SUMMARY

- An analysis of Santa Cruz Metropolitan Transit District's (METRO) financial status is prepared monthly in order to inform the Board of Directors regarding METRO's actual revenues and expenses in relation to the adopted operating and capital budgets for the fiscal year.
- This staff report is the web-accessible companion document to the attached PowerPoint presentation titled "Year to Date Monthly Financial Report as of November 30, 2017."
- Staff recommends that the Board of Directors accept and file the attached report.


## III. DISCUSSION/BACKGROUND

Below are the written explanations of the various charts and graphs in the attached Year to Date Monthly Financial Report as of November 30, 2017. The fiscal year has elapsed 42\%.
Slide 1
(Cover) Year to Date Monthly Financial Report as of November 30, 2017

## Slide 2

FY18 Operating Revenue and Expenses for the Month Ending November 30, 2017

- Operating Revenues for the month are favorable by $\$ 58 \mathrm{~K}$
- Operating Expenses
- Labor Regular - favorable by \$63K
- Labor OT - unfavorable by \$129K
- Fringe Benefits - favorable by $\$ 146 \mathrm{~K}$
- Non-Personnel - favorable by $\$ 59 \mathrm{~K}$
- Total Operating Expenses - favorable by \$141K
- Total Budget to Actual Variance - favorable by $\$ 199 \mathrm{~K}$


## Slide 3

FY18 Operating Revenue and Expenses Year to Date as of November 30, 2017

- Operating Revenues Year to Date are favorable by $\$ 327 \mathrm{~K}$
- Operating Expenses
- Labor Regular - favorable by $\$ 378 \mathrm{~K}$
- Labor OT - unfavorable by $\$ 534 \mathrm{~K}$
- Fringe Benefits - favorable by $\$ 808 \mathrm{~K}$
- Non-Personnel - favorable by \$263K
- Total Operating Expenses -favorable by \$916K

Total Budget to Actual Variance - favorable by $\$ 1,243 \mathrm{~K}$

## Slide 4

FY18 Operating Revenue by Major Funding Source - Year to Date as of November 30, 2017

- Passenger Fares- actual is $\$ 4,336 \mathrm{~K}$ while budget is $\$ 4,559 \mathrm{~K}$
- Sales Tax Revenue (including Measure D)- actual is $\$ 9,976 \mathrm{~K}$ while budget is \$9,493K
- TDA- actual and budget are $\$ 1,692 \mathrm{~K}$
- Other Revenue- actual is $\$ 260 \mathrm{~K}$ while budget is $\$ 205 \mathrm{~K}$
- Other Op Assistance/Funding- actual is $\$ 15 \mathrm{~K}$ while budget is $\$ 4 \mathrm{~K}$


## Slide 5

Favorable/ (Unfavorable) Revenue Variance to Budget Year to Date as of November 30, 2017

- Passenger Fares variance to budget is unfavorable by \$223K primarily due to:
- FY18 Q1 system-wide ridership decrease of 17.1\% (year over year).
- Sales Tax Revenue variance to budget is favorable by $\$ 483 \mathrm{~K}$ due to higher than anticipated receipts.
- Other Revenue variance to budget is favorable by $\$ 55 \mathrm{~K}$ primarily due to Advertising and Interest income.
- Other Op Assistance/Funding variance to budget is favorable by $\$ 11 \mathrm{~K}$ due to additional funding received by UCSC for the Articulated Bus Project (that was not anticipated and budgeted in FY18).


## Slide 6

FY18 Operating Expenses by Major Expense Category Year to Date as of November 30, 2017

- Labor - Regular- actual is $\$ 6,454 \mathrm{~K}$ while budget is $\$ 6,832 \mathrm{~K}$
- Labor - OT - actual is $\$ 1,221 \mathrm{~K}$ while budget is $\$ 687 \mathrm{~K}$
- Fringe Benefits - actual is $\$ 8,084 \mathrm{~K}$ while budget is $\$ 8,892 \mathrm{~K}$
- Services - actual is $\$ 1,262 \mathrm{~K}$ while budget is $\$ 1,453 \mathrm{~K}$
- Mobile Materials \& Supplies - actual is $\$ 1,204 \mathrm{~K}$ while budget is $\$ 1,225 \mathrm{~K}$
- Other Expenses - actual is $\$ 868 \mathrm{~K}$ while budget is $\$ 920 \mathrm{~K}$


## Slide 7

FY18 Operating Expenses by Major Expense Category Year to Date as of November 30, 2017

- Labor - Regular variance to budget is favorable by $\$ 378 \mathrm{~K}$ due to:
- Vacant funded positions
- Extended unpaid leaves of absence
- Lower Medical Insurance Premiums
- Lower Workers Comp Insurance Costs
- Labor - OT variance to budget is unfavorable by $\$ 534 \mathrm{~K}$ due to vacant positions and extended leaves of absence in various departments.
- Fringe Benefits variance to budget is favorable by $\$ 808 \mathrm{~K}$ primarily due to lower medical and workers comp insurance costs.
- Services variance to budget is favorable \$190K primarily due to Prof \& Tech Fees under budget.
- Mobile Materials \& Supplies variance to budget is favorable by $\$ 22 \mathrm{~K}$.
- Other Expenses variance to budget is favorable by $\$ 51 \mathrm{~K}$ primarily due to Casualty \& Liability (Settlement Costs).


## Slide 8

FY18 Capital Budget Spending Year to Date (by Funding Source) as of November 30, 2017

- Total Capital Funding year to date is \$660K; FY18 budget is $\$ 19.8 \mathrm{M}$
- Cal-OES Prop 1B Transits Security Grant funding (CTSGP) is $\$ 241 \mathrm{~K}$
- Operating and Capital Reserve funding is $\$ 329 \mathrm{~K}$
- Federal Capital Grants (FTA) funding is $\$ 213 \mathrm{~K}$
- State Transits Assistance (STA) - Transfers from Operating Budget) funding is $\$ 39 \mathrm{~K}$
- State - PTMISEA (1B) funding is (\$162K).(prior year funding)


## Slide 9

FY18 Capital Budget Spending Year to Date as of November 30, 2017

- Total Capital Projects spending year to date is $\$ 660 \mathrm{~K}$; FY18 budget is $\$ 19.8 \mathrm{M}$
- Construction Related Projects spending is $\$ 277 \mathrm{~K}$
- Revenue Vehicle Replacements spending is $\$ 195 \mathrm{~K}$
- Non-Revenue Vehicle Replacements spending is $\$ 175 \mathrm{~K}$
- Misc. spending is $\$ 11 \mathrm{~K}$.
- IT Projects spending is $\$ 3 \mathrm{~K}$.


## Slide 10

(Cover Sheet) - Additional Information

## Slide 11

Additional Information for the Month of November 2017

- Unemployment Rate \% in Santa Cruz County is 5.1\%
- \$ Gasoline per Gallon for the San Francisco-Oakland-San Jose area is \$3.23
- Monthly Ridership - Without UCSC (Cabrillo, Highway 17 and Fixed Route) has increased in November 2017.


## Slide 12

FY18 Operating Expenses Year to Date as of January 31, 2018: Preliminary

- Operating Expenses
- Labor Regular - favorable by \$538K
- Labor OT - unfavorable by \$769K
- Fringe Benefits - favorable by $\$ 1,055 \mathrm{~K}$
- Non-Personnel - favorable by $\$ 785 \mathrm{~K}$
- Total Operating Expenses - favorable by $\$ 1,609 \mathrm{~K}$


## Slide 13

(Cover Sheet) - FY18 \& FY19 Non-Controllable Budget Risks as of February 9, 2018

## Slide 14

FY18 \& FY19 Non-Controllable Budget Risks (exceeding \$200K)

- SB1 Repeal Risk; New TDA-STA PUC 99313 \& 99314; New TDA -STA-SGR Revenue
- Operating Budget-TDA-STA-SB1-100\% of the SB1 is at risk due to potential voter repeal - \$1,230K and \$1,766 at risk, in FY18 and FY19, respectively.
- Capital Budget-TDA-STA-SB1-SGR-100\% of the SB1-SGR is at risk due to potential voter repeal - \$671K at risk, in both FY18 and FY19 (as per Revised SCO estimate dated 11/3/17).
- Capital Budget- SB1-LPP-100\% is at risk due to potential voter repeal \$314K at risk, in both FY18 and FY19.
- Total SB1 Repeal Operating and Capital Budget Risk is $\$ 2,215 \mathrm{~K}$ in FY18 and $\$ 2,751 \mathrm{~K}$ in FY19.


## IV. FINANCIAL CONSIDERATIONSIIMPACT

Total Budget to Actual Variances for the month and year to date are favorable by \$199K and \$1,243K, respectively.

Non-Controllable budget risks currently exist that could have a significant impact to the operating and capital budgets. Staff will have more information about the potential SB1 voter repeal issue later in the year.

## V. ALTERNATIVES CONSIDERED

- There are no alternatives to consider, as this is an accept and file Year to Date Monthly Financial Report.


## VI. ATTACHMENTS

Attachment A: Year to Date Monthly Financial Report as of November 30, 2017 Presentation

Prepared By: Kristina Mihaylova, Sr. Financial Analyst

## VII. APPROVALS:

Approved as to fiscal impact:
Angela Aitken, Finance Manager

Alex Clifford, CEO/General Manager


Attachment A
to Date Monthly Financial Report
as of November 30, 2017
Santa Cruz METRO Board of Directors
February 23,2018
Angela Aitken, Finance Manager

## Attachment A



## Attachment A



Attachment A
FY 18 Operating Revenue by Major Funding Source
$\frac{\text { Year to Date as of November 30, } 2017}{42 \% \text { of Fiscal Year Elapsed }}$


Attachment A


Attachment A
FY18 Operating Expenses by Major Expense Category Year to Date as of November 30, 2017
42\% of Fiscal Year Elapsed

$\frac{\text { Favorable/(Unfavorable) Expense Variance to Budget }}{\underline{\text { Year to Date as of November } 30,2017}}$


- \$600
- \$800


Attachment A



Attachment A


Attachment A


Attachment A


Attachment A

## FY18 Operating Expenses:

## Year to Date as of January 31, 2018: PRELI MI NARY



| $\begin{aligned} & \infty \\ & \underset{\sim}{n} \\ & \forall \end{aligned}$ | $$ |  | $\begin{aligned} & \infty \\ & \stackrel{\infty}{\infty} \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \infty \\ & \underset{寸}{+} \\ & \underset{\sim}{\sim} \\ & \underset{\sim}{2} \end{aligned}$ | $$ |
| $\begin{aligned} & \text { N } \\ & \mathbf{N} \\ & \mathbf{O} \\ & \text { O } \end{aligned}$ | $\begin{aligned} & \text { ri} \\ & \text { N } \\ & \text { ت } \end{aligned}$ | $\begin{aligned} & \text { m } \\ & \stackrel{1}{2} \\ & \underset{\sim}{1} \\ & \underset{\sim}{2} \end{aligned}$ | $\begin{gathered} \mathrm{m} \\ N \\ \underset{\sim}{*} \end{gathered}$ |

Attachment A


Attachment A
FY18 \& FY19
Non-Controllable Budget

(\$1,766K)
$(\$ 671 K) *$
$(\$ 314 K)$
त्राISL'z\$)
(\$2,215K)
TOTAL SB1 Repeal Operating and Capital Budget Risk:
*Revised from \$737K, as per SCO estimate dated 11/3/17
14A. 14
Operating Budget:
TDA-STA-SB1: $100 \%$
(\$1,230K)

TDA-STA-SB1: $100 \%$ of the SB1 is at risk due to potential voter repeal
Capital Budget:
TDA-STA-SGR (Capital):100\% is at risk due to potential voter repeal
SB1- LPP (Capital): 100\% is at risk due to potential voter repeal

## Attachment A



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FROM: Erron Alvey, Purchasing Manager

## SUBJECT: CONSIDERATION OF ISSUING FORMAL INVITATIONS FOR BIDS FOR ROOF AND WINDOWS REPLACEMENT AT PACIFIC STATION

## I. RECOMMENDED ACTION

That the Board of Directors authorize the Purchasing Manager to issue formal Invitations for Bids for Roof and Window Replacement at Pacific Station.

## II. SUMMARY

- The Santa Cruz Metropolitan Transit District (METRO) requires the services of licensed contractors to replace the roof and windows at Pacific Station.
- Staff is requesting Board approval to use funds from the Fiscal Year 2015 allocation of the Public Modernization, Improvement, Service, and Enhancement Account Program (PTMISEA) for these procurements in an amount not to exceed $\$ 350,000$.


## III. DISCUSSION/BACKGROUND

The roof at Pacific Station was last replaced in 1997, twenty years ago. The roof has been patched many times since and is currently exhibiting leaks throughout the upstairs office areas. Several of the windows in the building also leak significantly during periods of rain. Due to the suspected conditions beneath the roof membrane and in the walls, staff is requesting funding to not only replace the roof and windows, but to repair any water-damaged materials discovered during construction.

Although the long-term future of Pacific Station may be uncertain at this time as discussions are underway with the City of Santa Cruz relative to various possibilities for a new or reconfigured transit center, there are still short-term needs. These conditions need to be addressed in order to keep the building in a state of good repair and make it a suitable environment for METRO staff, vendors, and the public to work and conduct business.

Staff is recommending the issuance of two formal Invitations for Bids for Roof and Window Replacement at Pacific Station.

## IV. FINANCIAL CONSIDERATIONSIIMPACT

This action will authorize the initiation of two procurements estimated to result in contracts with a value of $\$ 350,000$. PTMISEA funding is currently programmed as follows:
\$5,875,000 Pacific Station Allocation as of 2/26/2014
\$114,824 Remainder of FY15 Allocation plus interest
\$5,989,824 Total Pacific Station Allocation
$(\$ 3,086,247)$ Funds reallocated to MetroBase through 10/27/17
(\$1,002,244) Funds approved for other grant local matches as of 8/26/16
\$1,901,333 Funds remaining
Should the $\$ 350,000$ in FY15 PTMISEA funds be expended for the two Pacific Station projects described herein, the remaining balance available would be \$1,551,333.

## V. ALTERNATIVES CONSIDERED

- Do not approve the repairs. This is not recommended. Although alternative transit center solutions are being considered, METRO anticipates using this existing transit center for at least the next 3-5 years.


## VI. ATTACHMENTS

Attachment A: Authorizing Resolution

Prepared By: Erron Alvey, Purchasing Manager

## VII. APPROVALS:

Erron Alvey, Purchasing Manager



Approved as to fiscal impact:
Angela Aitken, Finance Manager
dk for $A A$

Alex Clifford, CEO/General Manager


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# BEFORE THE BOARD OF DIRECTORS OF THE SANTA CRUZ METROPOLITAN TRANSIT DISTRICT 

Resolution No.
On the Motion of Director:
Duly Seconded by Director:
The Following Resolution is Adopted:

## RESOLUTION OF THE BOARD OF DIRECTORS OF THE SANTA CRUZ METROPOLITAN TRANSIT DISTRICT AUTHORIZING THE PURCHASING MANAGER TO SOLICIT BIDS FOR ROOF AND WINDOWS REPLACEMENT AT PACIFIC STATION

WHEREAS, the Santa Cruz Metropolitan Transit District has a need for keeping the Pacific Station transit center in a state of good repair.

## BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE SANTA CRUZ METROPOLITAN TRANSIT DISTRICT AS FOLLOWS:

THAT, the Purchasing Manager is authorized to issue two Invitations for Bids for the services and/or supplies described above; and

THAT, the IFB's are approved for release pursuant to the provisions of the Santa Cruz Metropolitan Transit District's Procurement Policy.

PASSED AND ADOPTED by the Board of Directors of the Santa Cruz Metropolitan Transit District this 23rd day of February, 2018 by the following vote:

AYES: Directors -
NOES: Directors -
ABSTAIN: Directors -

ABSENT: Directors -

## Attachment A

Resolution No.
Page 2

Approved:
Board Chair

Attest:
Alex Clifford, CEO/General Manager

Approved as to form:
Julie A. Sherman, General Counsel

DATE: February 23, 2018
TO: Board of Directors

FROM: Erron Alvey, Purchasing Manager

## SUBJECT: CONSIDERATION OF AWARD OF CONTRACT TO PROTERRA, INC. FOR PURCHASE AND DELIVERY OF A ZERO EMISSION ELECTRIC BUS AND RELATED EQUIPMENT NOT TO EXCEED \$1,066,508

## I. RECOMMENDED ACTION

1) That the Board of Directors authorize the CEO to execute a contract with Proterra, Inc. for Purchase and Delivery of One Zero Emission Electric Bus and Related Equipment in an amount not to exceed \$1,066,508 for a five-year period.
2) That the Board of Directors authorize the CEO to execute future amendments with Proterra, Inc. for the nine (9) additional purchase options as funding becomes available, increasing the contract total for each option as it is exercised.

## II. SUMMARY

- The Santa Cruz Metropolitan Transit District (METRO) has a need for Purchase and Delivery of Zero Emission Electric Buses and Equipment.
- A joint procurement with Clemson Area Transit (lead agency), Solano County Transit, and METRO was conducted.
- A formal request for proposals was conducted to solicit proposals from qualified firms. Three (3) firms submitted proposals for review.
- An evaluation team composed of Clemson Area Transit (CAT), Solano County Transit (SolTrans), Center for Transportation and the Environment (CTE), and METRO staff reviewed and evaluated the proposals, and is recommending an award to Proterra, Inc.


## III. DISCUSSION/BACKGROUND

On September 25, 2015, the Board of Directors was presented an Electric Bus Implementation Strategy and adopted a Resolution authorizing the CEO to submit grant applications to acquire and operate electric buses.

On June 1, 2016, Caltrans announced a grant award in the amount of \$709,292 to METRO for the purchase of one battery electric bus to run new circulator service in downtown Watsonville. The grant is funded through the States Cap and Trade Program - Low Carbon Transit Operations Program (LCTOP).

LCTOP aims to curb climate change and emphasizes new and expanded services for disadvantaged communities.

After an extensive search for a transit agency that had purchase options on an existing Zero Emission Electric Bus contract that it would be willing to assign to METRO failed, METRO was successful in finding two agencies that were willing to partner in a new, joint procurement for such buses. On April 28, 2017, the Board of Directors authorized staff to participate in the joint procurement.

On May 1, 2017, CAT issued a Request for Proposals for Purchase and Delivery of Zero Emission Electric Buses and Equipment. On June 16, 2017, proposals were received and opened from Build Your Dreams (BYD), New Flyer of America, and Proterra, Inc. An evaluation team composed of Clemson Area Transit (CAT), Solano County Transit (SolTrans), Center for Transportation and the Environment (CTE), and METRO staff reviewed and evaluated the proposals, interviewed BYD and Proterra, Inc., and is recommending an award to Proterra, Inc. as the highest technically ranked firm providing the best value.

Additional time before finalizing the contract was needed by the Maintenance Department to review and verify the bus specifications, as well as develop METRO's own configuration (i.e. products specific to METRO that do not come standard on the bus) due to the transition of the Maintenance Manager. The original specifications were co-developed with CAT and approved by AI Pierce, who retried shortly thereafter.
Staff is recommending that the Board of Directors authorize the CEO to execute a five-year contract on behalf of METRO for the Purchase and Delivery of one (1) Zero Emission Electric bus and related charging equipment, with nine (9) additional bus purchase options, in an amount not to exceed \$1,066,508, and authorize the CEO to execute future bus purchase options as funding becomes available, with the understanding that staff will return to the Board to report each subsequent bus purchase and amount of funding for such purchase, and staff will add each purcahse to the applicable Capital Budget for Board approval before proceeding with an order. Proterra, Inc. will provide all services meeting all METRO's specifications and requirements of the contract. Erron Alvey, Purchasing Manager and in-house Electric Vehicle Project Manager, and Eddie Benson, Maintenance Manager, will serve as the Contract Administrators and will ensure contract compliance.

## IV. FINANCIAL CONSIDERATIONSIIMPACT

The base value of the contract is $\$ 1,066,508$ for the first Zero Emission Electric Bus and related charging equipment.

Funds to support this contract are as follows:

- \$709,292 - LCTOP Grant Award
- \$357,216 - FY15 PTMISEA

Funding is included in the Fleet Maintenance Fiscal Year 2018 Capital Budget.
The anticipated cost of exercising the nine (9) additional bus purchase options is $\$ 9,600,000$. As funding becomes available, staff will add it to the applicable Capital Budget for Board approval before proceeding with an order.

## V. ALTERNATIVES CONSIDERED

- Do not award this contract and direct staff to continue searching for existing options or issue a new RFP for a METRO contract. This is not recommended as lead time on a bus purchase is 12-18 months and this project has already been delayed by the initial search for existing options. A new bus procurement could take up to six months before a new award of a contract recommendation.


## VI. ATTACHMENTS

None

Note: A full copy of the Contract is available on request.

Prepared by: Erron Alvey, Purchasing Manager

## VII. APPROVALS:

Erron Alvey, Purchasing Manager

Approved as to fiscal impact: Angela Aitken, Finance Manager


Alex Clifford, CEO/General Manager


## SUBJECT: APPROVAL TO ADD A SECOND CUSTOMER SERVICE COORDINATOR POSITION AND ACCEPT REVISIONS TO THE CURRENT JOB DESCRIPTION

## I. RECOMMENDED ACTION

That the Board of Directors:

1) Approve the addition of a second Customer Service Coordinator position to the Customer Service Department; and,
2) Accept the revisions to the current Customer Service Representative job description.

## II. SUMMARY

- In November 2017, the Human Resources Department received the retirement notification of the Paratransit Superintendent, who was overseeing the Customer Service Department. In order to properly succession plan for the Superintendent position, on November 28, 2017 the Finance Manager, Angela Aitken, and Human Resources Manager, Jolene Church, assumed interim co-management responsibilities of the Customer Service Department.
- From November 2017 to current, an analysis of the day-to-day operational needs of the Customer Service Department was conducted by Angela Aitken.
- Deficiencies were found in supervision for multiple locations and shifts, staffing levels and operational procedures.
- Coordination and supervision of all Customer Service Representatives in two locations, 7 days a week from 7 a.m. to 6 p.m., is currently the responsibility of a single Customer Services Coordinator (CSC). This has resulted in substantial amounts of overtime and inadequate supervision when the CSC has a day off.
- It was determined that a second CSC needs to be added with both CSC's working four 10 hour shifts each. This will allow for adequate supervision at all times and an ability to create and maintain operational procedures.
- The job specification for the Customer Service Coordinator was reviewed and revised to encourage a solid pool of applicants in a recruitment with SEIU concurrence.


## III. DISCUSSION/BACKGROUND

In November 2017, the Human Resources Department received the retirement notification of the Paratransit Superintendent, who was overseeing the Customer Service Department. The Paratransit Superintendent had assumed responsibility over the Customer Service Department in June 2016 and it was determined at the time that a day-to-day supervisor would be needed, so one Customer Service Coordinator position was added to the department. For just over a year, Customer Service has operated under the Operations Department and been supervised by the Paratransit Superintendent and the Customer Service Coordinator.
In order to properly succession plan for the Paratransit Superintendent, on November 28, 2017 the Finance Manager, Angela Aitken, and Human Resources Manager, Jolene Church, assumed interim co-management responsibilities of the Customer Service Department.
From November 2017 to current, an analysis of the day-to-day operational needs of the Customer Service Department was conducted by Angela Aitken. Deficiencies were found in supervision for multiple locations and shifts, staffing levels and operational procedures.
Coordination and supervision of all Customer Service Representatives in two locations, 7 days a week from 7 a.m. to 6 p.m., is currently the responsibility of a single Customer Services Coordinator (CSC). This has resulted in substantial amounts of overtime and inadequate supervision when the CSC has a day off.
It was determined that a second CSC needs to be added with both CSC's working four 10 hour shifts each. This will allow for adequate supervision at all times and an ability to create and maintain operational procedures. In the past, the Paratransit Superintendent served as the second coordinator.

In February 2018, the job specification for the Customer Service Coordinator was reviewed and revised to encourage a solid pool of applicants for a recruitment with SEIU concurrence.

## IV. FINANCIAL CONSIDERATIONSIIMPACT

METRO's Customer Service Department currently has one FTE as a Customer Service Coordinator. One additional FTE represents an additional \$104,000 in personnel costs for the Customer Service Department for a fiscal year. The Customer Service Department has included the additional costs in the budget for FY19. The cost of the CSC for FY18, the current year, will be absorbed by favorable variance.

## V. ALTERNATIVES CONSIDERED

Reject the addition of an additional Customer Services Coordinator. Staff does not recommend this alternative as a permanent solution to address adequate levels of Customer Service staff supervision is necessary for day-to-day operations in a seven days per week operation.

## VI. ATTACHMENTS

Attachment A: Current Customer Services Coordinator Job Description
Attachment B: Revised Customer Services Coordinator Job Description

Prepared By: Jolene E. Church, Human Resources Manager

## VII. APPROVALS

Jolene E. Church, HR Manager

Approved as to fiscal impact:
Angela Aitken, Finance Manager


Alex Clifford, CEO/General Manager


## Attachment A

## CUSTOMER SERVICE COORDINATOR

## DEFINITION

Under direction, the Customer Service Coordinator provides oversight to Customer Service Representatives at the Pacific Station and other satellite locations, schedules and assigns work; provides transit, route, and schedule information to the public, both in person and telephonically; handles cash and balances sales receipts; distributes transit information; lost-and-found services; ID card administration; performs call center activities including verifying paratransit customers' eligibility and scheduling rides, providing customer service by answering inquiries and responding to customer concerns and/or elevating complaints as appropriate; assists in training staff; analyzing data, tracking and reporting information, documents and prepares correspondence, and other general administrative duties as needed.

## EXAMPLES OF DUTIES

Schedules work assignments accordance with labor contract provisions, directs department personnel, coordinates work activities, and assists department management as needed.

Coordinates a variety of departmental programs including Lost and Found, photo I.D. program, transit schedule distribution, school presentations, and other customer service activities.

Conducts and has primary responsibility for special projects related to public outreach and information.

Responds to and resolves customer service complaints, and/or escalates complaints to the appropriate department; ensures a solution is provided in a timely fashion.

Coordinates with Parts Department to replenish stock of inventory of tickets and passes at Customer Service centers.

Coordinates and conducts transit information programs for schools and other special interest groups.

Plans and implements special customer service information projects as directed.
Receives and responds to public information requests.
Replenishes bill changing and coin machines as needed.
Assists in development and preparation of management information system (MIS) reports; prepares and maintains internal control documents, records, forms, files and other statistical data, including reports of call center metrics and analysis of system effectiveness.

## Attachment A

Supervises, trains, evaluates and assists in the selection of customer service personnel.

Monitors calls to ensure quality customer service and may recommend corrective actions as appropriate.

Orders and purchases materials and supplies for department.
Works with Finance department to ensure internal controls exist for verifying cash balances and other departmental financial records.

May translate English materials into Spanish and vice versa, and provide bilingual telephone services.

Develops and conducts telephone and or in-person surveys.
Performs general office duties including typing and filing, and routine administrative details.

Perform Customer Service Representative duties as required.

## EMPLOYMENT STANDARDS

## Knowledge of:

- General office procedures
- Methods of effective customer complaint resolution
- Techniques for providing quality customer service and telephone courtesy
- Correct English usage and grammar
- Basic mathematics
- Conversational knowledge of Spanish preferred
- The Americans with Disabilities Act.
- The Labor Contract /MOU and appropriate work rules for time off


## Ability to:

- Lead and motivate personnel
- Learn transit system routes, schedules, and maps
- Convey information in a clear and intelligible manner
- Handle conflict situations in a tactful manner
- Perform with minimum instruction
- Understand inquiries and respond to them quickly
- Make correct change and handle ticket sales functions, and prepare deposits
- Use a computer and peripheral equipment
- Schedule and provide adequate coverage for work shifts


## Attachment A

## Skill in:

- Word processing and spreadsheet software
- Providing excellent public relations
- Specialized software related to functional area
- Working with sensitive groups, including disabled customers
- Selecting, directing, training, and evaluating staff
- Communicating clearly and concisely, both orally and in writing
- Establishing and maintaining effective working relationships with those contacted in the course of work


## TRAINING AND EXPERIENCE

Any combination of training and experience equivalent to:
Three (3) years successfully performing the duties of a Santa Cruz METRO Customer Service Representative OR
Two years successfully performing duties of a Santa Cruz METRO Sr. Customer Representative OR

High school diploma or equivalent AND three (3) years experience in customer service within a public transit agency; Supervisory/lead worker experience preferred.

## Special Requirements

- Possession of a valid California driver's license or ability to obtain one.
- Ability to speak/write Spanish preferred


## Physical/Mental Requirements

Frequently: Walk, climb stairs, twist (at the waist and the neck); bend (at the waist and the neck); grasp items using hands; perform functions with fine finger dexterity; talk, hear, see. Occasionally: may be required to lift up to 25 pounds (assisted); push/pull, carry, reach above head, and kneel; crouch; drive between work locations.

## Other

Frequently exposed to general public

## FLSA Status

Non-exempt
Union
SEIU - SEA

Revised 06/2016

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17A. 4

Attachment B
HUMAN RESOURCES DEPARTMENT

## CUSTOMER SERVICE COORDINATOR

## DEFINITION:

Under direction, supervises work of Customer Service Representatives, provides transit information to the public, and operates public information booths; orders District Bus Tickets and Passes, answers telephone information requests, conducts special projects and performs other related duties as assigned.

## DISTINGUISHING CHARACTERISTICS:

The Customer Service Coordinator is distinguished from the Customer Service Representative wherein the incumbent is responsible for the day to day scheduling, supervision, evaluation, and training of the Customer Service Representatives and oversight and management of the Customer Service booth and call center operations.

## EXAMPLES OF DUTIES AND RESPONSIBILITIES:

The duties listed below represent the various types of work that may be performed. The omission of specific statements of duties does not exclude them if the work is related or a logical assignment to this class.

- Schedules work assignments, supervises department personnel, and coordinates work activities of the customer service staff.
- Supervises a variety of departmental programs including Lost and Found, photo I.D. program, ticket and pass, schedule distribution, school presentations and other customer service activities.
- Conducts and has primary responsibility coordinating staff for special projects related to marketing and information.
- Responds to and resolves agency-wide customer service complaints and requests for public information.
- Orders Agency tickets and passes; coordinates with other departments for purchasing and inventory of tickets and passes.
- Coordinates and conducts transit information programs for schools and other special interest groups.
- Coordinates special event customer service activities.
- Plans and implements special customer service information projects as directed.
- Develops and implements work schedules in accordance with labor contract provision.
- Provides transit information to the public in a variety of locations including Metro Center information booths, on-board transit vehicles, schools, businesses, and other public locations.
- Assists in development and preparation of computer generated reports.
- Prepares and maintains internal control documents, records, forms, files, and other statistical data, including reports of call center metrics and analysis of system effectiveness.
- Supervises trains, evaluates and assists in the selection of customer service personnel.

Attachment B<br>HUMAN RESOURCES DEPARTMENT

- Develops, prepares and maintains internal control documents, records, forms, files and other statistical data.
- Orders and purchases materials and supplies for department.
- Prepares and maintains all required reports on telephone and booth information usage, analyzes system effectiveness and recommends corrective action.
- Meets with Finance Department and outside auditors to verify cash balances and departmental financial records.
- May utilize District hardware and software in the performance of job.
- May translate English materials into Spanish and vice versa, and provide bilingual telephone services.
- Monitors calls to ensure quality customer service and may recommend corrective actions as appropriate.
- May conduct telephone or in-person surveys.
- May perform general office duties including typing and filing, and routine administrative details.
- Performs Customer Service Representative duties as required.


## Ability to:

- Manage sales receipts, balance and reconcile monies collected, and oversee the cash handling and sales activities for the customer service department.
- Develop and oversee the scheduling of multiple location customer service representative schedules.
- Prepare, update, implement, and train staff on customer service procedures.
- Deliver exceptional customer service and public relations which includes first call resolution, deescalation of agitated customers, and responses to politically sensitive subject matter.
- Supervise, motivate, and train staff.
- Communicate succinctly and tactfully both verbally and in writing.
- Work independently with confidence under minimal instruction.
- Learn transit system routes, schedules and maps


## Knowledge of:

- General office protocol and procedures in a customer service environment, including call center and front desk functions.
- Conversational Spanish (preferred).

Cash management procedures, policies, and best practices.
MINIMUM QUALIFICATIONS:

## Education, Training and Experience:

Any combination of experience that would provide the equivalence of working three years in a customer service or call center environment which includes at least one year supervisory experience.

An associates degree in business administration, public administration, or a relevant field of study may be considered for substitution of up to one year of work experience.

Attachment B<br>HUMAN RESOURCES DEPARTMENT<br>Santa Cruz METRO

## LICENSES AND CERTIFICATES:

A valid driver license is required at the time of application. A valid State driver license is required at the time of appointment and must be maintained throughout employment.

## SPECIAL REQUIREMENTS:

Conversational Spanish speaking preferred.

## PHYSICAL AND MENTAL DEMANDS:

The physical and mental demands described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

## Physical Demands

While performing the duties of this job, the employee is regularly required to sit, walk, stand, climb stairs, reach, and/or twist (at the waist and neck), bend (at the waist and the neck); talk, hear, and see; grasp items with hands and fingers, handle, feel or operate phones, a computer, or other office equipment; perform functions with fine finger dexterity; reach with hands and arms; and perform repetitive movements of hands or wrists. The employee is infrequently required to lift up to 25 pounds (assisted); push/pull, carry, reach above head, and kneel, crouch,; drive between work locations.

Specific vision abilities required for this job include close vision and the ability to adjust focus.

## Mental Demands

While performing the duties of this class, an employee uses written and oral communication skills; reads and interprets data, information and documents; analyzes and solves problems; uses math and mathematical reasoning; performs highly detailed work; deals with multiple concurrent tasks; and interacts with others encountered in the course of work, including frequent contact with customers and/or the public and dissatisfied/difficult individuals.

## Work Environment:

The employee works in an office environment where the noise level ranges from quiet to moderate conversational with frequent public contact. Certain positions within the classification may require availability to work flexible schedule.

## OTHER CONDITIONS OF EMPLOYMENT:

May have non-standard work schedule which includes weekends, extended hours, and rotating shifts.

| *Adopted: | $00-00-00$ |
| :--- | :--- |
| *BOD Approved: $00-00-00$ |  |
| *Revised: | $02-07-18$ |
| *Job Family: | Customer Service |

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FROM: Jolene Church, Human Resources Manager

## SUBJECT: APPROVAL OF RECLASSIFICATION OF LEAD CUSTODIAN TO A WORKING TITLE OF CUSTODIAL COORDINATOR

## I. RECOMMENDED ACTION

That the Board of Directors approve the reclassification of the incumbent Lead Custodian position to a working title of Custodial Coordinator

## II. SUMMARY

- On June 29, 2016, Service Employees International Union (SEIU) formally requested a reclassification of the Lead Custodian as per SEIU Memorandum of Understanding (MOU) Article 8.7.1.
- In October 2016, the incumbent completed a Position Description Questionnaire (PDQ), signed by himself, the former Facility Maintenance Supervisor, Scott Barnes, and the former Maintenance Manager, Al Pierce. There were no changes made by either supervisor to the PDQ document submitted by the incumbent.
- In July 2017, the reclassification analysis was presented to the SEIU, stating that the incumbent was working within the scope of his job duties. SEIU challenged these findings. METRO and SEIU agreed to re-evaluate the reclassification request. Both parties engaged in an interactive process of evaluating the level of supervision and other functions of the job wherein it was believed that the incumbent was working beyond the scope of the position.
- In October 2017, when Jolene Church, the new Human Resources Manager came on board, SEIU agreed to allow time for her to conduct a desk audit and a review of the data compiled by both METRO and SEIU during the reevaluation.
- Following the incumbent's return from Medical Leave in November 2017, the Human Resources Manager performed a desk audit and in-depth review of the position and comparable data. It was determined at that time that the incumbent was working out of class and a review of the organizational structure and possible remedies were analyzed.
- In January 2018, the Human Resources Manager presented SEIU with a recommendation to reclassify the Lead Custodian to a working title of Custodial Coordinator, while placing the incumbent in the existing METRO position of Customer Service Coordinator. This was proposed as a temporary measure until a new position description could be developed as a part of the upcoming SEIU classification and compensation study. SEIU agreed.


## III. DISCUSSION/BACKGROUND

On June 29, 2016, in accordance with the SEIU MOU, Article 8.7.1, an individual reclassification request was submitted by the Lead Custodian in the Facilities Maintenance Department. The incumbent stated that he believed that his job duties were beyond the scope of the duties and competency levels required per the job description. This included the level of supervision that the incumbent provided to other custodial staff, scheduling, including after hours scheduling, evaluating and training staff, timekeeping, and overall coordination and supervision of the custodial function of the department.

In October 2016, the incumbent was provided with a Position Description Questionnaire (PDQ) wherein he provided details on his duties and the amount of time dedicated to each duty and the level of autonomy and supervision exercized.

In July 2017, the reclassification analysis was presented to the SEIU, stating that the incumbent was working within the scope of his job duties. SEIU challenged these findings and METRO and SEIU agreed to re-evaluate the reclassification request and both parties engaged in an interactive process of evaluating the level of supervision and other areas wherein it was thought the incumbent was working beyond the scope of the position.The provisional Assistant Human Resources Assistant analyzed the job descriptions of positions with similar duties and supervision both inside and outside of METRO. SEIU and METRO worked to identify the additional duties and responsibilities that the incumbent was performing.

Following her onboarding in October 2017, the new Human Resources Manager reviewed the work that had been done prior to her arrival on the Lead Custodian reclassification and requested an extension of time from the SEIU so that she could conduct a desk audit of the Lead Custodian.

It was determined during the desk audit that the Lead Custodian position had evolved to require a greater level of supervision and responsibility from when the job was created. It was also determined that the incumbent had been working out of class.

A review of the current organizational structure identified a gap in structure to accommodate the authority, supervision, and span of control exercized by the Lead Custodian. The current organizational structure includes a Lead Custodian that coordinates, supervises, and evaluates all the work of the Custodian I and II positions. The Lead Custodian reports to the Facilities Maintenance Supervisor (FMS). The scope of duties and span of control of the FMS has grown too large overtime for the FMS to also supervise the custodial group so the Lead Custodian was given that responsibility sometime in the past.

The current responsibilities of the Lead Custodian can be likened to the FMS, but on a smaller scale. Unfortunately, the current organizational structure does not have a secondary level supervisory position to supervise and coordinate the custodial workers. To remedy this, it is recommended that an intermediary position that exists elsewhere in the organization be added to the structure of the Facilities Maintenance Department as a temporary measure to allow for the immediate remedying of an out of class working condition.

It is recommended that the position of Customer Service Coordinator, which serves as an intermediary supervisory position in the Customer Service Department would be a good fit structurally as a temporary structural position in Facilities Maintenance, but with a working title of Custodial Coordinator until a new position can be developed. This will also provide an avenue for METRO to adjust the Lead Custodian's compensation by $5 \%$ to bring the position in compensation alignment with comparable agencies for the level of duties this expanded position now performs.

Most of METRO's peer comparable agencies contract out custodial services so comparable data is slim. Only two agencies have custodial services in-house and only, one, Santa Cruz County has a similar position to what we are comparing to. Santa Cruz County has a Supervising Custodian position with a salary range of \$25.47-\$32.21 per hour. METRO's Lead Custodian has a salary range of \$20.88$\$ 29.30$ per hour. METRO's Customer Service Coordinator (to be used with a working title of Custodial Coordinator) has a salary range of \$22.51-\$31.54 per hour.

The upcoming classification and compensation study for SEIU employees provides METRO with an ideal opportunity to correct positions that have evolved into new positions or where duties and competencies for jobs have changed. During the SEIU classification and compensation study, the Lead Custodian job description can be redrafted to include the expanded duties, the title formally changed to Custodial Coordinator, and the position structure of Facilities Maintenance can be changed to add the Custodial Coordinator to the organizational chart.

In January 2018, the Human Resource Manager presented the reclassification findings and recommendation to SEIU. SEIU is in agreement with the findings and this recommendation.

## IV. FINANCIAL CONSIDERATIONSIIMPACT

METRO's Fleet Department currently has 1.0 FTE that is impacted by the results of this reclassification request. As per the provisions outlined in the SEIU MOU Article 8.7.1, any impact to employee salaries resulting from a wage survey requested in June will become effective January $1^{\text {st }}$.

This represents an additional \$6,000 in salaries for the Fleet Department in FY18.

## V. ALTERNATIVES CONSIDERED

Reject the results of the Lead Custodian reclassification request. Staff does not recommend this action as the agreement between METRO and the SEIU provides for such reclassification requests and the resulting wage increase may help METRO attract and retain personnel.
VI. ATTACHMENTS

Attachment A: Lead Custodian Job Description
Attachment B: SEA Salary Schedules Effective June 15, 2017
Attachment C: SEA Salary Schedules Effective June 14, 2018

Prepared By: Jolene E. Church, Human Resources Manager

## VII. APPROVALS

Jolene E. Church, HR Manager



Approved as to fiscal impact: Angela Aitken, Finance Manager


Alex Clifford, CEO/General Manager


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# Attachment A <br> SANTA CRUZ METROPOLITAN TRANSIT DISTRICT LEAD CUSTODIAN 

## DEFINITION

Under general supervision, plans, coordinates, assigns, monitors and reviews the work of the other custodial staff, actively participates in the custodial and cleaning tasks at District facilities and transit centers, maintains custodial service records, and performs other related duties as required.

## EXAMPLES OF DUTIES

Plans, schedules, assigns, and coordinates custodial work performed in the District; resolves complaints and problems as necessary.

Trains, monitors and reviews work of custodial staff to ensure compliance with established standards and procedures; trains custodial staff in aseptic procedures, infection control and procedures for handling toxic materials as related to custodial work; trains new employees in the methods, procedures and equipment used.

Provides input into employee selection decisions, performance evaluations, disciplinary matters and other personnel decisions; maintains time records and schedules for assigned personnel.

Monitors work of contract personnel performing specialized work that may include carpet and window cleaning.

Determines quantities and types of supplies, materials, tools and equipment needed and arranges for purchase and procurement; maintains proper and accurate records; maintains equipment and tools in proper condition.

Maintains daily log of custodial work performed and prepares summary reports; performs daily inspections of District facilities.

Sweeps and collects trash in bus and passenger circulation areas and adjacent areas and rakes and removes trash from landscaped areas; sweeps, mops, scrubs, strips, waxes, and buff floors; sweeps, vacuums, shampoos and steam cleans carpets; operates heavy floor care equipment; dusts and polishes furniture, woodwork, metal work, fixtures and equipment; washes doors, windows, ledges, walls, ceilings, posts, benches, signs, coin equipment, venetian blinds, furniture, light fixtures and other furnishings.

Empties and disinfects trash receptacles and ashtrays; removes graffiti from transit centers and other locations.

Cleans and disinfects restrooms; maintains restrooms in sanitary condition and restocks supplies; cleans, sanitizes and polishes drinking fountains, sinks and other fixtures and equipment; uses chemical cleaning materials as required.

## Attachment A

Moves and arranges furniture and office equipment and performs routine maintenance; closes windows, turns off lights and locks doors to secure buildings; observes safe working practices including keeping storage areas in safe condition.

Posts and removes printed informational material at various locations.

Assists departmental crews in building and facility maintenance as necessary; may paint and perform painting preparation work on District facilities as required.

Participates in training in order to meet new technology standards and remain current in the principles and practices in assigned work activities.

## EMPLOYMENT STANDARDS

## Knowledge of:

- Modern methods, materials, tools, equipment and supplies used in custodial maintenance.
- Safety practices and procedures related to custodial work including handling toxic materials.
- Basic knowledge of general office and building maintenance work.


## Ability to:

- Plan, coordinate, direct and review the work of others.
- Effectively train others in work procedures and techniques.
- Establish and maintain effective interpersonal relationships with subordinates, other District staff and the public.
- Perform a wide variety of custodial, cleaning and general housekeeping duties in an effective and safe manner.
- Resolve technical problems as appropriate.
- Read and understand written instructions, directions and procedures.
- Prepare and maintain accurate records, logs and work orders.


## Training and Experience

Any combination of training and experience equivalent to:
Two years full-time experience performing custodial and building cleaning tasks.

## Special Requirements

Possess a valid California driver's license and safe driving record. Possess sufficient strength and stamina to perform manual labor that includes lifting and operating equipment and working outside. Available to work a flexible schedule including evenings, weekends, holidays and emergencies as needed. Willing to be exposed to a variety of cleaning chemicals and related products, using appropriate safety precautions.

Attachment B

| Effective June 15, 2017 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Step 1 | Step 1L | Step 1 lL | Step 2 | Step 2 | Step 2LI | Step 3 | Step 3 L | Step 3 LL | Step 4 | Step 4L | Step 4 LL | Step 5 | Step 5L | Step 5 LI | Step 6 | Step 61 | Step 6 LL |
| SEA SALARY SCHEDULE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ACCESS SERVICES COORDINATOR | 22.22 | 23.33 | 24.44 | 23.34 | 24.51 | 25.68 | 24.50 | 25.73 | 26.96 | 25.68 | 26.96 | 28.24 | 27.03 | 28.38 | 29.73 | 28.36 | 29.78 | 31.20 |
| ACCOUNTANTI | 29.05 | 30.50 | 31.95 | 30.50 | 32.03 | 33.56 | 32.03 | 33.63 | 35.23 | 33.63 | 35.31 | 36.99 | 35.31 | 37.08 | 38.85 | 37.08 | 38.93 | 40.78 |
| ACCOUNTANTII | 30.50 | 32.03 | 33.56 | 32.03 | 33.62 | 35.22 | 33.62 | 35.30 | 36.98 | 35.30 | 37.07 | 38.84 | 37.07 | 38.91 | 40.76 | 38.91 | 40.86 | 42.81 |
| ACCOUNTING CLERK | 19.09 | 20.04 | 20.99 | 20.05 | 21.05 | 22.05 | 21.05 | 22.10 | 23.15 | 22.10 | 23.21 | 24.32 | 23.21 | 24.37 | 25.53 | 24.37 | 25.59 | 26.81 |
| ACCOUNTING SPECIALIST | 27.91 | 29.31 | 30.71 | 29.30 | 30.77 | 32.24 | 30.77 | 32.31 | 33.85 | 32.31 | 33.93 | 35.55 | 33.93 | 35.63 | 37.33 | 35.62 | 37.40 | 39.18 |
| ACCOUNTING TECH | 21.71 | 22.80 | 23.89 | 22.79 | 23.93 | 25.07 | 23.93 | 25.13 | 26.33 | 25.12 | 26.38 | 27.64 | 26.38 | 27.70 | 29.02 | 27.69 | 29.07 | 30.45 |
| ADMIN ASSISTANT | 23.03 | 24.18 | 25.33 | 24.20 | 25.41 | 26.62 | 25.40 | 26.67 | 27.94 | 26.67 | 28.00 | 29.33 | 28.01 | 29.41 | 30.81 | 29.42 | 30.89 | 32.36 |
| ADMIN ASSISTANT/SUPERVISOR | 24.19 | 25.40 | 26.61 | 25.39 | 26.66 | 27.93 | 26.66 | 27.99 | 29.32 | 28.00 | 29.40 | 30.80 | 29.41 | 30.88 | 32.35 | 30.87 | 32.41 | 33.95 |
| ADMIIN CLERKI | 17.85 | 18.74 | 19.63 | 18.75 | 19.69 | 20.63 | 19.68 | 20.66 | 21.64 | 20.67 | 21.70 | 22.73 | 21.71 | 22.80 | 23.89 | 22.79 | 23.93 | 25.07 |
| ADMIN SPECIALIST | 24.19 | 25.40 | 26.61 | 25.37 | 26.64 | 27.91 | 26.66 | 27.99 | 29.32 | 28.01 | 29.41 | 30.81 | 29.37 | 30.84 | 32.31 | 30.84 | 32.38 | 33.92 |
| BENEFITS ADMINISTRATOR | 24.46 | 25.68 | 26.90 | 25.67 | 26.95 | 28.23 | 26.95 | 28.30 | 29.65 | 28.33 | 29.75 | 31.17 | 29.73 | 31.22 | 32.71 | 31.24 | 32.80 | 34.36 |
| CLAIMS INVESTIGATORI | 24.24 | 25.45 | 26.66 | 25.41 | 26.68 | 27.95 | 26.71 | 28.05 | 29.39 | 28.03 | 29.43 | 30.83 | 29.49 | 30.96 | 32.43 | 30.96 | 32.51 | 34.06 |
| CLAIMS INVESTIGATOR II | 26.91 | 28.26 | 29.61 | 28.24 | 29.65 | 31.06 | 29.66 | 31.14 | 32.62 | 31.16 | 32.72 | 34.28 | 32.76 | 34.40 | 36.04 | 34.40 | 36.12 | 37.84 |
| CUSTODIAL SERVICE WORKERI | 16.97 | 17.82 | 18.67 | 17.79 | 18.68 | 19.57 | 18.65 | 19.58 | 20.51 | 19.57 | 20.55 | 21.53 | 20.53 | 21.56 | 22.59 | 21.56 | 22.64 | 23.72 |
| CUSTODIA SERVICE WORKER\\| | 18.48 | 19.40 | 20.32 | 19.42 | 20.39 | 21.36 | 20.39 | 21.41 | 22.43 | 21.39 | 22.46 | 23.53 | 22.42 | 23.54 | 24.66 | 23.54 | 24.72 | 25.90 |
| CUSTOMER SERVICE COORDINATOR | 22.51 | 23.64 | 24.77 | 23.65 | 24.83 | 26.01 | 24.83 | 26.07 | 27.31 | 26.00 | 27.30 | 28.60 | 27.35 | 28.72 | 30.09 | 28.68 | 30.11 | 31.54 |
| CUSTOMER SERVICE REP | 18.75 | 19.69 | 20.63 | 19.67 | 20.65 | 21.63 | 20.64 | 21.67 | 22.70 | 21.63 | 22.71 | 23.79 | 22.71 | 23.85 | 24.99 | 23.85 | 25.04 | 26.23 |
| FAC MAINT SUPERVISOR | 31.13 | 32.69 | 34.25 | 32.68 | 34.31 | 35.94 | 34.31 | 36.03 | 37.75 | 36.01 | 37.81 | 39.61 | 37.80 | 39.69 | 41.58 | 39.67 | 41.65 | 43.63 |
| FAC MAINT WKR I | 19.01 | 19.96 | 20.91 | 19.97 | 20.97 | 21.97 | 20.92 | 21.97 | 23.02 | 21.94 | 23.04 | 24.14 | 23.02 | 24.17 | 25.32 | 24.16 | 25.37 | 26.58 |
| FAC MAINT WKR ॥ | 22.22 | 23.33 | 24.44 | 23.33 | 24.50 | 25.67 | 24.48 | 25.70 | 26.92 | 25.67 | 26.95 | 28.23 | 26.94 | 28.29 | 29.64 | 28.27 | 29.68 | 31.09 |
| FINANCIAL ANALYST | 34.35 | 36.07 | 37.79 | 36.07 | 37.87 | 39.67 | 37.87 | 39.76 | 41.65 | 39.77 | 41.76 | 43.75 | 41.76 | 43.85 | 45.94 | 43.85 | 46.04 | 48.23 |
| GRANTS/LEGISLATIVE ANALYST | 32.04 | 33.64 | 35.24 | 33.67 | 35.35 | 37.03 | 35.34 | 37.11 | 38.88 | 37.08 | 38.93 | 40.78 | 38.95 | 40.90 | 42.85 | 40.91 | 42.96 | 45.01 |
| HR CLERK | 21.77 | 22.86 | 23.95 | 22.91 | 24.06 | 25.21 | 24.03 | 25.23 | 26.43 | 25.28 | 26.54 | 27.80 | 26.50 | 27.83 | 29.16 | 27.84 | 29.23 | 30.62 |
| HR GENERALIST | 27.80 | 29.19 | 30.58 | 29.14 | 30.60 | 32.06 | 30.64 | 32.17 | 33.70 | 32.17 | 33.78 | 35.39 | 33.80 | 35.49 | 37.18 | 35.50 | 37.28 | 39.06 |
| HR SPECIALIST | 23.34 | 24.51 | 25.68 | 24.50 | 25.73 | 26.96 | 25.68 | 26.96 | 28.24 | 27.03 | 28.38 | 29.73 | 28.36 | 29.78 | 31.20 | 29.79 | 31.28 | 32.77 |
| IT TECH | 22.97 | 24.12 | 25.27 | 24.10 | 25.31 | 26.52 | 25.32 | 26.59 | 27.86 | 26.58 | 27.91 | 29.24 | 27.95 | 29.35 | 30.75 | 29.30 | 30.77 | 32.24 |
| JR.TRANS PLANNER | 23.87 | 25.06 | 26.25 | 25.05 | 26.30 | 27.55 | 26.34 | 27.66 | 28.98 | 27.63 | 29.01 | 30.39 | 29.03 | 30.48 | 31.93 | 30.47 | 31.99 | 33.51 |
| LEAD CUSTODIAN | 20.88 | 21.92 | 22.96 | 21.94 | 23.04 | 24.14 | 23.02 | 24.17 | 25.32 | 24.19 | 25.40 | 26.61 | 25.37 | 26.64 | 27.91 | 26.64 | 27.97 | 29.30 |
| LEGAL SECRETARY | 21.77 | 22.86 | 23.95 | 22.91 | 24.06 | 25.21 | 24.03 | 25.23 | 26.43 | 25.28 | 26.54 | 27.80 | 26.50 | 27.83 | 29.16 | 27.84 | 29.23 | 30.62 |
| PARALEGAL | 26.91 | 28.26 | 29.61 | 28.24 | 29.65 | 31.06 | 29.66 | 31.14 | 32.62 | 31.16 | 32.72 | 34.28 | 32.76 | 34.40 | 36.04 | 34.40 | 36.12 | 37.84 |
| PARALEGAL WITH HR DUTIES | 31.93 | 33.53 | 35.13 | 33.53 | 35.21 | 36.89 | 35.21 | 36.97 | 38.73 | 36.97 | 38.82 | 40.67 | 38.82 | 40.76 | 42.70 | 40.76 | 42.80 | 44.84 |
| PARATRANSIT ELIGIBILITY COORDINATOR | 26.91 | 28.26 | 29.61 | 28.24 | 29.65 | 31.06 | 29.66 | 31.14 | 32.62 | 31.16 | 32.72 | 34.28 | 32.76 | 34.40 | 36.04 | 34.40 | 36.12 | 37.84 |
| PAYROLL SPECIALIST | 24.04 | 25.24 | 26.44 | 25.25 | 26.51 | 27.77 | 26.51 | 27.84 | 29.17 | 27.84 | 29.23 | 30.62 | 29.22 | 30.68 | 32.14 | 30.68 | 32.21 | 33.74 |
| PERSONNEL TECHNIC:AN | 25.21 | 26.47 | 27.73 | 26.47 | 27.79 | 29.11 | 27.75 | 29.14 | 30.53 | 29.18 | 30.64 | 32.10 | 30.64 | 32.17 | 33.70 | 32.19 | 33.80 | 35.41 |
| PLANNING ANALYST | 30.37 | 31.89 | 33.41 | 31.89 | 33.48 | 35.07 | 33.48 | 35.15 | 36.82 | 35.15 | 36.91 | 38.67 | 36.90 | 38.75 | 40.60 | 38.75 | 40.69 | 42.63 |
| PURCHASING AGENT | 30.96 | 32.51 | 34.06 | 32.47 | 34.09 | 35.71 | 34.13 | 35.84 | 37.55 | 35.83 | 37.62 | 39.41 | 37.64 | 39.52 | 41.40 | 39.55 | 41.53 | 43.51 |
| PURCHASING ASSISTANT | 22.91 | 24.06 | 25.21 | 24.03 | 25.23 | 26.43 | 25.28 | 26.54 | 27.80 | 26.52 | 27.85 | 29.18 | 27.84 | 29.23 | 30.62 | 29.22 | 30.68 | 32.14 |
| REVENUE SPECIALIST | 18.54 | 19.47 | 20.40 | 19.46 | 20.43 | 21.40 | 20.44 | 21.46 | 22.48 | 21.43 | 22.50 | 23.57 | 22.50 | 23.63 | 24.76 | 23.64 | 24.82 | 26.00 |
| SAFETY SPECIALIST | 33.18 | 34.84 | 36.50 | 34.81 | 36.55 | 38.29 | 36.58 | 38.41 | 4024 | 38.39 | 40.31 | 42.23 | 40.29 | 42.30 | 44.31 | 42.32 | 44.44 | 46.56 |
| SCHEDULE ANALYST | 29.71 | 31.20 | 32.69 | 31.19 | 32.75 | 34.31 | 32.78 | 34.42 | 36.06 | 34.40 | 36.12 | 37.84 | 36.11 | 37.92 | 39.73 | 37.90 | 39.80 | 41.70 |
| = 10 Years Longevity (5\%); LL = 15 Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 37 | 3980 | 7/2017) |



Article 10.2 Longevity
"METRO shall compensate an employee with fongevity increments as follows:
Calculation Method:
Step 1: Calculate $5 \%$ of the Base (Base Step $\times 0.05$ )
Step 2: Base Step $+5 \%$ of the Base (as calculated in Step 1) to calculate $L$ ( 10 Years)
Step 3: Base Step $+2 \times 5 \%$ of the Base (as calculated in Step 1) to calculate LL ( 15 Years)

Example:
Step 1: Base Rate $=\$ 28.36 ; 5 \%$ of the Base Rate $=\$ 28.36 \times 0.05=\$ 1.42$
Step 2: $\$ 28.36+\$ 1.42=\$ 29.78$ (6L)
Step 2: $\$ 28.36+\$ 1.42=\$ 29.78(6 \mathrm{~L})$
Step 3: $\$ 28.36+\$ 1.42+\$ 1.42=\$ 31.20$ (6LL)

## Date <br> $8 / 25 / 17$



Attachment C

| Effective June 14, 2018 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Step 1 | Step 1L | Step 1 LL | Step 2 | Step 2L | Step 2 LL | Step 3 | Step 3 | Step 3 LL | Step 4 | Step 4L | Step 4 LL | Step 5 | Step 5L | Step 5 LL | Step 6 | Step 61 | Step 6 LL |
| SEA SALARY SCHEDULE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ACCESS SERVICES COORDINATOR | 22.22 | 23.33 | 24.44 | 23.34 | 24.51 | 25.68 | 24.50 | 25.73 | 26.96 | 25.68 | 26.96 | 28.24 | 27.03 | 28.38 | 29.73 | 28.36 | 29.78 | 31.20 |
| ACCOUNTANTI | 29.05 | 30.50 | 31.95 | 30.50 | 32.03 | 33.56 | 32.03 | 33.63 | 35.23 | 33.63 | 35.31 | 36.99 | 35.31 | 37.08 | 38.85 | 37.08 | 38.93 | 40.78 |
| ACCOUNTANTII | 30.50 | 32.03 | 33.56 | 32.03 | 33.62 | 35.22 | 33.62 | 35.30 | 36.98 | 35.30 | 37.07 | 38.84 | 37.07 | 38.91 | 40.76 | 38.91 | 40.86 | 42.81 |
| ACCOUNTING CLERK | 19.09 | 20.04 | 20.99 | 20.05 | 21.05 | 22.05 | 21.05 | 22.10 | 23.15 | 22.10 | 23.21 | 24.32 | 23.21 | 24.37 | 25.53 | 24.37 | 25.59 | 26.81 |
| ACCOUNTING SPECIALIST | 27.91 | 29.31 | 30.71 | 29.30 | 30.77 | 32.24 | 30.77 | 32.31 | 33.85 | 32.31 | 33.93 | 35.55 | 33.93 | 35.63 | 37.33 | 35.62 | 37.40 | 39.18 |
| ACCOUNTING TECH | 21.71 | 22.80 | 23.89 | 22.79 | 23.93 | 25.07 | 23.93 | 25.13 | 25.33 | 25.12 | 26.38 | 27.64 | 26.38 | 27.70 | 29.02 | 27.69 | 29.07 | 30.45 |
| ADMIN ASSISTANT | 23.03 | 24.18 | 25.33 | 24.20 | 25.41 | 26.62 | 25.40 | 26.57 | 27.94 | 26.67 | 28.00 | 29.33 | 28.01 | 29.41 | 30.81 | 29.42 | 30.89 | 32.36 |
| ADMIIN ASSISTANT/SUPERVISOR | 24.19 | 25.40 | 26.61 | 25.39 | 26.66 | 27.93 | 26.56 | 27.99 | 29.32 | 28.00 | 29.40 | 30.80 | 29.41 | 30.88 | 32.35 | 30.87 | 32.41 | 33.95 |
| ADMIN CLERK: | 17.85 | 18.74 | 19.63 | 18.75 | 19.69 | 20.63 | 19.68 | 20.66 | 21.64 | 20.67 | 21.70 | 22.73 | 21.71 | 22.80 | 23.89 | 22.79 | 23.93 | 25.07 |
| ADMIN SPECIALIST | 24.19 | 25.40 | 26.61 | 25.37 | 26.64 | 27.91 | 26.66 | 27.99 | 29.32 | 28.01 | 29.41 | 30.81 | 29.37 | 30.84 | 32.31 | 30.84 | 32.38 | 33.92 |
| BENEFITS ADMIINISTRATOR | 24.46 | 25.68 | 26.90 | 25.67 | 26.95 | 28.23 | 26.95 | 28.30 | 29.65 | 28.33 | 29.75 | 31.17 | 29.73 | 31.22 | 32.71 | 31.24 | 32.80 | 34.36 |
| CLAIMS INVESTIGATOR : | 24.24 | 25.45 | 26.66 | 25.41 | 26.68 | 27.95 | 26.71 | 28.05 | 29.39 | 28.03 | 29.43 | 30.83 | 29.49 | 30.96 | 32.43 | 30.96 | 32.51 | 34.06 |
| CLAIMS INVESTIGATOR II | 26.91 | 28.26 | 29.61 | 28.24 | 29.65 | 31.06 | 29.66 | 31.14 | 32.62 | 31.16 | 32.72 | 34.28 | 32.76 | 34.40 | 36.04 | 34.40 | 36.12 | 37.84 |
| CUSTODIAL SERVICE WORKER I | 16.97 | 17.82 | 18.67 | 17.79 | 18.68 | 19.57 | 18.65 | 19.58 | 20.51 | 19.57 | 20.55 | 21.53 | 20.53 | 21.56 | 22.59 | 21.56 | 22.64 | 23.72 |
| CUSTODIAL SERVICE WORKERII | 18.48 | 19.40 | 20.32 | 19.42 | 20.39 | 21.36 | 20.39 | 21.41 | 22.43 | 21.39 | 22.46 | 23.53 | 22.42 | 23.54 | 24.66 | 23.54 | 24.72 | 25.90 |
| CUSTOMER SERVICE COORDINATOR | 22.51 | 23.64 | 24.77 | 23.65 | 24.83 | 26.01 | 24.83 | 26.07 | 27.31 | 26.00 | 27.30 | 28.60 | 27.35 | 28.72 | 30.09 | 28.68 | 30.11 | 31.54 |
| CUSTOMER SERVICE REP | 18.75 | 19.69 | 20.63 | 19.67 | 20.65 | 21.63 | 20.64 | 21.67 | 22.70 | 21.63 | 22.71 | 23.79 | 22.71 | 23.85 | 24.99 | 23.85 | 25.04 | 26.23 |
| FAC MAINT SUPERVISOR | 31.13 | 32.69 | 34.25 | 32.68 | 34.31 | 35.94 | 34.31 | 36.03 | 37.75 | 36.01 | 37.81 | 39.61 | 37.80 | 39.69 | 41.58 | 39.67 | 41.65 | 43.63 |
| FAC MAINT WKRI | 19.01 | 19.96 | 20.91 | 19.97 | 20.97 | 21.97 | 20.92 | 21.97 | 23.02 | 21.94 | 23.04 | 24.14 | 23.02 | 24.17 | 25.32 | 24.16 | 25.37 | 26.58 |
| FAC MAINT WKR II | 22.22 | 23.33 | 24.44 | 23.33 | 24.50 | 25.67 | 24.48 | 25.70 | 26.92 | 25.67 | 26.95 | 28.23 | 26.94 | 28.29 | 29.64 | 28.27 | 29.68 | 31.09 |
| FINANCIAL ANALYST | 34.35 | 36.07 | 3779 | 36.07 | 37.87 | 39.67 | 37.87 | 39.76 | 41.65 | 39.77 | 41.76 | 43.75 | 41.76 | 43.85 | 45.94 | 43.85 | 46.04 | 48.23 |
| GRANTS/LEGISLATIVE ANALYST | 32.04 | 33.64 | 35.24 | 33.67 | 35.35 | 37.03 | 35.34 | 37.11 | 38.88 | 37.08 | 38.93 | 40.78 | 38.95 | 40.90 | 42.85 | 40.91 | 42.96 | 45.01 |
| HR CLERK | 21.77 | 22.86 | 23.95 | 22.91 | 24.06 | 25.21 | 24.03 | 25.23 | 26.43 | 25.28 | 26.54 | 27.80 | 26.50 | 27.83 | 29.16 | 27.84 | 29.23 | 30.62 |
| HR GENERALIST | 27.80 | 29.19 | 30.58 | 29.14 | 30.60 | 32.06 | 30.64 | 32.17 | 33.70 | 32.17 | 33.78 | 35.39 | 33.80 | 35.49 | 37.18 | 35.50 | 37.28 | 39.06 |
| HR SPECIALIST | 23.34 | 24.51 | 25.68 | 24.50 | 25.73 | 26.96 | 25.68 | 26.96 | 28.24 | 27.03 | 28.38 | 29.73 | 28.36 | 29.78 | 31.20 | 29.79 | 31.28 | 32.77 |
| IT TECH | 22.97 | 24.12 | 25.27 | 24.10 | 25.31 | 26.52 | 25.32 | 26.59 | 27.86 | 26.58 | 27.91 | 29.24 | 27.95 | 29.35 | 30.75 | 29.30 | 30.77 | 32.24 |
| JR.TRANS PLANNER | 23.87 | 25.06 | 26.25 | 25.05 | 26.30 | 27.55 | 26.34 | 27.66 | 28.98 | 27.63 | 29.01 | 30.39 | 29.03 | 30.48 | 31.93 | 30.47 | 31.99 | 33.51 |
| LEAD CUSTODIAN | 20.88 | 21.92 | 22.96 | 21.94 | 23.04 | 24.14 | 23.02 | 24.17 | 25.32 | 24.19 | 25.40 | 26.61 | 25.37 | 26.64 | 27.91 | 26.64 | 27.97 | 29.30 |
| LEGAL SECRETARY | 21.77 | 22.86 | 23.95 | 22.91 | 24.06 | 25.21 | 24.03 | 25.23 | 26.43 | 25.28 | 26.54 | 27.80 | 26.50 | 27.83 | 29.16 | 27.84 | 29.23 | 30.62 |
| paralegal | 26.91 | 28.26 | 29.61 | 28.24 | 29.65 | 31.06 | 29.66 | 31.14 | 32.62 | 31.16 | 32.72 | 34.28 | 32.76 | 34.40 | 36.04 | 34.40 | 36.12 | 37.84 |
| PARALEGAL WITH HR DUTIES | 31.93 | 33.53 | 35.13 | 33.53 | 35.21 | 36.89 | 35.21 | 36.97 | 38.73 | 36.97 | 38.82 | 40.67 | 38.82 | 40.76 | 42.70 | 40.76 | 42.80 | 44.84 |
| PARATRANSIT ELIGIBILITY COORDINATOR | 26.91 | 28.26 | 29.61 | 28.24 | 29.65 | 31.06 | 29.66 | 31.14 | 32.62 | 31.16 | 32.72 | 34.28 | 32.76 | 34.40 | 36.04 | 34.40 | 36.12 | 37.84 |
| PAYROLL SPECIALIST | 24.04 | 25.24 | 26.44 | 25.25 | 26.51 | 27.77 | 26.51 | 27.84 | 29.17 | 27.84 | 29.23 | 30.62 | 29.22 | 30.68 | 32.14 | 30.68 | 32.21 | 3374 |
| PERSONNEL TECHNICIAN | 25.21 | 26.47 | 27.73 | 26.47 | 27.79 | 29.11 | 27.75 | 29.14 | 30.53 | 29.18 | 30.64 | 32.10 | 30.64 | 32.17 | 33.70 | 32.19 | 33.80 | 35.41 |
| planiving analyst | 30.37 | 31.89 | 33.41 | 31.89 | 33.48 | 35.07 | 33.48 | 35.15 | 36.82 | 35.15 | 36.91 | 38.67 | 36.90 | 38.75 | 40.60 | 38.75 | 40.69 | 42.63 |
| PURCHASING AGENT | 30.96 | 32.51 | 34.06 | 32.47 | 34.09 | 35.71 | 34.13 | 35.84 | 37.55 | 35.83 | 37.62 | 39.41 | 37.64 | 39.52 | 41.40 | 39.55 | 41.53 | 43.51 |
| PURCHASING ASSISTANT | 22.91 | 24.06 | 25.21 | 24.03 | 25.23 | 26.43 | 25.28 | 26.54 | 27.80 | 26.52 | 27.85 | 29.18 | 27.84 | 29.23 | 30.62 | 29.22 | 30.68 | 32.14 |
| REVENUE SPECIALIST | 18.54 | 19.47 | 20.40 | 19.46 | 20.43 | 21.40 | 20.44 | 21.46 | 22.48 | 21.43 | 22.50 | 23.57 | 22.50 | 23.63 | 24.76 | 23.64 | 24.82 | 26.00 |
| SAFETY SPECIALIST | 33.18 | 34.84 | 36.50 | 34.81 | 36.55 | 38.29 | 36.58 | 38.41 | 40.24 | 38.39 | 40.31 | 42.23 | 40.29 | 42.30 | 44.31 | 42.32 | 44.44 | 46.56 |
| SCHEDULE ANALYST | 29.71 | 31.20 | 32.69 | 31.19 | 32.75 | 34.31 | 32.78 | 34.42 | 36.06 | 34.40 | 36.12 | 37.84 | 36.11 | 37.92 | 39.73 | 37.90 | 39.80 | 41.70 |

Attachment C


Article $\mathbf{1 0 . 2}$ Longevity
"METRO shali compensate an employee with longevity increments as follows:
$5 \%$ of the base salary after ten (10) years of continuous service.
An additional $5 \%$ of the base saiary after fifteen (15) years of continuous service."
Calculation Method:
Step 1: Calculate $5 \%$ of the Base (Base Step $\times 0.05$ )
Step 2: Base Step $+5 \%$ of the Base (as calculated in Step 1) to calculate L (10 Years)

$$
\begin{aligned}
& \text { Example: } \\
& \text { Step 1: Base Rate }=\$ 28.36 ; 5 \% \text { of the Base Rate }=\$ 28.36 \times 0.05=\$ 1.42 \\
& \text { Step 2: } \$ 28.36+\$ 1.42=\$ 29.78(6 \mathrm{~L}) \\
& \text { Step 3: } \$ 28.36+\$ 1.42+\$ 1.42=\$ 31.20(6 \mathrm{LL})
\end{aligned}
$$


18C. 2

DATE: February 23, 2018
TO: Board of Directors


FROM: Barrow Emerson, Planning \& Development Manager

## SUBJECT: METRO SYSTEM RIDERSHIP REPORTS FOR THE SECOND QUARTER OF

 FY18
## I. RECOMMENDED ACTION

Accept and file the METRO system ridership report for the second quarter of

## FY18.

II. SUMMARY

- This report contains ridership summaries and ridership by route for Santa Cruz Metropolitan Transit District (METRO) fixed route bus service for the second quarter (Q2) of FY18 (October 1 - December 31, 2017).
- Quarterly ridership reports are provided to keep the Board of Directors apprised of METRO's ridership statistics and ridership trends.


## III. DISCUSSION/BACKGROUND

Attachment A shows system-wide and college student ridership statistics for Q2 of FY18 and makes comparisons with ridership statistics from Q2 of FY17. This report also displays the use of passes and cash fares.

FY18 Q2 system-wide ridership increased 7.3\%
Reason(s) that Fixed-Route quarterly ridership increased include:

- Ridership comparison between FY18 second quarter and the second quarter of FY17 is for similar service levels for the first time since the COA.
- UCSC ridership levels increased 16.7\% compared to Q2 of FY17. They comprised $56.5 \%$ of total Q2 ridership in FY18, whereas they contributed to only $52.0 \%$ of system-wide ridership in FY17 Q2.
- Hwy 17 ridership decreased 3.2\%.
- Fixed-Route ridership, excluding UCSC, increased-decreased 2.9\%6.0\%.
- Child ridership, those under 46" accompanying an adult, is up $14 \%$.

Hwy 17 quarterly ridership decreased 3.2\%.
Reason(s) that Hwy 17 quarterly and YTD ridership decreased include:

## REVISED

- Increased car ownership rates across the U.S. are higher than before the recession among all households, but especially among low-income consumers - those most likely to ride the bus.
- In the past 5 years, Average Annual Daily Traffic Counts have increased on Highway 17 by 9.8\%. Increased congestion on the roads is slowing transit service and contributing to ridership decline.
- Inability to meet high ridership demand during peak commute times may have deterred discretionary riders with access to vehicles from continuing to use this service. To address this issue we will be introducing two new trips in the spring on weekday mornings, where we have seen the highest trip loads for this route.

UCSC ridership increased 16.7\%
Reason(s) that quarterly UCSC ridership decreased include:

- There were 6 more UCSC school days in Q2 FY18 compared to Q2 FY17, a 13\% increase. As UCSC comprises a substantial portion of our ridership the affect of the addition of 6 UCSC calendar days is distinct.
- Over the last five years, UCSC ridership shows an average annual increase of 2.5\%.
- UCSC ridership is compensating for the 2.3\% national downward trend in transit ridership reported by APTA and helping to bolster METRO fixed route ridership.

Quarterly Discounted Pass and Cash Fare usage decreased 0.2\% and increased 0.5\%, respectively

Reason(s) that quarterly discounted pass and cash fare usage decreased include:

- Ridership comparison between FY18 second quarter and the second quarter of FY17 is for similar service levels for the first time since the COA.
- Discounted riders are generally more transit dependent than regular riders and less likely to find alternative modes of transportation. It is expected that their ridership levels would remain relatively stable.

Quarterly Regular Pass and Cash Fare totals decreased 9.3\% and 6.8\%, respectively.
Reason(s) that quarterly regular pass and cash fare usage decreased include:

- Loss of discretionary riders. This loss of ridership may be due to the slower speeds and inadequate service provided by transit relative to traveling in a car. Over the last 5 years of Caltrans data, Average Annual Daily Traffic Counts have increased on the Highway 1 by $10 \%$.


## REVISED

- Existing discretionary riders are utilizing transit less frequently reducing the need for pass purchases. This shift in ridership patterns may be due to changing workforce travel patterns.
- AB60 passed in 2015, allowing undocumented residents to acquire a drivers' license. The number of drivers licenses issued per capita in Santa Cruz County increased $4.5 \%$ from 2014 to 2016 after years of this metric being stable.

Attachment B shows average ridership per trip for all weekday and weekend routes in Q2 of FY18. System-wide, on average there are 26 riders per trip on weekdays and 27 riders per trip weekends.

- The weekday route with the highest ridership average is route 16.
o This route serves UCSC via Laurel West.
- The weekend route with the highest ridership average is the route 16ST.
o This route is supplemental to the route 16 , which serves UCSC via Laurel East, and provides additional service primarily to UCSC students on the weekends.
- The weekday route with the lowest ridership average is route 34 .
o This route serves South Felton during the SLVUSD school term.
- The weekend route with the lowest ridership average is route 79 .
o This route serves Pajaro/East Lake.
Although FY18 Q2 showed a total ridership gain, this is primarily due to more school days for both UCSC and Cabrillo than in FY17 Q2. Contrary to this ridership increase the national trend shows public transit ridership (bus and rail) decreasing. Relative to FY15, FY16 transit ridership nationwide was down $2.3 \%$, with bus ridership in communities with less than 500,000 population showing a $5.7 \%$ decrease. Reinforcing this trend locally, between FY09 and FY18 METRO ridership for Q2 decreased approximately 12\% (Attachment C), while service hours only decreased 6.7\%.


## IV. FINANCIAL CONSIDERATIONSIIMPACT

Revenue derived from passenger fares and passes is reflected in the FY18 operating budget.

## REVISED

Board of Directors
February 23, 2017
Page 4 of 5

## V. ALTERNATIVES CONSIDERED

There are no alternatives to consider.

## VI. ATTACHMENTS

Attachment A: Quarterly System Ridership Summary for FY18 Q2 (October 1 December 31, 2017)

Attachment B: Quarterly Average Ridership by Route Report for FY18 Q2 (October 1 - December 31, 2017)

Attachment C: Total Second Quarter Ridership FY09-18

Prepared By: Cayla Hill, Planning Analyst

## VII. APPROVALS:

Barrow Emerson,
Planning and Development Manager

Approved as to fiscal impact:
Angela Aitken, Finance Manager

Alex Clifford, CEO/General Manager


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Attachment A
Quarterly System Ridership Summary


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## Attachment B

Quarterly Average Ridership by Route Report

| July 1, 2017-September 30, 2017 |  | Average Weekday Ridership per Trip |  |  |  |  | Average Weekend Ridership per Trip |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Route | Corridor | Riders | ucsc Riders | Cabrillo Riders | Discount <br> Fares and Passes | Regular Passes | Riders | ucsc Riders | Cabrillo Riders | Discount <br> Fares and Passes | Regular Passes |
|  | UCSC |  |  |  |  |  |  |  |  |  |  |
| 10 | UCSC via High St. | 54 | 52 | 0 | 1 | 0 | 52 | 48 | 0 | 2 | 1 |
| 15 | UCSC via Laurel West | 67 | 65 | 0 | 1 | 1 |  |  |  |  |  |
| 16 | UCSC via Laurel East | 85 | 81 | 0 | 1 | 1 | 40 | 38 | 0 | 1 | 0 |
| 16ST | UCSC via Laurel East Supp. |  |  |  |  |  | 92 | 88 | 0 | 1 | 1 |
| 19 | UCSC via Lower Bay | 56 | 53 | 0 | 1 | 1 | 61 | 56 | 0 | 2 | 1 |
| 20 | UCSC via West Side | 64 | 57 | 1 | 2 | 2 | 61 | 55 | 0 | 2 | 1 |
| 20D | UCSC via West Side Supp. | 33 | 32 | 0 | 0 | 0 |  |  |  |  |  |
| 22 | UCSC/Coastal Science Campus | 42 | 42 | 0 | 0 | 0 |  |  |  |  |  |
|  | Intercity |  |  |  |  |  |  |  |  |  |  |
| 35/35A | Santa Cruz/Scotts Valley/SLV | 16 | 1 | 1 | 4 | 5 | 18 | 1 | 1 | 6 | 5 |
| 69A | Capitola Road/Watsonville | 29 | 2 | 2 | 9 | 5 | 23 | 3 | 1 | 7 | 3 |
| 69W | Cap. Road/Cabrillo/Watsonville | 31 | 3 | 7 | 7 | 5 | 24 | 3 | 2 | 6 | 4 |
| 71 | Santa Cruz to Watsonville | 31 | 2 | 6 | 7 | 6 | 22 | 1 | 2 | 7 | 4 |
| 91X | Santa Cruz/Watsonville Express | 18 | 1 | 8 | 3 | 2 |  |  |  |  |  |
|  | Rural |  |  |  |  |  |  |  |  |  |  |
| 33 | Lompico SLV/Felton Faire | 8 | 0 | 0 | 1 | 4 |  |  |  |  |  |
| 34 | South Felton | 1 | 0 | 0 | 0 | 0 |  |  |  |  |  |
| 40 | Davenport/North Coast | 21 | 1 | 0 | 1 | 9 |  |  |  |  |  |
| 41 | Bonny Doon | 12 | 2 | 1 | 2 | 4 |  |  |  |  |  |
| 42 | Davenport/Bonny Doon | 14 | 2 | 1 | 2 | 4 | 13 | 2 | 1 | 3 | 2 |
|  | Local |  |  |  |  |  |  |  |  |  |  |
| 3 | Mission/Beach | 9 | 3 | 1 | 3 | 1 | 8 | 3 | 0 | 3 | 1 |
| 4 | Harvey West/Emeline | 14 | 1 | 0 | 7 | 3 |  |  |  |  |  |
| 55 | Rio Del Mar | 16 | 0 | 7 | 4 | 2 | 7 | 0 | 1 | 3 | 2 |
| 66 | Live Oak via 17th | 16 | 2 | 1 | 4 | 3 | 12 | 2 | 1 | 4 | 2 |
| 68 | Like Oak via Broadway/Portola | 13 | 3 | 1 | 4 | 2 | 11 | 2 | 1 | 4 | 2 |
| 72 | Watsonville Hospital/Pinto Lake | 15 | 0 | 2 | 5 | 2 | 9 | 0 | 0 | 4 | 1 |
| 745 | PVHS/Watsonville Hospital | 15 | 0 | 1 | 1 | 2 |  |  |  |  |  |
| 75 | Green Valley Road | 16 | 0 | 1 | 6 | 2 | 13 | 0 | 1 | 5 | 2 |
| 79 | Pajaro/East Lake | 7 | 0 | 1 | 3 | 1 | 5 | 0 | 0 | 2 | 1 |
|  | Highway 17 |  |  |  |  |  |  |  |  |  |  |
| Hwy 17 | Hwy 17 Express | 17 | - | - | 1 | 7 | 18 | - | - | 1 | 2 |
| Syst | em-wide Avg. Riders per Trip | 26 | 14 | 2 | 3 | 3 | 27 | 17 | 1 | 3 | 2 |

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Attachment C


19C. 1

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DATE: February 23, 2018
TO: Board of Directors


FROM: Barrow Emerson, Planning and Development Manager

## SUBJECT: CONSIDERATION OF AWARD OF CONTRACT TO DAN BOYLE \& ASSOCIATES, INC. FOR A DOWNTOWN SANTA CRUZ TRANSIT OPERATIONS ANALYSIS NOT TO EXCEED \$49,890

## I. RECOMMENDED ACTION

That the Board of Directors authorize the CEO to execute a contract with Dan Boyle \& Associates, Inc. for a Downtown Santa Cruz Transit
Operations Analysis in an amount not to exceed \$49,890

## II. SUMMARY

- The Santa Cruz Metropolitan Transit District (METRO) has a need for a Downtown Santa Cruz Transit Operations Analysis.
- A formal request for proposals was conducted to solicit proposals from qualified firms. Three firms submitted proposals for METRO's review.
- A three-member evaluation team composed of METRO and City of Santa Cruz staff reviewed and evaluated the proposals, and is recommending an award to Dan Boyle \& Associates, Inc., the highest ranked firm.


## III. DISCUSSION/BACKGROUND

METRO and the City of Santa Cruz have been working together since 2001 to identify the best long term plan for METRO operations in downtown Santa Cruz, including both services and facilities.

Redevelopment of the Pacific Station site has been discussed as there are rehabilitation activities under consideration by METRO and there are City interests in urban revitalization in downtown Santa Cruz. As part of this planning effort, METRO is interested in the efficient operation of the bus system in downtown. An analysis of our operating protocols could identify opportunities for operating efficiencies and improved customer convenience. Among the topics to be analyzed are:

- Could METRO operate an efficient/effective system with fewer routes/services accessing downtown Santa Cruz?
- Are there other ways to distribute downtown bus bays other than in a hub in a service oriented, cost-effective manner?
- Are METRO's current assumptions for current and future bus bay requirements relatively accurate? This question also includes potential opportunities presented by the introduction of Automatic Vehicle Locator technology in terms of reducing bus bays requirements and enhancing customer convenience.

As discussed above, a key part of this analysis will be consideration of recent technology advances in operating fleet management and customer communications, including real time bus arrival information. METRO has identified a number of features of our current operating protocol that it would like analyzed in the context of how these features are performed at other transit districts around the country.

At its August 25, 2017 meeting, the Board authorized staff to issue a Request for Proposals for a Downtown Santa Cruz Transit Operations Analysis. On October 3, 2017, METRO distributed Request for Proposals (RFP) No. 18-04 to 21firms, posted notice on its website and sent email notices to all GovDelivery subscribers. On October 31, 2017, proposals were received and opened from three firms. A list of these firms is provided in Attachment A. A three-member evaluation team, composed of staff from both METRO and the City of Santa Cruz, has reviewed and evaluated the proposals.

The evaluation team used the following criteria as contained in the Request for Proposals:

| Evaluation Criteria | Points |
| :--- | :---: |
| Ability to perform work in required timeframe | Pass/Fail |
| Project understanding | 10 |
| Past record of team members' performance and <br> experience | 50 |
| Cost proposal | 40 |
| Total Points Possible | $\mathbf{1 0 0}$ |

The evaluation team determined that Dan Boyle \& Associates, Inc. was the highest ranked firm. Staff is recommending that the Board of Directors authorize the CEO to execute a contract on behalf of METRO with Dan Boyle \& Associates, Inc. for a Downtown Santa Cruz Transit Operations Analysis in an amount not to exceed $\$ 49,890$. The Contractor will provide all services meeting all METRO's specifications and requirements of the contract. Barrow Emerson,

Planning and Development Manager, will serve as the Contract Administrator and will ensure contract compliance.

## IV. FINANCIAL CONSIDERATIONS/IMPACT

The value of the contract is $\$ 49,890$. The City of Santa Cruz has agreed to contribute $50 \%$ of this cost. METRO's portion will be $\$ 24,945$. Funds to support METRO's portion of this contract are included in the Planning Department FY18 Professional/Technical Services (503031) Operating Budget.

## V. ALTERNATIVES CONSIDERED

- No alternative is recommended. The information requested from the consultant is necessary in order to make important decisions about the future of METRO operations in downtown Santa Cruz.


## VI. ATTACHMENTS

Attachment A: List of Responding Firms
Attachment B: Contract with Dan Boyle \& Associates, Inc.

## Note: A full copy of the Contract is available on request.

Prepared By: Joan Jeffries, Administrative Specialist Barrow Emerson, Planning \& Development Manager

## VII. APPROVALS:

Barrow Emerson, Planning \& Development Manager


Approved as to fiscal impact: Angela Aitken, Finance Manager


Alex Clifford, CEO/General Manager


## Attachment A



Responding Firms for RFP No. 18-04

## Downtown Santa Cruz Transit Operations Analysis

Received by October 31, 2017 at 5:00 PM

| AECOM Technical Services, Inc. | San Jose | CA |
| :--- | :--- | :--- |
| Dan Boyle \& Associates, Inc. | San Diego | CA |
| NelsonlNygaard Consulting Associates, Inc. | San Francisco | CA |

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# PROFESSIONAL SERVICES CONTRACT FOR A DOWNTOWN SANTA CRUZ TRANSIT OPERATIONS ANALYSIS (18-04) 

THIS CONTRACT is made effective on February 28, 2018 between the SANTA CRUZ METROPOLITAN TRANSIT DISTRICT ("Santa Cruz METRO"), a political subdivision of the State of California, and DAN BOYLE \& ASSOCIATES, INC. ("Consultant").

## 1. RECITALS

1.01 Santa Cruz METRO's Primary Objective

Santa Cruz METRO is a public entity whose primary objective is providing public transportation and which has its principal office at 110 Vernon Street, Santa Cruz, California 95060.
1.02 Santa Cruz METRO’s Need for a Downtown Santa Cruz Transit Operations Analysis

Santa Cruz METRO has the need for a Downtown Santa Cruz Transit Operations Analysis. In order to obtain these services, Santa Cruz METRO issued a Request for Proposals, dated October 3, 2017, setting forth specifications for such services. The Request for Proposals is attached hereto and incorporated herein by reference as Exhibit A.
1.03 Consultant's Proposal

Consultant is a firm qualified to provide a Downtown Santa Cruz Transit Operations Analysis and whose principal place of business is 13077 Signature Point, Suite 200, San Diego, California 92130. Pursuant to the Request for Proposals issued by Santa Cruz METRO, Consultant submitted a proposal for a Downtown Santa Cruz Transit Operations Analysis, which is attached hereto and incorporated herein by reference as Exhibit B
1.04 Selection of Consultant and Intent of Contract

On January 26, 2018, Santa Cruz METRO selected Consultant as the offeror whose proposal was most advantageous to Santa Cruz METRO to provide the Downtown Santa Cruz Transit Operations Analysis described herein. This Contract is intended to fix the provisions of these services.

Santa Cruz METRO and Consultant agree as follows:

## 2. INCORPORATED DOCUMENTS AND APPLICABLE LAW

2.01 Documents Incorporated in this Contract

The documents listed below are attached to this Contract and by reference made a part hereof. This is an integrated Contract. This writing constitutes the final expression of the parties' Contract, and it is a complete and exclusive statement of the provisions of that Contract, except for written amendments, if any, made after the date of this Contract in accordance with Section 12.15 of the General Conditions to the Contract.

## A. Exhibit A

Santa Cruz METRO’s "Request for Proposals" dated October 3, 2017, including Addendum No. 1 dated October 19, 2017.

## Attachment B

## B. Exhibit B (Consultant's Proposal)

Consultant's Proposal to Santa Cruz METRO for a Downtown Santa Cruz Transit Operations Analysis, signed and dated by Consultant.
2.02 Conflicts

Where in conflict, the provisions of this writing supersede those of the above-referenced documents, Exhibits A and B. Where in conflict, the provisions of Exhibit A supersede Exhibit B.
2.03 Recitals

The Recitals set forth in Article 1 are part of this Contract.

## 3. DEFINITIONS

3.01 General

The terms below (or pronouns in place of them) have the following meaning in the Contract:
3.01.01 CONTRACT - The Contract consists of this document, the attachments incorporated herein in accordance with Article 2, and any written amendments made in accordance with Part IV, Section 12.15 of the General Conditions to the Contract.
3.01.02 CONSULTANT - The Consultant selected by Santa Cruz METRO for this project in accordance with the Request for Proposals issued October 3, 2017.
3.01.03 CONSULTANT'S STAFF - Employees of Consultant.
3.01.04 DAYS - Calendar days.
3.01.05 OFFEROR - Consultant whose proposal was accepted under the terms and conditions of the Request for Proposals issued October 3, 2017.
3.01.06 PROVISION - Any term, agreement, covenant, condition, clause, qualification, restriction, reservation, or other stipulation in the Contract that defines or otherwise controls, establishes, or limits the performance required or permitted by either party.
3.01.07 SCOPE OF WORK (OR "WORK") - The entire obligation under the Contract, including, without limitation, all labor, equipment, materials, supplies, transportation, services, and other work products and expenses, express or implied, in the Contract.

## 4. TIME OF PERFORMANCE

4.01 Term

The term of this Contract will be for a period not to exceed one (1) year and shall commence upon the execution of the Contract by Santa Cruz METRO.

Upon satisfactory performance of services, Santa Cruz METRO may extend this agreement beyond the initial term when mutually agreed to in writing by the parties.

## Attachment B

## 5. COMPENSATION

5.01 Terms of Payment

Santa Cruz METRO shall compensate Consultant in an amount not to exceed the amounts/rates agreed upon by Santa Cruz METRO. Santa Cruz METRO shall reasonably determine whether work has been successfully performed for purposes of payment. Compensation shall be made within thirty (30) days of Santa Cruz METRO’s written approval of Consultant's written invoice for said work. Consultant understands and agrees that if they exceed the $\mathbf{\$ 4 9 , 8 9 0}$ maximum amount payable under this Contract, they do so at their own risk.

Invoices

Consultant shall submit invoices with a purchase order number provided by Santa Cruz METRO on a monthly basis. Consultant's invoices shall include detailed records showing actual time devoted, work accomplished, date work accomplished, personnel used, and amount billed per hour. Expenses shall only be billed if allowed under the Contract.

Said invoice records shall be kept up-to-date at all times and shall be available for inspection by Santa Cruz METRO (or any grantor of Santa Cruz METRO, including, without limitation, any State or Federal agency providing project funding or reimbursement) at any time for any reason upon demand for not less than four (4) years after the date of expiration or termination of the Contract. Under penalty of law, Consultant represents that all amounts billed to Santa Cruz METRO are (1) actually incurred; (2) reasonable in amount; (3) related to this Contract; and (4) necessary for performance of the project.

## 6. NOTICES

All notices under this Contract shall be deemed duly given upon delivery, if delivered by hand, or three (3) days after posting if sent by registered mail, receipt requested, to a party hereto at the address hereinunder set forth, or to such other address as a party may designate by notice pursuant hereto.

Santa Cruz METRO<br>Santa Cruz Metropolitan Transit District<br>110 Vernon Street<br>Santa Cruz, CA 95060<br>Attention: Alex Clifford, CEO/General Manager

## CONSULTANT

Dan Boyle \& Associates, Inc.
13077 Signature Point, Suite 200
San Diego, CA 92130
Attention: Daniel Boyle, President
(858) 259-6515
dan@danboyleandassociates.com

## Attachment B

## 7. ACCEPTANCE OF ELECTRONIC SIGNATURES AND COUNTERPARTS

The parties agree that this Contract, agreements ancillary to this Contract, and related documents to be entered into this Contract will be considered executed when the signature of a party is delivered by scanned image as an attachment to electronic mail. Such scanned signature must be treated in all respects as having the same effect as an original signature. Each party further agrees that this Contract may be executed in two or more counterparts, all of which constitute one and the same instrument.
8. AUTHORITY

Each party has full power and authority to enter into and perform this Contract and the person signing this Contract on behalf of each has been properly authorized and empowered to enter into this Contract. Each party further acknowledges that it has read this Contract, understands it, and agrees to be bound by it.

Signed on $\qquad$

Santa Cruz METRO -
SANTA CRUZ METROPOLITAN TRANSIT DISTRICT
Alex Clifford, CEO/General Manager

Consultant -
DAN BOYLE \& ASSOCIATES, INC.
Daniel Boyle, President


Approved as to Form:
Julie A. Sherman, General Counsel


TO: Board of Directors

FROM: Barrow Emerson, Planning \& Development Manager

## SUBJECT: ACCEPT INITIAL FARE RESTRUCTURING ANALYSIS AND CONCEPTS AND DIRECT STAFF TO INITIATE PUBLIC OUTREACH

## I. RECOMMENDED ACTION

That the Board of Directors receive initial fare restructuring analysis and
concepts and direct staff to initiate public outreach
II. SUMMARY

- Santa Cruz Metropolitan Transit District (METRO) staff has been conducting preliminary analysis on fare restructuring for local and Highway 17 Express services, including opportunities for improved fare payment technology. There will be no increase in ParaCruz fares as part of this fare restructure.
- This analysis has determined that because of stagnant revenues and increasing costs, new revenue is necessary to avoid reducing service within the next five years.
- At its February $8^{\text {th }}$ meeting, the Finance, Budget and Audit Standing Committee directed staff to present initial passenger fare restructuring analysis and concepts to the Board at its February $23{ }^{\text {rd }}$ meeting.
- Staff requests that the Board of Directors receive an initial analysis and concepts and direct staff to initiate public outreach.


## III. DISCUSSION/BACKGROUND

Background
As part of long term financial and service planning, METRO staff has been conducting preliminary analysis of passenger fare restructuring for local and Highway 17 Express services, including technological upgrades to fare payment methods. There will be no increase in ParaCruz fares as part of this fare restructure.

This analysis is necessary because of potential risks to the 5-year balanced budget. Based on future budget projections (See Attachment A1 and A2), METRO will need additional revenue to maintain service levels over the next five years, as funding sources remain relatively stable while costs continue to increase.

Staff presented the initial passenger fare restructure analysis and concepts to the Finance, Budget, and Audit Standing Committee at its February $8^{\text {th }}$ meeting.

The two key concepts presented were:

1. The relative amount of revenue that could be raised with either a $\$ 0.25$ or $\$ 0.50$ increase to the current $\$ 2.00$ base fare and accompanying equal increases in all pass costs for local METRO bus services.
2. A list of potential targeted strategies that could provide financial savings for subsegments of METRO's ridership.

## Scale of Revenue Opportunities

METRO's fixed-route passenger fare revenue for FY17 was $\$ 9.4 \mathrm{M}$ with almost half of passenger fare revenue coming from funding contracts with UCSC and Cabrillo College for fixed route bus service that serves both college campuses. Based on FY17 ridership, the following is a preliminary estimate of potential fare revenue growth from passenger fare increases (Attachment B):
A. A base passenger fare increase of $\$ 0.25$ with a $12.5 \%$ increase across all fares and contracts would result in approximately $\$ 1 \mathrm{M}$ of gross revenue gain.
B. A base passenger fare increase of $\$ 0.50$ with a $25 \%$ increase across all fares and contracts could result in approximately $\$ 2 \mathrm{M}$ of gross revenue gain.
The purpose of providing these estimates is to clarify the potential scale of passenger revenue growth that is possible and its relative impact on the METRO annual budget. It is important to understand that the dollar values identified above are only estimates of gross revenue and that these values are not the real level of actual net revenue that would be gained, as it is assumed there would be lost ridership as a result of increased fares.
Historically, transit districts can see a ridership loss of around 4-5\% with a 10\% fare increase. Attachment B shows the potential impact of a 5\% ridership loss, reducing potential revenue by approximately $\$ 100,000$ and $\$ 200,000$ respectively, for the two potential fare increase levels noted above.

The estimates above assume that, leaving the fare increase aside, annual ridership will remain stable, an assumption that is contrary to declining public transit ridership trends across the country.

It also important to understand that these projections assume the UCSC and Cabrillo service contracts also increase by the same percentages. The ability of the two colleges to accommodate these increases has not been confirmed.

## Targeted Strategies

Separate from the two fare increase estimates noted above (A \& B), Attachment B shows opportunities to implement targeted pricing strategies that would address various needs and issues of our non-UCSC/Cabrillo passenger ridership who are generally transit dependent and have lower incomes.

- Scenario 1 - Increase the base fare to $\$ 2.25$ or $\$ 2,50$ but decrease the relative cost of the day pass, by reducing the current day pass cost (\$6) from three times the base fare to 2 ( $\$ 4.50$ or $\$ 5$ ) or 2.5 ( $\$ 5.50$ or $\$ 6.25$ ) times the single ride fare.

This proposal is intended to encourage use and give financial relief to people required to take multiple trips in one direction to complete their one way journey, in part due to METRO service network limitations. This could reduce the gross revenue increase by $\$ 60,000$ to $\$ 135,000$ depending on which strategy is chosen.

The next three scenarios are intended to reduce the number of patrons paying with cash through discounts for using passes/SMARTCARDS. Reductions in cash payments have the opportunity to help reduce METRO operating costs such as boarding delays and fare processing as well.

- Scenario 2 - Increase the base fare to $\$ 2.25$ or $\$ 2.50$, but hold the current fare for payment using any of the various passes currently offered.

Passes are popular; therefore this scenario would have a significant impact on any potential revenue increase. Assuming 5\% or $10 \%$ of patrons (depending on the level of fare increase) switch from paying single ride fares to using the discounted 15-Ride Pass this scenario could reduce the gross revenue increase by $\$ 460,000$ to $\$ 1,200,000$ depending on which strategy is chosen. This significant loss would be due to the extensive discount created if we did not increase the cost of passes at all. This scenario could result in a lower percentage of ridership loss compared to other scenarios discussed herein.

- Scenario 3 - Increase the base fare to $\$ 2.25$ or $\$ 2.50$, but hold the current fare for payments using a SMARTCARD.

There is currently limited use of SMARTCARDS because of difficulty in acquiring and reloading them. Some potential fare technology improvements could address this issue. This could reduce the gross revenue increase by $\$ 57,000$ to $\$ 93,000$ depending on which strategy is chosen.

- Scenario 4 - Increase value of Cruz Cash cards by providing $\$ 11$ value for $\$ 10$ cost, to encourage non-cash payments.

This scenario could reduce the gross revenue increase by $\$ 16,000$.
The following scenario is intended to create a fare product that staff feels will serve a specific demand.

- Scenario 5 - Creation of a 20-trip youth pass at a lower price than the monthly pass, because the monthly pass doesn't seem to match youth use patterns (i.e., occasional weekday school related trips). A pricing for this product has not yet been determined so potential revenue loss has yet not been calculated.

Again, adopting any of the above five scenarios would reduce the potential level of possible new revenue, as shown in Attachment B.

The premise of this last scenario is creating revenue to fund increased service.

- Scenario 6 - Currently the Hwy 17 Express 31-day pass is priced at approximately $50 \%$ discount (\$145), whereas most comparable commuter bus services provide only 25-33\% discounts.

Additional funding of approximately $\$ 79,000$ to $\$ 171,000$ could fund 2-6 additional daily one-way trips in the Santa Cruz to San Jose corridor. It is not recommended to increase the current \$7 one-way fare.

Introduction of the types of fare payment methods discussed below would not only provide patrons financial incentives and additional convenience, but would also speed up the boarding process, which would reduce operating costs for METRO and improve on-time performance for patrons.

## Passenger Fare Payment Technology

In addition to the strategies discussed above to reduce the financial impact of a base fare and passes increases, there is also the opportunity to improve customer convenience, amenity and experience through modernizing fare payment products and methods.
Basic passenger fare restructuring, such as raising the base passenger fare and adjusting the discount of a monthly pass, can be achieved without any change in passenger fare collection technology. However, in order for METRO to provide some passenger fare payment methods, improved technological features may be required.

These include:
A. Mobile ticketing, which allows purchase of tickets on mobile devices and fast and efficient boarding; and,
B. Account based systems, which allow customers to reload value to their various pass types remotely online in real time, which again contributes to decreased boarding time.

New passenger fare collection technology could be implemented concurrently with the passenger fare restructuring if desired, or at a later date. A staff recommendation on new fare collection technology would be made based on the necessity of the particular technological features to implement the desired fare payment and pricing strategies, along with implementation cost and timeframe considerations.

METRO is currently engaging technology vendors and analyzing the various new technological features being introduced at many of our peer transit agencies. At the

March Board meeting, staff will request approval to release a Request for Proposals to secure a vendor proposal for fare payment technology advances, to determine whether the costs are within METRO's capacity and the advances meet METRO's needs.

## Community Outreach

In accordance with METRO policy and FTA regulations, METRO staff is currently conducting outreach with our customers, with regard to the topics discussed in this report, through:
A. Face-to-face surveys at Pacific Station and Watsonville Transit Center; and,
B. Online surveys specifically tailored to both local and Hwy 17 riders;

Staff requests the Board direct staff to initiate public outreach activities to discuss the concepts presented above, including:
A. Speaking engagements with various stakeholder groups, such as representatives of the senior and disabled communities; and,
B. A series of geographically oriented public open houses.

The goal of this outreach is to further understand passenger travel patterns and which passenger fare payment technology improvements would be most beneficial to our riders.

## Process

Staff has initiated the following community outreach process in order to provide adequate time for public consideration prior to a final passenger fare restructuring decision May 2018 and the adoption of the METRO annual budget in June 2018:
A. February through March 2018: Staff analysis and community engagement
B. March 23, 2018: Preliminary staff recommendations to the Board
C. March - May 2018: Formal Public comment process
D. May 18, 2018: Public Hearing and possible Board adoption of revised Fare Policy
E. January 2019: Possible implementation of revised fare structure and enhanced fare payment technology.

The public outreach process set forth above will also include a number of targeted efforts, which may include all or some of the following: bilingual onboard messages for customers, newspaper notices, a news release, and community meetings. In addition, presentations will be made to the METRO Advisory Committee (MAC), UCSC and Cabrillo College, which have service contracts with METRO. Finally, staff will reach out to community-based organizations to inform them of the proposed changes. Public comments/feedback will be shared with the Board.

## IV. FINANCIAL CONSIDERATIONS/IMPACT

The initiation of a passenger fare restructuring analysis does not, in itself, have a financial impact, although outcomes of the process may result in initiatives that could have financial considerations, including increased passenger revenue and/or additional costs to provide improved fare technology tools.

## V. ALTERNATIVES CONSIDERED

The alternative is to not perform long-range passenger fare restructuring analysis, by which we could be missing possible opportunities related to operating efficiencies, marketing and long-term budget planning. This is not recommended.

## VI. ATTACHMENTS

## Attachment A1: Total Revenue \& Expenses FY12 - FY 22

Attachment A2: CPI Chart Updated 8-30-17
Attachment B: FY19 Fare Increase Scenarios

Prepared By: Barrow Emerson, Planning \& Development Manager

Approved as to fiscal impact:
Angela Aitken, Finance Manager
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Alex Clifford, CEO/General Manager


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## Attachment A1



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Attachment A2
CPI Chart updated 08-30-2017


* Total Expenses do not include year-end Depreciation, W/C IBNR, GASB 45 OPEB adjustments, or GASB 68 Pension adjustments.

21A2.1

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Attachment B


21B. 1

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DATE: February 23, 2018
TO: Board of Directors
FROM: Thomas Hiltner, Grants/Legislative Analyst

## SUBJECT: CONSIDER A RESOLUTION IN SUPPORT OF PROPOSITION 69 ON THE STATEWIDE JUNE 2018 BALLOT AND IN OPPOSITION TO EFFORTS TO REPEAL THE "ROAD REPAIR AND ACCOUNTABILITY ACT" (SB 1)

## I. RECOMMENDED ACTION

That the Board of Directors adopt a resolution in support of Proposition 69 on the June 2018 statewide ballot and in opposition to efforts to repeal SB 1.

## II. SUMMARY

- The State of California routinely diverted transportation revenue into the general fund and to service bond debt, thereby depriving transportation programs of funding.
- Proposition 69 would amend the California State Constitution to ensure that new transportation revenue cannot be diverted to non-transportation uses.
- Senate Bill 1, the Road Repair and Accountability Act of 2017 (SB 1) generates 5.2 billion dollars annually for transportation projects.
- Opponents of SB 1 have launched a petition effort to repeal the legislation, which voters will decide in November if the petition is successful.
- Adopting a resolution to support Proposition 69 and to oppose efforts to repeal SB 1 helps to establish a solid block of transportation providers to defend SB 1 as a source of critically needed infrastructure funding and to oppose efforts to repeal it.
- Staff recommends that the Board adopt the resolution.


## III. DISCUSSION/BACKGROUND

California transportation funding had routinely been used in the general fund for bond debt service. As an example, in 2010, the Legislature engineered the "gas tax swap" to create budget flexibility. In reality, the gas tax swap enabled excise taxes to be used for debt repayment because the sales tax on fuel was restricted to transportation needs. By eliminating the sales tax on gasoline and replacing it with an excise tax, the Legislature was able to add budget flexibility, which Proposition 69 would eliminate.

Proposition 69, the "Transportation Taxes and Fees Lockbox and Appropriations Limit Exemption Amendment," will prevent diverting transportation revenue from new taxes and fees. Proposition 69 is important companion legislation to SB 1 because it prevents any of the new transportation taxes and fees from being used for other purposes.

Senate Bill 1, the Road Repair and Accountability Act of 2017 (SB 1), is landmark legislation that generates approximately $\$ 5$ billion annually for ongoing and new transportation improvements which support reduction of greenhouse gas emissions and provide new transit service. In FY19 new transportation revenue from SB 1 will provide METRO approximately $\$ 2.75$ million more in operating and capital assistance, which is critically needed to maintain infrastructure in a state of good repair. Of these funds, approximately $\$ 1.8$ million can be used for either operations or capital, while the remaining approximately $\$ 950,000$ from the State of Good Repair and Local Partnership Program categories can only be used for capital projects. California has not had a major transportation infrastructurefunding bill since Proposition1B of 20016.

Staff recommends that the Board adopt a resolution (Attachment A) in order to establish METRO's backing of Proposition 69 SB and opposition to the efforts to repeal SB1, with the understanding that METRO public funds will not be used to support or oppose said ballot measures.

## IV. FINANCIAL CONSIDERATIONS/IMPACT

SB 1 will generate approximately $\$ 2.75$ million in FY19 above FY17 funding levels. METRO has budgeted anticipated SB 1 revenue into its five-year budget, and repealing SB 1 now would jeopardize transit service in Santa Cruz.

## V. ALTERNATIVES CONSIDERED

Don't adopt a resolution to convey the Board's position regarding legislation that impact public transit. This is not recommended as supporters and opponents of such legislation are ramping up campaigns over the future of transportation revenue in California. METRO

## VI. ATTACHMENTS

## Attachment A: Resolution supporting Proposition 69 and opposing the repeal of SB 1

Prepared By: Thomas Hiltner, Grants/Legislative Analyst

## VII. APPROVALS:

Barrow Emerson, Planning and Development Manager


Approved as to fiscal impact: Angela Aitken, Finance Manager
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Alex Clifford, CEO/General Manager


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## Attachment A

# BEFORE THE BOARD OF DIRECTORS OF THE SANTA CRUZ METROPOLITAN TRANSIT DISTRICT 

Resolution No. $\qquad$
On the Motion of Director: Duly Seconded by Director: $\qquad$
The Following Resolution is Adopted:

## RESOLUTION OF THE BOARD OF DIRECTORS OF THE SANTA CRUZ METROPOLITAN TRANSIT DISTRICT IN SUPPORT OF PROPOSITION 69 ON THE JUNE 2018 BALLOT AND OPPOSING EFFORTS TO REPEAL THE ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017 (SB 1)

WHEREAS, according to a report from the California Transit Association, California's local public transportation agencies have faced a 10-year, $\$ 72$ billion shortfall when comparing available funding to the actual transit capital and operating needs for rehabilitating transit systems and expanding service; and

WHEREAS, Proposition 69 on the June 2018 ballot would add additional accountability for taxpayers by preventing the State Legislature from diverting or raiding any new transportation revenues for non-transportation improvement purposes; and

WHEREAS, the "Road Repair and Accountability Act of 2017" (SB 1 Beall), passed by the Legislature and signed by the Governor last year, will raise $\$ 5$ billion annually in long-term, dedicated funding to invest in public transportation, make road safety improvements, fill potholes and repair local streets, highways, bridges and overpasses, with the revenues split equally between state and local government projects; and

WHEREAS, SB 1 represents the largest state investment in public transportation in a generation, providing more than $\$ 700$ million per year in new funding for public transit, including funding to expand transit capital and operations; replace older transit vehicles with zero-emission vehicles; and invest in intercity rail and commuter rail; and

WHEREAS, SB 1 will improve air quality and the environment by investing in public transit, and active transportation helps get people out of cars; and

WHEREAS, SB 1 provides critically-needed funding for the Santa Cruz Metropolitan Transit District that will be used to: purchase two zero-emission battery-electric buses; purchase six, 45' over-the-road coaches for the Highway 17 Express; provide local matching funds for a federal grant for nine CNG

## Attachment A

Resolution No.
Page 3
replacement buses; refurbish three CNG buses to extend useful life by six-eight years; and implement an Automatic Vehicle Locator system on all METRO buses; and

WHEREAS, SB 1 contains strong accountability provisions to streamline projects by cutting bureaucratic redundancies and red tape to ensure transportation funds are spent efficiently and effectively, while also establishing the independent office of Transportation Inspector General to perform audits, improve efficiency and increase transparency; and

WHEREAS, a proposed ballot measure aimed for the November 2018 ballot (Attorney General \#17-0033) would repeal the new transportation revenues provided by SB 1 and make it more difficult to increase funding for state and local transportation improvements in the future; and

WHEREAS, this proposed November proposition could divert more than \$3 million annually dedicated to Santa Cruz METRO and halt critical investments in future transportation improvement projects in our community.

NOW, THEREFORE BE IT RESOLVED that the Board of Directors of the Santa Cruz Metropolitan Transit District hereby supports Proposition 69, the June 2018 constitutional amendment to prevent new transportation funds from being diverted for non-transportation purposes; and

BE IT FURTHER RESOLVED that the Santa Cruz Board of Directors of the Santa Cruz Metropolitan Transit District hereby opposes the proposed November ballot proposition (Attorney General \#17-0033) that would repeal the new transportation funds and make it more difficult to raise state and local transportation funds in the future; and

THEREFORE BE IT FURTHER RESOLVED that the Santa Cruz Metropolitan Transit District supports and can be listed as a member of the Coalition to Protect Local Transportation Improvements, a diverse coalition of local government, business, labor, transportation and other organizations throughout the state, in support of Proposition 69 and opposing the repeal of SB 1, with the understanding that METRO public funds will not be used to support or oppose said ballot measures.

## Attachment A

Resolution No.
Page 3
PASSED AND ADOPTED this $23{ }^{\text {rd }}$ Day of February 2018 by the following vote:

AYES: Directors -
NOES: Directors -
ABSTAIN: Directors -
ABSENT: Directors -

## APPROVED

Board Chair

ATTEST $\qquad$
ALEX CLIFFORD
CEO/General Manager

APPROVED AS TO FORM:

JULIE SHERMAN<br>General Counsel

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## VERBAL PRESENTATION ONLY

## ARTICULATED BUS UPDATE

- SERVICE OVERVIEW
- STUDENT BALLOT MEASURE

Barrow Emerson, Planning and Development Manager

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## VERBAL PRESENTATION ONLY

APTA UNIVERSITY UPDATE<br>- SCHEDULE<br>- KEYNOTE SPEAKER<br>- RECEPTION<br>- SPONSORS

Barrow Emerson, Planning and Development Manager

24.1

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# VERBAL PRESENTATION ONLY 

## CEO UPDATE

Alex Clifford
25.1

House of Representatives
Washington, D.G. 20515

## Gongressman Jimmy Panetta 2Oth Distrigt, Galifornia

February 15, 2018

Mr. Alex Clifford
CEO/ General Manager
Santa Cruz Metro
110 Vernon St
Santa Cruz, CA 95060-2130
Dear Mr. Guftord, Ales 1
Thank you for meeting and for the tour of the Santa Cruz Metropolitan Transit District. It was great to see firsthand Santa Cruz Metro and its employees at work. I look forward to continuing our discussioh about federal funding for the transit program and other infrastructure projects on the central coast of California.

Thank you, again, and please contact my offige if there is anything that I can do for you in the future.


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## Northbound to San Jose:

For Scotts Valley passengers, A NEWTRIP will start from C avalla ro Transit Center,
 departing at 6:50am

The 6:35am departure from Santa Cruz Metro Center will depart at 6:40am and serve Pasatiempo, but MILNOTstop in Scotts Valley

## Southbound to Santa Cruz:

A NEWTRIP will depart San Femando \& $7^{\text {th }}$
 at 7:20am and service the regularSan Jose stopsthen proceed to Pasatiempo and Santa Cruz, but MLLNOTserve Scotts Valley

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# - ADDITIONAL MATERIALS DISTRIBUTED 

## AT BOARD MEETING -

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## NEWS CLIPS

January 26, 2018 - February 23, 2018

# SANTA CRUZ COUNTY <br> ARTICLES 

## Santa Cruz Sentinel

## Santa Cruz's Benchlands Homeless Camp To Be Emptied, New Site Operated At $\mathbf{\$ 9 0 K}$ A Month <br> 02/14/18

SANTA CRUZ >> Santa Cruz officials will empty the city-sanctioned San Lorenzo Park benchlands homeless encampment by month's end and open a replacement site in its stead. The Santa Cruz City Council on Tuesday unanimously approved the plan to oust people from the homeless camp Feb. 28 and relocate them to a fenced gravel city-owned lot at 1220 River St. The vote also included support for a three-phased plan to move from a temporary camp to a leased shelter space to a permanent new shelter.
Announcement of the camp relocation comes after several city and county missed self-imposed deadlines to address the benchlands camp, and just ahead of scheduled spring recreational rentals of the park, slated to begin March 10.
"I believe there are expectations in the community that the camp in the Benchlands will simply be picked up and moved to the new River Street Camp. That is neither our intention nor our plan," City Manager Martín Bernal wrote in a message dispersed to the community Wednesday. "While we hope that the majority of the campers currently staying in the Benchlands will take advantage of the River Street Camp, we know that many won't."
Though officials expect the new River Street Camp to operate at $\$ 90,000$-a-month through June, the city has funding available for just the first three months, city Principal Management Analyst Susie O'Hara told the council.
For the longer term, O'Hara said she and River Street Camp program manager Chris Monteith will ask Santa Cruz County counterparts, business leaders, nonprofits and faith-based partners for financial help to extend the camp until an indoor homeless shelter and day services center can be leased. Monteith is gearing up for the launch by hiring approximately 25 part-time workers the equivalent of about 11 full-time positions - to fill three, eight-hour shifts a day.
A property owner immediately adjacent to the River Street Camp, Larry Wolfsen, sent his son, Taylor Wolfsen, to tell the council Tuesday that the family was happy with proposed camp operation plans. Last month, Larry Wolfsen plied the council with a list of questions and concerns about the new camp.
"We think it's a good step if it unrolls as it's been presented to us," Taylor Wolfsen said. Community and homeless issues activist Brent Adams, one of a handful of speakers on the issue, was less impressed with the proposal. He recalled that where the Homeless Services Center now stands, the Interfaith Satellite Shelter Program managed a 200-person open-air homeless encampment in the mid-1990s, a cautionary tale to the city to avoid similar managed camps. "And now here we are with open-air encampments and building a hundreds of thousands of dollars emergency shelter program without blinking an eye," said Adams, a documentarian and director of the Warming Center Program who spent two years visiting managed homeless encampments along the West Coast. "We as a community are meant to be ignorant of this, just follow along, just follow along."
Councilwomen Sandy Brown and Richelle Noroyan both said they were concerned that plans to limit access and exit from the camp via shuttle trips would discourage some people from using the site. Noroyan also asked Monteith how the city would prioritize campers.
"With my experience, I believe that this is going to slowly ramp up. A lot of this is going to work by word of mouth, and my thought right now is first-come, first serve basis for people entering," said Monteith, who was hired last week in lieu of a nonprofit agency taking on camp management.
The River Street Camp, unlike the benchlands, will be staffed 24 hours a day, provide one daily hot meal, access to health and human services and a mobile shower trailer, while requiring participants to be shuttled on and off the site, though not required to leave during the day. Access to lighting, storage containers, a "social tent" with tables and chairs, a service provider interview tent, portable toilets and hand-washing stations, trash receptacles and a pet potty station will be provided at the camp.
Some encampment rules under consideration, according to O'Hara, include: signed rules and responsibility agreements; one tent per campsite hosting two to three people each; one bicycle per person; no weapons; quiet hours; participation in camp operations and more.
First Alarm security patrols will patrol the camp, and the Santa Cruz Police Department will set up a mobile command unit at nearby Vernon Street, Bernal wrote in his community message Wednesday.

## Santa Cruz Sentinel

## Santa Cruz Drops 'Boneyard,' Renames Planned City Homeless Encampment

02/12/18
SANTA CRUZ $\gg$ Santa Cruz city officials are working to rebrand a pending temporary homeless encampment, slated to open in coming weeks on River Street.

The city has been managing a large homeless encampment of as many as 100 people at the San Lorenzo Park benchlands since October, and in the coming weeks officials hope to move its denizens to a new 24-hour staffed camp nicknamed the "Boneyard." City Manager Martín Bernal referred to the camp by its nickname with the Santa Cruz City Council during its Jan. 9 meeting. The site previously was a storage site for city Water Department equipment and was used last winter as an intake site and shuttle pickup for two Winter Shelter locations.

The riverside fenced gravel lot at 1220 River St., going forward, will be named the "River Street Camp," city Principal Management Analyst Susie O'Hara said in an email to the Sentinel. Calling the camp the Boneyard "has negative connotations and is a potential barrier in itself" as the city is working to provide a safe and welcoming site for people to seek temporary shelter, O'Hara said.

The council is set to hear an update on efforts to launch the River Street Camp at its meeting Tuesday, within days of the announcement of Chris Monteith as the program's new program manager.

## Santa Cruz Sertinel

## Coastline: Metro Seeks Advisory Committee Members

Posted: 02/11/18
SANTA CRUZ

The Metro bus system's advisory committee is seeking volunteers.
This committee is a citizen entity for the Santa Cruz Metropolitan Transit District and addresses issues which members of the public raise with respect to Metro services.

Details and an online application form at: scmtd.com/en/agency-info/mac.

## Santa Crulu Sentinel

## TRAIN DREAMS HARM TRANSPORTATION OUTLOOK

Posted: 02/11/18
Coming from a METRO Board member and Regional Transportation Commission (RTC) alternate who should be advocating for our METRO bus system, Mike Rotkin's recent column exhibits a surprising train bias and misrepresents or ignores relevant facts:

1. All U.S. light rail systems with daily commuter service serve major metropolitan areas. Most serve populations of more than 2 million. Our entire county has under 275,000.
2. Caltrans traffic data shows more than half of all northbound Highway 1 traffic reaching the Highway $1 / 17$ interchange exits north onto Highway 17. A train wouldn't help them.
3. No RTC study forecasts a train taking enough people out of cars to make a dent in gridlock traffic or greenhouse gas emissions.
4. Contrary to stereotyped statements about Watsonville residents, a train would not help most since more South County residents work at Dominican Hospital, PAMF, Costco, Cabrillo, UCSC and for the county and city than in our tourist industry.
5. METRO serves these locations and could be made faster, more appealing, and more reliable sooner and for dramatically less money than it would take to build a train system that wouldn't reach these employers.
6. Bus fares are usually more affordable than train fares.
7. Rail investments often lead to declines in bus service and overall transit use.
8. Transit ridership is declining everywhere except in cities with redesigned bus networks.
9. Some Watsonville commuters work in trades requiring vehicles. They need realistic, achievable gridlock-reducing solutions, not an unfunded train with imaginary riders.
10. Railbanking preserves the rail easements so that future generations could revisit the rail option if it ever makes sense.

Mr. Rotkin's dismissal of any path along the rail corridor as "recreation-only" ignores global and national transportation trends. Entire countries including China, The Netherlands, Germany, and Denmark recognize well-designed active transportation infrastructure as an essential component of robust transportation systems.

Many American cities are finding relatively inexpensive investments in safer bike and pedestrian infrastructure and bus system improvements lead more people to leave their cars at home. These
cities are reaping additional benefits: lower healthcare costs, flourishing neighborhoods, and even dropping crime rates. Imagine the cafes, bike repair stands and other small businesses that might sprout up along a vibrant and effective trail that circles the Bay.

The rail-with-trail plan values empty rails or new tourist trains over potential trail users and will require expensive new bridges, mass tree removal and major retaining wall projects. A greenway prioritized for active transportation could include small scale transit options and would allow many local commuters using bicycles, e-bikes and other new transportation devices to get out of gridlock and into healthier, planet-friendly lifestyles.

We are in the midst of a global transportation revolution. Within a decade travel options will be vastly different then they are today. Our planning should not be limited to 19th century technology whose limitations and cost impede a healthy transportation future for our county. Let's hope those who are steering our transportation decisions can rise above misguided rail bias and allow our community to move forward.

## Santa Cruz Sentinel

## Santa Cruz Names Homeless Encampment Manager, Advancing Plan To Relocate Benchlands Group

Posted: 02/09/18
SANTA CRUZ $\gg$ On a path to building a permanent new homeless shelter, Santa Cruz has inched forward, hiring a program manager for a new temporary River Street encampment.

Homeless services worker Chris Monteith, who started work Monday, will take on the role of program manager for the pending so-called Boneyard camp. Monteith will be charged with overseeing the hiring of 11 camp "hosts" to staff 24 -hour camp coverage and two assistant program managers. The temporary camp workers will be paid hourly wages with no benefits, with $\$ 30$ an hour for Monteith, $\$ 22$ an hour for the assistants and $\$ 17$ an hour for the hosts, city spokeswoman Eileen Cross said. Monteith also will help finalize the camp's operational plans.

Monteith on Friday would not hazard a guess as to the camp's opening date.
"I hope to have just a really safe, sane environment for our population experiencing homelessness. It's going to evolve as the program goes on and we work on the operational plans," Monteith said. "But I would really like some community involvement. The more involvement, probably the more communal it will be. We're still trying to find social service providers and all that."

Monteith, 53 , of Felton, worked as Homeless Services Center residential services program manager for four years, until 2015, then as a counselor at Encompass Community Services and last year as the Association of Faith Communities' director of services for the Winter Shelter.

Monteith expected that the new Boneyard sit, at a fenced city-owned gravel lot at 1220 River St., will be a safe environment with hygiene and social services will draw in those in need. Asked about the benefit of creating a new homeless site, as opposed to focusing energies on expanding existing homeless shelter services, Monteith said he believed different programs serve different groups of people.
"This will serve a population base that is not currently being served," Monteith said of the
Boneyard.
On Friday afternoon, several campers staying at the San Lorenzo Park benchlands, said the idea of a relocation was welcomed, though past interviews with benchlands denizens have revealed campers' hesitations. Camper Michael Burkhardt said last month that the new fenced site reminded him of an "internment camp" that he believed others were scared of. Separately, several people on Friday said they were only at the camp temporarily and expected to have moved on to other locations prior the new camp shake-up.

One Santa Cruz High School alumni interviewed Friday said he saw little difference between the two options. Ashanti Craft, 48, has lived in Santa Cruz since the third-grade. He said, as a young person, he had not seen a big future for himself, but had definitely never seen himself here, sleeping in a tent in the middle of a Santa Cruz park. Craft said he plans to make the move to the city-sanctioned Boneyard camp because he is tired of seeing people hurt and dying.
"If the city says let's go, I'm going to go," Craft said. "I'm sure it won't be the same as here. This is a bit, just a little bit more wilder. I think what we need is a little bit more structure. But I think they're going to try to police it, which is going to be an issue. The more police that are going to be there, they're not going to want to go. They're going to be back downtown and on the mall, where they don't want us there in the first place. Out of sight, out of mind."

To improve living conditions for those without shelter, the new camp could include showers and laundry options, Craft said. Asked what types of social services and job assistance he'd like to see, Craft said he was less confident about their popularity.
"I think that would be a good idea, but, to keep it real, I don't know too many people here who would go. They have other issues. It gets hard to maintain a drug addiction and go to work. It's one or the other. It takes a month or so to do that, and then it's an ordeal to get back into the cycle."

Fellow benchlands camper Janine Salois, 56, said she will relocate "in a heartbeat" if asked, because the encampments are "greatly appreciated." If the city were looking to improve living conditions for the city's homeless at the next camp, Salois suggested "just a little more control."
"It kind of gets a little out of control. I'm hoping for the 55 and over camp," Salois said with a chuckle. "No, actually, just a little bit more - I hate that word, 'policing,' but, just more. That's about it. Just make it nice for everyone."

Seeing the rangers out at the camp reminds Salois, she said, of camping at a state park with hosts, where "everybody's mellow."

## Santa Cruz Sentinel

## Letter: New Smaller Buses Could Aid Transportation Issues

Posted: 02/08/18
Among many disturbing remarks in Mike Rotkin's Feb. 1 commentary, the worst is that for a METRO board member, he doesn't even mention how an increase in METRO services, as well as Measure D funded improvements in Highway 1, could help solve the county's transportation problems. New technology buses and some smaller and more agile vehicles on increased routes could significantly expand the county's reduced vehicle goals.

Mr. Rotkin states that "the preferred option for the Santa Cruz Regional Transportation Commission ... is the preservation of the rail line ..." however, the RTC's website indicates that the Unified Corridor Investment Study, to be completed in December, is examining four scenarios, only two of which include rail transportation. Did he miss the meeting where the board voted four scenarios for study, or is he saying that he doesn't need actual information to already know what is best for the county's citizens?

Nadene Thorne, Santa Cruz

## Santa Cruz Sentinel

## Housing Key To Growing Tech Jobs In Santa Cruz, Economist Chris Thornberg Says

By Jondi Gumz, Santa Cruz Sentinel

Posted: 02/07/18, 9:53 PM PST | Updated: 4 hrs ago
SANTA CRUZ >> The Santa Cruz County tech sector is providing high-paying jobs averaging more than $\$ 100,000$ a year, but future growth of those jobs will depend on whether there is housing for those workers.

That was the forecast by economist Chris Thornberg Wednesday night for 500 people at the Cocoanut Grove, hosting the 10th anniversary of the Santa Cruz New Tech MeetUp.
"Growth depends on land use," said Thornberg,
He presented preliminary findings from a report commissioned by the Santa Cruz Workforce Development Board. Among those findings:
${ }^{\circ}$ Santa Cruz County has about 5,000 tech jobs.
${ }^{\circ}$ About 10,000 residents commute to Silicon Valley to work in technology.
${ }^{\circ}$ The county has about 100,000 housing units, with a growth of 1.5 percent in the past five years.
"It's about the commuters who want to live here and who are driving on a daily basis to San Jose," Thornberg said.
"You need to foster a high job concentration region," he added, pointing out research in Riverside had found the highest paid jobs concentrated in big job centers.

For those who want to grow the high-paying tech sector, his advice is to show up at city council meetings when a big apartment building is proposed and speak up to support housing when others say "not in my backyard."

Otherwise, "you're part of the problem," he said to loud applause.
"The curse and the blessing" of Santa Cruz are that local startups are not just competing for talent with Silicon Valley tech companies but the local talent is competing with those Silicon Valley commuters for the limited housing stock.

Santa Cruz County has about 650 tech firms, with the highest pay in computer manufacturing, computer system design, followed by software.

Last year, venture capitalists invested $\$ 200$ million in Santa Cruz County tech companies, up from $\$ 100$-plus million the year before.
"A lot of money is sitting on sidelines waiting to get in," he said. "There's a lot of new startups...With new companies, you know job growth is not far behind."

The unemployment rate in Santa Cruz County is less than 6 percent, which is hampering business expansion, Thornberg said.
"Businesses that want to expand have trouble filling spots," he said. "We had a hike in the minimum wage and no one talked about it. You're not worried about paying minimum wage to a person who doesn't exist."

At the outset of the event, meetup founder Doug Erickson pointed out the group had grown to 4,000-plus members and hosted 9,544 presentations.

Erickson recalled one of the early presenters was the founder of Evernote, now a billion-dollar company.

Venture capitalist Bud Colligan gave Erickson a thank-you gift for investing 10 years to create a healthy tech eco-system in Santa Cruz.

Mark Adams, who has been part of the meetup for five years, bid farewell, sharing that his father died and he wants to spend more time with his family.

Startup co-founder Sam Lessin of Fin told the group artificial intelligence had been over-hyped but he is working on a new digital assistant that he hopes will be better.

During the "fireside chat" between tech evangelist Guy Kawasaki and UC Santa Cruz computer science professor Marilyn Walker, Kawasaki asked her opinion of Siri.
"It was a market-changing thing at a time when people said conversation couldn't done," she said. "By the time people figured out it didn't work, they already bought the phone."


# Understanding what's best for transportation 

By Mike Rotkin

Several recent Sentinel letters have argued that preserving the rail line through the county is a mistake because rail is only for the nostalgic, and that far more local residents will use a wider trail if the tracks are ripped up immediately. Unfortunately, they have less than a complete understanding of our transportation situation in Santa Cruz.

In general, rail, which is the least expensive and most environmentally sound solution to most modern transportation is sues, is growing as an alternative in cities world-wide and here in the United States. Communities like Portland, Oregon, have found that modern, light-rail trains, when combined with other transportation modes, are the key to efficiently moving large numbers of people in comfort and without the climate impacts of the automobile, which produces roughly 40 percent of all greenhouse gases in the United States. The federal and state governments are increasing, not decreasing, funding for rail projects in California.

More importantly, the rail corvidor that runs through our county was purchased with mil lions of dollars of State transportation funding that would need to be returned if passenger and freight service does not operate on the line. The rail and its right-of-way were purchased because we desperately need an additional transportation corridor through our county. North County, including the City of Santa Cruz, depend upon workers who live in Watsonville and work in our tourist industry

- our major source of employment and tax funding for city services. Tearing up the rail line will condemn thousands of workers to spending literally hours each workday going from home to work and back forever.

Whether the rail line is used for passenger rail service in the future, or simply to preserve an option for bus rapid transit, or some hybriid form of rail/street vehicle, many of which already are in use in Europe, taking out the rail at this point will mean we will never be able to use this corridor as a critically needed public transit option. Can anyone seriously suggest that if the corridor is turned into a wider recreation-only greenway that local citizens would ever allow it to be converted back to a serious transportation option? While it is true that a few bike fanatics like myself might occa sionally commute the 28 -mile round trip between Watsonville and Santa Cruz, proposing that as a serious transportation option is disingenuous at best.

When some people say that those who want to rip out the rail line are racist, they don't mean that they are all nasty: bigots who hate people of color. No doubt, many of the trailonly option advocates are, in general, in support of civil rights and equal treatment for all. But those who would opt for a trail-only option are guilty of caring more about their weekend recreational needs than the daily nightmare faced by a largely Latino labor force from Watsonville on its way to and from work in Santa Cruz. Even those taking public transit are condemned to two-plus hours on the road each day because, with only one corridor that is far too expensive to widen, the Metro buses are stuck in the same traffic as everyone else.



Friday, January 26, $2018 \geqslant$ MORE AT FACEBOOK COM/SCSENTINEL AND TWITTER.COM/SCSENTINEL

# For new owner of Capitola Mall, the way forward is complicated 



Stephen Logan, vice president of development of Merlone Geier Patrersul Wednesday night about the challenges of a site with multiple owners

## Merlone Geier wants new look, new uses at 1980s complex, but needs more input first

## By Jondi Gumz

jgumz@santacruzsentinelicom @jondigumz on Twitter

Capitolan Merlone Geier Part ners, Capitola Mall's new owner has torn down parts of outdated Shopping centers in Mountain View and Laguna Hills to build anew and woo shoppers looking for new experiences, but that's not the plan in Capitola.
"We didn't buy the real estate to tear it down but to make it better,"said Stephen Logan, vice president of development at Mer lone Geier, speaking to 100 peo ple at a meeting on the mallon
a rany Wednesday night at Jade Street Comminity Center.

This was Merlone Geet's first community meeting since the San Franciso ba sed company bought the mall in 2016.

Logan and architect David Geiser are trying to igure out what would attract more people to the coumtys only mall, buitin 1977 and expanded 12 years later, when 96 percent of shoppers today shop online.
That startling data point comes from Ieanna Kelly at CPC Strategy, which tracks e-commerce.

Having local tenants is the key to the success of the project"
said Geiser, suggesting local start. ups and restaurants, pop-ups, day careservices, groomers and two ing blank walls over to local artists. The mall needs more light. Its pretty sterile right now"

The next step, Logan said, is to send out 30,000 to 40,000 mailers to ask the community to answer an onime survey on what they want, with the goal to share a concept in summer of fall this year.

City review could take a cou ple of years.

## Woo Warriors?

"Retall traffic is slow;" said Brett Christopoulos, Merlone

Geier's leasing manager, explaining a modern anchor these days could be anything, a cof fee operator, food options, a favorite tree. Tts designing something that fits our ways, where we want to spend our time?

An example, he said, is HiveOakland, a kid-friendly and dogfriendly place to shop, live, work and gather, with a brewery, bar: bershop, fitness studio, and coworking, art gallery and event space.

Logan listed potential uses: Local or national restaurants, bowling, an outdoor play area.

MAM, mpage 4

## Mall

 FROMPAGE 2a medical office, a hotel, which would bring room tax revenue to the city, a movie theater, which would compete with the newly remodeled eight-screen Cin-
eLux Cafe and Lounge a block away.
Asked if San Jose's Santana Row is a model, Geiser said, "That's high end, very expensive. That wasn't our goal.
Ours was a local hangout",

One man in audience asked, "What about the (Santa Cruz) Warriors? Maybe we could have a permanent home:
(On Thursday, Santa Cruz Warriors president Chris Murphy saic the idea of moving from downtown Santa Cruz to Capitola is "a new concept:" He's been talking with the city of Santa Cruz about a permar nent arena to replace the temporary one opened in 2012 s so we can be part of the community for the long haul:)

## Housing

Asked about housing. Geiser said, "We don't control that much open land.: along 41st Avenue is a possibility, That would put the mall behind a housing project. I wish I had 5 acres?

When one man complimented the way Merlone Geier integrated housing into the Mountain View redevelopment, Geiser said, "We didn't have to tear down to have that available?

Many hands in the audience went up when asked if they thought housing could work at the mall; a small number of hands went up when asked if housing


Dave Geiser, at right, architect with Capitola Mall owners Merlone Geier Partners of San Francisco chats with Capitola resident Susan Westman and others at a meeting on the malls future

## woulf not work:

The complication with Capitola MaH is that Mer: lone Geier oyns the ontrance, imterior sections where smal stores lease, the area leased by Kohis, the fountain and some parking but not the propet: ties occmied by Tazset Ma* cy's, Sears, Bant of Amer. ica, Citibank, the future Olive Garden or the Ross Dress for Iess center:

If Verlone Geter could acquire outparcels such as Sears or Target, Ceiser said it might be possible ta buld three to four tesicen: tia fooors on top of ex enina floor retal:
Tliats not out core bus: ness," Ceiser said of hous" ing at We do 11 when $1 t$ makes sense":

## Retailers happy

Capitola Malls anchor stores have no plans to sell.

We have talked with
every major tenant," said

## DUETIOMS

Here are answers to more guestions people asked.
Acces sinlity upgrades: Yes, that's reguired by the city:
Street toyn the middle: The property's not big

Parkhg garage Will be looked at:
lecal contractorse A
strong desire to do that
hetrigus pickip in front: Bus stop needed but hazardous far pedestrians walk ng an ront of buses:
Seartis: Rart of the chat: terige:
Bharing station for elecrre whicles: Absolutely.
happy where they are?
Puting retail square tootage on 4ist Avenue might reguire taking that space ort of the mal, he added.
A vast packing lot surroumas the mall.

Itts overparked because of the requirements of the other major tenaints," Geiser said. "It requires approval that is not easy to get.. How do we move forward without having control?"

He suggested design changes with a beach theme: Redo the food hall, entertainment, new furniture, community tables, more skylights.
"Much as 1 love the fountain, I want to get rid of the fountain," he said.

He's not sure what should go there.

We want a vibrant new development; said Capitola resident Marilyn Warter. "If they could get a hold of Sears, it would be amazing?

Heather Richman, president of the nonprofit shop Art of Santa Cruz, which leases space in the mall. wants more foot traffic but worries about rent going up.

The majority of people come to Target and leave," she sail.

## Register-Pajaronian

## County Selects Rail Operator

Will Run Freight Operations, Possibly Passenger Service

By: TODD GUILD - Updated: 14 hours ago Thursday, January 25, 2018


2018-Register-Pajaronian

SANTA CRUZ - The Santa Cruz County Regional Transportation Commission approved a new operator for the 32 -mile Santa Cruz rail line that runs from Watsonville to Davenport, a plan that could be implemented once an ongoing study of the county's rail line is complete.

The commission voted 8-3 in favor of the plan during its Jan. 18 meeting.

Lakeville, Minn.-based Progressive Rail, Inc. will run the rail-freight operation centered in Watsonville.

But if the county ultimately decides to keep its rail after the study, the company could also implement passenger and freight rail service along the entire line, which would be renamed the Santa Cruz Scenic Railway.

This would include reinstating the Suntan Special, a tourist train that stops at the Santa Cruz Beach Boardwalk, but goes as far as San Jose.

Such service is billed as a way to relieve traffic congestion and boost tourism in Santa Cruz County.

The company has identified a warehouse at 880 West Beach St. in Watsonville to serve as a "transloading" facility.

In a service proposal to the SCCRTC, Progressive Rail said it hopes to increase exports of fruits and vegetables in refrigerated cars to the Midwest, and bring "proteins" on the return trip.

In addition, the company said it is better poised financially to make existing repairs to the tracks, bridges and trestles, and to keep it maintained into the future.

The company has projected $\$ 688,000$ in gross profit this year, a number that jumps to nearly $\$ 8$ million by 2022 , which company officials say would come from running the scenic railway.

SCCRTC called the proposal a "moot point," since any rail service will have to wait until damage from the 2017 storms is repaired. Those repairs are estimated to cost more than $\$ 2$ million.

The idea of creating a rail system is a controversial one.
Greenway Santa Cruz County, which advocates converting the rail line into a pedestrian and bike trail, came to the meeting to speak against the plan.

In an interview Wednesday, Greenway Executive Director Gail McNulty said that the rail system was built as a freight line for a relatively small county, not as a commuter corridor or for pleasure trips.
"We are advocating against the rail plan because we believe it doesn't make sense for a community our size," she said.

Instead, McNulty said the money would be better spent improving the Santa Cruz Metro bus system, which she said currently needs 62 new busses.

That would be a boon for people who live in the San Lorenzo Valley, which would not benefit from rail service, she said.
"We really want what's best for the entire county," McNulty said.
The Jan. 18 vote came after the commission on Nov. 2 filed a notice of default against Iowa Pacific Holding, the company that formerly ran the line under the name Santa Cruz and Monterey Bay Railway Co.

In the filing, SCCRTC accused Iowa Pacific of failing to maintain the railways, bridges and other parts of the line, and of not paying more than $\$ 23,000$ it owes for running the Christmastime Polar Express train. The commission also said that Iowa Pacific still owes the county more than $\$ 30,000$ for storing railcars along the tracks.

In a letter dated Dec. 4, Santa Cruz and Monterey Bay Railway Co. President Edwin Ellis cited financial troubles and said that last year's winter storms made running the Christmas train impossible.

The company still had five years left on a 10 -year contract.
"I would suggest that the commission seek another operator," Ellis stated in the letter.

## Other Transit Related Articles

## The San Diego Union-Tribune

February 19, 2018

## The Electric Vehicle Revolution Has A Cobalt Problem

The road to an imminent electric vehicle future has hit a speed bump - one made of cobalt. An essential ingredient in lithium-ion batteries that power millions of smartphones as well as plug-in electric cars, cobalt is in heavy demand.
But just as the silverish-gray metal has established itself as a critical element in the growth of the market in electric vehicles (EVs), cobalt has also become a source of serious ethical and economic concerns.
Most notably, the majority of the world's cobalt production is concentrated in the Democratic Republic of Congo, where in many cases children work in hazardous conditions mining the metal.
And once extracted, there are questions whether enough long-term supplies of cobalt can be established to fulfill the hopes of policymakers in places like California who want to transform the transportation system from gasoline-powered vehicles to EVs.
Supporters think the problems associated with the mining of cobalt can sort themselves out but even the most ardent acknowledge human rights as well as supply-chain issues need to be resolved.
For many consumers, the connection between cobalt and clean-car technology may come as a surprise.
"There's absolutely an educational process really that comes with all technology," said Blaine Townsend, senior vice president at the Foster City-based investment firm Bailard Wealth Management who has written about cobalt's supply chain problems.
"I think it's really difficult for the average consumer to understand all the science and the rare earth minerals that go into" the production of batteries for EVs, smartphones and computers.

## Why cobalt is so important for EVs

The cathodes in lithium-ion batteries typically used in EVs are made of metal oxides that contain a combination of cobalt and other elements.
Cobalt helps the cathodes concentrate a lot of power in a confined space. Without the element's energy density, batteries in EVs without cobalt tend to perform worse.
It's harder to recycle electric car batteries than lead-acid batteries used in gasoline-powered vehicles because of the number of materials involved and differences in how manufacturers build them.
As the EV sector attempts to move from niche-market status to mainstream acceptance, cobalt demand is surging.
California policymakers have pushed zero-emissions vehicles as essential to meet the state's mandates to dramatically reduce greenhouse gas emissions.
Gov. Jerry Brown has set a target of 1.5 million clean-energy vehicles on California's roads by 2025. In his final State of the State address last month, Brown ratcheted the number even higher - to 5 million zero-emission vehicles by 2030 .

The United Kingdom and France have announced plans to phase out gasoline and dieselpowered vehicles by 2040. All 16 states in Germany - home of Mercedes-Benz, BMW and Audi - passed a non-binding resolution to ban the sale of new gasoline and diesel vehicles by 2030.

While no date was set, a government official in China last year announced the country's intention to ban the sale of cars using fossil fuels. China represents the auto industry's largest market in the world, even bigger than the U.S.
Automakers are making their own moves.
Tesla has begun rolling out its Model 3, with a stripped-down base price of $\$ 35,000$, marketed as an EV for the masses.
Traditional carmakers have also made commitments, including:

- Ford, which announced plans to spend $\$ 11$ billion on EVs by 2022.
- GM said it will add two more all-electric cars to its fleet later this year and at least 18 more by 2023. "General Motors believes the future is all-electric," Mark Reuss, the company's head of product development, said last October.
- Volvo executives have vowed that by 2019 all its models will be either hybrids or powered solely by batteries.
Less than 1 percent of U.S. motorists own an electric vehicle but a 2017 report from the financial giant Morgan Stanley projected as many as 1 billion electric vehicles could be on the road worldwide by 2050.
Anticipating a flood in global sales of EVs, the demand for cobalt used in electric car batteries is expected to increase by nearly eight-fold by 2026.
The production of cobalt has quadrupled since 2000 but the price of the metal has skyrocketed, too - up more than 230 percent since the end of 2015.


## Cobalt and the Congo

The vast majority of cobalt is a byproduct from the mining of nickel and copper and 54 percent of the world's supply comes from one country - the Democratic Republic of Congo.
The Congo has suffered through two extremely violent civil wars in its relatively short history. The rule of law is haphazard and institutions are often riven with corruption. The country's presidential election is set for December, two years later than scheduled.
Mining is a linchpin of the economy but the work is often dangerous. Freelancers, known by the French word creuseurs. use picks and shovels to dig up cobalt and child labor is common. A 2016 report from Amnesty International cited estimates from UNICEF that about 40,000 boys and girls work in mines across the Congo, many of them at cobalt sites.
As with adult miners, the children are exposed to high levels of cobalt and work without gloves or masks, the report said.
Tesla has pledged to not take cobalt from child labor or creuseurs but it's hard to track the metal's origination once it has reached the end of the supply chain.
"It could come from 50 small suppliers to a middleman," Townsend said. "That middleman and five other middlemen ship what they've got to a smelter in China and western companies have to buy from that smelter. So it's really difficult to trace it."
With an eye on its growing assembly lines of EVs, China has moved quickly to gobble up stocks of cobalt. According to the CRU Group, a mineral consultancy, China controls 62 percent of the world's cobalt supply, with 90 percent of that coming from the Congo.

That's left North American and European carmakers scrambling to sign contracts to ensure their own supplies of the raw materials needed for battery minerals.
It's also led to searches for cobalt in other places. Canada is the fourth-largest producer of cobalt and miners in provinces from Ontario to the Northwest Territories are looking at potential sites to develop.
Cobalt production in the U.S. is small - just 650 metric tons were produced in 2017, according to the U.S. Geological Survey. The Congo, by comparison, produced 64,000 metric tons. Russia finished in second place with 5,600 metric tons.

## Cutting the cobalt cord?

A number of chemical companies and researchers are working on batteries for EVs that rely less on cobalt.
Two South Korean companies plan to roll out batteries that are eight parts nickel and just one part cobalt and one part manganese.
But earlier this month, the chief executive at a Belgium-based multinational that produces cathodes for EV batteries said cobalt will still be needed for the foreseeable future.
"There isn't a better element than nickel to increase energy density, and there isn't a better element than cobalt to make the stuff stable," Marc Grynberg, the chief executive at Umicore, told Reuters. "So (while) you hear about designing out cobalt, this is not going to happen in the next three decades. It simply doesn't work."
At the same time, Grynberg and others think concerns about cobalt supplies can be eased by finding a more efficient way to recycle smartphones. There are an estimated 1.6 billion discarded phones across the globe with batteries that include cobalt.
Analysis from researchers at MIT have predicted that while there may be some bottlenecks in the supply chain, no serious obstacles are in place for the next 15 years to blunt rising demand.
"I think what will happen is the lithium-ion battery is probably going to be a transitional power source," said Townsend, "and scientists are going to figure out a different chemical composition to power the electric vehicles that has less risk from the supply chain standpoint."
Others are less sanguine.
"Until there's a replacement material that can hold a charge and create a charge we've got a problem," said Lauren Fix, the executive director of The Car Coach, an automotive expert based in New York City who is critical of EVs.
"Tesla, GM or anyone else is going to have to raise the price of the vehicle to try to compensate for the increased costs" associated with rising demand and finite supplies, Fix said. "Combustion engines are not dead and the reason for that is we have a shortage of cobalt and this is pretty serious."

## Trying to make a deal

A number of automakers who have made commitments to build more EVs have put out requests to secure long-term cobalt supplies from international mining companies .
BMW, for example, is looking to ensure 10 years of supply.
K.C. Chang, a senior economist who focuses on commodities at the international research consultancy firm IHS Markit, said the negotiations will offer a good indication where the EV industry is heading.
"At the moment, the key negotiating points are the price as well as how much they can secure," Chang said in a telephone interview from his office in Toronto. "You're sourcing a very challenging mineral to find. So if it's difficult to find and it's very expensive, then it's also hard to build more electric vehicles."
If the negotiated prices are too high or supplies too tight, Chang said it will give automakers greater incentive to try to find alternative materials for batteries.
"I think electric vehicles have a bright future," Chang said. "It's just a question of how many more vehicles are going to be appearing on the road in the next decade."
IHS Markit projects 94 million vehicles will be sold globally this year, with EVs accounting for 4 million (about 4 percent).

Transportation

## Car Ownership Puts A Dent In SoCal Transit Ridership

Transit ridership across the six-county Los Angeles metro region has been slipping since at least the last 15 years as more residents purchase cars. Experts think a mix of technology, public policy and planning could help the ridership numbers bounce back.

February 15, 2018
Shutterstock
Despite adding hundreds of miles of transit service across Southern California in the last 25 years, the region continues to see ridership slip, and the reason may have a lot to do with cars.
Car ownership across the region - a six-county swath home to 18.8 million people - increased significantly among residents who have traditionally been frequent users of public transit, according to the study Falling Transit Ridership:
California and Southern California. The study was commissioned by the Southern California Association of Governments, which includes Los Angeles, Riverside, San Bernardino, Ventura, Orange and Imperial counties. It did not include San Diego County.
The number of households in the region without a car - generally regarded as low-income families - fell 30 percent from 2000 to 2015, according to the study, conducted by the University of California Los Angeles Institute of Transportation Studies. Meanwhile, car ownership among immigrant households from Mexico, another traditional user of mass transit, increased. The number of immigrant families without a car in Southern California dropped 66 percent from 2000 to 2015.

The rise of car-ownership - particularly among populations that have not always had access to a vehicle - is what Hasan Ikhrata, executive director of the Southern California Association of Governments (SCAG), calls "the smoking gun."
"The 'smoking gun' is between 2000 and 2015 we grew as a region by 2.3 million people. And in the same period we added 2.1 million cars. That's four times the rate from the 1990s," Ikhrata pointed out.

Since 1990, the SCAG region added more than 530 miles of commuter rail and more than 100 miles of light and heavy rail. Despite this significant buildout of transit service, the region actually lost 72 million transit rides annually between 2012 to 2016.
At L.A. Metro, the region's largest provider of mass transit, bus ridership fell 23 percent between 2009 to 2017, according to L.A. Metro ridership statistics. Meanwhile ridership on Metro's light rail network increased 22 percent during the same period, a result partly due to expansions in the network. However, ridership was still down 14.2 percent systemwide during this period because buses remained the "workhorses" of Los Angeles mass transit.
Passenger miles on the rail system - an indication of distance traveled and trains in operation - grew to more than 700 million miles in 2017, a 28 percent increase over 2009. Passenger miles on the L.A. Metro bus system grew to more than 1.5 billion in 2012. By 2017, passenger miles were down to 1.2 billion.
L.A. Metro makes service adjustments twice a year "to improve existing bus service and to take a look at non-productive bus lines and service," said Rick Jager, a spokesman for L.A. Metro. Also, as new light rail lines are added, Metro pulls back bus service that may be duplicative.
Metrolink, a commuter rail service linking Los Angeles, Ventura, Orange, San Bernardino and Riverside counties, has seen annual ridership dip and rise over the last decade. In the 2007-08 fiscal year ridership reached nearly 12.7 million passengers. By the 2015-16 fiscal year, the number of annual passengers had slipped to 11.5 million, while total train miles increased 10.7 percent during this period, according to Metrolink statistics.
Granted, transit agencies would like to turn these statistics around. And the solution, researchers say, lies in getting more residents to choose transit, even if it's only a few rides a month. The SCAG study found that 77 percent of residents - roughly 14.5 million people - "ride transit rarely or never."

## Only about 2 percent of the population in the SCAG region rides transit often, averaging 45 trips per month. While 20 percent of the residents ride occasionally, averaging 20 trips a month.

"If one out of every four of those people replaced a single driving trip with a transit trip once every two weeks, annual ridership would grow by 96 million more than compensating for the losses of recent years," reads the report. "The future of public transit in the SCAG region, then, will be shaped less by the mobility needs of people who do not own vehicles, and more by policy decisions that encourage vehicle-owning households to drive less and use transit more." The new information relating to increases in car ownership did not come as a huge surprise to Jager, who added that Metro is currently in the process of "reimagining and restructuring our bus system to better meet the needs of current and future riders." And the agency is receiving feedback from residents related to any number of route and other service changes.

Adjustments to transit service and system operations are likely needed, said Ikhrata.
As an example, Ikhrata pointed to the more than 100 different operators of transit systems across the six county region, adding that ridership across these systems should be more seamless with one mobile ticketing app.
"That's the kind of thing where you deploy technology and innovation to make sure that transit works," he remarked.
For its part, Metrolink made changes to its mobile ticketing app to allow users to transfer to L.A. Metro Rail lines by scanning their phones at the rail gates thanks to new optic readers. Nearly a third of Metrolink riders are commuters transferring onto Metro Rail in Los Angeles.
Aside from technology, the time is also right to have some larger conversations about land-use and all forms of public policy around mobility, said Ikhrata. The most urban and transit-friendly areas in the six-county SCAG region make up less than 1 percent of the land area, home to 17 percent of the region's population, according to the study. However, these neighborhoods are also home to 45 percent of the transit commuters.
"This [study] is also telling us that if you want transit ridership to go up, you have to tackle land-use and development patterns," he said. "Obviously, SCAG has no authority, or desire, to tell cities what to do, but cities need to pay attention to development patterns. And so therefore, the last question to ask is, how do we have a transportation system that works for us?"
If you want to change behavior - getting commuters to leave behind the car and take transit a few times a month - money can be a motivator.
"If you want those choice riders to take transit once in a while, you're going to have to charge the right price for driving," said Ikhrata.
"So if you can come to downtown Los Angeles and park for $\$ 5$ or $\$ 10$ a day, that's not going to be an incentive for you to take transit," he added. "But in cities like Manhattan where you pay $\$ 100$ a day, you'll think - maybe once in a while, you'll take transit."
Back at L.A. Metro, the bus system review - the first systemwide review since the 1990s - is set to be complete by April 2019. Officials say they plan to share the SCAG report with Metro's own consultants, as they explore ideas related to getting car owners - both those new to ownership and longtime drivers - to choose transit.
"Metro believes it's important to attract riders away from the automobile, if only to have them use the system once a week or once a month in our efforts to ease traffic congestion and improve the regions mobility," Jager said.
With transit ridership dropping across the region - and many cities dealing with similar trends - even as hundreds of miles of service are added, it's enough to have some wondering if it's all worth the cost.
"Some reporter said, 'Well, should we stop investing in transit?" Ikhrata recalled. "That's absolutely the wrong strategy. But we should be smart about how we invest in transit. We should use technology and innovation.
"We should take this as an opportunity say, 'OK, ridership is declining. People are owning more vehicles. How can we make the transportation work for everybody," he added. "That is really the question to ask."

## WA: Trump Calls For \$200B For Infrastructure Spending Nationwide; Washington Needs $\$ 140 \mathrm{~B}$

Feb 15, 2018
Feb. 12--Washington's roads and bridges need nearly $\$ 140$ billion in investments, but it's unclear what Eastern Washington could get out of President Trump's infrastructure plan.

The $\$ 200$ billion put forth in the plan, money intended to be leveraged by local and state dollars, would barely cover the needs in Washington, let alone those in the remaining 49 states.

Besides the $\$ 140$ million needed to fix roads and bridges the state needs $\$ 56$ billion to maintain the freight rail system, aviation infrastructure and ports, as well as the water, wastewater, stormwater and energy systems, according to a report released last year by the Association of Washington Business, the Association of Washington Cities, Washington State Association of Counties and Washington Ports.

Trump's infrastructure plan prioritizes roads and bridges.
The most recent assessment done by the American Society of Civil Engineers gave Washington's roads a D-plus and the bridges scored a C. According to that 2013 report, the 136,000 miles of roads were built more than 50 years ago and are being used well beyond their intended lifespan.
"Just as maintenance and improvement needs are increasing, transportation funding is decreasing, accompanied by poorer average pavement condition and increased congestion," the report said.

The bulk of the state's 7,800 bridges are in fair shape, with just 5 percent listed as "structurally deficient." But more than a third of the state's bridges are older than 50 years, and another third will exceed their "design life" in the next 20 years.

More than 1,500 bridges are listed as "functionally obsolete" because they either can't meet current traffic demands or don't meet current design standards.

There are 14 bridges in Spokane County listed in poor condition by the state transportation department, which means inspectors have seen "advanced deficiencies such as section loss, deterioration, cracking, spalling, scour, or seriously affected primary structural components."

The American Society of Civil Engineers hasn't graded Idaho's infrastructure, but said 411 of the state's 4,445 bridges are structurally deficient and 15 percent of its 51,000 miles of roads are in poor condition.

Overall, the ASCE gave the nation's infrastructure a D-plus. America's roads earned a D grade, and the bridges a C-plus.

It's unclear what Trump's plan would cover, even though he promised in his State of the Union address "gleaming new roads, bridges, highways, railways, and waterways across our land."

Staci Lehman, spokeswoman with the Spokane Regional Transportation Council, said it is "hard to tell at this point" if local funding will be altered by Trump's plan. SRTC is responsible for doling out federal funding for regional projects.

Lehman added that the council has heard transit projects may suffer financially under the plan and there may be an emphasis placed on projects involving freight
"We have no real details," Lehman said in an email. "At this point, the best thing we can do as a region is work together to have priorities clear and projects ready so we can be ready to move forward if funding opportunities do come our way."
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## Santa Cruz Seutine

# Trump's Infrastructure Plan Disappoints Bay Area Politicians, Transportation Officials 

02/13/18
WASHINGTON, D.C. >> Bay Area politicians and transportation officials decried President Trump's much-anticipated infrastructure spending proposal, unveiled Monday, as "woefully inadequate" to make the kinds of improvements to public transit and congestion management the region so desperately needs.
"After a full year of empty boasts, the president has finally unveiled a puny infrastructure scam that fully fails to meet the need in America's communities," said House Minority Leader Nancy Pelosi, D-San Francisco. "The Trump plan is to raise tolls on commuters, increase the burden on cities and states, sell our essential infrastructure to the whims of Wall Street, and yank away the protections that keep consumers safe and our air and water clean."

The proposal, which still must be approved by Congress and faces fierce obstacles in both parties, outlines $\$ 200$ billion in federal spending over 10 years for a wide range of infrastructure improvements - from rural WiFi connectivity to energy to upgrading Veterans Affairs facilities to highways. It relies heavily on state, local and private funds to leverage those dollars into $\$ 1.5$ trillion in spending on infrastructure projects.

Of that, $\$ 100$ billion of the proposed spending will be dedicated to an "Incentive Program," which would provide up to 20 percent of a project's cost in competitive grants to states and cities that make their own investments in infrastructure projects.

That works out to roughly $\$ 10$ billion per year, of which, each state can only apply to receive up to 10 percent - not a lot of money for costly public transit and highway projects, said Randy Rentschler, a spokesman for the Metropolitan Transportation Commission, the region's transportation planning agency. California is already facing a deferred maintenance backlog of $\$ 67$ billion, according to the governor's budget office.

Another $\$ 50$ billion is dedicated to rural infrastructure improvements, $\$ 20$ billion is slated for infrastructure financing, and $\$ 10$ billion is dedicated to purchasing federal property that's currently leased. The remaining $\$ 20$ billion is set aside for a "Transformative Projects Program" for "ambitious, exploratory, and ground-breaking" proposals.
"This whole thing is woefully inadequate," Rentschler said. "This is not remotely close to a major infrastructure plan and not remotely close to something that could be significant for transportation."

Federal grants already favor applications from state and local sponsors that contribute matching funds. And the Bay Area, in particular, has a long history of voting to tax itself to support
investments in transportation. California last year increased its gas tax and approved a 10-year extension of its cap-and-trade program, both of which contribute significant funds for infrastructure projects.

But historically, the state and local agencies needed only to provide a 20 percent match for federal funding, though Bay Area projects often offered more, said Carl Guardino, the president and CEO of the Silicon Valley Leadership Group and a member of the California Transportation Commission. Under Trump's proposal, those requirements are flipped, with an 80 percent match required.

The Bay Area's fledgling toll lanes could benefit from such a proposal, Rentschler said. But it's less clear how other high-profile projects, such as extending BART to San Jose, would benefit, Guardino said. The second phase of that project already has 65 to 70 percent of local matching funds, he said, but would need to come up with more under Trump's proposal.
"We're closer to being competitive than most regions have been or probably will be," Guardino said. "But this new requirement would be a stretch for most projects in our region."

As part of the plan, the administration also is making a push to sell off federal assets, such as Reagan National and Dulles International airports, as well as power assets around the country, according to a copy of the proposal. The plan calls for giving federal agencies "authority to divest of Federal assets where the agencies can demonstrate an increase in value from the sale would optimize the taxpayer value."

Also on Monday, Trump released his proposed 2019 budget, which includes some $\$ 240$ billion in proposed cuts over the coming decade to an array of existing infrastructure programs - more than what Trump proposed as "new" spending, according to an analysis by Senate Minority Leader Chuck Schumer, D-New York.
"This would be a big mistake and counterproductive to fostering prosperous communities," said Paul Skoutelas, the president and CEO of the American Public Transportation Association.

Nevertheless, Skoutelas said he was encouraged by Congress' decision earlier this year to reject similar proposed cuts in the 2018 budget. He called Trump's infrastructure plan an opportunity to "push for a bipartisan approach that continues and expands upon the historic federal support needed to address public transportation's priorities."

Congressional Democrats are pushing their own plan to spend $\$ 1$ trillion in public funds, investing in projects that aren't partially privatized. Their blueprint would focus on roads and bridges and expand existing programs like TIGER grants, which go to transit, rail and bicycle path funding, as well as roads and highways.

While just about everyone in American politics agrees the country needs to spend more on infrastructure, Trump's proposal, which was touted as an area where he could find bipartisan compromise, was a non-starter with congressional Democrats.

Rep. Anna Eshoo, D-Palo Alto, said she was "deeply disappointed" by the plan and called the incentives toward privatization "poison pills."

The federal budget cuts will make state infrastructure funding from Sacramento even more important, said Sen. Jim Beall, D-San Jose. Trump's plan "raises the cost of transportation projects by drastically reducing the size of federal matching grants that historically have helped states and local governments build, improve, and repair roads."

But there will be a lot of room for change before the proposal is enacted, said Michele Nellenbach, director of strategic initiatives at the Bipartisan Policy Center. She lauded the president's focus on infrastructure as a "good starting point for Congress to get to work."

The Washington Post contributed to this article.

## Transit

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Why do we need \#SB1? To (a)FixCARoads, for safer bridges, more efficient highways and \#transit, and safer routes for \#pedestrians and cyclists. \#SenatorBillMonning lays it all out for you in this OpEd in the @MontereyHerald. bit.ly/2Ca8n2X\#RebuildingCA 7:45 AM - 10 Feb 2018
Bill Monning: Gas tax needed to protect our quality of life
By Senator Bill Monning The Feb. 4 Herald editorial derides the gas tax enacted last year because it will "increase the cost of living," but it fails to acknowledge the need for our roads to be...

## Bill Monning: Gas Tax Needed To Protect Our Quality Of Life

Posted: 02/08/18, 4:28 PM PST|Updated: 3 days ago
By Senator Bill Monning
The Feb. 4 Herald editorial derides the gas tax enacted last year because it will "increase the cost of living," but it fails to acknowledge the need for our roads to be repaired or offer any alternatives.

While many federal representatives, including the President, have stated that infrastructure maintenance and repair is one of their top priorities, they have done absolutely nothing to convert rhetoric to action.

California, on the other hand, has taken a bold step to invest in the state's road infrastructure by enacting Senate Bill (SB) 1. This measure will help us to repair our failing roads, bridges, and highway system. As acknowledged in the Herald editorial, road and highway repair requires at least $\$ 130$ billion to improve. The revenues generated by SB 1 will, by 2027, repair or replace 17,000 miles of pavement; 55,000 culverts and drains; 7,700 signals, signs and sensors; and 500 bridges, throughout California.

SB 1, which went into effect on Nov. 1, 2017, is a user pays proposition - those that use the roads pay for their maintenance and repair - to help us maintain local roadways, replace bridges lost to storms, and clear highways blocked by floods. Monterey County depends on safe roads and highways to support our economy, which is based on the movement of agricultural goods and tourism.

It is important to note that while truckers will pay an additional 20 cents per gallon for diesel fuel, the California Trucking Association (CTA) supported SB 1 . Why? The CTA recognized that the safety of its drivers and the protection of its trucks depends on safely maintained highways. Similarly, the League of Cities, California State Association of Counties, California Chamber of Commerce, and the Transportation Agency of Monterey County all supported SB 1 because of the benefits that will be provided to local communities.

Every city in Monterey County will receive the benefits of SB 1 for local road repair and maintenance, and the county will receive an increase of almost $\$ 28$ million over the next 10 years.

And while the Herald editorial laments a tax increase and expresses support for the repeal of SB1, it provides no alternative as to how we might pay to provide road and bridge repairs or makes any recommendations for raising revenues to support our aging and fractured road infrastructure.

With the enactment of SB 1, Governor Brown and the state Legislature have taken steps to reduce congestion, improve air quality, foster job growth, and support the state's economy. Perhaps the Herald would be wise to include the opinions of local business leaders, and city and county governments before criticizing a measure that is needed to protect our quality of life. In the end, the quality of life may be directly linked to the cost of living.

Senator Monning was elected in 2012 to represent the 17th Senate District, which includes all of San Luis Obispo and Santa Cruz counties, and portions of Monterey and Santa Clara counties. Senator Monning previously served in the California State Assembly for two terms.

## Alameda-Contra Cosia Transit Districh

## AC TRANSIT MESSAGE OF CONDOLENCE AND SUPPORT

02/08/2018

Following today's tragic event at Ashby Avenue \& Califomia Street, Berkeley

The Alameda-Contra Costa Transit District (AC Transit) wishes to extend our deepest condolences to the family of the driver involved in today's tragic event. We will continue to work closely with the Berkeley Police Department as they investigate the circumstances of this collision. Please direct questions related the police investigation to the public information office of the Berkeley Police Department.

The AC Transit Operator involved in today's collision has been with the District since 2014. He is fully cooperating with the police investigation. AC Transit standard protocol requires that the Operator undergo drug and alcohol screening. Additionally, the Operator's emotional recovery is of paramount concern to the entire AC Transit family, and therapeutic counseling has been provided.

Please note, HIPPA regulations preclude AC Transit from releasing the names of individuals involved in any active investigation.

## DRIVER DIES IN BERKELEY AC TRANSIT BUS COLLISION

February 8, 2018
A driver died after a collision with an Alameda-Contra Costa Transit bus that sent both the bus and the vehicle crashing into a nearby home in Berkeley Thursday morning, a police spokesman said.

Officers responded at 6:38 a.m. to the collision reported in the area of Ashby Avenue and California Street, Berkeley police Sgt. Andrew Frankel said.

Investigators determined a red sedan was traveling south on California when it hit the AC Transit bus, which was heading west on Ashby, Frankel said.

The force from the collision sent both vehicles crashing into a parked car and then a nearby house, according to Frankel.

He said the driver and lone occupant of the red sedan died in the crash, while the bus driver and single passenger on board were not injured.

Ashby Avenue will be closed for much of this morning while police investigate the crash, Frankel said.

## Special VTA Committee To Seek Resolutions For Financial Stability

## February 7, 2018

For the next four months, three members of VTA's Board of Directors will work together with more than a dozen other community groups to seek out ways to improve the Valley Transportation Authority's financial stability. The agency is facing a $\$ 20$ million structural deficit in fiscal year 2018 and $\$ 26$ million in 2019. The VTA Board of Directors approved the formation of an Ad Hoc Financial Stability Committee at its February 1 meeting.

Anticipated to meet on a monthly basis between February and June 2018, the committee will provide recommendations and approaches to address VTA's immediate and long-term financial challenges. The committee will take a close look at the current budget, future economic outlook, and Board adopted policies and priorities to address the shortfall and submit recommendations to the VTA Board of Directors.

Through the work of this committee, VTA will have a better understanding of what steps it may need to take to become more financially stable and provide the critical transit service, congestion management and construction of transportation projects that local communities rely on.

Serving on the committee will be Board Members Cindy Chavez (Santa Clara County), Johnny Khamis (District 10, City of San Jose) and Ex-Officio Board Member Jeannie Bruins (City of Los Altos). Joining these members are one representative and one alternate from the following organizations:

VTA Policy Advisory Committee (PAC)
VTA Citizens Advisory Committee (CAC)
VTA Committee for Transportation Mobility and Accessibility (CTMA)
Santa Clara County City Managers Association
Santa Clara Coalition of Chambers of Commerce
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## Santa Cruz Sentinel

## New Downtown San Jose Towers Would Add 650 Homes



Davidson Plaza Towers in downtown San Jose, consisting of 653 residential units, in an conceptual image. Two new towers in downtown San Jose would add about 650 residential units to the city's skyline, a project that is near other efforts to add housing in the city's urban core. (Arquitectonica, Terrascape Ventures -- Contributed)

By George Avalos, gavalos@bayareanewsgroup.com
Posted: 02/05/18, 8:39 PM PST | Updated: 5 hrs ago
SAN JOSE $\gg$ Two new towers proposed for downtown San Jose would add about 650 residential units to the city's skyline, a project that is located near other efforts to add housing in the city's urban core.

Proposals for the residential high rises first emerged in 2016, when developer DAL Properties told this news organization that the company had entered discussions with San Jose officials about the feasibility of two housing towers at 255 W . Julian St. DAL said that several hundred units could comprise each tower. The project is being built by the developers Mark Lazzarini and Tony Arreola.
"We know there's a market for this," Lazzarini said Monday. "These urban areas like San Jose are in high demand. People want to live in a walk-able community that's close to transit, entertainment and restaurants that have an urban lifestyle."

Silicon Valley's dire lack of housing for its burgeoning workforce of tech and non-tech employees has only intensified the need for residential units and made the project more feasible.
"There continues to be a scarcity of housing relative to employment growth," Lazzarini said. "The challenge will be getting to market. We will reevaluate as we go in terms of construction and the project's feasibility."

The DAL firm, operating as Terrascape Ventures for this development, recently submitted specific proposals for the complex.

The project will included 653 residential units in the towers, as well as residence and amenity lobbies, and commercial spaces, Terrascape Ventures wrote in a submission to San Jose planners. The ground-floor retail will total 10,000 square feet, Lazzarini said.

Each tower will be 18 stories high. The project is dubbed Davidson Plaza Towers.
"This project is in a great location and it has the best of all situations," said Bob Staedler, principal executive with Silicon Valley Synergy, a land use and planning consultancy.

The Davidson Plaza residential complex would be located a short distance from the Diridon transit station and a proposed Google transit-oriented community of offices and other facilities where potentially 15,000 to 20,000 of the tech giant's employees might work. The Google proposal would add 6 million to 8 million square feet of offices to downtown San Jose.
"It is in a thriving downtown area, near San Pedro Square Market, near trails and two new parks, it's not too far from Diridon Station and it will be right next to the freeway," Staedler said. "This is still a community where people still need cars."

The proposed housing towers also would be adjacent to sites where at least 1,500 residential units are planned on or near several vacant lots. Developers are pushing forward with multiple projects that would transform blighted blocks, decaying buildings and vacant lots in the city's urban heart into a vibrant community.

The Diridon transportation hub is slated to become a major nexus for an array of transit lines, including BART, high-speed rail, light rail, Catrain, Amtrak and the ACE Train, along with buses.
"Davidson Plaza will be a winner," Staedler said. "It's going to be a residential project that people can reach from anywhere in the Bay Area, either through transit or in their car."

## GovTech.com

# Uber Is Not Behind La Transit's Ridership Decline 

## An increase in car ownership is actually behind the drop in bus and rail trips taken last year.

by Daniel C. Vock, Governing / February 2, 2018
In Los Angeles, the number of bus and rail trips taken last year was the lowest in more than a decade. Over just the last five years, transit ridership has declined 15 percent.

## What's behind the huge drops?

Cars. More specifically, the fact that a lot more people who might otherwise ride the bus or train now own cars.

That factor played a bigger role in recent ridership declines than did the advent of ride-hailing companies like Uber and Lyft, lower gas prices, the quality of transit service or higher fares, according to a new study from transportation researchers at the University of California at Los Angeles (UCLA).

## RELATED

Long a Bus City, Ohio's Capital Hires Consultants to Explore New Transit OptionsWashington Transit Agency Goes Electric, Adds New Tech to Buses

Although the research was limited to Southern California, it could have big implications if similar patterns are found elsewhere. Transit agencies around the country -- in Chicago, Cleveland, New York, Phoenix and Washington, D.C., to name a few -- are struggling to keep riders.
"The growth of household vehicles in the last 15 years has been astonishing," wrote the researchers from UCLA's Institute of Transportation Studies.

Southern California added 2.3 million people and 2.1 million vehicles from 2000 to 2015, or an average of 0.95 vehicles per new resident. That's a big change from 1990 to 2000, when the region added 1.8 million people but only 456,000 vehicles, or 0.25 vehicles per new resident.

That's important because while income, age, location and many other factors influence whether someone takes transit, according to the study, not having access to a car is the "defining attribute" of regular transit riders in the region.

Census data show that the rise in vehicle ownership is especially high in L.A. among low-income and immigrant residents who are otherwise among the most likely groups to rely on transit.

It's unclear what was driving the higher vehicle ownership rates, especially because wages were stagnant. But there are many indications that low-income consumers are taking on more vehiclerelated debt. Between 2000 and 2015, inflation-adjusted per capita vehicle debt in California rose 91 percent, according to the study.

Evelyn Blumenberg, a UCLA professor who co-authored the report, says vehicles could be more of a necessity among low-income residents because jobs and housing continue to spread into suburban areas.

The data could force agencies to rethink their strategies for increasing ridership.
For years, Brian Taylor, another UCLA professor who worked on the study, says he urged officials to concentrate their resources on high-density, high-ridership areas. But the researchers found that the neighborhoods best served by transit could also be responsible for some of the transit drops.
"The biggest declines have been on the best lines in the whole state," Taylor wrote. This evidence is consonant with these "neighborhoods becoming more affluent, with that affluence being associated with less transit use and with people left out of that affluence remaining on transit."

In Southern California, like many regions, very few people take transit, and even fewer take it regularly. That means that seemingly minor changes within small geographic areas or demographic groups can have a disproportionately large effect on transit ridership. Eighty percent of transit commuters in the area live on less than 5 percent of the land area.

While it's popular to blame ride-sharing, higher fares and lower gas prices for transit's declining popularity, the study breaks down why that's not true -- or at least not telling the full story:

## Uber and Lyft

Transit ridership started its decline in 2007, but the ride-hailing apps weren't even introduced until 2009 and weren't widely adopted until 2012.
"While the [ride-hailing services] may affect transit use, they cannot by themselves explain transit's recent patronage decline," the researchers concluded.

On top of that, there is still conflicting evidence over whether the services actually siphon off trips from transit. (The companies do not provide much public information about who rides them and where.)

But the app users tend to be well-off and college-educated. Users often take them on Friday and Saturday nights, when transit availability is scarce, or to get to and from an airport.
"What little evidence we do have suggests that most [ride-hailing] trips do not replace transit trips," the researchers wrote:

## Higher fares

For the most part, the researchers found only a small effect of higher fares on transit ridership. Fares in Southern California have generally been lower than the state and national averages. They have also held steady over the years after adjusting for inflation.

But Orange County seems to be an exception.
Since 2002, the county's transit authority raised fares by 50 percent. It also had the biggest ridership drop in the region of 35 percent since 2007. But even there, that doesn't appear to be the only factor.

According to industry rule of thumb, the researchers note, a 10 percent fare increase should lead to a 3 percent ridership decrease. If that were true, Orange County should have only seen a decline of 17 percent.

## Gas prices

The researchers concluded that fuel prices were a "real but probably minor driver in falling transit use."
"People who drive less when gas prices are high often walk, carpool, stay home or drive to nearer destinations (e.g. a restaurant that is two miles away instead of 10 ). Similarly, for many regular transit riders, changes in the price of gasoline are immaterial because many transit users do not have access to private vehicles," the researchers explained.
"Much of the adjustment to fluctuating fuel gas prices that occurs in the U.S. has no bearing on transit use, and the relationship between fuel prices and transit ridership tends to be weaker than the relationship between fuel prices and driving."
"'Weaker,' however, is not 'nonexistent," they cautioned. "Transit use does rise and fall with fuel prices, with a small lag."

## New rail

Los Angeles is in the middle of a transit building boom, especially for rail. But ridership has been decreasing on both bus and rail routes.

LA Metro's blue, red and green routes all lost ridership between 2012 and 2016, even as the new gold and Expo lines added them.

The researchers also did not find that bus service cuts drove the declines.
"Instead, service expansion has been accompanied by less ridership," they wrote. While buses got slower in traffic, Metro improved the on-time performance of its buses. Rail ridership fell, even though Metro's train's "maintained a near-perfect on-time record," they noted.

## The Hill

## GOP Chairman: Republicans' Reactions 'Mixed' On Gas Tax Increase

By Mallory Shelbourne - 02/01/18
House Transportation and Infrastructure Committee chairman Bill Shuster (R-Pa.) on Thursday said he received a "mixed" reaction when he brought up the gas tax during an infrastructure meeting at the GOP retreat.

Shuster said the subject "was the elephant in the room" during a working session that included several lawmakers, Transportation Secretary Elaine Chao and White House economic adviser Gary Cohn.
"Look, nobody wants to raise taxes. Nobody wants to raise fees in this country," Shuster told reporters at The Greenbrier resort in White Sulphur Springs, W.Va.

Shuster has long maintained that all options are on the table to contribute to an infrastructure overhaul, though he has also noted the gas tax hike's unpopularity among Republicans.

Proponents of raising the levy argue doing so is necessary to keep the Highway Trust Fund afloat. Money from the 18.4 -cent-per-gallon tax goes into the fund to pay for road projects, but that tax has not been raised since 1993, eroding the fund's purchasing power over time.

But increasing the tax has received varied reviews from lawmakers in both parties, though industry groups and some members of Congress have rallied behind an effort to raise the fee.

Shuster on Thursday emphasized that any infrastructure package must have bipartisan support, conceding that the GOP majority may have to lose some Republican votes to get Democrats on board.
"First and foremost, it has to be bipartisan to get it through the Senate," Shuster said. "And if we want to attract Democrats in the House, we probably lose some Republican votes."

The Pennsylvania Republican's comments come after President Trump during his annual State of the Union address called on Congress to craft an infrastructure plan of "at least" $\$ 1.5$ trillion to overhaul U.S. ports, bridges, highways, airports and other public works.

But the president offered few details on a proposal, which he said must streamline the permitting process and include public-private partnerships "where appropriate."

Senate Commerce, Science and Transportation Committee Chairman John Thune (R-S.D.) moderated the working session, which also included Sen. John Barrasso (R-Wyo.), who is chairman of the Senate Environment and Public Works Committee.

# BYD Announces New Electric Bus Deliveries To Santa Barbara, UC San Francisco 

Source: BYD Motors Inc. Feb 2, 2018

BYD Coach and Bus has announced two new partnerships that will see 29 American-made BYD K7 electric buses deployed across the California Coast.

The University of California, San Francisco, has purchased 15 of the 30 -foot buses and Santa Barbara Metropolitan Transit District is rolling out 14 of the same model. The delivery of these new buses reflects BYD's continued dominance of North American battery-electric bus manufacturing.
"Across North America, we continue to see growth in battery-electric bus adoption as more operators are realizing that they can reduce maintenance costs, improve rider comfort and reduce their environmental footprint simultaneously," stated Macy Neshati, BYD senior vice president.

With a range of more than 140 miles and a capacity of up to 42 passengers, depending on configuration, the K7 can serve as the workhorse of the low-floor shuttle fleet for diverse agencies. The K7 buses cost approximately $\$ 1.00$ less per mile to operate than the typical dieselpowered bus. The new buses produce zero emissions and make oil changes a thing of the past.

The proprietary BYD Iron Phosphate battery is nontoxic, 100 percent recyclable, fire-safe and incredibly long-cycled.
"BYD continues to lead the way in the research, development, manufacture and delivery of battery-electric buses in North America and around the world. We are grateful for the continuing confidence that the market places in us. Together we are changing the face of public transit," concluded Macy.

To date, 13 of the 15 buses have been delivered to University of California at San Francisco. Santa Barbara has received 11 of the 14 buses for their system. The remaining buses are currently in production. ABOUT BYD The Official Sponsor of Mother Nature, BYD is the world's largest manufacturer of electric vehicles. Specializing in battery technologies, BYD's mission is to solve our global energy challenge of reducing dependence on fossil fuels for transportation and power production. BYD is the overwhelming global leader in battery-electric buses with nearly 40,000 buses in service in communities in North America, South America, Asia and Europe. BYD is also an industry leader in several other high-tech sectors, including high-efficiency automobiles, medium- and heavy-duty trucks, electric forklifts, energy storage and solar power generation.


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## EXECUTIVE SUMMARY

In the last ten years transit use in Southern California has fallen significantly. This report investigates that falling transit use. We define Southern California as the six counties that participate in the Southern California Association of Governments (SCAG) - Los Angeles, Orange, Riverside, San Bernardino, Ventura and Imperial. We examine patterns of transit service and patronage over time and across the region, and consider an array of explanations for falling transit use: declining transit service levels, eroding transit service quality, rising fares, falling fuel prices, the growth of Lyft and Uber, the migration of frequent transit users to outlying neighborhoods with less transit service, and rising vehicle ownership. While all of these factors probably play some role, we conclude that the most significant factor is increased motor vehicle access, particularly among low-income households that have traditionally supplied the region with its most frequent and reliable transit users.

## Transit service and use trends in Southern California

Long associated with the automobile, in the last 25 years Southern California has invested heavily in public transportation. Since 1990, the SCAG region has added over 100 miles of light and heavy rail in Los Angeles County, and over 530 miles of commuter rail region-wide. These investments, however, have not been matched by increases in transit ridership. Transit ridership in the SCAG region reached its postwar peak in 1985. Through the 1990s and 2000s ridership rose and fell modestly, but never again reached its 1985 level. Figure ES-1 shows that per capita trips have been mostly declining in the SCAG region since 2007, and have fallen consistently since 2013.


Figure ES 1. Transit trips per capita. Relatively flat nationally, but down in California since 2009.

This decline spans modes; it is not simply a case of bus ridership falling while rail ridership increases. Rail ridership, on net, is also down. Further, these aggregate numbers mask large asymmetries in transit service and use. Transit use in particular is heavily concentrated among a relatively small segment of the population, in a small number of the region's neighborhoods, and on a small share of the region's transit systems. As a result of these asymmetries, even small changes in these households, neighborhoods, or transit systems can have an outsized effect on regional transit use.

## A few people make most of the trips

The average resident of the SCAG-region made about 35 transit trips in 2016, but the median resident made none. Only a minority of the population rides transit very frequently or even occasionally. About two percent of the population rides transit very frequently (averaging 45 trips/month), another 20 percent of the population rides transit occasionally (averaging 12 trips/month), and more than three-quarters of SCAG-region residents ride transit very little or not at all (averaging less than 1 trip/month). Heavy transit use, moreover, is concentrated among the low-income population, and especially low-income foreign born residents.

## A few neighborhoods generate most of the trips

Ten percent of all of the people who commuted to and from work on transit in 2015 lived in 1.4 percent of the region's census tracts, which covered just 0.2 percent of the region's land area; the average number of transit commuters in these few tracts was almost 12 times the regional average. Fully 60 percent of the region's transit commuters lived in 21 percent of the region's census tracts, which occupied 0.9 percent of the region's land area. Overall, the most urban and transit-friendly neighborhoods in the SCAG region comprise less than one percent of the region's land area. These neighborhoods hold about 17 percent the
region's population, but 45 percent of its transit commuters. So while the region's transit systems are increasingly diverse and far reaching, transit riders remain highly concentrated.

## A few operators carry most of the possengers

The SCAG region has over 100 transit operators, but just a few them carry the vast majority of riders. Figure ES-2 shows that nine percent of the region's operators are responsible for 60 percent of the region's transit service and carry about 80 percent of all transit riders.


Figure ES 2. Key metrics by operating grouping. 14\% of operators carry $83 \%$ of the trips.

Because service and riders are concentrated on the largest systems, ridership losses are concentrated on these systems as well. Four SCAG-region operators-LA Metro, Orange County Transportation Authority (OCTA), Los Angeles Department of Transportation (LADOT), and the Santa Monica Big Blue Busaccounted for 88 percent of the state's ridership losses between 2010 and 2016. LA Metro by itself accounted for a remarkable 72 percent of the state's losses. Because LA Metro's losses are themselves highly concentrated, a dozen routes in LA County account for 38 percent of all the lost ridership in California. In fact, half of California's total lost ridership is accounted for by 17 LA Metro routes ( 14 bus and 3 rail lines) and one OCTA route.

## Possible causes of eroding transit use

Why is transit use falling? We consider a number of potential explanations, and review our findings below.

## Changes in transit sevice and fares have mostly followed and not led falling ridership

Transit use can fall if transit becomes harder to use: if service declines, or fares rise. It does not appear, however, that these factors played a large role in the SCAG region's falling ridership. While transit fare increases are never popular, they are occasionally necessary to keep pace with rising costs. Figure ES-3 shows the inflation-adjusted trends in average fare paid per mile of transit travel between 2002 and 2016 in the U.S., California, and the SCAG region. Fares in Southern California are lower than those in the rest of the state and the country and have been remarkably flat over time.


Data source: National Transit Database (2000-2016)
Figure ES 3. Average fare per passenger mile traveled in 2015 dollars. Average fare per PMT remained fairly consistent and even declined a little since 2009.

These regional averages can mask significant variation among transit operators. In particular, inflationadjusted fares per boarding for both OCTA and the Big Blue Bus increased by about 50 percent between 2002 and 2016 - to nearly $\$ 1.25$ and $\$ 0.75$ per boarding respectively. So while fares have probably not caused significant ridership declines across the region, they may have played a role at operators like OCTA and Big Blue.

Transit service in the SCAG region, moreover, mostly rose while ridership was falling, and ridership fell even on routes that maintained excellent on-time records. These circumstances suggest that service quantity and reliability were not large factors in falling transit use. There is some evidence, admittedly limited, that riders felt unsafe on transit vehicles in recent years, which may have contributed to the ridership decline.

## Fuel prices have likely played a contributing, but not leading role

Fuel prices have been volatile since 1998, but have fallen substantially since peaking in 2012. Figure ES-4 compares trends in fuel prices and transit use in the Los Angeles metropolitan area. While there is a generally positive relationship (as fuel prices rise so too does ridership), it is a relatively weak one - fuel prices rise and fall much more dramatically than transit patronage. The timing of transit's decline, moreover, is not conducive to a fuel price explanation. Per capita transit use in Southern California has been mostly falling since 2007, and it fell between 2009 and 2011 when fuel prices were rising sharply.


Data sources: National Transit Database (2000-2016), US Energy Information Administration
Figure ES 4. Transit ridership and gas prices in Los Angeles Metropolitan Area.

## The Transportation Network Companies do not appear to have cannibalized transit

We have very little data that lets us directly measure the effect of transportation network companies (TNCs, like Lyft and Uber) on transit use. What evidence we do have suggests that most TNC trips are probably not replacing large numbers of transit trips. The typical TNC user does not resemble the typical transit rider, the typical TNC trip does not occur when and where most transit trips occur, and most TNC users report no change in their travel by other modes. However, if the pool of TNC users continues to expand, the effect of TNCs on transit use - both positive and negative - may expand as well.

## Evidence about neighborhood change and migration of lower-income people is mixed, but suggestive

Transit is heavily-supplied in a small proportion of places, and heavily used by a small proportion of people. If the neighborhoods where transit quality is high change, and become less likely to hold the small group of people who use transit regularly, then transit use could fall. We find some evidence consistent with the idea that neighborhood change has been associated with less transit use. Areas that were heavily populated with transit commuters in the year 2000 became, in the next 15 years, slightly less poor, and significantly less foreign born. Perhaps most important, the share of households without vehicles in these neighborhoods fell notably. All these factors align with a narrative where a transit-using populace is replaced by people who are more likely to drive. We emphasize, however, that this relationship is not one we can measure with precision, and it would be premature to declare neighborhood change a large culprit in falling transit ridership.

## Private vehicle access increased substantially from 2000 forward

A defining attribute of regular transit riders is their relative lack of private vehicle access. But between 2000 and 2015, households in the SCAG region, and especially lower-income households, dramatically increased their levels of vehicle ownership. Census data show that from 1990 to 2000 the region added 1.8 million people but only 456,000 household vehicles (or 0.25 vehicles per new resident). From 2000 to 2015 , the SCAG region added 2.3 million people and 2.1 million household vehicles (or 0.95 vehicles per new resident).

The growth in vehicle access has been especially dramatic among subsets of the population that are among the heaviest users of transit. Between 2000 and 2015, the share of households in the region with no vehicles fell by 30 percent, and the share of households with fewer vehicles than adults fell 14 percent. Among foreign-born residents, zero-vehicle households were down 42 percent, and those with fewer vehicles than adults were down 22 percent. Finally, among foreign-born households from Mexico, the share of households without vehicles declined an astonishing 66 percent, while households with more adults than vehicles dropped 27 percent. Living in a household without a vehicle is perhaps the strongest single predictor of transit use; the decline of these households has powerful implications for transit in Southern California.

Vehicle ownership is not, of course, the only determinant of regional transit ridership-income, race, age, and nativity, to name a few, also matter. But vehicle access may well be the largest factor. We demonstrate the strong association between vehicle access and transit ridership by building a series of statistical models of transit ridership. The models cover the SCAG region, all of California, Los Angeles

County, and the SCAG region outside of LA County. Each model compares two predicted outcomes: the change in transit use we would expect to see based on due to changes in socioeconomic attributes other than vehicle ownership, and the change we would expect to see if we account, in addition, for changes in vehicle access. In short, we compare a scenario where incomes, nativity, racial composition, and various other attributes change the way they did from 2000-2015, but where vehicle access is unchanged, to a scenario where vehicle access changes as well.


Figure ES 5. Transit use changes based on area.
Figure ES-5 shows the results of these models. The dotted blue line in each case is an estimate of transit ridership trends between 2000 and 2015 based on changes in the region's income, nativity, and so on, but assuming no change in vehicle ownership. The solid red lines represent these same models, but with the region's observed changes in vehicle access included. In all cases the blue line predicts transit use starting at a lower point and declining only modestly, while the red line shows transit use starting at a higher point and falling sharply, more in line with what we are actually observing. The models reinforce the idea that vehicle access is the decisive factor in transit use: income, age, and many other factors matter, but they matter largely because they predict the ability to access and use motor vehicles. In Southern California since 2000, that ability has increased, and transit use has fallen.

## Conclusion

Public transportation is unlikely to fare well when Southern California is flooded with additional vehicles, especially when those vehicles are owned disproportionately by transit's traditional riders. Much of the region's built environment is designed to accommodate the presence of private vehicles and to punish their absence. Extensive street and freeway networks link free parking spaces at the origin and destination of most trips. Driving is relatively easy, while moving around by means other than driving is not. These circumstances give people strong economic and social incentives to acquire cars, and - once they have cars - to drive more and ride transit less.

The advantages of automobile access, which are particularly large for low-income people with limited mobility, suggest that transit agencies should not respond to falling ridership by trying to win back former riders who now travel by auto. A better approach may be to convince the vast majority of people who rarely or never use transit to begin riding occasionally instead of driving. This task is unquestionably more difficult than serving frequent-riding transit dependents, and it would likely require weakening or removing some of the state's and region's entrenched subsidies for motor vehicle use. But the opportunity is substantial. The SCAG region, between 2012 and 2016, lost 72 million transit rides annually. That number seems daunting, but the region has a population of 18.8 million, and about 77 percent of those people (roughly 14.5 million), ride transit rarely or never. If one out of every four of those people replaced a single driving trip with a transit trip once every two weeks, annual ridership would grow by 96 million - more than compensating for the losses of recent years. The future of public transit in the SCAG region, then, will be shaped less by the mobility needs of people who do not own vehicles, and more by policy decisions that encourage vehicle-owning households to drive less and use transit more.

## FALLING TRANSIT RIDERSHIP: CALIFORNIA AND SOUTHERN CALIFORNIA

In the last 15 years Americans have supported public transportation more and demanded it less. California, the nation's most populous state, is in many ways emblematic of this pattern. Motivated by concerns about congestion and climate change, California's state and local governments have invested heavily in transit, often with the explicit approval of voters. This investment is particularly evident in Southern California. Since 1990, the six-county Southern California Association of Governments (SCAG) region has added over 100 miles of light and heavy rail in Los Angeles County, and over 530 miles of commuter rail region-wide. In November 2016, voters in LA County approved a $\$ 120$ billion sales tax measure for transportation, with a plurality of the funding dedicated to expanding and improving transit (Measure M: Metro's Plan to Transform Transportation in LA 2016). This measure marked the third such countywide tax increase since 1990, and the fourth one overall. Other SCAG counties have also routinely passed sales tax measures for transportation and transit improvements.

Over the same period, however, California's transit use (depending on how one measures it) has varied from modest increases to relative stagnancy to-in more recent years-steep decline. Southern California is again illustrative. Despite its heavy investments in transit, in absolute terms the region's transit ridership reached its postwar peak in 1985 . Through the 1990 s and mid-2000s ridership rose and fell modestly, never reaching 1985 levels, and in 2012 it began declining. In per capita terms, ridership has fallen more steadily since the 1980s. Ridership per capita was flat in the early 2000s, but started trending down again in 2007. In California overall, per capita ridership was flat until 2009, when it began a decline from which it has not recovered (The National Transit Database (NTD), 2015).

Why is transit ridership falling? The question is not merely academic. The combination of rising supply and falling demand has profound fiscal implications for transit operators, since it substantially increases the public cost of moving each passenger. Increased transit supply has meant increased public investment, particularly in new rail services. Measured as a ten-year rolling average of capital and operating costs, transit investment in both the US and California rose almost 50 percent between 2000 and 2015. These rising expenditures, when combined with falling patronage, yield falling productivity. Between 2005 and 2016, transit productivity - measured as passenger boardings per vehicle revenue hour (VRH) -has fallen 5 percent in California and 14 percent in the SCAG region. Falling productivity is not sustainable; it usually ends with more subsidies or less service.

Beyond fiscal concerns, falling ridership calls into question a number of California's ambitious environmental goals. California's aggressive agenda for combatting climate change is predicated in part on many people using transit more and driving less. The carbon reduction targets set out in Senate Bill 375, California's landmark climate reduction bill of 2008, involve large mode shifts to transit and away from driving, while the California Department of Transportation's current Strategic Management Plan includes an explicit goal of doubling the state's transit mode share by 2020 (California Department of Transportation, 2015). But transit ridership, despite heavy transit investment, is trending very much in the opposite direction.

This report assesses California's, and particularly Southern California's, recent ridership downturn. We emphasize Southern California because - as we will show - California's falling ridership is in many ways Southern California's falling ridership. Had transit use not fallen in the SCAG region through 2016, it would not have fallen statewide.

Our study considers the years from 2000 to 2015 or 2016 (depending on data availability). While widespread concern about falling transit use did not begin until ridership began falling absolutely in 2012, we focus on the per capita decline that began about five years before that. The falling absolute ridership of the last few years is important, and we do pay outsized attention to it. But we view it as a particularly acute manifestation of the longer-run per capita decline, not as a phenomenon in itself. Absolute declines in ridership are at once more noticeable and less important than per capita declines. Ridership numbers that are not adjusted for population lack context, and focusing only on absolute ridership declines can for that reason yield incomplete or misleading results.

For example, since 2012 gas prices have fallen sharply, transportation network companies (TNCs) like Lyft and Uber have expanded dramatically, undocumented immigrants have been granted drivers' licenses, and the economy has rebounded from the Great Recession. All these factors may have depressed transit use, but all of them also occurred well after per capita transit ridership began to decline. Thus none of them, individually or in combination, can fully explain Southern California's, or California's, transit patronage losses.

Our analysis faces data limitations common to examinations of transit. Aggregate data on transit use are widely available through the National Transit Database (NTD), but users of NTD data can never be entirely sure of the data's accuracy. ${ }^{1}$ NTD records are compiled from the reports of individual transit operators to the federal government, and for a variety of reasons - from failure to report to mistakes in reporting to errors in correcting those mistakes - NTD data do not always match up with operator data. We have checked some of the NTD data used in this report against operator data and been satisfied that they reasonably conform, but checking all the data would be impossible. We emphasize that this problem is almost universal in transit studies: all data are imperfect, but the NTD is the nation's standard source for transit data.

A second issue is that while data on transit use are easy to find, data on transit users are not. Public transportation is used by a small and hard-to-track subset of the population, making riders (and especially former riders) hard to study. The U.S. Census, in its annual American Community Survey (ACS), provides detailed economic and demographic information about transit commuters, but commutes are a minority of transit trips, and commuters (as we will show) are a minority of transit riders. More detailed data on transit users can be found in the California Household Travel Survey (CHTS) which provides an in-depth look at travel of all types by Californians, and complements those travel data with extensive person-level
${ }^{1}$ Transit operators who receive funding from the Federal Transit Administration's Urbanized Area Formula Program, or its Rural Formula program, must submit data to the NTD on the financial and operating conditions of their systems, as well as the conditions of their assets and rolling stock. Just over 660 operators receive such funding and report to the NTD. See https://www.transit.dot.gov/ntd
socioeconomic information. But the CHTS is a one-year snapshot, only available for 2012. As a result, we have a data mismatch: excellent data for a single year, but a research question - why is transit ridership declining? - that demands data on changes over time.

A last data obstacle is that the determinants of transit use are varied, ranging from gas prices to auto ownership to the quality of transit service, and no single data set contains all of them. Some factors thought to influence transit use, like the availability of free parking, are not systematically tracked at all.

To work around these limitations, we draw on an array of spatial, person-level, and administrative data. At different points we use the U.S. Census summary files, the Integrated Public Use Microdata (IPUMS) of the Census, ${ }^{2}$ state and national travel diary data, gas price and economic data from the Energy Information Agency and the Bureau of Labor Statistics, and data and rider surveys conducted by some of Southern California's larger transit operators. One operator-the Los Angeles County Metropolitan Transportation Authority (Metro, or LA Metro) -by itself accounts for most of the region's transit use and has ample public data available. As a result, at different points in the report when data for the entire region is lacking, we draw on data specific to LA Metro.

Largely because of these data constraints, the case we build is circumstantial; we offer no definitive proof of cause-and-effect. But the evidence is nevertheless compelling. The primary factor we identify is automobile ownership. In the last 15 years, household vehicle access in the SCAG region has grown dramatically. Vehicle ownership has grown particularly sharply among subgroups most likely to use transit, such as the low-income and the foreign born from Latin America. The steep rise in vehicle access among these groups that occurred as transit ridership began to fall is not direct proof, but it is a smoldering if not a smoking gun. Public transportation is unlikely to fare well when Southern California is flooded with additional vehicles. Much of the region's built environment is designed to accommodate the presence of private vehicles and to punish their absence. Extensive street and freeway networks link free parking spaces at the origin and destination of most trips. These circumstances give people strong incentives to acquire cars, and - once they have cars - to drive more and ride transit less.

The surge in vehicle ownership does not explain all of the transit decline. And it may well have been reinforced by falling gas prices and the rise of TNCs - though again we note that increasing vehicle ownership and declining transit use began before TNCs existed and when gas prices were still high. But increased vehicle ownership by itself probably explains much of Southern California's lost transit ridership.

Our findings accord with previous research about transit patronage. Giuliano (2005) has shown that compared to Americans at large, the poor use transit more but like it less. The typical low-income rider wants to graduate to automobiles, while the typical driver might view transit positively but have little interest in using it (Manville \& Cummins, 2015). These facts, coupled with the falling ridership of recent years, raise questions about transit's future.

Transit ridership is not, by itself, a legitimate goal of public policy. Transit use is instead a means to achieve other public ends. Traditionally, transit's goals have been twofold: Providing mobility to disadvantaged people who lack it, and mitigating the social and environmental costs of private automobiles by providing alternatives to them. The first goal has long accounted for more of transit's ridership, while the second

[^6]has accounted for more of its rhetoric. Throughout the United States, and particularly in Southern California, public transportation advocates have emphasized transit's potential to manage traffic and reduce pollution. In practice, however, transit has functioned overwhelmingly as a social service for lowincome people with little private mobility (Taylor \& Morris, 2015).

Because transit has primarily carried low-income people, rising vehicle ownership among those people suggests a future where public transportation's core ridership could dramatically shrink. While this outcome poses a grave problem for transit operators, it is not obvious that transit operators should try to win these low-income riders back, at least not to the very high levels at which they rode transit previously. With very few exceptions, acquiring an automobile in Southern California makes life easier along multiple dimensions, dramatically increasing access to jobs, educational institutions and other opportunities (Kawabata \& Shen, 2006). As a result, pulling low-income former riders out of their cars and back onto trains and buses could make transit agencies healthier but the region poorer. If transit agencies want to protect their fiscal health while also increasing social welfare, they may need to convince the vast majority of people who never use transit to begin riding occasionally instead of driving. This task is unquestionably more difficult than serving a large pool of people who have few alternatives to transit. Convincing some drivers to start using transit would likely require weakening or removing some of the state's and region's entrenched subsidies for motor vehicle use. But transit is unlikely to grow substantially, to accomplish its environmental goals, if driving remains artificially inexpensive.

## THE SPATIAL AND DEMOGRAPHIC DISTRIBUTION OF AMERICAN PUBLIC TRANSPORTATION

Public transportation use in the United States is distributed unevenly across people and places. Transit accounts for about two percent of all passenger miles travelled (PMT), and about two percent of personal trips overall (NHTS 2009). These small overall numbers, however, conceal transit's outsized importance to some people in some places. The average U.S. resident made about 32 transit trips in 2016 (Neff \& Dickens, 2017; U.S. Census Bureau, 2016), but the modal resident made zero trips, and a small number of people rely on transit extensively. Chu (2012) shows that 20 percent of Americans live in neighborhoods without transit, while 60 percent live in neighborhoods with transit but have not used it in the previous month. Another 11 percent uses transit less than ten times per month, while eight percent take ten or more trips monthly.

The small share of people who use transit frequently is concentrated in a handful of metropolitan areas. In 2016, 65 percent of all transit boardings occurred on the nation's ten largest transit operators; the 15 systems in the New York region by themselves account for over 40 percent of the country's transit trips (FTA, 2016). Even within these transit-heavy areas, however, most people do not use transit regularly, because most transit use occurs in the central cities, and specifically among lower-income and foreign-
born people in these cities. And even within these subgroups, whose members are more likely to ride transit, most people do not use transit.

Why is transit use so rare? In the broadest terms, travelers will choose to ride transit when they believe transit has the lowest relative costs - in money, time, or risk and uncertainty - of the various transportation modes available to them. These factors help explain why so much transit use occurs in New York City. New Yorkers ride transit as much as they do not only because transit service is frequent and extensive, but also because riding a subway across Manhattan is often cheaper, faster and more reliable than driving. Manhattan's streets are clogged with unpredictable congestion and parking is scarce and expensive. ${ }^{3}$ In most other places, driving is a faster door-to-door option, and one that people also believe is safer (Yoh, Iseki, Smart, \& Taylor, 2011). Driving in these places is also more reliable: When congestion is low and transit service is sparse, riding transit might involve more time waiting at stops and transferring between vehicles, which make trips seem unpredictable, complicated and burdensome (Iseki \& Taylor, 2009). For this reason, outside New York and a handful of other urban places, most transit users are people who for various reasons do not have the option of travelling by car.

The fact that so few people use transit regularly is important but often overlooked, especially in discussions about why ridership might fall. Per capita transit use can fall when current riders ride less, when the number of people who never ride grows, or both. Strictly speaking, there is no difference between these root causes. A person who rides and stops is a lost transit rider, but so is a person who moves to a transit service area and never rides. The decision to stop and the failure to start both reduce per capita transit use.

In practice, however, concerns about falling per capita ridership are rarely concerns about new residents who never start riding, and are instead concerns about current riders who leave. This dynamic is understandable, as riders who leave are easier to notice. But it is important to remember that transit riders leave transit regularly, even when ridership is stable or growing. If riders who leave are replaced by others, their departure from transit is less noticeable, and ridership might remain unchanged. For that matter, ridership can remain unchanged even when riders leave and are not replaced by other people. If an existing rider stops taking her daily trip and drives instead, but another frequent rider adds a daily trip, the number of riders falls but per capita ridership does not. Conversely, if two riders who take three trips a day each start taking two, the number of riders won't change but ridership will. Riders are not equivalent to ridership; stable ridership can conceal large churn among riders, and vice-versa.

## The Spatial Concentration of Transit in California and Southern California

As it is in the nation at large, public transit use in California is unevenly distributed: a small share of people and places account for a large share of overall rides. Northern Californians use transit more intensively than Southern Californians, largely as a result of high ridership in San Francisco and its surrounding areas, but most of California's transit use occurs in Southern California, where a majority of the state's

[^7]population lives (Figure 1). Transit accounts for 6 percent of all trips in the Bay Area, as opposed to 5 percent in the SCAG region, but the SCAG region - because it is so large - accounts for 52 percent of California's transit trips, while the Bay Area accounts for 28 percent. Southern California thus exerts a large influence on California's overall transit use.


Figure 1. Transit mode share and distribution of transit trips by California region.

Figures 2 and 3 show the trend in transit boardings nationwide, in California, and the SCAG region between 2000 and 2016, first in absolute and then in relative terms. Absolute ridership was largely flat over this time in all three geographies. In relative terms ridership grew steadily between 2004 and 2007 (SCAG region), 2008 (the U.S.), and 2009 (California). This period of growth was followed by patronage losses from the start of the Great Recession through 2011, particularly in California. The recession's end brought a gradual transit patronage recovery, followed by steep declines from 2014 onward.


Figure 2. Boardings (unlinked passenger trips). Growing nationwide, but relatively flat in California and SCAG.


Figure 3. Indexed boardings. Growing nationwide, but California and SCAG face steeper declines, returning to 2000 levels.

Figure 4 expresses these ridership trends in per capita terms. Between 2005 and 2016, per capita ridership peaked in California in 2009, in the nation in 2008, and in the SCAG region in 2007. Since 2007, per capita transit use in the SCAG region has been mostly falling-before the recession, the rise of Lyft and Uber, or the post-2012 drop in fuel prices.


Figure 4. Transit trips per capita. Relatively flat nationally, but down in California since 2009.

Because the SCAG region accounts for so much of California's ridership, and because in recent years its decline has been so steep, losses in the SCAG region from 2012 to 2016 actually account for all of California's ridership losses during that time. Figure 5 shows changes in transit ridership across California from 2012 to 2016. During this time annual transit boardings statewide fell by 62.2 million. The SCAG region, however, lost 72 million annual rides, or 120 percent of the state's total losses. Ridership outside the SCAG region actually rose 20 percent, largely as a result of gains made by transit systems in San Francisco. The Bay Area Rapid Transit District (BART) alone accounted for 28.4 percent of the state's increased transit ridership (although by 2017 ridership on BART, and in California outside the SCAG region, had also started to fall).


Figure 5. CA net change in ridership (2012-2016). Losses in CA are driven by losses from the largest operators in the SCAG region, while Bay Area region saw growth in ridership.

Within the SCAG region, transit trips (and lost trips) are similarly geographically concentrated. We can illustrate this concentration in a number of ways. For example, the CHTS shows that in 201282 percent of the transit trips in the SCAG region were in Los Angeles County. Another 8 percent were in Orange County, and the remaining ten percent were spread over the other four counties.

A second way to measure concentration, which allows us to examine smaller levels of geography, is to use census data and map the location of the region's transit commuters. While commuters are not the majority of transit riders, they do tend to use transit frequently and intensively, and we have high-quality data about their residential locations. Those locations are intensely concentrated. In 2000, 2010, and 2015, 60 percent of the SCAG region's transit commuters lived in 20 percent of its census tracts, which represented (depending on the year) one to three percent of the region's land area. In all three years, ten percent of the region's transit commuters lived in one percent of the region's census tracts, which accounted for two-tenths of one percent ( $0.2 \%$ ) of the region's land area. ${ }^{4}$ (Note that even in these tracts, most workers do not commute via transit - 7 out of 10 use some other means.) Unsurprisingly, these tracts are overwhelmingly located in LA County, followed by Orange County.

A third way to illustrate the concentration of transit use is to examine transit trips by operator. Figure 6 shows that the ten largest transit agencies in the SCAG region account for 60 percent of all transit service

[^8](measured in vehicle-revenue hours), and 80 percent of all transit trips. The smallest 60 transit operators, by contrast, account for just over 6 percent of service and just over two percent of trips.


Figure 6. Key metrics by operator grouping. 9\% of operators carry $80 \%$ of the trips

Digging still deeper, the distribution of service and trips within these large operators is also highly skewed. LA Metro accounts for most of the SCAG region's trips, and LA Metro's ridership is itself highly concentrated. The agency has over 100 transit routes, but in both 2012 and 2016 over half of its total rides took place on 20 of those routes. ${ }^{5}$ Metro's busiest routes are also, unsurprisingly, where the agency has suffered the largest ridership declines. A dozen Metro lines accounted for 53 percent of all the agency's lost rides between 2012 and 2016.

Putting all this information together, we see that declining transit patronage through 2016 in California is essentially declining patronage in Southern California, and that Southern California's ridership declines are themselves remarkably concentrated. As a result, the state's lost ridership can be traced to a small number of Southern California transit operators. Four SCAG operators (LA Metro, the Orange County Transportation Authority (OCTA), the Los Angeles Department of Transportation (LA DOT), and the Santa Monica Big Blue Bus) accounted for 88 percent of the state's ridership losses, and LA Metro by itself accounted for a remarkable 72 percent of the state's losses. Because LA Metro's losses are themselves highly concentrated, a dozen routes from LA Metro account for 38 percent of all the lost ridership in California. Half of California's total lost ridership is accounted for by 17 LA Metro routes ( 14 bus and 3 rail lines) and one OCTA route.

[^9]If we examine these routes more closely (Figures 7 and 8), we see that they include both bus and rail. Transit agencies nationwide - LA Metro included - have made substantial investments in rail service, but the bus remains the workhorse of public transit in the US, the SCAG region and LA County. Bus trips are 78 percent of all transit trips in California and 86 percent of transit trips in the SCAG region. ${ }^{6}$ Given that buses carry the most passengers, it is not surprising that they have also seen the largest ridership declines, accounting for 84 percent of the lost rides between 2012 and 2016. While some bus routes gained ridership, the bus routes that lost riders lost more than the growing routes gained. The five bus lines with the largest declines were urban routes that travel in and out of downtown LA, while the five lines that gained the most ridership ran more outlying and circumferential routes.

Two Metro rail lines, meanwhile - the Gold and Expo - opened extensions after 2012, and partly as a result their ridership grew. But Metro's remaining rail lines, most of which also travel into downtown LA, saw steep ridership losses that exceeded the Gold and Expo Line's gains. The SCAG transit decline thus spans modes; it is not a simple story of buses falling behind while rail surges. Instead major routes that run into the heart of the city - the sort of routes where transit is traditionally strongest - are losing riders precipitously.

[^10]

Source patiotin


Figure 7. LA MTA: Bus lines with the most ridership change (2012-2016).


Figure 8. LA MTA: Net change in Ridership (2013-2016) by mode. Buses made up $84 \%$ of loss and rail made up 12\%.

## The Demographic Concentration of Transit Use in Southern California

Transit use in the SCAG region is concentrated among a small group of people as well as a small number of places. People ride transit for different reasons, but a common thread running through regular transit users is lack of access to a private vehicle. This trait is not universal; many commuter rail passengers, for example, could make their trips by car and choose not to, but commuter rail is a small portion of overall transit ridership. In general, transit ridership is powerfully associated with lack of vehicle access (Taylor \& Fink, 2013). Note again, however, that this relationship is not symmetrical. While most regular transit users lack vehicle access, most people without vehicle access do not regularly use transit, in part because transit is unavailable in many places.

Lack of vehicle access might arise for economic reasons, for medical reasons, or out of personal preference or habit (Brown, 2017). The relationship between vehicle access and transit use could also run two ways. People might ride transit because they do not have a car (either they cannot afford a car or cannot use
one for medical or legal reasons) or they may not have access to a car because they ride transit (they live and work near high-quality transit and so need not spend money on vehicles). ${ }^{7}$

Non-economic reasons for lacking a vehicle include disabilities or medical conditions that prevent driving, and legal sanctions that forbid it (e.g. losing a license as a result of traffic infractions, or being in the country illegally). In Southern California, perhaps the largest non-economic source of low vehicle access is immigration. Even controlling for income, immigrants are less likely than the native born to have vehicles, and more likely to use public transportation. Why this is so remains something of a puzzle. Scholars have proposed various explanations, including immigrants' tendency to live in dense areas; their tendency to live in close-knit communities that allow for more communal resources, including sharing of cars; a habit of not driving carried over from the native country; and - if the immigrant is undocumented - legal barriers to owning and operating automobiles (Blumenberg \& Smart, 2014; Chatman \& Klein, 2009, 2013; Liu \& Painter, 2012). The evidence suggests, however, that driving less and riding transit more is not universal among the foreign born - immigrants from some countries, particularly Mexico and many countries in Central America, are less likely than others to drive and more likely to ride (Chatman, Klein, \& DiPetrillo, 2010). There is also substantial evidence that over time immigrants assimilate and begin to travel more like the native born, with more driving and less transit use (Blumenberg \& Evans, 2010). Thus transit ridership cannot be sustained by immigration alone; it requires a steady stream of new immigrants from particular countries, who will arrive with a transit habit and replace those earlier arrivals who assimilate driving.

Economic reasons for lacking vehicle access can include both low incomes and the high cost of driving. In some parts of California, such as northeastern San Francisco, a combination of heavy congestion, high tolls, and scarce and expensive parking make the price of owning and operating a vehicle high, and encourage even affluent people to ride transit (notably, the same density that makes the city congested can makes transit service more effective by putting large numbers of trip origins and destinations within steps of transit stops). Yet there are few places in Southern California where driving is challenging in this way. Congestion is severe, but parking is abundant and often inexpensive if not free, and low-to-moderate densities make transit less able to effectively link many places. As a result, income becomes the principal determining factor in vehicle access, and thus of transit use.

Figure 9 uses CHTS data to illustrate the disproportionate propensity to use transit among the low-income, the foreign-born, and households with limited vehicle access. The figure's dashed vertical line represents the overall average of daily unlinked transit trips in the SCAG region, and the circle associated with each subgroup indicates its relative size in the overall population. The figure shows, in short, that transit use is more common among smaller segments of the population. African Americans and Hispanics ride transit about three times as much as Whites and Asians. Immigrants who have been in the country less than ten years ride substantially more than both the native-born and longtime immigrants who have been in the country longer. Households earning under $\$ 25,000$ per year ride more than twice as much as households earning $\$ 25,000$ to $\$ 50,000$, and these households in turn ride twice as much as households earning over $\$ 50,000$ annually. By far the largest differences, however, are those that represent vehicle availability. Households without vehicles take almost five times as many transit trips as households with one vehicle,

[^11]and households with one vehicle take twice as many trips as households with two. If we measure vehicles per adult, households with one vehicle for every two adults take twice as many trips as households with one vehicle per adult. Finally, people without driver's licenses take many more transit trips than licensed residents.


Figure 9. Mean transit trips by socio-economic characteristics and automobile access (CHTS).

The drawback of the CHTS, as we have mentioned before, is that it provides only one year of data. Table 1 uses LA Metro's annual rider surveys to show that the prevalence of people with low incomes and limited vehicle access on transit extends across years. We examine the 2005 survey (the earliest available) and then annual surveys from 2010 to 2016. Across both bus and rail riders, at least 69 percent of transit users (and often closer to $80 \%$ ) report not having a vehicle available to make their trip. These proportions are higher for bus riders than rail riders, but even among rail riders between 58 and 65 percent (depending on the year) report not having a vehicle. The share of riders reporting not having a vehicle, furthermore, has grown over time.

In addition to limited vehicle access, Metro riders generally have low incomes and are strongly dependent on transit. Close to half of all surveyed LA Metro riders in each year have household incomes under $\$ 15,000$. The median household income of riders hovers near $\$ 16,000$, and the average income barely exceeds $\$ 25,000$ in most years. In most years a strong majority of riders are habitual (riding over 4 days a
week) and a majority are longtime users (riding over 5 years). The riders are also overwhelmingly nonwhite.

All these characteristics make Metro riders - who are, again, most of SCAG's transit users - strikingly different from the population at large. The CHTS shows that in 2012, 73 percent of LA County residents took transit only occasionally or never, and the 2016 Census ACS shows that LA County residents are 26 percent non-Hispanic white, and that county median household income is $\$ 62,000$. Only 5 percent of the county's households earn less than $\$ 15,000$ per year. Thus SCAG's largest transit operator has for over a decade been dominated by low-income, nonwhite people with little vehicle access, people who live and move very differently from the typical Southern Californian.

|  | 2005 | 2010 | 2012 | 2013 | 2014 | 2015 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Share No Vehic̣le Available (\%) | 69 | 75 | 81 | 79 | 69 | 78 |
| $\quad$ Bus Only | 73 | 76 | 82 | 80 | 70 | 82 |
| Rail Only | 50 | 64 | 63 | 63 | 58 | 65 |
| Share Earning Under \$15k/Year |  |  | 51 | 45 | 47 | 47 |
| Median Household Income (\$) |  |  | 14,706 | 16,316 | 15,910 | 15,918 |
| Mean Household Income (\$) |  | 26,025 | 25,540 | 23,223 | 25,747 |  |
| Share White | 8 | 9 | 10 | 9 | 9 |  |
| Share Riding 5+ Days/Week | 56 | 67 | 67 | 67 | 68 |  |
| Share Riding 5+ Years | 49 | 53 | 52 | 59 | 57 |  |

Source: Metro Rider Surveys. Not all questions asked every year. Dollars are nominal. "No vehicle" indicates that respondents lack access to a vehicle for the current trip.
Table 1. Characteristics of LA Metro riders, 2005-2015.

The importance of vehicle access is reinforced by evidence from other transit operators. A small operator in the SCAG region, the Montebello Bus Lines, surveyed residents (not just riders) in 2016. Most respondents did not ride transit, and 55 percent of non-riders said they would only ride if they lost access to their car. Most people who did ride did not have access to a vehicle (Diversified Transportation Solutions 2015). In 2016, the OCTA also surveyed Orange County residents about their travel behavior. The results were similar. Only three percent of people who always had vehicle access listed transit as their primary travel mode, compared to 33 percent of people who never had a vehicle (True North Research 2015). ${ }^{8}$

The OCTA survey also stands out for usefully disaggregating "lack of vehicle access," and demonstrating that vehicle access is not the same as vehicle ownership. Over 70 percent of OCTA transit users had a car in their household, but the car was not available to them. In most instances it was being used by someone else, but 19 percent of current riders were unable to drive, and another eight percent reported having a vehicle that was not working (True North Research 2015). People in households with vehicles can still lack

[^12]vehicle access. If a household has more adults than vehicles, and if most adults move around on most days, then someone is without a car, and the odds of using public transportation rise.

We emphasize again, however, that most people simply do not use public transportation very often. The four panels of Figure 10 use 2012 CHTS data to divide the California, Southern California, and LA County populations into three groups: Transit Commuters (respondents who use transit for the journey to work); Transit Non-Commuters (respondents who used transit in the week prior to the survey but do not use transit for the journey to work); and Infrequent Transit Users (respondents who do not use transit for the journey to work and did not use it in the previous week).

In general, and unsurprisingly, transit use is more intensive in the SCAG region than in California, and more intensive in LA County than in the SCAG region. Beyond this difference, the patterns relating to these three types of users are generally consistent across the three geographies. Transit Commuters, who garner perhaps the most attention from public officials and transit planners, ride most frequently ( 44 to 49 trips per month), but are a very small share ( $2 \%$ to $3 \%$ ) of the population; as a result, they account for just 25 percent to 30 percent of all transit trips taken, despite their frequent use. Transit Non-Commuters ride transit less frequently ( 11 to 16 trips per month) than Transit Commuters, but account for a much larger share ( $20 \%$ to $23 \%$ ) of the population, and as a result they actually account for over half ( $54 \%$ to $57 \%$ ) of all transit trips. Finally, Infrequent Transit Users ride little or not at all, averaging only 0.9 to 1.5 trips per month across the three geographies. This group, however, comprises about three-quarters ( $73 \%$ to $78 \%$ ) of the population, and because of this large base, Infrequent Transit Users account for better than one in seven ( $16 \%$ to $18 \%$ ) of all transit trips.


Figure 10. Mean and total daily trips by transit user group for the SCAG region, California, Los Angeles County, and non-Los Angeles SCAG region.

This snapshot of transit users is a picture of asymmetry, and this asymmetry suggests how transit ridership can fall dramatically and seemingly suddenly. The people who ride transit regularly are a narrow segment of the population. They come disproportionately from households with two or more adults per available vehicle, and especially from households with no vehicles. They have lower incomes, on average, and are more likely immigrants, young adults, and African-American or Latino. Many of them do not ride transit to or from work; transit commuters are just three percent of the population, and 13 percent of regular transit riders. The transit industry is thus heavily-dependent on a small subset of people, and very sensitive to even small changes in how those people choose to move around.

## EXAMINING SOUTHERN CALIFORNIA'S DECLINE IN TRANSIT USE

Transit ridership can fall for multiple reasons. For convenience we divide these reasons into two categories: factors that transit operators (funding permitting) can control, and factors they cannot. We take these up in turn.

## Factors Within Transit Operators' Control

## The Quantity and Quality of Transit Service

People will ride transit less if service is slow, infrequent, or unreliable, and/or if rides are difficult or dangerous to take. As the quantity or quality of service falls, ridership should fall as well.

## The Quantity of Transit Service

Some observers contend that recent drops in transit ridership can be tied directly to declining service quantity. For example, Hertz (2015) ties falling transit ridership to cuts in bus service, and articles in both the Wall Street Journal (Harrison, 2017) and New York Times(Rosenthal, Fitzsimmons, \& LaForgia, 2017) make similar arguments. Freemark (2017) argues that LA's declining bus ridership is a function of Metro's falling service levels, and observes that average bus speeds fell 13 percent between 2005 and 2013.

Service levels certainly have a strong influence on ridership, even controlling for reverse causality - the fact that places with more riders often add more service (Alam, Nixon, \& Zhang, 2015; Taylor, Miller, Iseki, \& Fink, 2009). But service levels can be measured in many ways; two of the most common metrics are vehicle revenue miles (VRMs) and vehicle revenue hours (VRHs). VRM measures the distance transit vehicles cover while in service, while VRH measures the amount of time vehicles are in service. Both Hertz (2015) and Harrison (2017), in relating falling ridership to service declines, measure service using VRM. VRM alone, however, can be a problematic measure of transit service. In practical terms, VRM differentiates faster, longer-distance commuter services from lower speed local service. VRH, in contrast, measures the supply of different kinds of services (local bus service, bus rapid transit, rail transit, express bus, commuter rail, etc.) more similarly. VRH differentiates less among modes and service area types because the time between stops often varies far less than the distance travelled between them. A dozen stops spaced far apart in uncongested outlying suburbs can take a similar amount of time to serve as a dozen closely-spaced stops in a congested urban environment. The miles covered on the two routes will vary greatly, but the time required to serve them may not.

As a result, falling VRM can indicate service cuts, but can also reflect transit vehicles operating in higher levels of congestion, or agencies increasing local service rather than express service, or agencies redirecting service from outlying areas to central areas.

For example, if a transit agency shifts service from outlying suburban routes that travel longer distances at higher speeds to shorter, slower urban routes, VRM would almost certainly fall, as would average speed. But VRH may not change. Vehicles moved to dense areas typically cover less ground, but also move more slowly, stop more frequently, and dwell longer at each stop to allow more people to board and alight. In this case a "cut" in VRM would not necessarily be associated with a cut in VRH, and could actually deliver more service to more people.

In short, falling VRM is hard to interpret without also examining VRH. If VRM and VRH fall at roughly the same rate, then service is likely falling absolutely. But VRM falling substantially more than VRH suggests a change in service deployment or operating conditions (such as worsening congestion), rather than a service cut.

With this as background, we can consider the SCAG region's recent trends in VRM and VRH; we will show that rates of change in VRM and VRH have generally not been in concert. Figure 11 shows the relative trends in total VRM for the US, California, the SCAG region, and the SCAG region excluding LA Metro or OCTA between 2000 and 2016.

While VRM has increased across all four geographies, it has grown faster in the SCAG region than the U.S. or California as a whole, and faster still among SCAG's smaller transit operators - suggesting a relative shift in service delivery from LA Metro and OCTA to the smaller operators.


Figure 11. Indexed vehicle revenue miles. Growth in service in the SCAG region outpaces national and state trends; within the SCAG region, all other operators have collectively added service at a faster rate than LA MTA or OCTA.

This pattern is confirmed if we examine absolute VRM trends in the SCAG region separately for LA Metro, OCTA, and the remaining SCAG operators (Figure 12): Overall transit VRM has been growing for all three groups, but growing faster at the smaller operators.


Figure 12. Vehicle revenue miles. Service levels for LA MTA matches aggregate service provision for all other operators in the region (minus OCTA). Service is growing faster in the SCAG area excluding LA MTA and OCTA than at LA MTA or OCTA.

While VRM rose in the aggregate from 2000 and 2016, it has not been climbing for all modes. Figure 13 shows the roller coaster that has been the VRM trend for local bus service over this period: Significant growth between 2000 and 2005, little change between 2005 and 2009, a steep drop between 2009 and 2013, and slow growth from 2014 to 2016. Rail service, in contrast, has been steadily rising, especially light rail (Figure 14).


Figure 13. SCAG region: VRM for bus. Service in miles traveled dropped by $15 \%$ between 2007 and 2013. Service has increased since. Hours of service has also declined, but not as rapidly as miles of service, indicating that service is cut on suburban bus lines.


Figure 14. SCAG region: VRM for rail. Substantial service increases for all commuter and light rail since 2000.

If we examine service hours (VRH), we see similar aggregate trends. VRH rose from 2000 to 2009 in the US, California, and the SCAG region, fell from 2009 to 2011 during the Great Recession, and then climbed again across all three geographies through 2016 (Figure 15).


Figure 15. Indexed vehicle revenue hours. Growth in service in the SCAG region outpaces national and state trends.

Figure 16 shows the percent change in vehicle revenue hours over two time periods - 2005 to 2016 and 2010 to 2016 - across three geographies (US, California, SCAG region) and across four types of SCAGregion transit operators (Largest, Large, Medium, and Small). The figure shows that VRH increased during both time periods across all three geographies and all four operator types. It also shows, however, that VRH grew least among the largest operators that have lost the most riders, while it increased much more among the smaller operators.


Figure 16. Changes in indexed vehicle revenue hours by region and SCAG transit operator size: 2005-2016 \& 2010-2016. Service growth among the largest SCAG operators was lower than national, state, or regional averages, and much small than smaller SCAG-region operators.

Finally, Figures 17 and 18 show the absolute and relative changes in VRM and VRH by mode between 2010 and 2016. ${ }^{9}$ The figures show substantial overall shifts in service among modes, with local bus, rapid bus and demand response taxi service declining, while rail, commuter bus, and vanpool service increased. In absolute terms, local and rapid bus service declined most, while commuter bus and vanpool grew most; in relative terms, rail transit grew most while demand response fell most.

[^13]

Figure 17. Percent change in service (hours and miles) by mode: SCAG region 20102016. Rail and vanpool have largest \% gains, and service is added in the urban core, rather than to outlying areas. Bus service hours were slightly reduced, and came from outlying areas.


Note: For each operator-mode observation, only operators with a full pair of data (2010 \& 2016) were included. Excluded observations span 19 operators. Data source: National Transit Database (2010-2016).

Figure 18. Change in service (hours and miles) by mode: SCAG region 2010-2016. A 9\% reduction in bus service miles is equivalent to 16.5 million bus service miles cut. Vanpool had the most service miles added, reflecting the longer commutes that vanpool serves.

Overall, these shifts in service provision reflect both the choices and mandates of public policy. For better than three decades Southern California, and Los Angeles County in particular, has chosen to invest heavily in new rail services. As these new services have come on line, they account for a growing share of the region's transit service. Second, federal civil rights legislation, in the form of the Americans with Disabilities Act, has mandated the delivery of both accessible and demand-response transportation services to a growing and aging population. In combination, these choices and mandates have shifted transit service away from buses and toward rail and van services. ${ }^{10}$

What do these changes in transit service supply mean for transit patronage? First, Figure 19 shows the trends per capita VRH and per capita transit boardings over the past quarter century in the SCAG region. Transit service supply has been mostly climbing in the SCAG region for better than a quarter century, while transit use has never reached the 1991 levels. Given this, there is no prima facie case that faltering transit service supply is driving down patronage.


Figure 19. Transit trips and transit supply (1991-2016). Per capita transit supply has increased $34 \%$ since 1991, while per capita transit use has not changed much.

[^14]As a final way to examine the relationship between service levels and ridership, we examine the shifts between modes that occurred within the region's largest transit operator, LA Metro. Doing so allows us to address the possibility that aggregate increases in services are masking drops in those types of services - such as buses - that most transit riders rely on. The figures below show the indexed trends in boardings, service (VRH), and productivity (boardings/VRH) for LA Metro bus (Figure 20) and rail (Figure 21) service from 2000 to 2016, and demand response service (Figure 22) since 2008. For local bus and BRT service, transit service supply has tended to follow, rather than lead, changes in ridership - at least through 2014. Beginning in 2014, bus service rose slightly while boardings plunged. Rail service, not surprisingly, has increased more than 150 percent since 2000, and ridership has increased as well, though more slowly. Both service and patronage have tailed off since 2014, but largely in concert - there is no obvious sign of one leading the other. Finally, demand response and van service supply has grown steadily since 2008; boardings increased steadily, albeit more slowly than service, through 2015 . Over the past year, service continued to gradually climb, while patronage began to fall.

Collectively, these data offer little evidence that service cuts are driving away customers. Instead service expansion has been accompanied by less ridership, with the main result being lost productivity, particularly for rapidly expanding rail and van services. Rail and van productivity (measured as boardings per VRH) has eroded steadily since 2009, while the service effectiveness of local bus and BRT service began dropping later (and more precipitously) in 2014. Falling service does not seem to be the culprit for falling ridership; falling ridership, in concert with expanding service, is the culprit for falling productivity.


Figure 20. LA MTA: Indexed bus and BRT boardings, service, and productivity. Declining ridership since 2007, with services' slow growth in the post-recession period leading to declining productivity.


Figure 21. LA MTA: Indexed rail boardings, service, and productivity. Light rail service doubles with the opening of the Expo Line. Boardings do increase, but slower than the amount of service added.


Figure 22. LA MTA: Indexed demand response boardings, service, productivity. Ridership more than doubled, while service increased by $2.8 x$.

## The Quality of Transit Service

Even if transit quantity does not change, transit quality might. Transit quality has no specific definition, but we can divide it into speed, reliability, and experience. Speed measures how quickly transit vehicles move throughout the region. Reliability is a measure of on-time performance: Do vehicles arrive and depart when they are supposed to? Experience is a measure of how safe or comfortable people feeling during their transit journey, including the time they spend waiting for and transferring among their buses and trains.

Local bus and BRT service in the SCAG region has been slowing down over time. This slowdown is likely a result of many factors, including worsening congestion, shifts from faster suburban to slower urban service, shorter stop spacing, and longer stop "dwell" times to load and unload passengers. Whatever the underlying causes, region-wide bus vehicle speeds declined five percent between 2000 and 2010, and another eight percent between 2010 and 2016, for a total drop in speed of nearly 13 percent over 16 years. By comparison, rail transit speeds were down only two percent between 2000 and 2016.

Falling speeds slow travel times, and if operators do not counteract falling speed by adding more vehicles, then headways (the time between vehicle arrivals at a stop) will rise. Rising headways make transit less attractive by increasing average wait times at stops and lengthening the times of transfers among vehicles. Research has shown that transit passengers find waiting for busses and trains to be especially burdensome, so increased headways can undermine the quality of transit service even if the quantity (in terms of vehicle revenue hours of service) stays unchanged (Iseki \& Taylor, 2009).

The SCAG region has 41 transit agencies that operate fixed-route general public service, and on-time performance naturally varies across them. ${ }^{11}$ Measuring reliability for all or even most of these operators is therefore beyond the scope of this report. We can, however, examine reliability for LA Metro, which again accounts for the lion's share of the SCAG region's transit trips and lost trips.

Historically, Metro has been unreliable relative to other large transit agencies. A 2008 study by the agency showed that compared to 9 peer operators, Metro had both a lower on-time target and a lower on-time percentage (a vehicle is considered "on-time" if it is less than 5 minutes late). Metro aimed to have 70 percent of its vehicles arrive on time, and attained a rate of 63 percent. In comparison, New York attempted an 83 percent on-time rate and attained an 82 percent rate (Flowers \& Snoble, 2008). Metro's reliability problems occur almost entirely on buses, which can easily become trapped in congestion (and which, of course, can also exacerbate congestion).

In the intervening years, however, Metro's on-time performance appears to have improved substantially. An analysis of Metro data by local reporters (Mendelson, 2015) suggests that from 2010 to 2015 Metro rail maintained a 99 percent on-time rate (with subways being late 1 stop out of 200 , and light rail 1 stop out of 50 ), while the buses improved their on-time rate to 81 percent. We say "appears" because this discussion comes with an important caveat: Reliability is a function of the conditions in which buses and trains operate, the efficacy of the bus and train operations, and the schedule that sets the performance expectations. Controlling for conditions or operations, schedules that assume few traffic disruptions and little layover or recovery times can be difficult to meet, while those that assume slower speeds and provide generous layover and recovery times at the ends of routes are easier to meet.

As a result, transit operators can improve measured reliability in two ways. The first involves steps like better field supervision, quicker boarding and alighting procedures that reduce dwell times, and giving buses their own lanes in chronically congested districts. All these steps can change operations, and lower the variability of travel times. But the second way to improve reliability is to change the schedule, by factoring in more slack. Doing so is not necessarily disingenuous, and may simply reflect the challenges of operating in heavy congestion. Adding slack to schedules can allow vehicles to maintain performance even in the face of disruptions (severe congestion, crashes, crowds of people boarding or alighting at particular stops, and so on). The downside to this approach, however, is that too much slack in the schedule might increase reliability on paper but manifest as poorer-quality service in the eyes of riders. As slack increases average vehicle speeds fall, headways rise, and so do timepoint holds (instances where vehicles wait at stops so as not to run ahead of schedule). A service that is on-time because its schedule makes it less frequent is not a high-quality service.

We could not, with the data and time available to us, determine if Metro's schedule adherence improved because its buses met the existing schedule more often, or because schedules themselves were changed. If bus performance improved on the street as opposed to on paper, then we would have little reason to think service reliability was a large factor in falling ridership - bus ridership would have fallen even as schedule adherence increased. But we cannot say for certain that this occurred. We do know, however,

[^15]that rail ridership fell even as rail maintained a near-perfect on-time record. So we have some reason to think that service reliability did not play a large role in the ridership downturn.

We should also note that the advent of mobile apps that track transit vehicles in real time may have diminished the problems caused by unreliable buses. Unreliability is a larger problem when it strands people at stops with little idea of when a vehicle will arrive. To the extent people can follow vehicles in real time and adjust their departures to minimize waiting, some of the worst aspects of irregular transit vehicle arrivals can be mitigated (Yoh et al., 2011). LA Metro has next bus and next train information at its rail stations and BRT stops, and real time information about local and express buses is available on multiple smartphone applications. Metro's 2016 rider survey shows that 51 percent of bus riders have a smartphone, and that 66 percent of these riders use the phone "very often" or "occasionally" to get information about Metro rides.

A transit vehicle that arrives on time can still have poor service quality, if the experience of using the vehicle - which includes walking to the stop, waiting at the stop, and riding - is unpleasant. Specifically, if people using transit feel unsafe or uncomfortable, ridership could fall (Delbosc \& Currie, 2012; Iseki \& Taylor, 2009). Safety perceptions are often gendered (Loukaitou-Sideris, 2015), and a slight majority of transit users in the SCAG region are women. Note that perceptions of safety are different from, and probably more important than, safety itself. Many behaviors that are not crimes, and that do not directly threaten other people, may nevertheless disturb people nearby, and can discourage them from using transit (Ellickson, 1996; Fink, 2012).

There is some reason to think that transit vehicles, stations, and stops in the SCAG region - and particularly along LA Metro routes - came to feel less safe to riders in recent years. In 2016, LA Metro surveyed former riders, and 28 percent said that the primary reason they stopped riding transit was that they felt either unsafe or uncomfortable. Unfortunately, this survey is not conclusive. Former transit riders are a hard group to reach, and there are responses in the survey that suggest that the overall sample may not have been representative. As a result, we cannot be certain that safety actually loomed so large for former riders. At the same time, even if the survey inflated safety concerns by a factor of two, a nontrivial share of former riders (14 percent) report leaving transit because they felt unsafe. And considerable anecdotal evidence suggests that in recent years transit users started to feel less safe - such reports prompted Metro to completely revamp its security procedures in 2017.

What might explain riders' perceptions that transit is less safe? Possibly some riders have always felt unsafe, and what changed was not conditions on transit but the option to leave (if people got access to vehicles or TNCs, for example). We do not discount this possibility, but will take it up later in this report. If we assume that perceptions of safety really did decline in recent years, one potential (and admittedly speculative) reason involves LA County's dramatic increase in homelessness after 2010. Table 2 shows changes in the LA County homeless population from 2005 to 2017, based on homeless counts done by the Los Angeles County Housing Services Administration. Homeless counts, and especially counts of the unsheltered homeless, are for obvious reasons prone to error. Nevertheless, the table suggests that homelessness, while not as severe today as it was in 2005, has in recent years both risen sharply and changed in composition. The unsheltered chronic homeless (people who are not just homeless but also have some sort of disabling condition) became a larger proportion of the homeless overall.

| Year | All Homeless |  | Share Unsheltered | Chronic Homeless |  | Share <br> Unsheltered |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Unsheltered |  | Total | Unsheltered |  |
| 2005 | 65,287 | 53,429 | 81.8\% |  |  |  |
| 2007 | 59,956 | 39,168 | 74.0\% |  |  |  |
| 2009 | 38,602 | 21,073 | 54.6\% |  |  |  |
| 2011 | 39,153 | 20,157 | 52.4\% |  |  |  |
| 2013 | 39,463 | 25,136 | 63.7\% | 7,475 | 6,652 | 89.0\% |
| 2015 | 44,359 | 31,025 | 69.9\% | 13,356 | nd | nd |
| 2016 | 46,874 | 34,701 | 74.0\% | 14,644 | 13,746 | 93.9\% |
| 2017 | 57,794 | 42,828 | 74.1\% | 17,531 | 13,321 | 93.1\% |
| Pct Change, | -13.0\% | -24.8\% | -10.4\% |  |  |  |
| 2005-2017 |  |  |  |  |  |  |
| Pct Change, | 33.2\% | 50.8\% | 26.3\% |  |  |  |
| 2009-2017 |  |  |  |  |  |  |
| Pct Change, 2013-2017 | 46.5\% | 70.4\% | 16.3\% | 57.4\% | 59.2\% | 4.4\% |

Source: Los Angeles Homeless Counts, Los Angeles Almanac
https://www.lahsa.org/homeless-count/reports
http://www.laalmanac.com/social/so14.php
Table 2. Changes in LA County homeless population, 2005-2017.

Homelessness - the simple condition of people being without housing - often arises from high housing prices that push some people out of the housing market (O'Flaherty, 1998). Chronic homelessness, however, which tends to be much more visible (in part because the chronic homeless are less likely to be sheltered) often has different underlying causes related to addiction or mental illness. In conversations with transit operators during the writing of this report, some mentioned the impact of California's prison realignment program, which led to many inmates being released from prisons and jails. The state's carceral institutions have traditionally held many mentally ill persons, and discharging them without any corresponding increase in other social services may have increased the number of people with addictions and disabilities living on the streets. No government entity tracks prison realignment's impact on homelessness, but some advocates estimate that up to 20 percent of the state prisoners discharged, and up to 10 percent of county jail inmates, have now become homeless(Holland, 2015). There is also small body of evidence, some academic and some journalistic, suggesting that the unsheltered homeless gather disproportionately around transit facilities. Transit vehicles can provide shelter and protection, while transit stops can provide a roof or even just a bench (Emmons, 2013; National Academies of Sciences, Engineering, and Medicine, Transportation Research Board, Transit Cooperative Research Program, \& Boyle, 2016; Trevor, n.d.; Voorhees Center for Neighborhood and Community Improvement, 2016). To the extent some of these people use transit stops and transit vehicles as ad hoc shelters, and to the extent their presence or behavior disturbs others, realignment may have played a role in making transit seem less safe, and reducing ridership. We emphasize again that this line of thinking is quite speculative and warrants further research.

## Transit Fares

Potential transit riders weigh the quality of a ride against its price. Like most goods, transit, even at constant quality, will become less attractive if its price rises, and more attractive if the price falls. The postwar high-water mark for transit in Los Angeles County occurred during a three-year program that cut bus fares in half from 1982 to 1985 . When this program ended and bus fares returned to their previous levels, transit ridership fell substantially (Southern California Rapid Transit District, 1986).

The inverse relationship between fares and use, however, is complicated by two factors. First, the people who use transit the most - lower-income people with limited or no vehicle access - are generally more price sensitive in that they have less income, but less price sensitive in that they have few viable alternatives to transit. As a result, many transit riders are less sensitive to fare increases than one might expect given their incomes. Second, although every transit operator has a posted one-way fare, relatively few riders actually pay that rate, because agencies offer a variety of discounts and bulk payment mechanisms, including daily, weekly or monthly passes, youth and elderly discount passes, and so on that offer substantial discounts to particular classes of riders, including those who ride frequently (Yoh, Taylor, \& Gahbauer, 2016). Heavy users who buy monthly passes will typically pay a per-ride rate much lower than the advertised fare. LA Metro's 2016 rider survey showed nearly half ( $49 \%$ ) used a daily, weekly, or monthly pass, while about 25 percent paid a discounted fare.

Further complicating this issue is that transit fares can be calculated on a per-trip or per-mile basis. Arguably the most intuitive way to think about fare increases is per-trip: How much does a person pay to get aboard a vehicle? But once a passenger is on board, what follows might be a local bus trip of two blocks or a light rail trip of 22 miles. With the exception of commuter rail and some express bus routes, transit fares generally do not change with distance travelled. If the average fare to board a vehicle rises less quickly than the average distance of a trip, the per-mile fare could fall more than the per-trip fare rises, and transit may in a real sense become less expensive. For our purposes, the fare per trip is probably more relevant, as it is likely more salient to potential riders, but it remains worthwhile to consider both.

This wide array of payment methods and rates, and ways of considering these rates, makes calculating the actual fare paid by different classes of users beyond the scope of this report. We can, however, easily determine the average fare paid per boarding for a given system and the SCAG region, by simply dividing total fare revenues collected by either total boardings or passenger miles. While these metrics will fail to capture some of the nuances of fare payment among different types of users (they cannot completely control, for instance, the bulk discounts for heavy users of different lines) they are a measure of the fare payments actually made by people when they ride.

Figure 23 below displays the average inflation-adjusted fare paid per boarding across all transit systems in the US, California, and the SCAG region between 2002 and 2015. The figure shows, first, that the average transit fare paid is lower in the SCAG region than for California as a whole, which in turn is lower than the average transit fare paid nationwide. Second, the figure shows that the average inflationadjusted fare paid per boarding in California began creeping up in 2012, and to a lesser extent in the US since 2013 and the SCAG region since 2015. Overall, however, the average inflation-adjusted fare per boarding in the SCAG region has been remarkably flat since 2002 .


Figure 23. Average fare per boarding in 2015 dollars. Average fare per boarding has stayed relatively constant in the SCAG region.

National, state, and regional averages, of course, can mask considerable variation in fares paid across transit systems, services, and riders. Figure 24 shows the same inflation-adjusted trend in fares paid per boarding since 2002 for each of the six largest transit operators in the SCAG region. Focusing on these larger operators tells a different story. With the exception of Long Beach Transit, inflation-adjusted fare payments have been increasing over time on these operators. In particular, inflation-adjusted fares per boarding at both OCTA and the Big Blue Bus increased by about 50 percent between 2002 and 2016 - to nearly $\$ 1.25$ and $\$ 0.75$ per boarding respectively. Foothill transit had (in 2016) the highest average fares paid (at $\$ 1.25$ per boarding), followed in order by OCTA, LA MTA, the Big Blue Bus and Long Beach Transit, while LA DOT had the lowest average fare paid (at just over $\$ 0.50$ per boarding).


Figure 24. SCAG: Average fare per boarding for largest operators in 2015 dollars. Inflation-adjusted average fares per boarding have increased the most rapidly for OCTA and LADOT.

Figure 25 shows the 14 -year trend in real average fare paid per mile for the nation, California, and the SCAG region. Here we see that average fares paid per mile have remained largely unchanged in the U.S. and California, and in the SCAG region they have actually fallen. Despite being lower than average per mile fares in the state and nation, average per mile fares in the SCAG region have declined about 20 percent since 2009.


Figure 25. Average fare per passenger mile traveled in 2015 dollars. Average fare per PMT remained fairly constant, and even declined a little since 2009.


Figure 26. SCAG: Average fare per PMT for largest operators in 2015 dollars. Average fare per PMT increased the most rapidly (about $\$ 0.07$ per mile) for LADOT and slightly for OCTA (\$0.04 per mile).

If we zoom in on the six largest transit operators in the SCAG region, we see that inflation-adjusted fares per mile rose notably at two systems - LA DOT ( $+\$ 0.07 / \mathrm{mile}$ ) and OCTA ( $+\$ 0.04 / \mathrm{mile}$ ). On the Big Blue Bus and Foothill Transit per mile fares rose modestly, and at Long Beach Transit and LA Metro they fell (despite Metro's 2014 fare increase).

The most notable attribute of the figures above is the steep increase in fares for OCTA. OCTA's fares have risen over 50 percent since 2002, and OCTA is also the transit operator that has suffered the sharpest decline in ridership (about $35 \%$ since 2007). The transit industry's rule of thumb (sometimes called the Simpson-Curtin rule) suggests that a 10 percent increase in fares will be associated with about a 3 percent reduction in ridership. By this heuristic, OCTA's fare increases should have resulted in a 17 percent ridership decline.

To help isolate the association between fare increases and transit use, we estimated a multivariate regression statistical model using data for each transit operator in the SCAG region for each year between 2002 and 2016. Full details of this model are in the Appendix, but we used fixed effects to control for the panel nature of the data, and controlled for the level of service each operator provided, the average time between each bus or train arrival, and the density, size and population of the service area.

We find, after controlling for these factors, that higher fares are indeed associated with lower ridership, but by less than industry rules of thumb might suggest. Across the SCAG region over this time period, a 10 percent fare increase was associated with a roughly 1.6 percent decrease in ridership. This relationship is relatively "inelastic" (i.e. it suggests people are not very sensitive to prices) though it falls within the range of findings from other studies of how fare increases influence ridership (Cervero, 1990; Linsalata \& Pham, 1991). Based on these results, we would expect OCTA patronage to have fallen about 8 percent since 2002, as a result of its fare increases.

It seems plausible, in light of these data, to suggest that fare increases played some role in OCTA's lost transit trips. But OCTA's losses, as large as they are, account for a small fraction of the SCAG region's total losses. The bulk of those losses were from LA Metro, and it is harder to suggest that fare increases played a big role in Metro's ridership decline.

## Factors Outside Transit Operators' Control

## Fuel Prices

Fuel prices are a large and highly salient operating cost of driving. As fuel prices rise people drive less, and as they fall people drive more. In general, a ten percent increase in the price of gasoline is associated with a long-run (5 year) one to three percent reduction in vehicle travel (Goodwin, Dargay, \& Hanly, 2004). Driving more, however, is not the same as using transit less, since (again) the typical driver almost never uses transit. People who drive less when gas prices are high often walk, carpool, stay home, or drive to nearer destinations (e.g. a restaurant that is 2 miles away instead of 10). Similarly, for many regular transit riders changes in the price of gasoline are immaterial, because many transit users do not have access to private vehicles. As a result of these factors, much of the adjustment to fluctuating fuel gas prices that occurs in the U.S. has no bearing on transit use, and the relationship between fuel prices and transit ridership tends to be weaker than the relationship between fuel prices and driving.
"Weaker," however, is not "nonexistent," and in both Southern California and nationwide, fuel prices rose and fell sharply from the late 1990s through 2015. Prices increased at a record pace from 1998 to 2008, declined, and then rose sharply again until 2013, after which they plunged (Figure 27). Transit ridership also fell steeply from 2013 to 2016. It is reasonable to think that falling gas prices could contribute to falling transit ridership. A steep drop in gas prices could have lured some of the minority of transit riders who do have vehicles away from transit use. Even among riders without vehicles available, falling fuel prices could have an indirect impact. When fuel is cheap rides in cars become more available: Friends or family members who become more likely to drive, and people who might otherwise have used transit might start carpooling for some trips.


Source: ElA Average Gas Price (retail regular gasoline for US, Callornia, Los Angeles), 2002-2016

Figure 27. Average gas per gallon in 2015 dollars.

As to how much a steep drop in fuel prices might undermine transit use: the research literature reports a fairly wide array of elasticities (estimates of transit's sensitivity to gas price changes). These range from relatively large effects for commuter rail ( 0.37 , when gasoline costs more than $\$ 3$ per gallon) (Nowak \& Savage, 2013) to much lower average estimates for bus ridership that range from -0.05 to 0.22 (Blanchard, 2009; Iseki \& Ali, 2014; Mattson, 2008). Blanchard (2009) used gas price changes in LA County to estimate a bus ridership elasticity of 0.092 , a subway elasticity of 0.011 , a commuter rail elasticity of 0.126 , and light rail elasticity of 0.071. Lane (2010), also studying LA, found similar results. All these estimates suggest that a 10 percent change in fuel prices is associated with about a half-percent change in transit use in the near term, and a 1 to 1.8 percent change in the longer-term. Gas prices fell 30 percent from 2012 to 2016,
which would imply a 3 percent reduction in bus ridership, and larger losses in rail and commuter rail, all else equal.

One way to consider this relationship of fuels prices to fares is to compare the ratio of average fare paid per boarding with the average price of gasoline in the SCAG region over this period (Figure 28). As with fares generally, we see that this fares-to-gas ratio is lower in the SCAG region than in California as a whole, and lower in California than the nation as a whole. Further, while the price of a transit trip relative to a gallon of gas has been climbing across all three geographies since about 2012, the ratio in the SCAG region today remains substantially lower than it was in 2002.


Source: NTD, 2002-2016; EIA Average Gas Price (retail regular gasoline), 2002-2016.
Note: Average LA gas prices are used for the SCAG region.

Figure 28. Average fare as a percent of region's average gas per gallon. Average fare is consistently less than the cost of a gallon of gas, even as gas prices have been falling since 2014.

Figure 29 plots the trend in gas prices against the trend in absolute and per capita transit ridership in the SCAG region (we use the Los Angeles Metropolitan Statistical Area average gas prices). The graph suggests a real but fairly modest relationship: Transit use does rise and fall with fuel prices, with a small lag. The response does not appear to be large, however, especially for ridership per capita. But with only one data point per year, we can only say so much about the role of gasoline prices. It would be surprising if falling gas prices did not contribute to the decline in transit ridership, but it is difficult to quantify their precise role. Overall, we consider falling fuel prices to be a real but probably minor driver in falling transit use.


Figure 29. Transit ridership and gas prices in Los Angeles.

## The Transportation Network Companies

The large absolute decline in transit ridership coincided not just with falling gas prices but also with the rise of Transportation Network Companies (TNC) like Lyft and Uber. TNCs are a plausible culprit in transit's decline. TNCs can offer the convenience of automobile travel to people who do not own automobiles, and could therefore become viable substitutes for public transportation. Any explanation for falling transit use that hinges on TNCs, however, faces a timing problem: TNCs began operating in Southern California in 2009, and did not begin serving people in large numbers until 2012. Per capita transit ridership began falling in 2007. So while the TNCs may affect transit use, they cannot by themselves explain transit's recent patronage decline.

Moreover, TNCs' influence on mode choice is theoretically ambiguous. On the one hand, TNCs let people purchase vehicle trips a la carte. If those trips are inexpensive, then TNCs can be a faster, more direct, less-crowded, and more comfortable substitute for transit. While some TNC trips are substantially more expensive than transit fares, the TNC shared ride services, like Lyft Line and Uber Pool, have sometimes seen fares fall low enough to be competitive with one-way transit fares. Given the speed and convenience these services offer, they could draw some riders away from transit, provided those riders have smartphones and credit cards.

On the other hand, TNCs could also increase transit use. TNCs could help solve first-mile/last mile problems, and get people to transit stops that are beyond walking distance. TNCs could also provide transit riders a form of insurance - if some people don't take transit because they worry an emergency might arise where they need a car (for instance, getting a sick child home from school) the option of calling
a TNC during one of those emergencies can lower the perceived risk of taking public transportation, and make it more attractive.

Finally, since most people in most regions do not use transit or even consider doing so, the average TNC trip may have little impact on transit ridership. If the typical Uber passenger has never used a bus and never considered doing so, Uber's growth cannot be blamed for transit's decline.

Because TNCs provide almost no operating data to the public, we do not have sufficient evidence to adjudicate between these scenarios. We do not know even basic information - such as the total number of TNC trips in the SCAG region year over year, or the general areas where those trips originate - that could cast light on the relationship between TNCs and public transportation (Transportation Research Board, \& National Academies of Sciences, Engineering, and Medicine, 2016). ${ }^{12}$

What little evidence we do have suggests that most TNC trips do not replace transit trips. Surveys done by independent researchers and organizations suggest that the typical TNC user does not resemble the typical transit rider (TNC users are disproportionately college-educated and affluent), and that the most common times and places for TNC rides are Friday and Saturday nights in popular commercial districts, and trips to airports (Clewlow \& Mishra, 2017; Feigon \& Murphy, 2016; Rayle, Dai, Chan, Cervero, \& Shaheen, 2016). Large surveys by Clewlow and Mishra (2017) and APTA (Murphy 2016) suggest that most TNC trips occur between 10 p.m. and 4 a.m., when transit runs infrequently and carries few riders. Clewlow and Mishra (2017) find that the majority of TNC users report no change in their use of other modes. All this evidence suggests little impact on transit.

The caveat attached to these findings, however, is that the subgroups most likely to take transit - lowincome racial and ethnic minorities - are also difficult to survey. Even very large, well-funded surveys often struggle to get adequate coverage of poorer households. As such, we cannot rule out the possibility that actual TNC use in some poorer neighborhoods is higher than the current data suggest.

Moreover, as the pool of TNC users continues to expand, the TNCs' effect on transit use - both positive and negative - may well increase. These amplified effects will be still more likely if TNC prices fall, and TNC use grows disproportionately in dense, high transit ridership areas populated by residents with relatively low levels of household motor vehicle access. For this reason, the relationship between TNCs and transit should be monitored, and there may well be a public interest in letting transit agencies see at least basic data about the location and volume of TNC trips. But relatively little evidence suggests that TNCS are a big player in the current transit decline. The timing, again, does not match up well.

## Neighborhood Change and Migration

Transit is heavily-supplied in a small proportion of places, and heavily used by a small proportion of people. This situation creates a potential matching problem. If the small group of people who use transit a lot becomes less likely to live in the small number of places that offers a lot of service, transit use could

[^16]fall. Such a mismatch could occur for a number of reasons. The highest-profile explanation is gentrification-driven displacement. If gentrification pushes transit-riding lower-income households away from transit-rich neighborhoods, and replaces them with higher-income residents, transit use may fall. The new higher-income residents may use transit more than they did previously, but less than the lowerincome residents they replace (Dominie, 2012). ${ }^{13}$

Gentrification and displacement, however, account for only a small portion of moves by poor and immigrant households. Most moves by such households are by choice, or for reasons unrelated to inmigration by the affluent-for example, a low-income resident might lose a job and be forced to move (either to find new work, or to find a place with lower rent), even if neighborhood rents are not rising (Freeman 2005; Freeman and Braconi 2004; Newman and Wyly 2006; Vigdor 2002). The relevant fact is that in recent years many poor households, when they move for whatever reason, relocate to the suburbs. As poor households suburbanize, they move farther from transit on average (Farrell, 2016; Kneebone, 2014; Kneebone \& Garr, 2010; Singer, 2011; Zimmerman, Restrepo, Kates, \& Joseph, 2015). Upon arriving in the suburbs, low-income people may well use transit more than other suburbanites, but less than they had used it when they lived in central-city neighborhoods. If they are not replaced in central-city neighborhoods by other people who ride at high rates, then as a result of their migration overall transit use could fall.

Ideally we could examine the extent to which migration influences transit use by following low-income households and their travel behavior over time and across neighborhoods. Unfortunately, the data that would allow us do this do not exist. What we can do instead is use census-tract level data to examine changes in the spatial location of transit commuters and in the characteristics of residents living in hightransit commuting neighborhoods. We approach this task in two ways: identifying tracts with transitfriendly built environments and seeing how they change over time, and identifying tracts with high levels of transit commuting, and examining change within those places over time. These approaches have limits, as we will explain, but in combination they show a decline in the number of transit commuters in many high-transit use neighborhoods in 2010 and 2015, a decline in transit mode share in these neighborhoods (particularly from 2000 to 2010), and a shift in the characteristics of neighborhood residents in ways that help to explain declining transit use.

We have two methods available to identify areas that are highly conducive to transit use. These are areas that, regardless of who lives in them, are transit-friendly, either because of their levels of transit service or attributes of their built environment. Our first measure of transit-conduciveness is SCAG's High Quality Transit Area designation. SCAG defines a High Quality Transit Area as an area within one-half mile of a fixed guideway transit stop or a bus transit corridor where buses arrive at a frequency of every 15 minutes or less during peak commuting hours. SCAG last identified existing High Quality Transit Areas using data for 2012. These High Quality Transit Areas are located in 762 census tracts-about 45 percent of the region's total Census tracts.

Our second measure of transit-conduciveness comes from a typology of neighborhoods developed at the UCLA Institute of Transportation Studies for the US Federal Highway Administration (Voulgaris, Taylor, Blumenberg, Brown, \& Ralph, 2016), using data from 2010-2013 (Ramsey \& Bell, 2014; Voulgaris et al.,

[^17]2016). This typology characterizes neighborhoods based on their built environment and transportation system characteristics (e.g. density, land use mix, age of housing stock, resident turnover, street network characteristics, and transit supply), but not on the characteristics of the people living in these neighborhoods. In this way the typology can capture how transit-friendly a neighborhood's built environment is. We focus in particular on one neighborhood type called "Old Urban," which indicates very-high density neighborhoods with high-levels of transit supply. Old Urban neighborhoods are much less common than SCAG High Quality Transit Areas-in 2010 there were 719 Old Urban neighborhoods in the region.

For our purposes, the limitations of both the SCAG designation and the Old Urban designation are that the data used to construct them are from 2010 or after. As a result, we can track changes in these neighborhoods from 2010-2015, but we do not have a good measure of tract-level transit supply or transit-conduciveness from 2000 to 2010, the time period when transit use in the SCAG region began to fall.

To examine changes from 2000 forward, we examine the clustering of transit commuters. This method is imperfect, since as we have shown commuters are a minority of transit users, but we assume for this exercise that as regular transit users, commuters tend to cluster in areas conducive to transit use. This assumption is contestable, but we have no other Census tract-level data on transit use that stretches back to 2000. We identify high-transit commuter neighborhoods with data on transit commuters by Census tract from the 2000 Decennial Census, and the 2010 and 2015 ACS. ${ }^{14}$ For each year, we rank order tracts by the number of transit commuters in them. As we discussed earlier, transit commuters are highly concentrated in a very small fraction of the SCAG region's land area; eighty percent of transit commuters live on less than five percent of the land area and in less than 40 percent of census tracts. This distribution changed very little from 2000 to 2015.

We examine changes over time using the rank-ordered transit commuting data from the 2000 Census. We identified the census tracts that most intensively host transit commuters; these tracts, which are 1.43 percent of all census tracts in the region and 0.02 percent of the region's land area, hold ten percent of the region's transit commuters. We call these " $10 \%$ Tracts." The mean number of transit commuters in these tracts is almost 12 times the regional average. For comparison, we also extracted data on the tracts where the top 60 percent of transit commuters live; these neighborhoods comprise 20.6 percent of all census tracts and 0.86 percent of the land area. We call these " $60 \%$ Tracts." The mean number of transit commuters in these neighborhoods is 4.5 times the regional average. The number of ten percent tracts is extremely small: in 2000, just 48. The number of tracts that hold 60 percent of the commuters, in contrast, is 743 -roughly the same number as are in the Old Urban designation.

The tracts in the $10 \%$ and $60 \%$ designations in 2000 strongly overlap with the SCAG High Quality Transit Area and Old Urban designations. If we take the $10 \%$ Tracts in 2000 and follow them forward, we see that about 85 percent are Old Urban tracts, and all of them are SCAG High Quality Transit tracts. Similarly, of the tracts in the $60 \%$ designation in 2000 , in 201055 percent of them are Old Urban, and 85 percent are

[^18]High Quality Transit. As such, following the trajectory of the $10 \%$ and especially the $60 \%$ Tracts may be a rough-but-reasonable proxy for following the trajectory of transit-rich areas.

As a first step, we follow three of these four tract designations - 60\% Tracts, Old Urban, and High Quality Transit - over time, to the extent we can. For the latter two designations, this means only tracking changes from 2000 to 2015. We follow the year $200060 \%$ Tracts from 2000 to 2010, and then to 2015. (We use the 60\% Tracts, rather than the $10 \%$ Tracts, because their numbers are more comparable to the Old Urban tracts).

Figure 30 summarizes the results. Essentially, the 60\% Tracts saw substantial changes between 2000 and 2010, and these changes are consistent with the idea that the people most likely to use transit migrated away from transit-rich areas. From 2000 to 2010, the poverty rate in these tracts fell by four percentage points, the share foreign born fell from 48 percentto 45 percent, and the share of households without vehicles fell from 23 percent to 17 percent. From 2010 to 2015, in contrast, relatively little changed, and that same pattern holds if we examine Old Urban tracts and SCAG High Quality Transit Areas. Across all three neighborhood typologies, poverty rose slightly, the share of foreign born fell slightly, and - perhaps most important, given the importance of vehicle access to transit use - the share of households without vehicles stayed at the point it had fallen to. (The same general pattern holds for the $10 \%$ Tracts, although to conserve space these are not shown in the figure).


Figure 30. Characteristics of high-transit areas, 2000, 2010, and 2015 (2000 Census tracts over time)

Some additional data also suggest neighborhoods changing in ways not conducive to transit use. Figure 31, for example, shows that in both the $10 \%$ and $60 \%$ Tracts the transit commute mode share fell between 2000 and 2015 (with most of the decline occurring between 2000 and 2010.) Although not shown graphically, Census data also indicate that in these tracts, both the number of workers and overall earnings for workers rose, but earnings did not rise for those commuters using transit to get to work.


Figure 31. Mean transit commute mode share in high-transit neighborhoods, SCAG Region by year.

In summary, then, we observe changes in census tracts that in the year 2000 were most heavily-populated by transit commuters. These tracts, in turn, overlap substantially with tracts that we know in 2010 were rich in transit supply and/or had transit-friendly built environments, letting us infer (albeit with some uncertainty) that these neighborhoods were transit-rich in 2000 as well. Particularly between 2000 and 2010, in these neighborhoods we see falling transit commuting, falling population, a falling share of immigrants, falling poverty, more vehicle ownership, and higher earnings for workers overall but not those workers who commute via transit. All of this evidence is consonant with these neighborhoods becoming
more affluent, with that affluence being associated with less transit use, and with people left out of that affluence remaining on transit.

We emphasize that this story is far from conclusive. For the reasons we discussed above, the relationship between neighborhood change and transit use is very hard to measure. The data we have are consistent with neighborhood changes in the most transit-friendly SCAG-region neighborhoods contributing to falling transit use, but they are not conclusive. This is an area that warrants substantial further research.

## Rising Vehicle Ownership

The defining attribute of regular transit riders is often a lack of vehicle access. Between 2000 and 2015, vehicle access in the SCAG region became much more common. Households in the SCAG region, and especially lower-income households, dramatically increased their levels of vehicle ownership. Census summary file data show that from 2000 to 2015 , the SCAG region added 2.3 million people and 2.1 million household vehicles (or 0.95 vehicles per new resident). To put that growth in perspective, from 1990 to 2000 the region added 1.8 million people but only 456,000 household vehicles ( 0.25 vehicles per new resident). The growth of household vehicles in the last 15 years has been astonishing.

There are strong reasons to believe that this surge in vehicle ownership is largely responsible for the decline in transit use. A back of the envelope calculation can illustrate the magnitude of the problem this vehicle surge could pose for transit operators. Data from the US Consumer Expenditure Survey show that from 2000 to 2015, the average expenditure per household vehicle in LA County was about $\$ 3,729 .{ }^{15}$ Since SCAG residents added 2.1 million vehicles in this time, a midrange estimate of private expenditures on household vehicle growth is $\$ 7.8$ billion. Over the same period of time, LA Metro and Metrolink combined to spend about $\$ 6.4$ billion opening new rail service, and about $\$ 7.4$ billion on combined rail and Bus Rapid Transit service. Thus even a conservative estimate of private investment in vehicle growth shows it easily outpacing public investment in fixed-route, dedicated right-of-way transit - the type of transit that is supposed to be most competitive with driving. This level of increased vehicle ownership is in many ways incommensurate with robust transit use.

To be sure, much of this vehicle growth would not influence transit use. Because most SCAG residents had never used transit, increased vehicle ownership in most SCAG households would not contribute to transit's decline. The 2000s were when the Millennials, a demographically large cohort, reached ages when many would buy automobiles. Millennial car-buying could help explain the bulge in vehicle acquisition, but unless those Millennials would otherwise be on transit these additional vehicles would not necessarily explain falling transit use.

[^19]Some additional evidence, however, suggests that vehicle ownership did play a role in reducing ridership. When the OCTA surveyed its former riders in 2015, for example, 70 percent reported leaving transit because they had acquired a car (True North Research 2015).

Moreover, we have reason to think that the increase in vehicle ownership occurred disproportionately among populations that are more likely to take transit. Census data show that vehicle access increased most among lower-income households (we return to this point below, in Figure 40). Vehicle access also rose disproportionately among the foreign born. Table 4 shows changes in both zero-vehicle households and those with a vehicle "deficit" (that is, fewer vehicles than adults). Across the entire SCAG region, the share of households without vehicles fell 30 percent between 2000 and 2015 , while the share of households with a vehicle deficit fell 14 percent. Among foreign-born households, these percent declines were larger - 42 percent and 22 percent - and among the foreign born from Mexico they were larger still. Among the foreign born from Mexico, the share of households without vehicles fell by two-thirds between 2000 and 2015 , and the share with a vehicle deficit fell 28 percent. Thus car ownership rose across-the-board, but rose fastest among subgroups with a high propensity to ride transit. And these changes largely occurred between 2000 and 2010, which aligns with the timing of the transit downturn that began in 2007.

|  | All SCAG <br> Share Households With: | Foreign Born <br> Share Households With: | Mexican Foreign Born <br> Share Households With: |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | No Vehicles | Vehicle | No Vehicles | Vehicle Deficit | No Vehicles | Vehicle <br> Deficit |
|  |  | Deficit |  |  |  |  |
| 2000 | 10.2 | 30.1 | 14.1 | 47.1 | 15.7 | 57.2 |
| 2010 | 7.7 | 26.1 | 9.4 | 38.9 | 7.0 | 46.0 |
| 2015 | 7.1 | 25.9 | 8.2 | 36.6 | 5.4 | 41.6 |
| Pct | $\mathbf{0 . 3 0}$ | -0.14 | -0.42 | -0.22 | -0.66 | -0.27 |
| Change |  |  |  |  |  |  |

Table 4. Vehicle ownership trends, SCAG region (US Census, Census IPUMs).

To refine our understanding of the association between vehicle ownership and transit use, we estimated a multivariate regression model. As a result of the data constraints we discussed earlier, this process involved two steps. Recall that our fundamental data obstacle was a mismatch between the availability of detailed, person-level information about travel behavior and our need to answer a question about changes over time. The CHTS provides detailed travel behavior, as well as demographic and socioeconomic data, but only for the year 2012. The Census provides detailed annual data, but for almost every category except travel behavior and transit use.

We resolve this problem by first using the CHTS to build a model that predicts total unlinked trips as a function of different demographic, socioeconomic, and neighborhood attributes. Importantly, all of these attributes - such as sex, nativity, income, vehicle ownership, and so on - are also tracked in 2000, 2010 and 2015 Census IPUMS microdata. This symmetry allows us to take the parameters of the CHTS model and apply them to time-series data from the Census. We use the CHTS, in short, to estimate the relationship between transit use and different social and economic characteristics, and then use the

Census to track how those characteristics have changed. Once we have measured that change in the Census, we can use the CHTS results to estimate how transit use would have changed as a result.

A core assumption of this approach is that the relationships between transit use and the socioeconomic and demographic attributes, which we can only measure in 2012, are relatively constant across time. We assume that changes in transit use from 2000 to 2015 are driven primarily by changes in the composition of the population, and not by changes in the propensity to use transit by people in different population groups. Our approach is more valid, for example, if transit use changes because there are more or fewer people in poverty, or with vehicles, and not because poor people or people with vehicles become more or less likely to use transit. The latter scenario is possible, but we cannot measure it.

We constructed models for California, the SCAG region, Los Angeles, and the SCAG region outside of Los Angeles. Figure 38 shows results from the first stage of our analysis: the major predictors of transit trips in in the SCAG region. Unsurprisingly, transit trips are highly associated with automobile ownership and access, even accounting for other potential determinants of transit use. Beyond automobile access, transit use is associated with lack of a driver's license, being nonwhite, and being foreign-born - especially being foreign-born and a new arrival. ${ }^{16}$

[^20]

Figure 32. All SCAG unlinked trip predictors (CHTS).


Figure 33. Relationship between increased vehicle ownership and falling transit trips (CHTS and US Census Bureau).

When we apply these parameters to Census IPUMS data from 2000, 2010 and 2015, ${ }^{17}$ we see a powerful association between rising household vehicle access and falling transit trips. Figure 39 illustrates this relationship by graphing the results of two models. The first model, represented by the dashed line, predicts the change in county transit trips based on changes in all factors except vehicle access. In the SCAG region, the line has a mild negative slope from 2000 to 2010 and then a small positive slope from 2010 to 2015, suggesting that changes in these demographic, economic, and geographic factors would be associated with a small decline in transit use since 2000, albeit with a modest uptick between 2010 and 2015. The graphs for Los Angeles County and the SCAG region outside LA County suggest that this predicted modest uptick (which did not actually occur) would have taken place in SCAG's outlying counties. In Los Angeles County, transit trips were predicted to keep declining through 2015.

The second model, represented by the solid line, is identical to the first model but includes changes in automobile access. The difference in results is dramatic. This line starts at a higher point and falls sharply to a lower point, both of which suggest the important role automobile access has in influencing transit use. An absence of automobiles is associated with much more use, and the acquisition of automobiles is associated with much less. The line also suggests that many socioeconomic attributes play an essentially the intermediary role in mode choice. Income, nativity, age, location within the region, and many other factors can influence transit use, but they do so primarily by predicting people's access to private cars.

[^21]Income alone, for example, does not take people off buses. Income helps people buy automobiles, and it is auto access that fuels an exodus from transit. ${ }^{18}$

Why did vehicle ownership rise so much? We cannot answer this question definitively, but as we discussed earlier in this report, vehicle ownership has both economic and non-economic determinants. The noneconomic determinants include the growth or decline of immigrant groups who are less likely to acquire vehicles, and changes in licensure laws or other laws that surround owning and operating vehicles. The economic reasons can themselves be divided into two categories: changes in personal spending power, and changes in the price of vehicles themselves.

Since the foreign-born, and particularly the recently-arrived foreign-born, are less likely than the nativeborn to own vehicles, one possibility is that number or composition of immigrants changed. In absolute terms, the foreign-born population in the SCAG region grew between 2000 and 2015 . However, it did not grow as fast as the overall population, so the region's share of foreign-born fell, albeit modestly (from $31 \%$ to just over $30 \%$ ). This proportional decline occurred entirely within LA County, which has the most transit service. Every other SCAG county saw its share of foreign-born rise.

|  | Imperial | Los <br> Angeles | Orange | Riverside | San <br> Bernardino | Ventura | All SCAG |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2000 | $32.2 \%$ | $36.2 \%$ | $29.9 \%$ | $19.0 \%$ | $18.6 \%$ | $20.7 \%$ | $31.0 \%$ |
| 2010 | $31.9 \%$ | $35.6 \%$ | $30.5 \%$ | $22.4 \%$ | $21.6 \%$ | $22.9 \%$ | $31.0 \%$ |
| 2015 | $32.6 \%$ | $34.7 \%$ | $30.5 \%$ | $22.0 \%$ | $21.3 \%$ | $22.8 \%$ | $30.4 \%$ |
| \% Change | $1.2 \%$ | $-4.3 \%$ | $2.0 \%$ | $13.7 \%$ | $12.6 \%$ | $9.2 \%$ | $-2.0 \%$ |

Table 5. Share foreign born residents, Southern California counties (2000-2015). US Census.

The composition of immigrants, however, changed more dramatically. Table 6 shows that between 2000 and 2015 (and especially between 2000 and 2010), the share of the foreign-born from Asia rose 23 percent, while the share from Central America fell ten percent, and the share from Mexico fell over 13 percent. In 2000, 48 percent of SCAG immigrants were from Mexico, while by 2015 only 41 percent were. Because existing evidence suggests that immigrants from Mexico and Central America are less likely to have automobiles and drive than immigrants from other origin countries, this shift could contribute to rising auto use, especially among the foreign born (US Census ACS 2015).

[^22]|  | 2000 | 2010 | 2015 | Change |
| :--- | :--- | :--- | :--- | :--- |
| Asia | $28.7 \%$ | $33.9 \%$ | $35.3 \%$ | $23.0 \%$ |
| Americas | $63.7 \%$ | $59.1 \%$ | $57.7 \%$ | $-9.4 \%$ |
| Latin America | $62.4 \%$ | $58.0 \%$ | $56.5 \%$ | $-9.5 \%$ |
| Central America | $58.8 \%$ | $54.5 \%$ | $53.0 \%$ | $-9.9 \%$ |
| $\quad$ Mexico | $47.7 \%$ | $42.4 \%$ | $41.3 \%$ | $-13.4 \%$ |
| South America | $2.6 \%$ | $2.7 \%$ | $2.7 \%$ | $3.8 \%$ |

Source: US Census Summary File Data. US Census Bureau classifies Mexico
as part of Central America. Data on Caribbean Americas omitted.
Table 6. Composition of SCAG immigrants (2010-2015).

Moreover, among both the foreign-born overall and the foreign-born from Mexico, in data from the US Census IPUMs we see both an assimilation effect and a cohort effect reinforcing the trend toward more vehicles. More recent waves of immigrants are more likely to have vehicles shortly after arrival, and those who do not are faster to acquire them as time goes on.

In the year 2000, for example, 31 percent of the foreign-born households in the SCAG region that had emigrated from Mexico between 1990 and 1999 had no household vehicle, and 74 percent had a vehicle deficit. By 2010, just 9.3 percent of this same cohort of immigrant households had no vehicle, and only 51 percent had a vehicle deficit. By 2015, these figures were 7 percent and 41 percent. This is the assimilation effect; as time passes, immigrants begin to behave more like the native -born.

The cohort effect, however, is more notable. The more recent waves of immigrants to Southern California are more likely to own vehicles shortly after arrival, and as such they have not fully replenish the stock of zero-vehicle households that shrank as existing immigrants assimilated toward cars. In 2010, only 17 percent of the Mexican immigrant households in the SCAG region that had arrived in the US between 2000 and 2009 had no vehicles, compared to 31 percent for those that arrived between 1990 and 1999 in the year 2000. Similarly, only 62 percent of these 2000-2010 arrivals had a vehicle deficit in 2010; in 2000, 74 percent of Mexican immigrants who had arrived since 1990 had a vehicle deficit. By 2015 the share of zero-vehicle households in thepost- 2000 cohort was down to 10 percent, and the share with vehicle deficits down to 49 percent. And by in 2015, only 11 percent of Mexican immigrant households that had arrived in 2010 or after did not have a vehicle. A similar pattern holds for the foreign-born overall. More recent waves of immigrants acquired more vehicles more quickly, meaning that as previous waves of immigrants acquired cars, the ranks of the carless were shrinking rather than being replenished.

In sum, immigrants overall are now a slightly smaller share of the population, but also more likely to own vehicles, and to own them earlier after arrival. Mexican immigrants, who are a mainstay of transit ridership in Southern California, remain more likely than the foreign-born overall to live in households without vehicles, but since 2000 they have both added household vehicles and become a smaller share of total immigrants.

It is not clear why the foreign-born began adding more cars. In 2015, California began issuing driver's licenses to undocumented immigrants. While licensure may have increased vehicle ownership, for a variety of reasons we do not think it played a large role. First, a license makes a vehicle more useful, but not more affordable; if the barrier to acquiring a vehicle is price, a license does little to overcome that. One might argue in response that legality and not price was the actual barrier, but existing evidence suggests this is simply not the case: many undocumented immigrants, even without licenses, were already driving (Lovejoy \& Handy, 2008). Indeed, the prevalence of undocumented driving was the primary motivation for the law that authorized licensure. The decision to issue licenses was justified primarily on safety, not mobility, grounds - there were concerns, for example, that unlicensed undocumented drivers would flee the scene of accidents. It is possible that undocumented immigrants drove less - and took transit more - before being licensed, and that licensing did help depress transit use. Even this scenario, however, has its limits. A law that took effect in 2015 cannot explain a per capita ridership decline that began in 2007 or an explosion in vehicle ownership that began in the early 2000 s.

Ruling out legal changes brings us to possible economic factors for increased vehicle ownership: Perhaps immigrants (and others) began acquiring more cars because they had more money. A small but persuasive literature on personal consumption shows that poorer people tend to convert even small increases in income into vehicle purchases - a testament to how valuable vehicle access can be (Aaronson, Agarwal, \& French, 2012; Adams, Einav, \& Levin, 2009; Leininger, Levy, \& Schanzenbach, 2010; Parker, Souleles, Johnson, \& McClelland, 2013; Souleles, 1999).

The 2000-2015 period was volatile economically, as the economy grew steadily before cratering during the Great Recession. During most of this time, furthermore, median wages and incomes were stagnant. Median household income in LA County, for example, was about $\$ 59,000$ in both 2000 and 2015, and was slightly lower during the recession in 2010. The Census suggests that newer waves of immigrants are if anything slightly poorer than the cohorts that came before them: In 2000 average incomes of immigrants that had arrived since 1990 was slightly higher than the average income of immigrants in 2010 who had arrived after 2000. Finally, we can see in Figure 40 that vehicle growth occurred across all income groups, for both the foreign-born and the native-born. In 2000 just under 40 percent of households earning less than $\$ 25,000$ per year had a vehicle-deficit, as did 60 percent of immigrant households in the same income bracket. In 2015 less than 30 percent of native-born households in the same income bracket had a vehicledeficit, as did just over 50 percent of immigrant households. The pattern holds for households earning $\$ 25,000$ to $\$ 50,000$, and for more affluent households.


Figure 34. Share of households with vehicle deficits, by income and nativity, 2000-2015, US Census ( solid line $=$ foreign born, dashed line $=$ native born).

It is therefore not obvious that rising incomes played a large role in rising vehicle ownership. Certainly the macro-economy played some role in changing levels of transit use. Transit use contracted during the Great Recession: A robust economy puts more people to work, which increases both commuting and discretionary travel. A faltering economy does the reverse. But these same economic trends do not appear to explain why people acquired so many more vehicles than they had in previous periods.

Even at constant incomes, households can acquire more vehicles if the effective price of those vehicles falls. The effective price reflects not the sticker price, but the actual outlay required of a consumer to drive the vehicle home. A large part of this outlay is often a down payment, meaning that vehicles can become more affordable not just if their price declines, but also if financing that price becomes easier.

Some evidence does suggest that vehicle finance became easier during this time. Although lost somewhat in the shadow of easy home-lending credit, automobile credit also surged in the run-up to the Great Recession. And unlike home lending, which tightened considerably after the crash, automobile lending has remained relatively loose. Consumers with good credit scores (typically above 700) can find auto loans with low- and sometimes even zero-interest rates. Since the recession, the share of SCAG-region residents with credit scores below 660 (considered subprime) has fallen (Figure 41), suggesting that consumers have gotten better access over time to low-interest loans (Federal Reserve Bank of New York and Equifax, various). Subprime auto loans also remain prevalent, allowing consumers with poor credit histories or low
incomes to finance vehicle purchases. U.S. auto loan originations among subprime consumers increased 140 percent from 2010 to 2015 (New York Fed Consumer Credit Panel / Equifax). We do not have locallevel data on vehicle debt, but inflation-adjusted per capita vehicle debt in California rose 91 percent between 2000 and 2015 (Federal Reserve Bank of New York). ${ }^{19}$


Data sources: Federal Reserve Bank of St. Louis, Economic Research Division

Figure 35. Percent of sample with credit scores below 660, by county in SCAG region.

## CONCLUSION

Per capita transit ridership, long sluggish in Southern California, began to fall in 2007. In 2012 that per capita decline accelerated, and manifested as a more noticeable and more alarming absolute decline. The precise reasons for this decline are almost certainly manifold, and hard to disentangle. Gas prices fell sharply after rising steeply. The explosive growth of Uber and Lyft provided new mobility options to some people who had been mobility-constrained. In Orange County, fares rose substantially. On LA Metro, by at least some accounts, feelings of danger increased. Some of the people most likely to use transit moved to areas where transit was less prevalent. Especially in recent years, all these factors most likely contributed to transit's downturn.

[^23]But in weighing the evidence, the overwhelming factor appears to be a dramatic increase in the stock of private automobiles. Between 2000 and 2015 Southern Californians acquired vehicles at nearly four times the rate they had between 1990 and 2000. This growth of the private vehicle stock lines up-in timing, in magnitude, and in theory-with the region's falling transit use. Vehicle access grew across all income levels and groups, but disproportionately among those groups, like the low-income and foreign-born, who are most likely to ride transit. Transit ridership in the SCAG region has long depended on a sizable minority of people who did not, largely for economic reasons, have access to cars. After 2000, many of these people acquired cars, and it should not surprise us that they started riding transit less.

To be sure, the case we build in reaching this conclusion is circumstantial. For reasons we have already enumerated, the data available to examine transit riders are scarce and fragmented, which leaves alternative explanations possible if not plausible. Certainly future research should emphasize more data collection. Given the data available today, however, in our judgement rising vehicle ownership is the best explanation for falling transit ridership.

If this explanation is sound, it poses a daunting problem for transit operators. When lower-income people graduate from transit to driving, transit agencies bear a cost, but the other side of that cost is a large benefit for both the people who start driving and for society overall. In the aggregate, Southern Californians drive too much, once the various costs of pollution, congestion and crashes are accounted for. But some Southern Californians - the poorest of them - drive too little, and both their lives and the region as a whole would be improved if they drove a bit more. The low-income person who acquires a vehicle often makes fewer trips than an affluent person (driving is expensive) and the trips they make are often essential, and have social benefits that exceed their social costs. A car trip by a low-income household is more likely than one by an affluent household to involve finding and keeping work, getting to school, or accessing better health and daycare options. These trips might modestly increase congestion and pollution, but they have large paybacks in employment, earnings, and overall well-being that exceed those costs. Affluent households, in contrast, make many more trips, and more trips whose social value is lower (they might increase congestion and pollution not just by driving to work, but also by driving to lunch, or to visit friends).

Given the powerful difference a car can make in the lives of low-income people, efforts by transit agencies to recapture low-income riders can have a perverse impact: they would target some of the highest-value vehicle trips in the region. Ideally, of course, transit agencies would pull people away from lower-value vehicle trips. It makes little sense to deprive a low-income person of their trip to work at a location poorly served by transit, when affluent people routinely drive for errands and visits that they could easily complete by foot or transit. A quick trip to a store a half mile away (or a trip to a store a mile away when a comparable store is a quarter mile away) is more likely to have social costs that exceed its benefits. And these trips are abundant.

Given this situation, and given the ambitious greenhouse gas reduction goals that California has assigned to transit, planners and operators may need to expand transit's target market. Transit should by no means abdicate its social service mission, but as we stated in the introduction, per capita transit use falls when current riders stop riding, and when new residents don't start. Transit today relies on a high rate of use by a narrow base of people. But if that narrow base of people is acquiring vehicles, transit's healthy future lies in reversing those circumstances, and striving for at least a low rate of use by a broad base of people. The SCAG region lost 72 million transit rides annually from 2012 to 2016. This number seems daunting,
but the region has 18.8 million people. According to the CHTS, about 77 percent of those people (roughly 14.5 million), ride transit rarely or never. Herein lies vast untapped potential. If one out of every four of those people replaced a single driving trip with a transit trip once every two weeks, annual ridership would grow by 96 million-more than compensating for the losses of recent years.

The obstacle to this outcome, however, is large and beyond the direct control of transit operators: driving is too cheap. The large subsidies given to transit in recent years pale next to the longstanding subsidies for automobiles that are hidden in unpriced road use, unpriced or underpriced street parking, high minimum parking requirements, and taxpayer- and developer-financed road-widenings. If public policy does not adequately confront underpriced driving, then transit ridership will likely continue to falter, and transit will not meet its ambitious environmental goals.

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## Appendix A

Fare regression output.
Descriptive Data (data are in panel form; observations are agency-years). Route coverage = route miles/service area. Headways = route miles/ (revenue miles/service miles). The service area is in square miles. Service area and service population are the difference between UZA average level of service and service area/ service population.

## Absolute Levels

|  | mean | sd | n |
| :--- | :---: | :---: | :---: |
| unlinked passenger trips | $15,213,380$ | $130,300,000$ | 9,030 |
| vehicle revenue hours | 395,268 | $1,659,684$ | 9,037 |
| headway | 33.07 | 51.01 | 6,954 |
| route coverage | 3.18 | 6.32 | 6,922 |
| service area | 713.2 | $8,963.3$ | 9,793 |
| service population | 718,549 | $1,729,745$ | 9,794 |
| fare (2015\$) | $\$ 1.71$ | $\$ 2.52$ | 8,647 |

## Change from Prior Year

|  | mean | sd | n |
| :--- | :---: | :---: | :---: |
| change in unlinked passenger trips | 170,442 | $6,338,137$ | 8,037 |
| change in vehicle revenue hours | 5,015 | 87,867 | 8,047 |
| change in headway | 0.02 | 18.81 | 6,277 |
| change in route coverage | -0.07 | 5.45 | 6,255 |
| change in service area | 0.0 | 0.4 | 8,852 |
| change in service population | 0 | 0 | 8,853 |
| change in fare (2015\$) | $\$ 0.01$ | $\$ 0.64$ | 7,702 |

Regression Output:
The regressions are linear and all variables are naturally log-transformed. Models were run with the dependent variables being levels and changes. Model 4 is the model discussed in the text.

* change from the prior year is calculated using absolute levels

| $y=$ passenger trips | $(1)$ | $(2)$ | $(3)$ | $(4)$ |
| :--- | :---: | :---: | :---: | :---: |
| VARIABLES | OLS | OLS | OLS | FE |
|  |  |  |  |  |
| vehicle revenue hours | $1.264^{* * *}$ | $1.312^{* * *}$ | $1.289^{* * *}$ | $0.754^{* * *}$ |
|  | $(0.00974)$ | $(0.00950$ | $(0.09447)$ | $(0.0108)$ |
| headway | $-0.155^{* * *}$ | $-0.193^{* * *}$ | $-0.209^{* * *}$ | $-0.0152^{*}$ |
|  | $(0.0128)$ | $(0.0129)$ | $(0.0116)$ | $(0.00833)$ |
| route coverage | $0.0416^{* * *}$ | $0.0635^{* * *}$ | $0.0824^{* * *}$ | $0.0164^{* * *}$ |
|  | $(0.00809)$ | $(0.00815)$ | $(0.00697)$ | $(0.00555)$ |
| service area (miles $\left.{ }^{2}\right)$ | $-0.126^{* * *}$ | 0.00594 |  |  |
|  | $(0.0129)$ | $(0.0104)$ |  |  |
| service pop | $0.214^{* * *}$ |  | $0.139^{* * *}$ | $0.0380^{* * *}$ |
|  | $(0.0128)$ |  | $(0.0102)$ | $(0.00679)$ |
| fare (2015\$) | $-0.0270^{* *}$ | -0.0105 | $-0.0249^{* *}$ | $-0.162^{* * *}$ |
|  | $(0.0106)$ | $(0.0108)$ | $(0.0107)$ | $(0.00677)$ |
| Constant | 0.0223 | $-0.434^{* * *}$ | -0.134 | $5.708^{* * *}$ |
|  | $(0.0918)$ | $(0.0895)$ | $(0.0910)$ | $(0.123)$ |
|  |  |  |  |  |
| Observations | 6,767 | 6,767 | 6,767 | 6,767 |
| R-squared | 0.868 | 0.862 | 0.866 | 0.498 |
| Number of agencies |  |  |  | 620 |
| Standard errors in parentheses |  |  |  |  |
| *** p<0.01, ** $p<0.05, * p<0.1$ |  |  |  |  |


| $\mathrm{y}=$ change in passenger trips | $(1)$ | $(2)$ | $(3)$ | $(4)$ |
| :--- | :---: | :---: | :---: | :---: |
| VARIABLES | OLS | OLS | OLS | FE |
|  |  |  |  |  |
| change in VRH | $32.08^{* * *}$ | $32.08^{* * *}$ | $32.08^{* * *}$ | $27.19^{* * *}$ |
|  | $(1.096)$ | $(1,096)$ | $(1.096)$ | $(1.147)$ |
| change in headway | $-12,979^{* *}$ | $-12,973^{* *}$ | $-13,133^{* *}$ | $-9,162$ |
|  | $(5,995)$ | $(5,994)$ | $(5,981)$ | $(6,095)$ |
| change in route coverage | 28,528 | 28,498 | 29,237 | 18,718 |
|  | $(20,642)$ | $(20,637)$ | $(20,554)$ | $(21,703)$ |
| change in service area (miles $\left.{ }^{2}\right)$ | $-98,385$ | $-95,007$ |  |  |
|  | $(263,173)$ | $(259,378)$ |  |  |
| change in service pop | 19,953 |  | 3,401 |  |
|  | $(262,368)$ |  | $(258,587)$ |  |
| change in fares (2015\$) | $-287,046^{*}$ | $-286,709^{*}$ | $-287,167^{*}$ | $-301,584^{*}$ |
|  | $(172,940)$ | $(172,869)$ | $(172,928)$ | $(178,218)$ |
| Constant | 31,160 | 31,496 | 31,138 | 59,982 |
|  | $(86,058)$ | $(85,937)$ | $(86,052)$ | $(84,787)$ |
|  |  |  |  |  |
| Observations | 6,102 | 6,102 | 6,102 | 6,102 |
| R-squared | 0.124 | 0.124 | 0.124 | 0.094 |
| Number of agencies |  |  |  | 602 |

Standard errors in parentheses
*** $p<0.01,{ }^{* *} p<0.05$, * $p<0.1$

## Appendix B

Neighborhood change attributes and locations.




Mean Characteristics of Transit-Rich Neighborhoods:
Change over time in Tracts with High Concentrations of Transit Commuters in 2000

| 10 Percent | 2000 | 2010 | 2015 |
| :---: | :---: | :---: | :---: |
| \% Transit Use | 38\% | 33\% | 33\% |
| \% Poverty | 38\% | 32\% | 36\% |
| \% Foreign Born | 63\% | 62\% | 57\% |
| \% 0-Vehicle Households | 43\% | 34\% | 34\% |
| \% NH White | 9\% | 10\% | 8\% |
| N Tracts | 48 | 48 | 48 |
| \% of All Tracts in Region | 1.4\% | 1.2\% | 1.2\% |
| Total Tracts | 3,393 | 3,954 | 3,953 |
|  |  |  |  |
| 60 Percent | 2000 | 2010 | 2015 |
| \% Transit Use | 16\% | 14\% | 13\% |
| \% Poverty | 27.79 | 23.13 | 26.55 |
| \% Foreign Born | 47.84 | 44.31 | 42.10 |
| \% O-Vehicle Households | 22.78\% | 15.76\% | 15.68\% |
| \% NH White | 14.39 | 17.42 | 15.86 |
| N Tracts | 691 | 691 | 691 |
| \% of All Tracts in Region | 20.4\% | 17.5\% | 17.5\% |
| Total Tracts | 3,393 | 3,954 | 3,953 |

Sources: US Census 2000, ACS 2006-2010, ACS 2011-2015

## Appendix C



## Appendix D

Additional trip predictors and descriptive data.

## Los Angeles County Unlinked Transit Trip Predictors




Mean Ratio of Household Vehicles to Adults
Sy Household income \& molvidual Age (Bno Lne) and All-Adult Companson (Ooted Red Line)


## Trump Calls For Infrastructure Plan Of 'At Least' \$1.5T

By Melanie Zanona - 01/30/18 09:58 PM EST
President Trump called on Congress to pass an infrastructure bill costing at least $\$ 1.5$ trillion during his inaugural State of the Union address on Tuesday night, hoping to breathe some life into one of his long-stalled campaign promises.

Trump's rebuilding plan, which is expected to be a core part of his 2018 agenda, will be divided into two major goals: rebuilding U.S. infrastructure and speeding up the permit approval process.
"I am asking both parties to come together to give us the safe, fast, reliable and modern infrastructure our economy needs and our people deserve," Trump said.
"Tonight, I am calling on the Congress to produce a bill that generates at least $\$ 1.5$ trillion for the new infrastructure investment we need."

Trump's pitch, however, lacked critical policy details, like how the White House plans to pay for the package or how exactly the money will be spent.

Still, the president used the stage as an opportunity to start selling both lawmakers and the public on the idea of a national rebuilding program, which Trump has been calling for since the 2016 campaign.

Trump initially promised to unveil a plan to rebuild U.S. roads, bridges, airports and other public works within his first 100 days in office, but the issue took a back seat to other GOP priorities such as taxes and health care last year.

The administration has since missed a series of self-imposed deadlines to release more details about Trump's infrastructure vision.

But more detailed legislative principles are expected to land on Capitol Hill in the next few weeks following Trump's address. The administration has been talking about a plan costing $\$ 1.7$ trillion, though the private sector and local governments would be picking up the majority of the tab.

Trump's plan would use $\$ 200$ billion in federal funding to raise at least $\$ 1$ trillion worth of overall infrastructure investment, largely by offering incentives to the private sector and local governments to back transportation projects.
"Every federal dollar should be leveraged by partnering with state and local governments and, where appropriate, tapping into private sector investment to permanently fix the infrastructure deficit," Trump said.

According to a leaked draft of the plan that surfaced last week, 50 percent of the federal funding in the proposal would go toward a so-called incentive program that rewards cities and states that raise their own revenue for infrastructure. It would also loosen a federal ban on tolling existing interstate highways and remove other "constraints" on public-private partnerships for transit systems.

Trump said Tuesday the proposal would also be paired with significant permit reform in an effort to reduce regulatory roadblocks and bring down the length of the construction approval process to "no more than two years, and perhaps even one."
"America is a nation of builders," Trump said. "We built the Empire State Building in just one year. Isn't it a disgrace that it can now take ten years just to get a permit approved for a simple road?"

While Trump has repeatedly said the infrastructure plan could be done with bipartisan support, Trump's proposal has so far drawn an icy reception from Democrats.

Democrats have blasted the forthcoming package as a corporate giveaway that is too reliant on the private sector and places too much of a financial burden on cashstrapped cities and states.

They also worry that the proposal will gut environmental regulations in order to speed up the construction approval process.

Even before the State of the Union, Democrats on the Joint Economic Committee were slamming the proposal as a "bait and switch."

The immediate disapproval suggests the White House faces an uphill battle to sell any proposal to lawmakers, who are fresh off fights over immigration and tax reform.
"We can all agree that our infrastructure needs a major investment and upgrade, but indications of the president's plan simply won't cut it," Sen. Martin Heinrich (D-N.M.), the ranking member of the committee, said in a statement.

After the speech, Rep. Peter DeFazio (D-Ore.) said he's "given up" on receiving an infrastructure plan from the White House in the coming weeks. The ranking member of the House Transportation Committee said the White House "abruptly" canceled a briefing scheduled for Tuesday with lawmakers without providing a reason.
"I mean, we've been promised a plan at least seven times, with deadlines." DeFazio told reporters after the president's address. "They don't have a plan. But they raised the price tag by fifty percent."

Rep. John Garamendi (D-Calif.), another member of the Transportation Committee, said the administration's proposal, as it stands now, "ought to be dead on the arrival."
"It's all happy talk. There's no money. All the money disappeared with the tax cut," Garamendi told The Hill after Trump's speech.
"You can't build infrastructure without money. There is no new money in this. It repurposes existing money. So how are you going to do it?" he added.

## California Transit Assocition

## MST Approves Projects Funded with New State Gas Taxes

## 1/30/2018

Monterey-Salinas Transit (MST) approved \$772,263 in Road Repair and
Accountability Act of 2017 funding to replace older buses with new modern, more fuel efficient buses. Also known as Senate Bill 1, the money comes from the biggest new state commitment to transportation in over 40 years. Through a long-overdue increase in the gas tax, Senate Bill 1 will invest over $\$ 50$ billion in new transportation projects over the next decade, including highway, bridge and local road repairs, strategic investments in congested commute and freight corridors, and transit service improvements.
"We have a once-in-a-generation opportunity to make significant investments in transportation and mobility projects that have been neglected and underfunded over the last 20 years," says Carl Sedoryk, MST General Manager and CEO.

Annually, MST will receive approximately $\$ 2.5$ million for critical transit projects, in addition to opportunities to apply for matching funds. With preliminary planning work nearing completion this summer, MST will soon use a portion of its Senate Bill 1 funding to begin the engineering and environmental work for better transit service along the Highway 1 corridor between Marina and Monterey, making a significant investment in this congested commute route.

As MST works to complete this pre-construction work, Monterey County voters have already committed up to $\$ 15$ million through Measure $X$ transportation funds to build meaningful infrastructure improvements along this corridor that would reduce congestion for all those that travel in this area. And, it is likely that MST will be able to use these $\$ 15$ million in local funds to leverage additional millions of state and/or federal dollars to further improve traffic flow along the Marina-to-Monterey Highway 1 corridor.

Another MST project eligible for funding under Senate Bill 1 is an upgrade and modernization of its Salinas maintenance facility. Modernizing the maintenance facility will help MST towards its goal of replacing fossil fuel powered buses with modern clean air electric buses. This project will result in improved air quality and more transit services for the disadvantaged community near East Alisal in Salinas, while also supporting local construction jobs.

Unfortunately, there are well-funded efforts underway to qualify a ballot measure for November 2018 to repeal this new law that provides funding for these important investments in our community.
"Unless rejected, the repeal of Senate Bill 1 will rob our local communities of the critical funding we desperately need to fix our roads, improve our transit services and facilities, and improve the quality of life throughout Monterey County," says Sedoryk.

# APTA Urges Increased Public Transit Investment In Infrastructure Initiative And Opposes Proposal To Decrease Funding 

## Source: American Public Transportation Association Jan 29, 2018

The following is a statement by APTA President and CEO Paul P. Skoutelas;
"On behalf of the 1,500 public and private sector members of the American Public Transportation Association, and the millions of people who ride public transit every day. We strongly oppose any cuts to public transportation and intercity passenger rail programs to fund an infrastructure initiative.
"According to reports, a White House representative outlined a plan at the U.S. Conference of Mayors meeting that would cut existing funding for public transit infrastructure to pay for the initiative. This is not only disappointing, it is short sighted and counterproductive.
"These reductions would harm the American economy and communities of all sizes. As it stands now, America is severely underinvesting in public transportation. The American Society of Civil Engineers rates public transit infrastructure a D minus, which is the lowest of any category in their surface transportation report card. These proposed cuts would make the industry's existing $\$ 90$ billion of State-of-Good-Repair gap even worse.
"Public transportation is an integral part of America's infrastructure. It is an essential element in making the nation's transportation network function. Facilitating efficient surface transportation, including public transportation, has long been recognized as a federal responsibility and it is critical to our global economic competitiveness. In fact, 87 percent of the 35 million trips taken each day on public transportation directly impact the economy - because Americans ride public transit to commute to work or to spend money at retail businesses and entertainment venues.
"According to a recent APTA poll, 3 out of 4 Americans support increased public transportation investment.
"If the cuts the Administration is suggesting mirror the reductions in its proposed 2018 budget for the Federal Transit Administration, Capital Investment Grants (CIG), the Transportation Investment Generating Economic Recovery program (TIGER), and Amtrak, Congress already rejected this measure in the 2018 appropriations process.
"Congress affirmed this federal responsibility when it authorized $\$ 2.3$ billion annually, through 2020, for the CIG program in the Fixing America's Surface Transportation (FAST) Act, which was overwhelmingly approved by bipartisan votes of 83-16 in the Senate and 359-65 in the

House of Representatives. In the FAST Act, Congress also saw the value in Amtrak and authorized nearly $\$ 5.5$ billion through 2020 for Amtrak's national network. Additionally, in recognition of TIGER's huge popularity, Congress annually funds this program at significant levels, which is routinely oversubscribed and supports important multimodal projects that do not always lend themselves to the traditional formula funding programs.
"APTA calls on the Administration and Congress to support these programs. APTA believes an infrastructure initiative that builds on, and complements, the FAST Act provides a unique opportunity for Congress to address the long-term solvency of the Highway Trust Fund, state-of-good-repair backlogs, the need for increased capacity, and safety issues. We call on the Administration and Congress to identify serious, new and sustainable funding to strengthen and grow our transportation infrastructure - not cut it."

## MASS ThANSTI

## CA: SANDAG Faces Nearly \$20B Shortfall For Transportation Projects

Joshua Emerson Smith On Jan 29, 2018 Source: McClatchy

Jan. 26--As more San Diegans shop online and spend more of their income on housing and health care costs, the region is projected to see a troubling decline -- some $\$ 20$ billion -- in sale tax revenue collected for roads, highways and public transit.

Transnet -- the region's half-cent sales tax for transportation -- is now expected to bring in $\$ 19.2$ billion over its 40 -year life, down from an estimated $\$ 39$ billion, according to an independent review.

The findings were presented Friday by Sjoberg Evashenk Consulting to the San Diego Association of Governments board of directors, which consists of 21 mayors and other elected officials from around the county.

Beyond a decrease in spending on taxable items, the report also found that earlier forecasts significantly overestimated population and income growth.

The report found that SANDAG has had an aggressive headstart on completing the projects promised in the voter-approved initiative. Of 48 major capital projects, the agency has completed a 33 percent, with another 28 percent in progress.
"It's reasonable to conclude that Transnet could be delivered in a 40-year time frame, although this cannot be known with complete certainty," said Michael Nash, who presented the findings for consulting company.

SANDAG got ahead of the game by issuing bonds and taking advantage of low construction costs through Caltrans during the economic downturn.

However, since 2012, the cost of building such projects have skyrocketed and are expected to continue to climb.

The report comes as the agency starts an overhaul of its long-range spending plan. The revelations will likely mean that officials will have to make some tough decisions about how to prioritize available funds down the road -- potentially nixing some projects promised to taxpayers.

The report was met with shock by many of the elected officials on the board.
"I think given that we are going to get half the projected money, we need to make some changes here," said San Diego City Councilwoman Lori Zapf.

Escondido Mayor Sam Abed said: "This is really significant piece of information where the revenues are at from where we projected."

Asked why the cost of building new highways and roads was spiking, Caltrans District 11 acting Director Cory Bims blamed the fluctuating cost of raw materials.
"It can be very volatile," he said. "Major construction items for projects, steel and concrete and asphalt, there's lot of things that influences those costs. It can come back down again as quickly as it went up."

Transnet was first approved by voters in 1988 for a 20 -year period. It was extended in 2004 for another 40 years out through 2048. The tax is responsible for more than 650 projects, such as for highways, public transit, local streets and habitat conservation.

In the first 10 years of the extension, the sales tax brought in more money than expected, although revenue started to underperform in 2014. The report found that other agencies around the nation were facing similar situations.

SANDAG is in the process of hiring a new executive director because its former head, Gary Gallegos, resigned last year amid scandal.

After voters in failed in 2016 to approve a tax increase to beef up the region's transportation system, revelations emerged that Gallegos had concealed an internal debate about whether the levy would have actually delivered the billions promised.

## CNBC

## Drivers In California's Three Largest Cities Spent \$17 Billion On Gas In 2017 -- And Nearly \$7 Billion Was Wasted

- Drivers in Los Angeles, San Francisco and San Diego may have spent as much as $\$ 17$ billion on gas last year, a new estimate from start-up Zendrive suggests.
- And $\$ 6.8$ billion of that expense was essentially wasted due to congestion and bad driving associated with the peak traffic of commute hours.
- Zendrive analyzes driving behavior using a variety of public and private sources.

John Shinal \| @johnshinal
Published 4:09 PM ET Sun, 28 Jan 2018 CNBC.com


Mitchell Funk | Photographer's Choice | Getty Images
Think filling up your car is expensive? Try doing it one of California's three largest metro areas.
Drivers in Los Angeles, San Francisco and San Diego may have spent as much as $\$ 17$ billion on gas last year, based on a new estimate from Zendrive, a start-up that analyzes driving behavior to improve commercial driver safety.

And roughly $\$ 6.8$ billion of that expense was essentially wasted due to bad driving habits and traffic congestion.

The data shows that the approximately 30 million residents of the state's three biggest metropolitan areas spend a lot of money essentially going nowhere.

The total expense estimates were based on data the start-up compiled on the average costs of gas, average fuel ratings of vehicles, average household sizes and average distances for commuting and total miles driven in each metropolitan area during 2017.

The data came from sources including the U.S. Department of Transportation, the U.S. Census, the American Automobile Association, public transit authorities in each region and from GasBuddy, maker of an app that helps consumers find fuel prices, Zendrive CEO Jonathan Matus told CNBC in a phone interview.

The figure for total savings comes from a study by the Department of Energy which found that bad driving habits such as speeding, rapid acceleration and frequent braking cost Americans an extra 40 percent in fuel costs each year.

Zendrive also found that trips during the lunch hour were more dangerous to Bay Area drivers that those made during either the morning or evening commute, while drivers in the region are most aggressive on Mondays.

## CNBC

## Trump Gears Up For $\$ 1$ Trillion Infrastructure Plan, But GOP Lawmakers Push Back On The Idea Of A Gas Tax

- "I'm not for raising the gas tax," said Senate Majority Whip John Cornyn. "It's going to be a declining source of revenue."
- The Trump administration plans to release an infrastructure plan that reportedly includes at least $\$ 200$ billion in federal spending.
- The U.S. Chamber of Commerce unveiled a plan earlier this month to raise the gas tax by 25 cents -- five cents a year for five years.

Ylan Mui|@ylanmui
Published 4:03 PM ET Sun, 28 Jan 2018 Updated 8:05 AM ET Mon, 29 Jan 2018


Denis Balibouse | Reuters
President Donald Trump gestures as he arrives for the World Economic Forum (WEF) annual meeting in Davos, Switzerland January 25, 2018.

President Donald Trump's massive infrastructure package just hit a major roadblock.
Prominent Republican lawmakers are already coming out against raising the federal gas tax to pay for the president's promised $\$ 1$ trillion investment in infrastructure. Speaking on Saturday night at a private donor retreat here hosted by billionaire industrialists Charles and David Koch, Senate Majority Whip John Cornyn opposed the idea.
"I'm not for raising the gas tax," he told the roughly 500 attendees. "It's going to be a declining source of revenue."

The Trump administration is preparing to release an infrastructure plan in the coming weeks that reportedly includes at least $\$ 200$ billion in federal spending that would jumpstart investment from the private sector, and state and local governments.

Yet the proposal is not expected to outline where the money would come from, leaving Congress to fill in the details.

The U.S. Chamber of Commerce unveiled a plan earlier this month to raise the gas tax by 25 cents - five cents a year for five years - a move the group acknowledged would be an uphill battle. The chamber estimated it would cost drivers $\$ 9$ a month and raise $\$ 394$ billion over the next decade.

## 'The math doesn't work'

"It's the simplest, fairest, and most effective way to raise the money we need for roads, bridges, and transit," Chamber President Tom Donohue said in a statement.

The federal gas tax stands at 18.4 cents and has not been increased since 1993. Revenues from the gas tax have been declining, because it is not indexed to inflation, and because fuel efficiency standards have risen. The shortfall has left the federal highway trust fund chronically underfunded

At the donor retreat, lawmakers argued dwindling collections are a sign that the gas tax is not a sustainable source of revenue. Tennessee Rep. Marsha Blackburn came out against it, along with North Carolina Senator Thom Tillis, who said "the math doesn't work."

He added: "How do you fund [the administration's proposal]? I don't have all the answers. But I think it goes beyond something as simple as the gas tax."

The Koch network is also lobbying against the proposal. Tim Phillips, head of the Kochaffiliated Americans for Prosperity, called raising the gas tax "a huge mistake."
"The gasoline tax would just be a disaster, especially coming on the heels of a really good tax proposal," he told reporters invited to attend the retreat here Saturday. "That would just be terrible for the country."

Correction: The Chamber of Commerce estimates that a plan to hike the gas tax would raise $\$ 394$ billion over the next decade.

## The Denver Post

## Colorado Springs Transit System Hoping To Go Electric With VW Settlement Money

By Liz Forster | The Gazette
January 28, 2018 at 8:39 pm


Christian Murdock, The Gazette
Buses leave the Mountain Metropolitan Transit's downtown bus on Kiowa Street in Colorado Springs Tuesday, Oct. 21, 2014.

Colorado Springs' public transit system is hoping to cash in on the blueprint for increasing the state's electric vehicle network that Gov. John Hickenlooper unveiled last week.

The Colorado Electric Vehicle Plan distributes $\$ 68.7$ million Colorado will be receiving German car maker Volkswagen as part of a settlement for violating emissions laws. Some of the money will go toward replacing public transit buses.
"The selling points for us are the benefits to the environment and low maintenance and fuel costs," said Craig Blewitt, the director of Mountain Metro Transit. "One of the pillars of the city's SmartCOS program is to pursue electric vehicles for the city, and this is consistent with that effort."

The state plan is more than just a pathway for cities and towns to reap the benefits of the Volkswagen settlement. It is a 14-page play-by-play, a "road map" as Hickenlooper described during his announcement Wednesday, of how the state will accelerate the widespread adoption of electric vehicles.
"We're really excited that we have senior leadership pointing the compass on this," said Steve McCannon, the state's Regional Air Quality Council's mobile sources program director.

## TLOs $\mathfrak{A n g e l e s}$ Times

## I Sit On The Air Resources Board. California's FootDragging On Electric Buses Is Beyond Egregious

By Dean Florez Jan 26, 2018|4:00 AM


A Metro Orange Line bus drives through the North Hollywood station in Los Angeles on July 20, 2017. (Los Angeles Times)

For nearly two years, the California Air Resources Board has been refining a rule that would require public transit agencies across the state to shift to zero-pollution buses. These buses produce no tailpipe pollution, and riders don't risk their lung health as they wait to pay their fare.

I sit on the Air Resources Board, and I have seen egregious foot-dragging that's putting the whole rule-making process at risk. As of now, there are 39 public transit agencies in the state with fleets of more than 50 buses. Half of those agencies have at least some zero-emission buses or have recently ordered such vehicles.

The Los Angeles County Metropolitan Transit Authority adopted a plan last summer to shift its bus fleet to $100 \%$ electric vehicles by 2030. A few weeks later, Stockton announced that $100 \%$ of buses in that conservative Central Valley city would run on electric power by 2025.

But a handful of agencies are resisting any proposal to phase in electric buses and phase out reliance on polluting natural gas or diesel.

That reluctance has helped stall bold action at the Air Resources Board. Specifically, a few vocal opponents of shifting to electric buses have insisted that the technology isn't ready, the costs are too high and public agencies can't afford to abandon fossil fuels.

Simultaneously, the natural gas industry has been working steadily in Sacramento to grab on to incentive funds intended for electric vehicles, including electric buses.

Here are the facts:
Electric bus technology has improved dramatically. In just a short time, the range a bus can travel without recharging has risen from just over 100 miles to about 300 miles. That's a range that easily accommodates the distance most transit buses travel in an average day. For those routes that are longer, there's in-route fastcharging technology.

Prices for electric buses are dropping almost as dramatically as range is increasing. Electric buses are now competitive with fossil-fueled buses on a total cost of ownership basis.

Air Resources Board staff, using a computer-generated model, have determined that if all public transit agencies in California shifted their entire fleets to zeroemission buses by 2040, they would save more than $\$ 500$ million compared with the status quo.

California is the electric bus manufacturing capital of the nation. Three out of the four leading electric bus makers serving the nation are located in the state. Two BYD and Proterra - are building buses right here in Los Angeles County. Another new electric bus company, GreenPower Bus, is building a factory in the Central Valley.

## 

# Brown Calls For 5 Million Electric Vehicles By 2030, \$2.5 Billion For Charging Stations 

By: Paul Rogers | progers@bayareanewsgroup.com | Bay Area News Group
PUBLISHED: January 26, 2018 at 1:13 pm |UPDATED: January 28, 2018 at 12:52 pm
Gov. Jerry Brown on Friday announced a sweeping new environmental initiative to cap his final year in office, signing an executive order that commits the state to a goal of 5 million zero-emission vehicles on the road by 2030 .

The ambitious target dwarfs his previous goal of 1.5 million EVs by 2025, and includes a plan to spend $\$ 2.5$ billion in new funding to encourage motorists to buy them. And it comes as the Golden State is leading the way on taking aggressive measures to fight global warming as the Trump administration moves to dial back the country's commitment to combat climate change.

Right now, with Teslas, Nissan Leafs and other electric cars becoming a fixture on Bay Area and L.A. freeways, California has about 350,000 electric vehicles, far more than any other state. But hitting Brown's new goal - a nearly 15 -fold increase from current levels - will be a major challenge.

Brown's order means that a huge state investment in charging stations, along with more tax credits, rebates and other initiatives, will be needed in the next decade. Transportation is the largest source of greenhouse gases in California, accounting for about 39 percent of the total, with most of that coming from passenger cars and SUVs.

Brown hinted at the new plan on Thursday during his State of the State speech, but his message was lost on most observers in a speech filled with myriad topics, from prison reform to health care.
"The goal is to make our neighborhoods and farms healthier, our vehicles cleaner - zero emission the sooner the better - and all of our technologies increasingly lowering their carbon output," Brown said in Thursday's speech.
"We've all got a lot of work. And think of all the jobs, and how much cleaner our air will be then."

The earth's climate continues to warm, and Brown has made the issue a focus of his current term as governor. The 10 hottest years since 1880, when modern

These electric bus companies are creating good-paying manufacturing jobs. They're showing again that the new energy economy can benefit the state, the environment and public health, all at the same time.

In return for investing in electric buses, transit agencies will help cut climate pollution as well as common air pollution. Although California's electricity system still includes natural gas power plants, electric buses produce nearly a third less climate pollution than the least polluting natural-gas bus. And life-cycle emissions from electric buses will continue to decline as the electricity system in California moves toward $100 \%$ renewable energy.

Transit agencies that adopt electric buses are also helping demonstrate and encourage development of technology that can eventually become common in other vehicles, including heavy-duty trucks. Though some transit agencies, such as L.A. Metro, have the vision needed to make the change, others need a push.

There's no reason for the Air Resources Board to delay any longer than we already have. We must finish the years-in-the-making rule requiring transit agencies to buy electric buses as their fossil-fueled buses wear out.
temperature records began, have all occurred since 1998, according to NASA. And last year, California suffered deadly heat waves and record wildfires, from Napa and Sonoma counties to Santa Barbara.

Doubling down on goals set by his predecessor, Gov. Arnold Schwarzenegger, Brown in recent years has signed laws committing the state to generating 50 percent of its electricity from renewable sources like solar and wind by 2030, and cutting greenhouse gas emissions 40 percent from 1990 levels by 2030.

To reach the second goal, much more must be done to reduce the amount of gasoline California burns, experts say.
"There is no way on earth they can reach their greenhouse gas goals unless they do something to force a lot more electric vehicles in the mix," said James Sweeney, director of the Precourt Energy Efficiency Center at Stanford University. "That's the reality. I don't think they will be able to meet the goals even if they do force a lot more electric vehicles in the mix because there are all of the existing vehicles on the road."

Brown's order on Friday lays out an eight-year plan for the state to spend $\$ 2.5$ billion between now and 2025, dramatically expanding the number of electric vehicle charging stations from roughly 14,000 now to 250,000 . The number of high-speed charging stations would increase from roughly 1,500 now to 10,000 , and the number of hydrogen fueling stations would jump statewide from 31 now to 200 in 2025.

An electric Smart car is plugged in at an electric vehicle charging station in downtown San Jose in 2015. (Gary Reyes/Bay Area News Group)

Much of the money, $\$ 1.6$ billion, would come from proceeds from the state's cap-and-trade auctions and would fund vehicle rebates. The other $\$ 900$ million would come largely from an existing $\$ 2$ fee on vehicle registration first approved by Schwarzenegger for clean air programs and would fund charging stations, many built in partnership with private companies.

Zero-emission vehicles, called "ZEVs" by bureaucrats and policy wonks, include electric cars, buses and trucks that run on batteries only. The category also includes plug-in hybrid vehicles that run on electricity but have small gasoline engines, like the Chevy Volt, the BMW 740e and the Chrysler Pacifica mini-van. And they include fuel cell vehicles that run on hydrogen gas, like the Honda Clarity or Toyota Mirai.

Environmentalists cheered Friday's news.
"The governor is basically going big before he goes home," said Simon Mui, a senior scientist with the Natural Resources Defense Council, a nonprofit environmental advocacy group. "What he's laying out is a foundation to move California away from fossil fuels and internal combustion engines."

The auto industry gave general support Friday for the new plan. The industry has clashed over the past 50 years with California regulators who banned leaded gasoline, mandated smog checks and relentlessly tightened engine rules to reduce air pollution after Gov. Ronald Reagan first created the California Air Resources Board in 1967. But it particularly likes the fact that Brown's executive order continues to provide rebates for Californians who purchase electric cars and funds charging stations.
"While we'll surely have questions that we'll need clarification for, we're pleased to see that Gov. Brown has committed to an ambitious program to develop desperately needed infrastructure and a consistent incentive program that will give customers the confidence and encouragement to purchase zero-emission vehicles (ZEVs)," said Curt Augustine, vice-president of the Alliance of Automobile Manufacturers. "Meeting California's climate goals is a partnership."

Although they produce no tailpipe pollution and help reduce smog and global warming emissions, electric cars have not yet caught on in a broad way in California. Only 5 percent of the state's annual vehicle sales are electric cars. Gasoline is still relatively cheap compared to many other countries. Charging stations are not yet widespread in every California city. And many new electric cars cost considerably more than gasoline-powered vehicles.

Mary Nichols, head of the California Air Resources Board, said Friday that if the plan is successful, 40 percent of new car sales in 2030 will be zero-emission vehicles. That may sound far-fetched, but Volvo announced recently that every new car it makes after 2019 will have an electric motor, and several European countries, including France, have passed laws to ban gasoline engines on all new cars by 2040 .

But California could face another speed bump: Brown leaves office next January, and there are no guarantees that the next governor or state lawmakers will continue funding the $\$ 2.5$ billion effort.
"We've enjoyed great support from past governors, as well as this one, for air quality programs in the state of California, and I don't think there's likely to be a slacking off in the next administration," Nichols said. "We're hoping it will be maintained and the logic of it will be compelling."

## ORACLEonline



## VTA Drops Youth Fare And Releases New App Among 2018 Improvements

By: Claire Anderson on January 25, 2018
The Valley Transportation Authority started the new year by implementing several changes, including modifying their fare rates and offering new payment methods. The youth bus and light rail fare for single rides has dropped from $\$ 1.75$ to $\$ 1$, while the adult fare has increased from $\$ 2$ to $\$ 2.25$.

Sophomores Sarah Teng and Aminah Carrington regularly take the bus to school and said they appreciate the change.
"If you have to go a long way on the bus, it's more reasonable [to pay \$1]," Teng said.

While both students said that the change in price would be unlikely to affect their day-to-day lives, they noted the impact it could have on students and their families.


The EZFare app has over 1,000 downloads in the Google Play Store
"I know that for other people, it would have been a struggle [if the price had increased]," Carrington said.

In addition, the launch of VTA's EZfare mobile app allows riders to pay for their fare with their mobile device.

According to the VTA website, the EZfare app allows riders to pay for their tickets in advance, eliminating the need to bring cash to the bus. The app also allows riders to store multiple ticket purchases to eliminate extra hassle.

By purchasing a single ride ticket through the EZfare app or with a Clipper card, riders can get free transfers across buses and light rail for two hours.

Although neither student uses the EZfare app to pay for their bus fare because they have Clipper cards, they can still see why this would be helpful to other students.
"Teenagers are usually on their phones, so maybe it might help, but I'm sort of like an old lady when it comes to technology," Carrington said.

## First Transit Partners With The Minn. DOT, Easymile, 3M To Demo SAV

Posted on January 25, 2018


First Transit is partnering with the Minnesota Department of Transportation, EasyMile and 3M to demonstrate shared autonomous vehicle (SAV) capabilities in winter weather. Photo: First Transit

First Transit is partnering with the Minnesota Department of Transportation, EasyMile and 3M to demonstrate shared autonomous vehicle (SAV) capabilities in winter weather.

First Transit is offering rides on the SAV at a local mall in Downtown Minneapolis on January 26, 27, and 28.

First Transit will support the project with onsite personnel, operations and maintenance support for the SAV.
"First Transit is proud to be leading the way in SAV technology and innovation," said Justin Pate, sr. VP First Transit. "As SAV technology is changing at a quick pace, we are excited to be at the forefront."

First Transit currently has three operations of the SAV across North America, announcing the first autonomous passenger shuttle pilot in North America, signing an exclusive partnership with GoMentum Station for autonomous vehicle Innovation and Research, and bringing autonomous vehicle passenger shuttles to Dallas sports fans.

## METRO

## Transdev To Run Autonomous Shuttle Pilot In Jacksonville

Posted on January 24, 2018


Transdev also operates the first autonomous vehicle network in the country at Babcock Ranch, a planned town in Southwest Florida near Ft. Myers. Photo: Transdev

Transdev has been selected to operate an autonomous shuttle pilot for Florida's Jacksonville Transportation Authority (JTA), as part of the agency's overall plan to replace the Skyway monorail service with shared autonomous vehicles.

The JTA launched the Ultimate Urban Circulator $\left(\mathrm{U}^{2} \mathrm{C}\right)$ Autonomous Vehicle Test and Learn track in December 2017. The test and learn process will enable JTA to gain critical information for the development of the $\mathrm{U}^{2} \mathrm{C}$ program. It will focus on the long-term feasibility of implementing autonomous transit into existing and planned routes along the city's downtown riverfront.

The $\mathrm{U}^{2} \mathrm{C}$ will transform, modernize, and expand the JTA's Skyway with next generation autonomous vehicles (AV), to provide greater connectivity, reliability, fast and direct service, as well as sustained economic growth in downtown Jacksonville.

For the Test and Learn Track, Transdev will operate multiple 12-person EasyMile Shuttles, the EZ-10. A new test track has been created to show the capabilities of
the vehicles that will operate during special events connecting passengers to select locations near Jacksonville's Sport Complex.

Transdev also operates the first autonomous vehicle network in the country at Babcock Ranch, a planned town in Southwest Florida near Ft. Myers. There, visitors will first use AV shuttles to tour homes in the community before eventually serving as a mobility solution to connect residents to the downtown area.

Globally, Transdev has partnered with both the Renault-Nissan Alliance and Delphi Automotive to accelerate the implementation of open-road AV solutions, with planned operations starting this year in the Paris suburbs and in Rouen, Normandy in Northern France.


[^0]:    61260 01/22/18 61261 01/22/18

[^1]:    APOLLO VIDEO TECHNOLOGY LLC

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[^2]:    ParaCruz Operations Status Report

[^3]:    ParaCruz Operations Status Report

[^4]:    ParaCruz Operations Status Report

[^5]:    | 51 Calendar School Days of SJSU |
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    | 52 Calendar School Days of Cabrillo |
    | 52 Calendar School Days of UCSC |

[^6]:    ${ }^{2}$ The IPUMS data are from Ruggles et al (2017).

[^7]:    ${ }^{3}$ Manhattan also has relatively few highway lane-miles, which contributes to its surface-street congestion.

[^8]:    ${ }^{4}$ Calculated from summary file data of the Decennial Census 2000, and the 2010 and 2015 ACS.

[^9]:    ${ }^{5}$ Calculated from Metro ridership-by-line data, 2012 and 2016.

[^10]:    ${ }^{6}$ Calculated from the 2012 California Household Travel Survey.

[^11]:    ${ }^{7}$ These reasons might interact. People who cannot afford vehicles might choose to live near transit because of their lack of vehicle access (Glaeser, Kahn, \& Rappaport, 2008).

[^12]:    ${ }^{8}$ Note that $2 / 3$ of people without vehicle access still did not use transit regularly.

[^13]:    ${ }^{9}$ Note that because Figure 17 shows absolute changes in both VRM and VRH on the same $Y$-axis, the VRM changes appear to be substantially larger than the proportional differences shown in Figure 16. These apparently large differences are mostly an artifact of transit service moving anywhere from about 6 (for the slowest urban bus service) to 40 (for the fastest commuter rail service) miles per hour, on average. This means that, for example, a one million VRH increase might be expected to have a corresponding 10 million or more V.RM increase.

[^14]:    ${ }^{10}$ Though not directly relevant to our question, these shifts have significant budgetary implications beyond just the deployment of various services (Taylor, Garrett, \& Iseki, 2000). Local bus and bus rapid transit services (with the exception of those operating in exclusive rights-of-way) tend to be the cheapest to deliver and require the smallest per passenger subsidies. By contrast, the annualized capital plus operating expenses of rail transit tend to be substantially greater per passenger, while the per passenger subsidies for ADA demand response services tend to be the highest of all.

[^15]:    ${ }^{11}$ With another 69 systems operating demand-response and other types of transit services, for a total of 110 regional transit service providers.

[^16]:    ${ }^{12}$ TNCs are required under California law to report a host of data on rides given, disability access, and drivers to the California Public Utilities Commission. Unlike transit data in the NTD, however, these TNC data are not public. The CPUC cannot easily turn those data over to the public or public agencies. Such conditions are common throughout the United States. For more - http://www.cpuc.ca.gov/General.aspx?id=3989

[^17]:    ${ }^{13}$ This outcome could well result in lower transit ridership but also lower VMT and GHG, because the higher income in-migrants are more likely to replace driving with their transit trips (see Chapple et al. 2016, Chapter 4).

[^18]:    ${ }^{14}$ Because we are using tract-level data, the ACS data are from the 5 -year samples. The 2010 data are from the 20062010 ACS, and the 2015 data are from the 2011-2015 ACS.

[^19]:    ${ }^{15}$ The Consumer Expenditure Survey tracks the average net outlay per vehicle purchased. Data are not available for the other SCAG counties, but the average net outlays are probably similar across Southern California. Moreover, the $\$ 3,729$ figure is the average of each annual average. Since more vehicles were purchased in the early to mid -2000 s, and at higher prices, this figure likely underestimates the true average. See https://www.bls.gov/cex/csxmsa.htm

[^20]:    ${ }^{16}$ While we experimented with different functional forms for the regression, we settled on a zero-inflated negative binomial regression. A negative binomial regression is a standard tool for analyzing overdispersed count data, and the zero-inflation corrects for bias that might otherwise be introduced when the value of the dependent variable is frequently zero, as it is with personal transit trips.

[^21]:    ${ }^{17}$ A natural concern is that the CHTS might measure nativity, income, etc. differently than the Census. We validated our approach by first using the Census independent variables to replicate the CHTS estimates, suggesting this is not a problem.

[^22]:    ${ }^{18}$ We should note that these models are not predictive models - their purpose is not to yield output that precisely matches the observed transit ridership in the SCAG region (and in fact our predictions do not match observed ridership). We do not build a predictive model for two reasons. First, we are not using the correct data to do so. Regional ridership counts come from annual reporting to the NTD. Because we need person-level data that includes socioeconomic attributes, we are using one-day travel diary data from the 2012 CHTS, and then matching that to person-level data from three Census years. Second and more important, the goal of the regressions is to test a particular hypothesis - that vehicle access is the decisive factor in transit use - not to predict transit ridership. Our output thus yields an estimate of the relative magnitude of the importance of auto access, not a precise measure of how many trips each additional increment of auto access actually cost the SCAG region.

[^23]:    ${ }^{19}$ Data come from the New York Federal Reserve Bank's Consumer Credit Panel.

