



03-19-10 A08:35 IN

1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
619.231.1466 FAX 619.234.3407

Agenda

JOINT MEETING OF THE BOARD OF DIRECTORS

for the

Metropolitan Transit System,
San Diego Transit Corporation, and
San Diego Trolley, Inc.

March 25, 2010

9:00 a.m.

James R. Mills Building
Board Meeting Room, 10th Floor
1255 Imperial Avenue, San Diego

This information will be made available in alternative formats upon request. To request an agenda in an alternative format, please call the Clerk of the Board at least five working days prior to the meeting to ensure availability. Assistive Listening Devices (ADLs) are available from the Clerk of the Board/Assistant Clerk of the Board prior to the meeting and are to be returned at the end of the meeting.

ACTION RECOMMENDED

1. Roll Call
2. Approval of Minutes - March 11, 2010
3. Public Comments - Limited to five speakers with three minutes per speaker. Others will be heard after Board Discussion items. If you have a report to present, please give your copies to the Clerk of the Board.

Approve

Please turn off cell phones and pagers
during the meeting

1255 Imperial Avenue, Suite 1000, San Diego, CA 92101-7490 • (619) 231-1466 • www.sdmts.com

Metropolitan Transit System (MTS) is a California public agency comprised of San Diego Transit Corp., San Diego Trolley, Inc., San Diego and Arizona Eastern Railway Company (nonprofit public benefit corporations), and San Diego Vintage Trolley, Inc., a 501(c)(3) nonprofit corporation, in cooperation with Chula Vista Transit. MTS is the taxicab administrator for seven cities. MTS member agencies include the cities of Chula Vista, Coronado, El Cajon, Imperial Beach, La Mesa, Lemon Grove, National City, Poway, San Diego, Santee, and the County of San Diego.



CONSENT ITEMS

- | | | |
|----|--|---------|
| 6. | <u>MTS: Auditing Services - Exercise of Contract Option Years</u>
Action would authorize the CEO to exercise option years one, two, and three (MTS Doc. No. G1013.1-06) with Caporicci & Larson LLC for auditing services. | Approve |
| 7. | <u>MTS: Transportation Development Act (TDA) Claim Amendment</u>
Action would approve the revised MTS Transportation Development Act (TDA) capital claim Nos. 242, 258, 305, and 531 to fund FY 2010 operations. | Approve |
| 8. | <u>MTS: Authorization for Use of Additional City of San Diego Billboard Reserve Funds</u>
Action would authorize the use of additional funds from the City of San Diego Billboard Reserve Fund to the City of San Diego for support of the Encanto/62nd Street Trolley Station Mural Project. | Approve |
| 9. | <u>MTS: Property Insurance Renewal</u>
Action would authorize the CEO to renew the property insurance coverage for MTS, San Diego Transit Corporation (SDTC), and San Diego Trolley, Inc. (SDTI) with the California State Association of Counties (CSAC) Property Insurance Program, effective March 31, 2010, through March 31, 2011, with a basic coverage deductible of \$25,000, \$100,000 for collision on buses and light rail vehicles, and \$1,500,000 on roads, bridges, and tunnels. | Approve |

CLOSED SESSION

- | | | | |
|-----|----|--|--------------------|
| 24. | a. | SDTI: CLOSED SESSION - CONFERENCE WITH LABOR NEGOTIATORS Pursuant to California Government Code Section 54957.6
Agency-Designated Representative - Jeff Stumbo
Employee Organization - International Brotherhood of Electrical Workers Local 465 | Possible
Action |
| | b. | MTS: CLOSED SESSION - CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Pursuant to California Government Code Section 54956.8;
<u>Properties:</u> 7490 and 7550 Copley Park Place, San Diego, California (Assessor Parcel No. 356-410-08, 356-410-09);
<u>Agency Negotiators:</u> Tiffany Lorenzen, General Counsel; Tim Allison, Manager of Real Estate Assets; <u>Negotiating Parties:</u> RV Investment CA, LLC, RV Investment CA, LLC II; <u>Under Negotiation:</u> Price and Terms of Payment | Possible
Action |

Oral Report of Final Actions Taken in Closed Session

NOTICED PUBLIC HEARINGS

25. None.

DISCUSSION ITEMS

30. MTS: Southern California Consortium Disadvantaged Business Enterprise (DBE) Disparity Study (Tiffany Lorenzen) Possible Action
Action would: (1) receive the final Southern California Consortium DBE Disparity Study; and (2) adjust the current fiscal year 2010 goals from 1.72% to 12.6% and implement the goals through June 30, 2012, consistent with new federal guidelines.

REPORT ITEMS

45. SDTC: CNG-Hybrid Bus Demonstration Project (Claire Spielberg) Receive
Action would receive a report on MTS's CNG-Hybrid Bus Demonstration Project.
46. MTS: Mid-Coast Corridor Transit Project (Leslie Blanda of SANDAG) Receive
Action would receive a report on the Mid-Coast Corridor Transit Project.
47. MTS: Operations Budget Status Report for January 2010 (Mike Thompson) Receive
Action would receive a report on MTS's operations budget status for January 2010.
60. Chairman's Report Information
61. Audit Oversight Committee Chairman's Report Information
62. Chief Executive Officer's Report Information
63. Board Member Communications
64. Additional Public Comments Not on the Agenda
If the limit of 5 speakers is exceeded under No. 3 (Public Comments) on this agenda, additional speakers will be taken at this time. If you have a report to present, please furnish a copy to the Clerk of the Board. Subjects of previous hearings or agenda items may not again be addressed under Public Comments.
65. Next Meeting Date: April 8, 2010
66. Adjournment

METROPOLITAN TRANSIT DEVELOPMENT BOARD
ROLL CALL

MEETING OF (DATE): 3-25-10

CALL TO ORDER (TIME): 9:00 a.m.

RECESS: _____

RECONVENE: _____

CLOSED SESSION: 9:05 a.m.

RECONVENE: 10:04 a.m.

PUBLIC HEARING: _____

RECONVENE: _____

ORDINANCES ADOPTED: _____

ADJOURN: 11:20 p.m.

BOARD MEMBER	(Alternate)	PRESENT (TIME ARRIVED)	ABSENT (TIME LEFT)
CUNNINGHAM	☒ (Boyack) ☐	9:33 a.m.	
EWIN	☒ (Allan) ☐		
EMERALD	☒ (Faulconer) ☐		11:05 a.m.
GLORIA	☐ (Faulconer) ☐		
JANNEY	☒ (Bragg) ☐		11:09 a.m.
LIGHTNER	☒ (Faulconer) ☐		
MATHIS	☒ (Vacant) ☐		
MCCLELLAN	☐ (Hanson-Cox) ☐		
OVROM	☒ (Denny) ☐		
RINDONE	☒ (Castaneda) ☐		
ROBERTS	☐ (Cox) ☐		
RYAN	☐ (B. Jones) ☐		
SELBY	☒ (England) ☐		
VAN DEVENTER	☒ (Zarate) ☐		
YOUNG	☒ (Emerald) ☐	9:33	10:00 a.m.

SIGNED BY THE OFFICE OF THE CLERK OF THE BOARD

CONFIRMED BY OFFICE OF THE GENERAL COUNSEL

W. L. Rogers
W. L. Rogers

JOINT MEETING AND FINANCE WORKSHOP OF THE BOARD OF DIRECTORS FOR THE
METROPOLITAN TRANSIT SYSTEM (MTS),
SAN DIEGO TRANSIT CORPORATION (SDTC), AND
SAN DIEGO TROLLEY, INC. (SDTI)

MINUTES

March 11, 2010
MTS
1255 Imperial Avenue, Suite 1000, San Diego

1. Roll Call

Chairman Rindone called the Finance Workshop meeting to order at 8:00 a.m. A roll call sheet listing Board member attendance is attached.

2. MTS: FY 2010 Midyear Adjustment and FY 2011 Preliminary Projections

Cliff Telfer, Chief Financial Officer, stated that the presentation will include the midyear adjustment to the current fiscal year and a review of FY 2011 budget development. He introduced Larry Marinesi, Budget Manager.

Mr. Marinesi gave a PowerPoint presentation on the fiscal year 2010 mid-year assumptions and executive summary that included revenue, variable pension obligation bond refinance transactions and expenses. He reviewed revenues that have decreased and as a result, the Board authorized the use of \$12.6 million in one-time funds and \$11.8 million in one-time revenue to refinance the pension obligation bonds in November.

Mr. Marinesi stated that the Board authorized the implementation of Sunday service adjustments, which took place in February. He added that the adjustments will save \$2.7 million for the current fiscal year, and he described internal belt-tightening. He explained that the Budget Development Committee has recommended using an additional \$1.06 million in contingency reserves and an additional \$12.6 million in one-time funding to balance the current year budget. He compared the original budget with the amended budget that is balanced for fiscal year 2010. He pointed out that the June 30, 2010, projected balance of contingency reserves is \$21.7 million, which represents 10% of the total operating budget.

Mr. Marinesi reviewed the preliminary budget projection for fiscal year 2011, including revenue and key expense assumptions. He stated that the projected deficit is \$10 million. He added that in November, the Board authorized the use of an additional \$5 million in Transportation Development Act (TDA) from operations and the continuing shifting of \$3.2 million in CNG credits to the operating budget. He pointed out that the preliminary projection is a \$2 million shortfall for fiscal year 2011.

Sharon Cooney reviewed other potential funding sources, including the settlement of the legal case that CTA won, which cannot be counted on. She stated that there is a special session bill that is a new source of funding for transit agencies. Mr. Jablonski added that leadership in Sacramento is skeptical that the Governor will sign the bill, things are very tentative, and the tone at the state is that this upcoming year will be the toughest year yet.

Mr. Marinesi concluded his presentation with a fiscal year 2011 budget time line. Members discussed the projections, options to balance the budget, use of one-time funds, and the hope that the economy is recovering.

Action Taken

Mr. Van Deventer moved to approve Resolution No. 10-05 which includes the usage of an additional \$1,056,000 in nonrecurring revenues to balance the MTS FY 2010 operating budget and receive the report regarding preliminary FY 2011 budget projections. Mr. McClellan seconded the motion, and the vote was 11 to 0 in favor.

3. Public Comments

None.

The Finance Workshop adjourned at 8:49 a.m., and the Board of Directors meeting began immediately following.

4. a. Roll Call - A roll call sheet listing Board member attendance is attached.
b. Approval of Minutes - February 18, 2010

Mr. Cunningham moved to approve of the minutes of the February 18, 2010, Board of Directors meeting. Mr. McClellan seconded the motion, and the vote was 11 to 0 in favor.

c. Public Comments

Tracy Cain: Ms. Cain stated that she is an SDTI employee, and her comments today are regarding seniority, which is a subject that is not being addressed by MTS with the union during negotiations. She gave examples of people who have lost seniority because they were out of work for 30 days. She stated that the loss of seniority affects morale and families. She added that it is disturbing that MTS will not talk about the issue in negotiations because it would cost the company nothing.

Jim Lobb: Mr. Lobb stated that he works for SDTI in the Revenue Department. He referred to the APTA award that MTS received for the Outstanding Public Transit System. He also referenced a 5% increase for the CEO. He added that SDTI employees have been offered no wage increases and a reduction in benefits.

Mr. Jablonski stated that the award that MTS received is built on the solid work of all of the employees, and their efforts are appreciated. He added that MTS is in labor negotiations with the union to come to a resolution on a labor agreement during extraordinary times.

Andra Fairchild: Ms. Fairchild stated that she is in a wheelchair and has requested that the Compass Card reader be located in a more accessible location at Civic Center on Third Avenue. She pointed out that other stations that have readers on both sides of the street.

Daryl Lowry: Mr. Lowry stated that he should not feel threatened by trolley security. He added that he has not only been threatened, he has had bones broken and eye surgery. He stated that demand letters have been sent to MTS. He stated that trolley security needs to know about constitutional and civil rights law. He made reference to his lawsuit against MTS and the MTS lawyer.

CONSENT ITEMS

6. MTS: Increased Authorization for Legal Services - Best Best & Krieger LLP
Action would authorize the CEO to execute MTS Doc. No. G1274.1-09 with Best Best & Krieger, LLP (BBK) for legal services and ratify the prior contract entered into under the CEO's authority.
7. MTS: FY 2010/11 Community-Based Transportation Planning Grant
Action would approve Resolution No. 10-2 authorizing the CEO to enter into a contract with the California Department of Transportation (Caltrans) for the use of a community-based transportation planning grant (if awarded).
8. MTS: Investment Report - January 2010
Action would receive a report for information.
9. MTS: Fixed Assets Internal Audit Report
Action would receive an internal audit report on fixed assets.
10. MTS: Trolley Automatic Passenger Counters - Contract Award
Action would authorize the CEO to execute MTS Doc. No. L0912.0-10 with Init Innovations in Transportation (Init) for the purchase of automatic passenger counters (APCs) for the trolley fleet, including 53 base vehicles, 26 optional vehicles, and all required hardware, software, and services in an amount not to exceed the project balance of \$1.5 million to include the base contract (\$1,211,581) plus optional equipment in the amount of up to \$288,419.
11. MTS: Support for SANDAG Application for Proposition 1A Funds Assigned to MTS
Action would approve Resolution No. 10-6 stating the commitment of San Diego Trolley, Inc.'s (SDTI's) share of California State Proposition 1A (2008) revenue for use on the Blue Line Rehabilitation Project and in support of the San Diego Association of Governments' (SANDAG's) application for funding.

Action Taken

Mr. McClellan moved to approve Consent Agenda Item Nos. 6 through 11. Mr. Van Deventer seconded the motion, and the vote was 12 to 0 in favor.

CLOSED SESSION

The Board convened to Closed Session at 9:02 a.m.

24. a. MTS: CLOSED SESSION - CONFERENCE WITH LEGAL COUNSEL
EXISTING LITIGATION Pursuant to California Government Code section
54956.9(a): Daniel Lopez v. San Diego Transit Corporation (Case
No. 37-2009-00081786-CU-PA-CTL)
- b. MTS: CLOSED SESSION - CONFERENCE WITH LEGAL COUNSEL
ANTICIPATED LITIGATION Pursuant to California Government Code section
54956.9(b): (One Potential Case)

The Board reconvened to open session at 9:27 a.m.

Ms. Tiffany Lorenzen, MTS General Counsel, reported the following:

- a. The Board received a report and gave direction to outside counsel.
- b. The Board received a report and gave direction to staff.

NOTICED PUBLIC HEARINGS

None.

DISCUSSION ITEMS

30. MTS: First Transit, Inc. ADA Paratransit Services

Jim Byrne, Director of Transportation, introduced Scott Transue, ADA Manager. Mr. Byrne gave a PowerPoint presentation on the paratransit contract award. Mr. Byrne stated that paratransit services are provided to individuals who are not able to use the fixed-bus route system. He stated that the services are provided in full compliance with the Americans with Disabilities Act and provide nearly 350,000 passenger trips annually. He stated the service is provided by 120 MTS-owned paratransit vehicles operated by First Transit, which is a contracted provider based in El Cajon.

Mr. Byrne stated that MTS issued a Request for Best and Final Offers from the two finalist firms, and it was determined by the evaluation panel that First Transit was the best choice.

He reviewed staff's recommendation to approve the contract award to First Transit based on its management team and video-recording devices, automatic vehicle locators, and mobile-data terminals. The contract would include \$106,007,025 for the provision of paratransit services for a base period of five years with two 2-year option periods. MTS's FY 11 cost would increase less than 1% from \$59.52 to \$59.58 per revenue hour.

Mr. Jablonski stated that this is a great example of MTS's negotiated procurement process. He stated that Mr. Byrne has shown leadership in revising the RFP, Mr. Transue, procurement, finance and the rest of the team is to be commended for this effort.

Action Taken

Mr. Van Deventer moved to approve awarding a contract to First Transit. Ms. Emerald seconded the motion, and the vote was 12 to 0 in favor.

31. MTS: Consultant Services for Naming Rights - Contract Award

Rob Schupp, Director of Marketing, gave a PowerPoint presentation on the naming rights contract award. He stated that this is a full scope of work to evaluate the entire MTS system. He stated that the goal is to generate greater advertising revenue. He reported that an RFP was issued last year for a consultant to evaluate MTS assets, conduct market research to identify potential sponsors, develop a database and valuation of assets, develop a marketing strategy, and implement strategy and secure sponsorships.

Mr. Schupp stated that two qualified responses to the RP were received by The Superlative Group and Creative Intellectuals. He added that The Superlative Group was by far the leader in

expertise and also submitted a superior work plan. He described The Superlative Group team, consultants, and experience. He reviewed the work plan and Phases I and II.

Mr. Schupp described the compensation package and provided examples. The compensation package is as follows:

Asset Valuation	\$125,000 made in three payments. Deducted from future commissions
Retainer	\$7,500 per month + travel
Commission	● 12% over term if less than 3 years ● if more than 3 years, MTS chooses either 6% if paid in first 3 years or 12% if paid over duration of agreement
Other Sponsors	Same as above
Travel	Reimbursed at cost according to MTS guidelines
Duration	2 years with two 1-year options
NCTD Inclusion	

Members discussed MTS's advertising policy, revenue vs. branding, and advertising opportunities.

Action Taken

Mr. Roberts moved to authorize the CEO to execute MTS Doc. No. G1262.0-10 with The Superlative Group for a two-year base period with two 1-year options for consultant services for naming rights. Ms. Emerald seconded the motion, and the vote was 13 to 0 in favor.

REPORT ITEMS

45. SDTI: Chargers Football 2009 Year-End Summary

Tom Doogan, Special Events Coordinator gave a PowerPoint presentation on the 2009 year-end summary for the Chargers football season. He stated that this is the fifth year of Green Line service to the stadium since the opening of the Mission Valley East extension and the 12th full season overall of service to Qualcomm Stadium for the Chargers.

Mr. Doogan gave an overview of LRT service and frequency, attendance, and ridership. He reported that ridership history has remained relatively flat since 2005 with the opening of the Mission Valley East extension. He reported on ticket sales that were conducted manually at 11 locations and fare inspections that were conducted in bound and out bound. He pointed out that manual ticket sales amounted to \$465,638 in 2009, which was a slight decrease from 2008.

Mr. Doogan reported on revenue over the 11 game season, and reviewed comparison data that measures event service efficiencies. He stated that cost recovery for the Chargers vs. Raiders game on November 1, 2009, resulted in net operating revenue of \$59,107. He added that the average net revenue for the 2009 season is \$56,557. He pointed out that the estimated net revenue for the 2009 Chargers season is \$621,000.

Mr. Doogan reported on the challenges for the 2010 Chargers season and the Holiday Bowl. He gave an update on the NCAA Bowl Games that included the Poinsettia Bowl and the Holiday Bowl. He added that ridership was up 53% for the 2009 Holiday Bowl.

Action Taken

Mr. Rindone moved to receive the report. Mr. Cunningham seconded the motion, and the vote was 13 to 0 in favor.

46. MTS: Safety and Transit Facilities

Kristen Rohanna, SANDAG gave a PowerPoint presentation on public safety at transit stations. She reported that the possible connection between public transit and crime is a controversial issue. She stated that some people feel that transit provides criminals easy access into neighborhoods that they otherwise would not have access to, and others feel that it is the transit station's surrounding neighborhood characteristics, such population and density, that influence the amount and type of crime around a transit station – not the station itself. She stated that this study attempts to sort out this issue.

Ms. Rohanna stated that in 2006, SANDAG was awarded a grant by Caltrans to explore transit's impact on public safety. She described the formal working group that was formed and reviewed how neighborhoods were selected. She stated that the analysis concluded with 50 neighborhoods that do have a station and 50 neighborhoods that do not have a station. She reviewed the average number of crimes by type that were analyzed and the differences after transit stations were added.

Ms. Rohanna stated that the study found that the presence of a transit station did not impact crime. She added that station design features, such as lighting and fencing, were not related to fewer crimes; however, the surrounding area was found to be related to crime differences. Specifically, stations without convenience stores, major employment centers, retail, or high-vehicle or foot traffic had fewer crimes on average. She stated that in conclusion, the presence of a transit station does not increase neighborhood crime and added that neighborhood characteristics tend to influence crime rates.

Action Taken

Mr. Rindone moved to receive the report. Ms. Denny seconded the motion, and the vote was 12 to 0 in favor.

47. MTS: Hazard Center Revitalization Project

Evan Gerber, Project Manager for Oliver McMillan (project developer), gave a PowerPoint presentation on an overview of the Hazard Center Revitalization Project located at 7510 Hazard Center Drive. He stated that this is a model project that envisions the removal of the existing theater and the addition of 473 residential units (including 48 affordable homes) and 4,205 square feet of commercial space. The project is adjacent to the Hazard Center Trolley Station on the Green Line. He reviewed the planning principals and the conceptual site plan.

Members discussed the history of the site and the benefits of the relationship of this project with public transit.

Mr. Roberts moved to direct staff to draft a letter in support of the project to be brought back to the Board for approval and to receive the report. Mr. Ewin seconded the motion, and the vote was 8 to 0 in favor.

Action Taken

Ms. Lightner, Mr. Gloria and Ms. Emerald, City of San Diego Council representatives, were not present for the vote.

48. MTS: Service Performance Monitoring Report for July through December 2009

Devin Braun, Senior Transportation Planner, gave a PowerPoint presentation on the six-month update for FY 2010 service performance monitoring. He stated that Board Policy No. 42 specifies how MTS service is evaluated. He stated that customer-focused and competitive-difference statistics and sustainability statistics are part of the evaluation criteria.

Mr. Braun stated that overall, MTS passenger statistics are -14.2% (down 7 million passengers) based on the same six months of the previous fiscal year. He added that the majority of this amount are trolley statistics, (5.3 million passengers), and bus statistics include is 1.7 million passengers, which is a -6% decrease.

Mr. Braun stated that the trolley's large swing in ridership is also attributed to the Trolley Ridership Estimation Program's (TREP's) susceptibility to variances in the estimates. He stated that trolley ridership statistics will be corrected with the installation of the trolley automatic passenger counters in September.

Mr. Braun reported that the number of average weekday passengers is -12.4%, and bus passengers alone are -3.5%. He reported that the passengers per revenue hour is -10.2%, and bus riders per revenue hour are -2.9%. He reviewed statistics for passengers per in-service hour, on-time performance preventable accidents per 100,000 miles, complaints per 100,000 passengers, in-service miles, in-service hours, and peak vehicle requirements.

Mr. Cunningham requested that Mr. Jablonski communicate to the employees that their efforts to increase on-time efficiencies are appreciated. He also acknowledged Ms. Lightner for her efforts on Route 880.

Action Taken

Mr. McClellan moved to receive the report. Mr. Cunningham seconded the motion, and the vote was 10 to 0 in favor.

60. Chairman's Report

Mr. Mathis stated that he will be sharing photos of vintage trolleys. He reported that the vintage trolley program is steadily moving forward, and testing may begin by the end of May. He added that it is possible that service may start sometime during the summer.

61. Audit Oversight Committee Chairman's Report

None.

62. Chief Executive Officer's Report

Mr. Jablonski reported that he was in Sacramento this week to attend the California Transit Association (CTA) Executive Committee meeting, and he participated in a CTA leadership visit with the senate and assembly leaders to discuss the current proposal before the Governor and the lawsuit.

63. Board Member Communications

Ms. Denny thanked Mr. Mathis for his time and efforts on the vintage trolley project. Mr. Rindone pointed out that there is an article in the South County section of the Union-Tribune on the expansion of the BRT from Otay Ranch in Eastlake through Chula Vista to San Diego.

64. Additional Public Comments Not on the Agenda

Clive Richard: Mr. Richard stated that he has spoken to staff about his concerns and has chosen not to speak to the Board.

Debbie George: Ms. George introduced herself as a counselor with the State Department of Vocational Rehabilitation. She stated that MTS is evaluating the disabled transit pass process and is considering that only people in the medical profession can write the letter regarding a person's disabled status. She requested that MTS consider that vocational rehabilitation counselors be authorized to write letters also. Mr. Mathis requested that Ms. George submit a letter to Tiffany Lorenzen.

65. Next Meeting Date

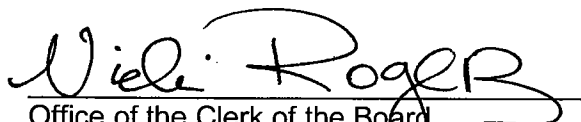
The next meeting of the MTS Board of Directors is on March 25, 2010.

66. Adjournment



Chairperson
San Diego Metropolitan Transit System

Filed by:



Office of the Clerk of the Board
San Diego Metropolitan Transit System

Approved as to form:



Office of the General Counsel
San Diego Metropolitan Transit System

Attachment: Roll Call Sheet

METROPOLITAN TRANSIT DEVELOPMENT FINANCE WORKSHOP & BOARD
ROLL CALL

MEETING OF (DATE): 3-11-10

CALL TO ORDER (TIME): 8:00 a.m.

END FINANCE WORKSHOP: 8:49 a.m.

CONVENE BOARD MEETING: 8:49 a.m.

CLOSED SESSION: 9:02 a.m.

RECONVENE: 9:27 a.m.

PUBLIC HEARING: None

RECONVENE: None

ORDINANCES ADOPTED: _____

ADJOURN: 11:15 p.m.

BOARD MEMBER	(Alternate)	PRESENT (TIME ARRIVED)	ABSENT (TIME LEFT)
CUNNINGHAM	☒ (Boyack) ☐	8:23 a.m.	
EWIN	☒ (Allan) ☐	8:05 a.m.	10:56 a.m.
EMERALD	☒ (Faulconer) ☐	9:01 a.m.	
GLORIA	☒ (Faulconer) ☐		
JANNEY	☒ (Bragg) ☐		10:24 a.m.
LIGHTNER	☒ (Faulconer) ☐		
MATHIS	☒ (Vacant) ☐		
MCCLELLAN	☒ (Hanson-Cox) ☐		
OVROM	☐ (Denny) ☒		
RINDONE	☒ (Castaneda) ☐		
ROBERTS	☒ (Cox) ☐	9:15 a.m.	
RYAN	☐ (B. Jones) ☐		
SELBY	☒ (England) ☐	8:05 a.m.	
VAN DEVENTER	☒ (Zarate) ☐		10:53 a.m.
YOUNG	☐ (Emerald) ☐		

SIGNED BY THE OFFICE OF THE CLERK OF THE BOARD

CONFIRMED BY OFFICE OF THE GENERAL COUNSEL

Wiliam Rogers
[Signature]



Metropolitan Transit System

1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Revised

METROPOLITAN TRANSIT SYSTEM



**2010 JOINT BOARD AND
EXECUTIVE COMMITTEE MEETING SCHEDULE
JAMES R. MILLS BUILDING, 10TH FLOOR
1255 IMPERIAL AVENUE, SAN DIEGO**

Executive Committee Thursdays at 9:00 a.m.	Board Meetings Thursdays at 9:00 a.m.
No Corresponding Executive Committee Meeting January 14	January 7 January 21
CANCELLED February 11	February 18
March 4 March 18	March 11 (8:00 a.m. Finance Workshop also) March 25
CANCELLED April 1 April 15	April 8 April 22
May 6 May 20	May 13 May 27 (9:00 a.m. Finance Workshop also)
June 3 June 17	June 10 June 24
July 8	July 15
August 12	August 19
September 9 *	September 23*
October 7 ** October 21	October 14 October 28
November 4	November 18
December 2	December 9

*The California League of Cities is holding its annual meeting September 15 – 18. Meetings in September have been scheduled accordingly.

** The APTA Annual Meeting is being held October 3 – 6. The schedule has not been adapted to accommodate this meeting, but changes may be made at a later date.

Meeting Schedule - MTS Board & EC - 2010.doc - Revision 3..doc

1255 Imperial Avenue, Suite 1000, San Diego, CA 92101-7490 • (619) 231-1466 • www.sdmts.com



Metropolitan Transit System (MTS) is a California public agency comprised of San Diego Transit Corp., San Diego Trolley, Inc., San Diego and Arizona Eastern Railway Company (nonprofit public benefit corporations), and San Diego Vintage Trolley, Inc., a 501(c)(3) nonprofit corporation, in cooperation with Chula Vista Transit. MTS is the taxicab administrator for seven cities.

MTS member agencies include the cities of Chula Vista, Coronado, El Cajon, Imperial Beach, La Mesa, Lemon Grove, National City, Poway, San Diego, Santee, and the County of San Diego.



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda

Item No. 6

JOINT MEETING OF THE BOARD OF DIRECTORS
for the
Metropolitan Transit System,
San Diego Transit Corporation, and
San Diego Trolley, Inc.

FIN 320

March 25, 2010

SUBJECT:

MTS: AUDITING SERVICES – EXERCISE OF CONTRACT OPTION YEARS

RECOMMENDATION:

That the Board of Directors authorize the Chief Executive Officer (CEO) to exercise option years one, two, and three (MTS Doc. No. G1013.1-06) with Caporicci & Larson LLC for auditing services.

Budget Impact

Exercising the option years would provide a savings of \$235,000.

DISCUSSION:

MTS currently has a contract with Caporicci & Larson LLC to provide audit services of financial statements for five years (FY 2006 – FY 2010). In addition, MTS has options for three 1-year terms, which would cover the FY 2011 through FY 2013 audits.

The services for the base-year contract will conclude on approximately December 31, 2010, upon completion of the FY 2010 audit. A Request for Proposals (RFP) and the contract award process would take approximately 9 to 12 months and would go beyond the conclusion of the base contract.

The contract for audit services started in FY 2006 at \$295,000 per year with a 4% per year escalation throughout the contract years and for the option years if exercised. In



Metropolitan Transit System (MTS) is comprised of the Metropolitan Transit Development Board (MTDB) a California public agency, San Diego Transit Corp., and San Diego Trolley, Inc., in cooperation with Chula Vista Transit and National City Transit. MTS is Taxicab Administrator for eight cities. MTDB is owner of the San Diego and Arizona Eastern Railway Company. MTDB Member Agencies include: City of Chula Vista, City of Coronado, City of El Cajon, City of Imperial Beach, City of La Mesa, City of Lemon Grove, City of National City, City of Poway, City of San Diego, City of Santee, and the County of San Diego.

FY 2009, Caporicci & Larson unilaterally reduced the cost of the contract for FY 2009 to the first year amount of \$295,000.

The table below shows the effect of this cost reduction by Caporicci & Larson:

	<u>Fiscal Year</u>	<u>Original Contract</u>	<u>Reduced Amount</u>	<u>Change</u>
	2006	295,000	295,000	0
	2007	306,800	306,800	0
	2008	319,072	319,072	0
	2009	331,835	295,000	36,835
	2010	345,108	295,000	50,108
Base Contract		<u>1,597,815</u>	<u>1,510,872</u>	<u>86,943</u>
Option year	2011	358,913	295,000	63,913
Option year	2012	373,269	295,000	78,269
Option year	2013	388,200	295,000	93,200
Option years		<u>1,120,382</u>	<u>885,000</u>	<u>235,382</u>
Grand Total		<u>2,718,197</u>	<u>2,395,872</u>	<u>322,325</u>

Based upon the above, staff brought the issue before the Audit Oversight Committee at its March 4, 2010, meeting seeking direction. Staff's recommendation was to exercise the option years.

The Audit Oversight Committee voted to forward a recommendation to the Board of Directors to approve the option years of the contract. Therefore, staff is requesting that the Board of Directors authorize the CEO to exercise option years one, two, and three (MTS Doc. No. G1013.1-06) with Caporicci & Larson LLC for auditing services.


 Paul C. Jablonski
 Chief Executive Officer

MAR25-10.6.AUDITING SVCS CONTRACT OPTION YEARS.CAPORICCI.TLYNCH.doc

Key Staff Contact: Tom Lynch, 619.557.4538, tom.lynch@sdmts.com

Attachment: A. Draft MTS Doc. No. G1013.1-06

DRAFT

March 25, 2010

MTS Doc. No. G1013.1-06
FIN 320

Mr. Gary Caporicci
Partner
Caporicci & Larson LLP
4858 Mercury Street
San Diego, CA 92111

Dear Mr. Caporicci:

Subject: AMENDMENT NO. 1 TO MTS DOC. NO. G1013.0-06 FOR AUDITING SERVICES

This shall serve as Amendment No. 1 to our agreement for audit services as further described below.

SCOPE OF SERVICES

Continue to provide auditing services as stipulated in the original contract.

SCHEDULE

This amendment exercises the options for the FY 2011, FY 2012, and FY 2013 audits, from July 1, 2010 through March 31, 2014.

PAYMENT

Payments shall be \$295,000 per year for each year of the above three-year period.

All other conditions remain unchanged. If you agree with the above, please sign below, and return the document marked "Original" to Contracts Specialist at MTS. The other copy is for your records.

Sincerely,

Agreed:

Paul C. Jablonski
Chief Executive Officer

Gary Caporicci
Caporicci & Larson LLP

Date: _____

MAR25-10.6.AttA.CAPORICCI AUDIT SVCS
G1013.1-06.TLYNCH.doc



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda

Item No. 7

JOINT MEETING OF THE BOARD OF DIRECTORS
for the
Metropolitan Transit System,
San Diego Transit Corporation, and
San Diego Trolley, Inc.

FIN 340.2

March 25, 2010

SUBJECT:

MTS: TRANSPORTATION DEVELOPMENT ACT (TDA) CLAIM AMENDMENT

RECOMMENDATION:

That the Board of Directors approve the revised MTS Transportation Development Act (TDA) capital claim Nos. 242, 258, 305, and 531 to fund FY 2010 operations.

Budget Impact

The TDA claim amendments would result in the closeout of previous-year Articles 4.0, 4.5, and 8.0 claim funds and create an increase of \$520,464 in TDA funds for MTS operations. The TDA articles provide authority for claiming funds for general transit operations and capital.

DISCUSSION:

On March 5, 2010, MTS staff received notification from the San Diego Association of Governments (SANDAG) that there were outstanding available TDA balances remaining from prior year's claims. Acting on direction from the Budget Development Committee to locate all available funding sources, including one-time monies, MTS staff recommends that these available balances be used to fund FY 10 operations. The table below displays the TDA balances by claim number:

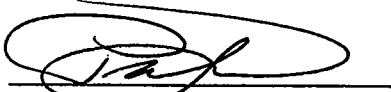
Article Number	Claimant	Claim Number	Available Balance
4.5	MTS	531	\$425,697
4	MTS	258	\$19,643
8	MTS	242	\$75,000
8	MTS	305	\$124
Total:			<u>\$520,464</u>

1255 Imperial Avenue, Suite 1000, San Diego, CA 92101-7490 • (619) 231-1466 • www.sdmts.com



Metropolitan Transit System (MTS) is a California public agency comprised of San Diego Transit Corp., San Diego Trolley, Inc., San Diego and Arizona Eastern Railway Company (nonprofit public benefit corporations), and San Diego Vintage Trolley, Inc., a 501(c)(3) nonprofit corporation, in cooperation with Chula Vista Transit. MTS is the taxicab administrator for seven cities. MTS member agencies include the cities of Chula Vista, Coronado, El Cajon, Imperial Beach, La Mesa, Lemon Grove, National City, Poway, San Diego, Santee, and the County of San Diego.

All of the claims above were used in previous years to fund MTS capital projects that have since been completed. Any future TDA capital needs will be included in the MTS system-wide annual capital improvement program. Therefore, staff recommends that the Board approve the revision of TDA claim Nos. 242, 258, 305, and 531 to fund FY 2010 MTS operations.



Paul G. Jablonski
Chief Executive Officer

Key Staff Contact: Lisa Fowler, 619.557.4510, Lisa.Fowler@sdmts.com

MAR25-10.7.TDA CLAIM AMDMT.LFOWLER.doc



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda

Item No. 8

JOINT MEETING OF THE BOARD OF DIRECTORS
for the
Metropolitan Transit System,
San Diego Transit Corporation, and
San Diego Trolley, Inc.

AG 250

March 25, 2010

SUBJECT:

MTS: AUTHORIZATION FOR USE OF ADDITIONAL CITY OF SAN DIEGO
BILLBOARD RESERVE FUNDS

RECOMMENDATION:

That the Board of Directors authorize the use of additional funds from the City of San Diego Billboard Reserve Fund to the City of San Diego for support of the Encanto/62nd Street Trolley Station Mural Project.

Budget Impact

\$5,000 would be used from the City of San Diego Billboard Reserve Fund. The balance remaining in this fund would be approximately \$33,685.

DISCUSSION:

In 1979, MTS acquired the San Diego and Arizona Eastern (SD&AE) Railway Company from Southern Pacific Railway. SD&AE was converted to a Nevada nonprofit corporation and is the landholder of the railroad from San Diego to San Ysidro and San Diego to El Cajon. That railroad line was developed for light rail passenger service and is now known as the San Diego Trolley. During the course of the construction of the line to San Ysidro, 40 signs and billboards were removed from the railroad right-of-way without compensation being paid to the billboard owners (Gannett Outdoor Company and Metromedia, Inc.). Of the 40 signs removed, 13 were located in the City of San Diego. Litigation ensued, and a settlement was proposed whereby MTS would seek permission from various cities to install up to 6 larger billboards along the railroad right-of-way. The City of San Diego agreed to allow 1 sign to be placed in the right-of-way adjacent to Interstate 15 (located in Council District 4) 25 feet north of Imperial Avenue. The lease was signed on January 15, 1987, and consisted of a 15-year term at the rate of \$4,100 per year.



At the same time, billboard reserve funds were created by MTS for exclusive use by the cities where the billboards were placed. The reserve monies are funded by the lease revenue generated by the billboard owners and may be used by the cities for purposes that have a clear nexus to mass transit, such as landscaping along the right-of-way, graffiti and litter removal, and pedestrian improvements. In order to access reserve fund monies, a city must submit a written request to MTS. The request must include a description of the qualified project, the amount of funds requested, and a schedule for expenditure. Each request is subject to approval by the Board and the city making the request.

In January 2000, the lease agreements for the City of San Diego's billboard were amended with the lease term beginning on April 1, 2000, and expiring on March 31, 2015. The rent for the billboard was set at \$25,000 per year payable monthly. The current value of the City of San Diego billboard reserve account is approximately \$38,685.

The Southeastern Economic Development Corporation (SEDC) has received a grant to place a mural on the MTS right-of-way planned for the Encanto/62nd Street Trolley Station. The project agreements, a right of entry permit for the installation, and a license for maintenance purposes are in place to facilitate the creation of a mural on a station wall adjacent to the south platform of the station. The installation on site will take approximately 42 days. SDTI flagging will be required for safety, and the cost is estimated at \$5,000.

The City of San Diego is requesting, per its letter dated March 9, 2010 (Attachment A), that the flagging costs be paid from the City's billboard fund. The mural will serve as a landscape feature and graffiti deterrent, and it meets the requirements for expenditures from this fund. Therefore, staff recommends Board approval of the additional funds for this project.



Paul C. Jablonski
Chief Executive Officer

Key Staff Contact: Tim Allison, 619.595.4903, Tim.Allison@sdmts.com

MAR25-10.8.BILLBOARD RESERVE FUNDS.TALLISON.doc

Attachment: A. Letter from the City of San Diego dated 3/9/10



Att. A, AI 8, 3/25/10

THE CITY OF SAN DIEGO

ANTHONY YOUNG
COUNCILMEMBER
FOURTH DISTRICT

March 9, 2010

CHAIRMAN,
COMMITTEE ON
BUDGET & FINANCE

CO-CHAIRMAN,
CITY-COUNTY
REINVESTMENT
TASK FORCE

VICE-CHAIRMAN,
COMMITTEE ON
PUBLIC SAFETY
& NEIGHBORHOOD
SERVICES

COMMITTEE ON
LAND USE & HOUSING

COMMITTEE ON RULES,
OPEN GOVERNMENT, AND
INTERGOVERNMENTAL
RELATIONS

LEAGUE OF
CALIFORNIA CITIES
AT-LARGE DIRECTOR

SANDAG
BOARD OF DIRECTORS
TRANSPORTATION COMMITTEE

SAN DIEGO CONSORTIUM
POLICY BOARD

SAN DIEGO METROPOLITAN
TRANSIT SYSTEM BOARD
EXECUTIVE COMMITTEE

SAN DIEGO COUNTY
REGIONAL AIRPORT
AUTHORITY

SOUTHEASTERN ECONOMIC
DEVELOPMENT CORPORATION

Paul Jablonski
President/CEO
MTS
1255 Imperial Avenue
San Diego, CA 92101

I am writing this letter today to request billboard funds in the amount not to exceed \$5000. The project is an initial phase of the 41st Street Multi-Modal Transit Station Improvements. A mural is to be painted on a blank wall in the depressed passenger waiting area. The wall currently attracts persistent graffiti tags and requires considerable maintenance. The wall extends 400 feet long and 1600 sq.ft in area. The mural, titled "Liquid Harmony" will be painted by an artist collaboration that includes local artists and an internationally reknown "graffiti artist", Pose II, known well and respected by "writers". The organization "Writerz Block" has agreed to maintain the mural. The 3 artists will receive a \$20,000 commission paid for by SEDC using Redevelopment funds.

MTS has added a requirement that flaggers be utilized for the job. The MTS flaggers cost is the subject of this request as it was anticipated in the budget for the mural. The cost is \$18.20/hr. regular time and \$27.30/hr for overtime and the total cost is estimated by MTS to range from \$3,000 to \$5,000. The flaggers are needed during the duration of the mural painting, when the artists are doing their work, in March and into April, 2010.

My community is anticipating the enhancements that will be coming into our trolley station. The reserve monies are funded by the lease revenue generated by the billboard owners and may be used by the cities for purposes, which have a clear nexus to mass transit, such as landscaping along the right-of-way, graffiti and litter removal, and pedestrian improvements. I am looking forward to the wonderful art project that will be coming to fruition in the next couple of months.

Sincerely,

ANTHONY YOUNG
Councilmember
4th District City Council





1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
619.231.1466, FAX 619.234.3407

Agenda

Item No. 9

JOINT MEETING OF THE BOARD OF DIRECTORS
for the
Metropolitan Transit System,
San Diego Transit Corporation, and
San Diego Trolley, Inc.

LEG 491

March 25, 2010

SUBJECT:

MTS: PROPERTY INSURANCE RENEWAL

RECOMMENDATION:

That the Board of Directors authorize the Chief Executive Officer (CEO) to renew the property insurance coverage for MTS, San Diego Transit Corporation (SDTC), and San Diego Trolley, Inc. (SDTI) with the California State Association of Counties (CSAC) Property Insurance Program, effective March 31, 2010, through March 31, 2011, with a basic coverage deductible of \$25,000, \$100,000 for collision on buses and light rail vehicles, and \$1,500,000 on roads, bridges, and tunnels.

Budget Impact

The preliminary renewal premium is approximately \$1,029,630, which is about 7% above last year's preliminary premium of \$962,346. The actual billed premium last year was 5% below the proposed preliminary premium. This variation is attributed to a substantial increase in bus vehicle values. The premium is anticipated to be charged against the budgets of MTS (\$3,182), SDTC (\$202,816), and SDTI (\$823,632). No budget adjustment is proposed at this time. Fiscal year 2011 budgets are being developed, and funds will be designated and included within them.

PROPERTY PREMIUM ESTIMATED FISCAL YEAR SPLIT			
Policy Period: 03/31/10 - 03/31/11			
Agency	FY 10	FY 11	Total Premium
MTS	\$1,061	\$2,121	\$3,182
SDTC	\$67,605	\$135,211	\$202,816
SDTI	\$274,544	\$549,088	\$823,632
TOTAL	\$343,210	\$686,420	\$1,029,630



Metropolitan Transit System (MTS) is a California public agency and is comprised of San Diego Transit Corporation and San Diego Trolley, Inc. nonprofit public benefit corporations, in cooperation with Chula Vista Transit and National City Transit. MTS is the taxicab administrator for eight cities and the owner of the San Diego and Arizona Eastern Railway Company. MTS member agencies include: City of Chula Vista, City of Coronado, City of El Cajon, City of Imperial Beach, City of La Mesa, City of Lemon Grove, City of National City, City of Poway, City of San Diego, City of Santee, and the County of San Diego.

DISCUSSION:

MTS's property insurance policy expires on March 31, 2010, and covers the real and personal property of MTS, SDTC, and SDTI. The policy is obtained through California State Association of Counties (CSAC), a joint purchase group of all but a handful of California counties created for the purpose of obtaining insurance at a reduced cost. SDTC has been insured through this group since 1993. Effective November 1, 1997, all MTS entities became insured with CSAC.

The CSAC Property Program is a complex layering of multiple insurance carriers, including both domestic and European insurers. Most of the CSAC members, including both the City and County of San Diego, purchase earthquake insurance. MTS and its entities have elected not to purchase this optional coverage.

The entire CSAC Program consists of 54 of the 58 California counties, which gives it tremendous purchasing power with premiums. At inception of the last three-year purchasing endorsement, CSAC listed premiums to be over \$48 million. This allows MTS to take advantage of significant leverage in the marketplace.

Special form perils coverage provides risk protection, most perils, and causes of loss unless specifically excluded by the policy. Some excluded perils excluded in MTS's policy are earthquake, wear and tear, pollution, war risk, fraud (by an employee), nuclear radiation, and loss to trees, money, or watercraft. These exclusions do not include all of the perils or properties specifically excluded but give an idea of the kind of losses that would not be covered. A separate pool of \$10 million has been established for fire storm exposure. Details of how and when this coverage would be triggered are under refinement. As a legal contract, an insurance policy may require extensive effort to determine if disputed coverage exists.

MTS's current policy carries a blanket limit of \$600 million, which applies to perils for any one occurrence (some sublimits are applicable to specific types of losses). MTS has a \$25,000 self-insured retention per occurrence, \$100,000 for collision on buses and light rail vehicles, \$250,000 for comprehensive coverage on buses, and \$1,500,000 on roads, bridges, and tunnels. In general, loss valuation is on a replacement-cost basis.

The premium is increasing 7% from the previous year. The policy includes terrorism coverage for all CSAC members. In general, the premium rate charged per unit value remains very competitive within the insurance marketplace.



Paul G. Jablonski
Chief Executive Officer

Key Staff Contact: James Dow, 619.557.4562, jim.dow@sdmts.com

MARCH25-10.PROPERTY INS RENEWAL.JDOW



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda

Item No. **30**

JOINT MEETING OF THE BOARD OF DIRECTORS
for the
Metropolitan Transit System,
San Diego Transit Corporation, and
San Diego Trolley, Inc.

LEG 430

March 25, 2010

SUBJECT:

MTS: SOUTHERN CALIFORNIA CONSORTIUM DISADVANTAGED BUSINESS
ENTERPRISE (DBE) DISPARITY STUDY (TIFFANY LORENZEN)

RECOMMENDATION:

That the Board of Directors:

1. receive the final Southern California Consortium DBE Disparity Study; and
2. adjust the current fiscal year 2010 goals from 1.72% to 12.6% and implement the goals through June 30, 2012, consistent with new federal guidelines.

Budget Impact

None.

DISCUSSION:

As a Federal Transit Administration (FTA) grantee, MTS complies with the federal regulations set forth in Title 49 of the Code of Federal Regulations Part 26 regarding participation by DBEs in the U.S. Department of Transportation (DOT) Program. The DBE regulations require FTA grantees to prepare DBE goals based upon the number of ready, willing, and able DBE-certified contractors available to bid on certain categories of MTS capital projects.



The second component of the DBE regulations requires MTS to prepare a triennial DBE program. The program outlines how MTS ensures that DBE contractors have an equal opportunity to receive and participate in DOT-assisted contracts. The goals of the program are:

1. to ensure nondiscrimination in the award and administration of DOT-assisted contracts;
2. to create a level playing field on which DBEs can compete fairly for DOT-assisted contracts;
3. to ensure that the DBE program is narrowly tailored in accordance with applicable law;
4. to ensure that only firms that fully meet 49 CFR Part 26 eligibility standards are permitted to participate as DBEs;
5. to help remove barriers to the participation of DBEs in DOT-assisted contracts;
6. to assist the development of firms that can compete successfully in the marketplace outside of the DBE program; and
7. To provide appropriate flexibility to recipients of federal financial assistance in establishing and providing opportunities for DBEs.

The FTA also recommends that grantees perform a disparity study to analyze the actual utilization of minority- and women-owned contractors, the current market conditions, and any barriers to participation in FTA-funded contracts on a regular basis (generally every 5 to 10 years). In early 2008, MTS and the San Diego Association of Governments (SANDAG) were invited to participate in a disparity study commissioned by the Los Angeles County Metropolitan Transit Authority (Metro). In addition to MTS, SANDAG and Metro, the Orange County Transportation Authority and the Southern California Regional Rail Authority (Metrolink) participated in the study.

Metro retained BBC Research & Consulting to conduct the disparity study. Each participating agency received its own independent study. The study is designed to assist MTS in making decisions concerning compliance with the federal DBE requirements by:

1. recommending an overall annual aspirational goal for DBE participation in FTA-funded contracts;
2. determining achievement of the annual aspirational goal through neutral means;
3. identifying specific measures to be used in implementing the federal DBE Program; and
4. considering initiatives applicable to locally funded contracts.

The study components include a complete legal analysis of DBE-related cases, comprehensive vendor interviews, statistical analyses of participation of minority- and women-owned firms in MTS contracts from 2003 to 2007, and analyses of marketplace conditions in the San Diego area.

Dave Keen from BBC Research & Consulting will be present during the Board meeting to provide a presentation on the final study results. There were a few changes that were made to the final study based upon comments that were received by MTS as well as the other consortium members.

Fiscal Year 2010 DBE Goals

DBE goals are developed in accordance with federal regulations set forth in Title 49 of the Code of Federal Regulations Part 26, Participation by DBE in the U.S. Department of Transportation Program. Goals for FY 10 were developed by MTS's outside consultant, Gonzalez-White Consulting Services, and were approved by the Board at its September 24, 2009, meeting.

The following MTS projects were eligible for participation in DBE goal-setting:

MTS FTA FY09-10 BUDGETED CONTRACTS		
PROJECT NO.	PROJECT DESCRIPTION	FY09-10 BUDGET
MINOR CONSTRUCTION		
11183	SDTI Cross Tie Procurement	224,000
11213	SDTC KMD Building Improvements	106,000
11253	MCS South Bay Division Gas Detection System	120,000
11255	Broadway Wye Switch Machines	600,000
11260	Training Center Rehab	4,500
11273	El Cajon Transit Center	38,900
	Total Construction	1,093,400
PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES		
11165	LRV Paint and Body Rehab	440,000
11184	Bus Video Cameras	1,122,200
11192	IT Elipse Financial System	280,000
11206	Rail Profile Grinding	280,000
11214	LRV HVAC Overhaul	1,420,000
11219	LRV Propulsion Components	227,200
11241	IT Network Infrastructure	40,000
11254	LRV Brake Overhaul	280,000
11263	Signal Event Recorder Upgrade	62,400
11274	Hastop Module for Planning Hastus Program	62,800
11275	LRV Traction Motor Disconnects	220,000
11276	SDTI Ticket Vending Equipment (TVM)	400,000
	Total Services	4,834,600
WHOLESALE DURABLE GOODS		
11162	Organizational Desktops	176,200
11167	LRV Tires	392,800
11250	CVT 40 FT CNG BUSES (2)	62,500
11251	LRV Gearbox Overhaul parts	1,200,000
11240	SDTC Support Equipment	84,500
11252	LRV Blower Motor Overhaul	80,000
	Total Wholesale Durable Goods	1,996,000
	Total Budgeted Contracts FY09-10	7,924,000

The current FTA DBE FY 10 goals are as follows:

<u>Category</u>	<u>Proposed Goal</u>
Construction/Special Trades	0.77 percent
Services	0.85 percent
Durable Goods	<u>0.10 percent</u>
Total Goal	1.72%

These goals are based upon total budgeted expenditures of \$1,093,400 for construction contracts, \$4,834,600 for service contracts, and \$1,996,000 for durable goods. By way of comparison, the FY 09 FTA DBE goals were .45 percent for construction based upon budgeted expenditures of \$427,200, 1.06 percent for services based upon budgeted expenditures of \$2,616,600, and .15 percent for durable goods based upon budgeted expenditures of \$636,600.

On March 5, 2010, the FTA issued revisions for 49 C.F.R. § 26.45(e) and (f), which now require grantees to submit DBE goals every three years rather than annually. Given that MTS just completed a comprehensive DBE study, staff is recommending that the Board adopt the goals proposed in the study for a three-year period consistent with the new FTA regulations. The new FTA DBE goal would be 12.6% and would remain in effect through June 30, 2012.

The new goal includes the potential for participation from Small Business Enterprises (SBE), Minority Business Enterprises, and Disadvantaged Business Enterprises (DBE). Each of these classifications has different qualification requirements. Although MTS analyzes the number of SBEs, MBEs, and DBEs that are able to participate in its projects and includes that potential participation in its goal-setting, *MTS may not count participation by SBEs and MBEs toward meeting the new annual 12.6% goal*. Only participation by DBEs may be counted by FTA grantees.



Paul C. Jablonski
Chief Executive Officer

Key Staff Contact: Tiffany Lorenzen, 619.557.4512, tiffany.lorenzen@sdmts.com

MAR25-10.30.DBE DISPARITY STUDY.TLOREN.doc

Attachment: A. Final Executive Summary (entire study [727 pages] available upon request)

SECTION ES.

Executive Summary

The San Diego Metropolitan Transit System (MTS) must implement the Federal Disadvantaged Business Enterprise (DBE) Program to receive U.S. Department of Transportation (USDOT) funds. Recent court decisions and guidance from USDOT have led MTS to reexamine how it implements the Program. On May 1, 2006, MTS discontinued the use of DBE contract goals/good faith efforts for contracts funded by the Federal Transit Administration (FTA). MTS discontinued use of DBE contract goals/good faith efforts in response to U.S. Department of Transportation guidance issued regarding agencies in the Ninth Circuit.¹ MTS maintained an overall aspirational goal for DBE participation after discontinuing use of DBE contract goals/good faith efforts.

BBC Research & Consulting conducted this disparity study to assist MTS in making decisions concerning compliance with the Federal DBE Program:²

1. Setting an overall annual aspirational goal for DBE participation in FTA-funded contracts;
2. Determining achievement of the annual aspirational goal through neutral means;
3. Identifying specific measures to be used in implementing the Federal DBE Program; and
4. Considering initiatives applicable to its locally-funded contracts (contracts for which the Federal DBE Program does not apply).

1. Overall Annual Aspirational DBE Goal

At this time, each year MTS must develop an overall annual aspirational goal for DBE participation in FTA-funded contracts. The Federal DBE Program requires a “base figure analysis” and consideration of any “step 2” adjustments in deriving this annual goal.³

Base figure analysis. MTS should consider 22.8 percent as the base figure for its overall annual aspirational goal for DBE participation, which exceeds MTS’s 1.72 percent overall annual aspirational DBE goal for FFY 2010.⁴ MTS included certified DBEs in its calculations (a USDOT-approved methodology). BBC also counted in the base figure minority- and women-owned firms that possibly could be certified as DBEs but are not currently certified, which is recommended by USDOT if such information can be developed.⁵ (When only counting certified DBEs, BBC’s approach produces a base figure of 4.5%).

¹ See [http://www.fta.dot.gov/documents/March_23_FRN_pdf_\(website\).pdf](http://www.fta.dot.gov/documents/March_23_FRN_pdf_(website).pdf).

² MTS joined four Southern California public transportation agencies in this joint study (the Los Angeles County Metropolitan Transportation Authority, Southern California Regional Rail Authority, Orange County Transportation Authority, and San Diego Association of Governments). The study began in December 2007 and was completed in early 2010 after the public had the opportunity to review and comment on the draft report.

³ Note that the annual aspirational goal differs from the process MTS might use to set any individual contract-specific goals, which would consider the unique aspects of that contract and the availability of DBEs for potential subcontracted work.

⁴ Minority- and women-owned firms comprise 38 percent of the 2,480 businesses BBC examined as available for specific types of Consortium agency transportation prime contracts and subcontracts. Because BBC performed the availability analysis on a dollar-weighted basis given the sizes, types and other characteristics of individual contracts, calculation of MBE/WBE availability differs from a simple counting of firms.

⁵ Based on information on race/ethnicity/gender ownership and the annual revenue of the firms. The base figure does not include firms that have graduated from the DBE Program or have otherwise had recent certification denials.

Note that the annual aspirational goal could change based on changes in the actual contract opportunities that are available in any given year. Section III of the report describes the base figure analysis.

Consideration of possible step 2 adjustments. MTS must consider specific types of information regarding the relative availability of DBEs before finalizing its overall annual aspirational DBE goal.⁶ This process is referred to as consideration of a “step 2” adjustment. The adjustment can be downward or upward. BBC’s in-depth analysis of each factor outlined in the Federal DBE Program suggests that MTS consider one of the following options concerning a step 2 adjustment.

Option 1 – Making an upward adjustment at this time. Over the long-term, there are reasons that MTS might consider a higher overall aspirational goal than the 22.8 percent base figure.

- If MTS were to make an adjustment, it could consider the 23.5 percent figure for DBE participation after adjusting for disparities in business ownership rates (discussed in Section VI of the report).
- Analyses of access to capital and other factors also support an overall annual aspirational goal higher than 22.8 percent.

Option 2 – Making no step 2 adjustment. MTS might adopt the 22.8 percent base figure for its overall annual aspirational goal for DBE participation without any step 2 adjustment. The Federal DBE Program does not require agencies to make a step 2 adjustment in the goal-setting process as long as the agency can explain this decision.

Option 3 – making a downward adjustment at this time. There are also reasons for a downward step 2 adjustment:

- BBC’s estimate of overall DBE participation on FTA-funded contracts for 2003 through 2007 was about 2.4 percent. It appears that many of the minority- and women-owned firms receiving MTS prime contracts and subcontracts were not DBE certified. (Therefore, this statistic may not fully reflect a measure of “current capacity of DBEs to perform work”⁷ as it does not include firms that could potentially be certified as DBEs.

MTS might conclude that the 22.8 percent base figure for DBE participation is so much higher than DBE participation of 2.4 percent that it should adjust the goal based on an average of 22.8 percent and 2.4 percent, which is 12.6 percent. This approach is consistent with the averaging of a base figure and past DBE participation in past MTS goals submissions approved by FTA.

⁶ See 49 CFR Section 26.45 (d) and Section VI of the disparity study report for a discussion of each factor.

⁷ Per 49 CFR Section 26.45 (d)(1)(i).

2. Percentage of the Annual Goal to be Achieved through Neutral Means

USDOT requires agencies to meet the maximum feasible portion of the overall annual goal using race-neutral means. Agencies should examine questions listed below when projecting the portion of their overall annual goal to be met through race- and gender-neutral means:⁸

- a. What is the participation of DBEs in the recipient's contracts that do not have contract goals?
- b. There may be information about state, local, or private contracting in analogous areas where contract goals are not used (e.g., in situations where a prior state/local affirmative action program was ended). What is the extent of participation of minority- or women-owned businesses in programs without goals?
- c. What is the extent of race-neutral efforts that the recipient will have in place for the next fiscal year?
- d. Are there firm, written, detailed commitments in place from contractors to take concrete steps sufficient to generate a certain amount of DBE participation through race-neutral means?
- e. To what extent have DBE primes participated in the recipient's programs in the past?
- f. To what extent has the recipient oversubscribed its DBE goals in the past?

The following summarizes BBC's analysis of each question (see Section VI for more details.)

a. Participation on MTS contracts without goals/good faith efforts program. MTS discontinued its use of a DBE contract goals/good faith efforts program on May 1, 2006. After May 1, 2006, MTS set "advisory goals" for DBE participation on FTA-funded contracts, but did not require bidders to meet those goals or show good faith efforts.

Overall utilization of minority- and women-owned firms. There were 40 FTA-funded contracts from May 2006 through December 2007 within the procurement areas BBC examined in the MTS disparity study. Minority- and women-owned firms (MBE/WBEs)⁹ obtained 10 of the 40 FTA-funded contracts, accounting for 80 percent of federal contract dollars during that time period. (There appeared to be no subcontracts for these procurements.)

⁸ See <http://www.dotcr.ost.dot.gov/Documents/Dbc/49CFRPART26.doc>.

⁹ This analysis counts firms as MBE/WBEs if they are certified as MBE/WBEs and/or as DBEs and when they indicate minority or female ownership and are not certified (because they are too large to meet certification criteria, have let certification lapse, have chosen not to be certified, or for other reasons).

BBC examined 57 FTA-funded MTS contracts from 2003 through April 2006. These contracts involved 39 subcontracts, providing a total of 96 contract elements for analysis of the period when MTS used a DBE contract goals/good faith efforts program for some contracts. These contracts totaled \$59 million.¹⁰ During this period, about 10 percent of prime contract and subcontract dollars went to minority- and women-owned firms, as shown in Figure ES-1.

BBC also studied MBE/WBE utilization for 38 locally-funded transportation contracts totaling \$1.4 million for 2003 through 2007.¹¹ No subcontracting goals program applied to these contracts. MBE/WBE utilization on locally-funded contracts was about 25 percent. Utilization of certified DBEs was 20 percent for locally-funded contracts. (Sections IV and V of the report discuss results in more detail.)

Figure ES-1.
**MBE/WBE share of prime/
subcontract dollars for FTA-
funded transportation contracts,
before and after May 1, 2006,
and for locally-funded contracts,
2003–2007**

Note:

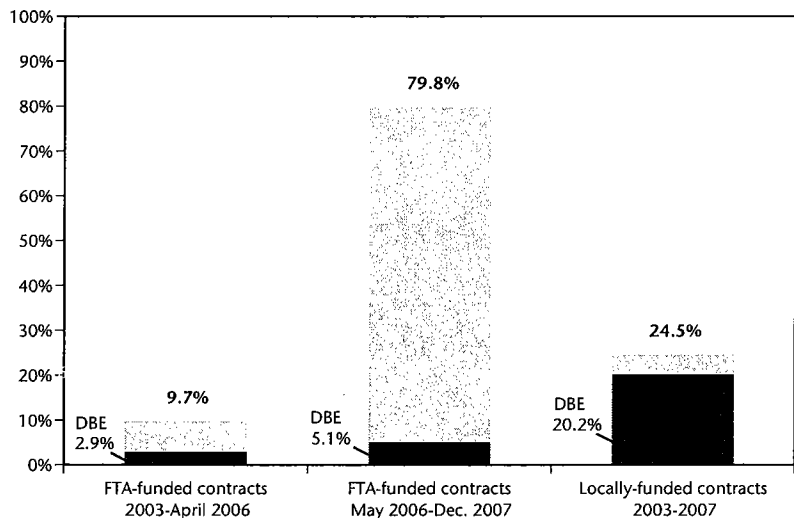
Certified DBE utilization.

Number of contracts/subcontracts analyzed is 96 for 2003–April 2006 FTA-funded contracts, 40 for May 2006–Dec. 2007 FTA-funded contracts, and 38 for 2003–2007 locally-funded contracts.

For more detail and results by group, see Figures E-2, E-3 and E-4 in Appendix E.

Source:

BBC Research & Consulting from data on MTS contracts.



¹⁰ In total, BBC identified 538 MTS procurements that were FTA-funded within the study period. These procurements represented \$453 million. Only a portion of these procurements were suitable for analysis in the disparity study, as described below. BBC also analyzed 460 MTS procurements totaling \$103 million that were locally-funded, of which a portion were suitable for further examination in the study. Race/ethnicity/gender ownership of utilized firms was determined through multiple sources in addition to certification records, including telephone interviews with individual firms. Section II and Appendix C of the report discuss the methodology for the utilization analysis. Appendix E of the report provides a detailed breakdown of utilization by group for specific types and time periods of MTS contracts and subcontracts.

¹¹ "Locally-funded" contracts are those without USDOT funds. As such, some contracts with state funding could be included.

Figure ES-2 provides utilization results, by group, for MBE/WBE and separately for DBEs. As shown, Hispanic American-owned firms accounted for most of the MBE/WBE utilization.

Figure ES-2.

DBE and MBE/WBE share of prime/subcontract dollars for transportation contracts, by race/ethnicity/gender

	Federally-funded contracts		Locally-funded contracts	Total
	2003– April 2006	May 2006– Dec. 2007	contracts 2003–2007	2003–2007
MBE/WBEs				
African American-owned	0.2%	0.0%	0.0%	0.2%
Asian-Pacific American-owned	1.1	0.5	3.5	1.0
Subcontinent Asian American-owned	0.0	0.0	0.0	0.0
Hispanic American-owned	7.8	78.3	19.4	20.0
Native American-owned	<u>0.0</u>	<u>0.0</u>	<u>0.9</u>	<u>0.0</u>
Total MBE	9.1%	78.9%	23.8%	21.2%
WBE (white women-owned)	<u>0.7</u>	<u>0.9</u>	<u>0.7</u>	<u>0.7</u>
Total MBE/WBE	9.7%	79.8%	24.5%	21.9%
DBEs				
African American-owned	0.2%	0.0%	0.0%	0.2%
Asian-Pacific American-owned	1.0	0.5	3.5	1.0
Subcontinent Asian American-owned	0.0	0.0	0.0	0.0
Hispanic American-owned	1.5	4.6	15.8	2.3
Native American-owned	<u>0.0</u>	<u>0.0</u>	<u>0.9</u>	<u>0.0</u>
Total MBE	2.7%	5.1%	20.2%	3.5%
WBE (white women-owned)	0.2	0.0	0.0	0.1
White male-owned DBE	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Total DBE	2.9%	5.1%	20.2%	3.6%

Note: Numbers rounded to nearest tenth of 1 percent. Numbers may not add to totals due to rounding.

For more detail, see Figures E-2, E-3, E-4 and E-38 in Appendix E.

Number of contracts/subcontracts analyzed is 96 for 2003–April 2006 FTA-funded, 40 for May 2006–Dec. 2007 FTA-funded, 38 for 2003–2007 locally-funded contracts and 174 for all contracts.

Source: BBC Research & Consulting from data on MTS contracts.

Dollars going to all subcontractors and MBE/WBE subcontractors. There were striking differences in subcontracting activity before and after the MTS change in implementation of the DBE contract goals program.

- About 7 percent of the dollars on FTA-funded contract dollars for 2003 through April 2006 were subcontracted. MBE/WBEs obtained 42 percent of these subcontract dollars.
- MTS indicates that no FTA-funded contracts examined in the disparity study for May 2006 through December 2007 involved subcontracts. Also, MTS indicated that there were no subcontracts involved on locally-funded contracts for 2003–2007. MTS did not operate any subcontracting goals program for locally-funded contracts.

Disparity analysis. There was considerable underutilization of MBE/WBEs as a whole for 2003–April 2006 when MTS had a DBE contract goals program in place:

- For 2003–April 2006 (when MTS had a DBE contract goals/good faith efforts program in place) there were substantial disparities for WBEs and African American-, Subcontinent Asian American- and Native American-owned firms.
- MBE/WBE utilization for FTA-funded contracts from May 2006 through December 2007 was 80 percent, which is very high and exceeded what would be expected given overall MBE/WBE availability for these contracts (70%). Two contracts for Hispanic American- owned firms accounted for most of this work. There were substantial disparities for WBEs and firms owned by African Americans, Subcontinent Asian Americans and Native Americans.
- Utilization of Asian-Pacific American owned-firms and Native American-owned firms on MTS locally-funded contracts exceeded availability. Utilization of Hispanic American-owned firms was in line with availability for locally-funded contracts. There were substantial disparities for WBEs and African American- and Subcontinent Asian American-owned firms.

Section IV and V of the report as well as Appendix E provide more detail concerning methodology and results.

b. Information about state, local, or private contracting in analogous areas where contract goals are not used. What is the extent of participation of minority or women-owned businesses in programs without goals? The five Consortium agencies participating in the Southern California Regional Disparity Study make purchases within the same local transportation contracting market, and operated and then discontinued DBE contract goals/good faith efforts programs. A combined utilization and disparity analysis from BBC's studies for the five Consortium agencies (LACMTA, OCTA, SCRRA, SANDAG and MTS) is presented here. (MTS comprises a very small portion of the total Consortium dollars examined.)

Overall utilization of minority- and women-owned firms. Figure ES-4 combines utilization from each of the five Consortium agencies.

- Minority- and women-owned firms obtained 16.7 percent of Consortium agency FTA-funded contract dollars from 2003 through the time that agencies discontinued use of DBE contract goals/good faith efforts programs (which varied from March/April to September 2006).
- After the change in the program, MBE/WBE utilization on FTA-funded contracts was 29.7 percent.
- MBE/WBE utilization for 2003–2007 locally-funded Consortium contracts was 15.4 percent.

Figure ES-3.
MBE/WBE share of Consortium agency prime/subcontract dollars for FTA-funded transportation contracts, before and after change in DBE contract goals, and for locally-funded contracts, 2003–2007

Note:

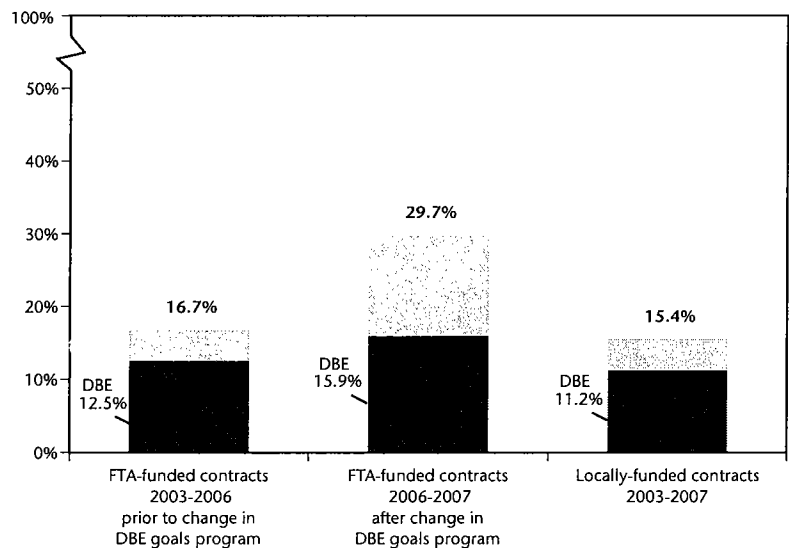
Certified DBE utilization.

Number of contracts/subcontracts analyzed is 4,088 for 2003–2006 FTA-funded contracts prior to change in DBE contract goals program, 1,290 for 2006–Dec. 2007 FTA-funded contracts after the change in program, and 2,039 for 2003–2007 locally-funded contracts.

For more detail and results by group, see Figures E-103, 104 and 105 in Appendix E.

Source:

BBC Research & Consulting from data on LACMTA, MTS, OCTA, MTS and SCRRA contracts.



Disparity analysis. BBC compared combined MBE/WBE utilization for Consortium agencies (by group) with the level of utilization expected based on a combined availability analysis for Consortium contracts (see Section VI). There was no disparity in Consortium utilization of MBE/WBEs, overall, for FTA-funded contracts during the time when the DBE contract goals/good faith efforts program was in place at each agency. However, there were disparities for WBEs and African American- and Subcontinent Asian American-owned firms.

When examining FTA-funded contracts for the combined Consortium agencies from the period in 2006 when agencies discontinued DBE contract goals/good faith efforts to the end of 2007, there were no overall disparities for MBE/WBEs but substantial disparities for WBEs and African American- and Native American-owned firms.

For locally-funded Consortium contracts, utilization of MBE/WBEs was about 60 percent of what would be expected based on MBE/WBE availability for these contracts. Disparities were identified for each MBE/WBE group except for African American-owned firms.

c. Race- and gender-neutral remedies available to MTS. MTS has implemented a number of race- and gender-neutral remedies and partners with other organizations serving small businesses in Southern California. BBC suggests that MTS continue ongoing activities and consider additional race- and gender-neutral remedies (see Section VI), four of which are highlighted below.

Subcontracting programs. The MTS Disadvantaged Business Program includes “encouraging prime contractors to subcontract portions of work that they might otherwise perform themselves.”¹² However, there appeared to be no subcontracts involved in FTA-funded contracts from May 2006 through December 2007 or on locally-funded contracts for 2003–2007. To better accomplish this aspect of its program, MTS could consider an initiative similar to the Mandatory Subcontracting Minimum (MSM) provisions used by the City of Los Angeles:

- On contracts that might involve subcontracting, MTS would set a percentage to be subcontracted based on analysis of the work to be performed.
- Prime contractors bidding on the contract would need to subcontract a percentage of the work equal to or exceeding the minimum for their bids to be deemed responsive. MTS would need to incorporate flexibility in the program, including the opportunity for the prime contractor to request a waiver.

MTS could also evaluate a small business subcontracting goals program, similar to the DBE contract goals/good faith efforts program except that eligibility criteria would not include race/ethnicity/gender of the firm owner.

Because many MTS procurements are for goods and services that may have few or no subcontracting opportunities, subcontracting programs may only have a small impact on the utilization of small businesses including minority- and women-owned firms.

¹² Disadvantaged Business Enterprise Program of the San Diego Metropolitan Transit System, August 2005, p.13.

Small business program for prime contractors. MTS could also consider a small business program that encourages certified small business participation as prime contractors. Efforts could include solicitation of small businesses for bids and extra evaluation points for small business prime consultants responding to Requests for Proposals and Requests for Qualifications.¹³

The State of California and the City of Los Angeles operate small business programs that MTS could evaluate.

Limited contract sizes. MBE/WBEs obtained about 32 percent of the dollars of MTS small prime contracts (less than \$100,000) from 2003 through 2007, only slightly less than what would be expected based on availability for this work. MTS should continue to evaluate when contracts can be divided into multiple smaller contracts.

Other MTS neutral measures. MTS includes a number of additional neutral measures in its Disadvantaged Business Program, including:

- Requiring prompt payment of subcontractors (Metro includes a prompt payment clause in each FTA-funded contract).
- Assuring that bidding and contract requirements facilitate participation by DBEs and other small businesses, including ensuring that bid notices and requests for proposals are available in a timely manner.
- Providing outreach to firms and community organizations to advise them of opportunities.
- Providing assistance in overcoming limitations such as inability to obtain bonding or financing, technical assistance and other services.
- Carrying out information and communications programs and other support services to facilitate consideration of DBEs and other small businesses.
- Ensuring distribution of the MTS DBE directory and assisting DBEs and other small businesses to develop their capability to utilize emerging technology and conduct business through electronic technology.
- Advise prospective contractors regarding new contracts and the areas for possible subcontracting and of the availability of ready, willing and able subcontractors, including DBE firms, to perform such work.

MTS will also need to further develop a comprehensive electronic bidders list. It might use information on potential bidders developed through this disparity study in adding to this list.

MTS will need to continue these and other neutral efforts per 49 CFR Part 26. There are a number of opportunities for MTS to partner with other agencies and small business organizations in San Diego and other parts of Southern California. MTS can be a co-sponsor and referral source for these initiatives, including mentor-protégé programs and other business development efforts. Fully implementing these initiatives may require MTS to commit additional financial resources to these activities.

¹³ The State and City of Los Angeles programs focus on non-federally-funded contracts, not federally-assisted contracts.

d. Are there firm, written, detailed commitments in place from contractors to take concrete steps sufficient to generate a certain amount of DBE participation through race-neutral means? When MTS changed its implementation of the goals program, it no longer required contractors to commit to a certain amount of DBE participation.

e. To what extent have DBE primes participated in the recipient's programs in the past? MBE/WBEs accounted for 21 percent of prime contract dollars on FTA-funded contracts from 2003 through 2007. Participation of certified DBEs was about 1 percent of FTA-funded prime contract dollars. One Hispanic American-owned firm that was not DBE-certified represents much of the MBE/WBE utilization.

f. To what extent has the recipient oversubscribed its DBE goals in the past? BBC independently examined contract awards for MTS FTA-funded contractors for the period from May 2006 through December 2007. As previously shown (see Figure ES-1), minority- and women-owned firms received 80 percent of contract dollars. Only counting certified DBEs, utilization was 5 percent of FTA contract award dollars. (There were no subcontracts identified for these contracts.)

Overall percentage to be achieved through neutral means. Through December 2007, MTS's overall utilization of minority- and women-owned firms for FTA-funded contracts after its change in the DBE subcontracting goals program was 80 percent, exceeding the level expected based on availability of MBE/WBEs.

This information suggests that MTS should consider meeting its annual aspirational goal entirely through neutral means, in accordance with 49 CFR Section 26.51.

However, considerable MBE utilization on FTA-funded contracts from May 2006 through December 2007 was with two groups — Asian-Pacific American-owned firms and Hispanic American-owned firms — and substantial disparities persisted for other MBE/WBE groups. MTS should consider how it might meet as much as possible of its annual aspirational goal through neutral means and also address disparities for WBEs and African American-, Subcontinent Asian American- and Native American-owned firms in accordance with federal regulations in 49 CFR Section 26.51. Additional neutral efforts include initiatives discussed on the previous two pages.

3. Implementation of the Federal DBE Program

The Federal DBE Program requires MTS to meet the maximum feasible portion of its overall goal by using race-neutral means of facilitating DBE participation. In making any policy decision to engage in a remedy that targets DBEs, if it determines such a remedy is needed, MTS should consider this disparity study and additional pertinent information per 49 CFR Part 26.

Additional neutral efforts. Additional race- and gender-neutral efforts are discussed above and in Section VI of the report.

DBE goals/good faith efforts. If after tracking the effectiveness of neutral remedies MTS considers reinstating DBE contract goals/good faith efforts, it will want to carefully examine which groups exhibit disparities in contracts without the DBE subcontracting goals/good faith efforts program (for example, all groups of DBEs except for Asian-Pacific American-owned firms and Hispanic American-owned firms showed disparities for FTA-funded and locally-funded contracts for 2003 through 2007).

Guidance from the FTA indicates how a local transportation agency would operate any future DBE contract goals program in which eligibility is limited to certain race/ethnic/gender DBE groups.¹⁴ Only DBEs owned by those groups would count toward meeting a DBE contract goal. Other DBEs would still participate in MTS contracting in other ways (e.g., meeting a mandatory subcontracting minimum or potentially participating in a small business prime contractor program). MTS would include all DBE groups when preparing DBE participation reports to FTA. If MTS were to adopt an approach similar to the above example, it would need to request a waiver from USDOT to limit participation in this program component to certain groups.

MTS should also consider whether or not any type of subcontracting goals program would be an effective remedy given the limited subcontracting opportunities it appears to have in its FTA-funded contracts.

Periodic review/tracking of MBE/WBE as well as DBE utilization. Ongoing review of program effectiveness is a requirement of 49 CFR Part 26.

MTS needs metrics to track success in addition to those suggested in the Federal DBE Program, including careful tracking of MBE/WBEs (by group) as well as DBE participation in both FTA-funded and locally-funded contracts.

If MTS chooses to pursue a solely race- and gender-neutral implementation of the Federal DBE Program for the immediate future, it should monitor utilization and availability of minority- and women-owned firms, by group. MTS may need to consider adding certain race- and gender-conscious remedies if a solely neutral program is not effective in addressing any disparities in its utilization of certain groups of minority- and women-owned firms on FTA-funded contracts.

4. Programs Applicable to Locally-funded Contracts

Neutral remedies. MTS could consider applying the neutral remedies explored here to its locally-funded contracts as well as FTA-funded contracts. For example, small business subcontracting and prime contractor programs might be applied, as needed, across areas of MTS contracts.

Race- and gender-based remedies. At present, Proposition 209 (Article I, Section 31 of the California Constitution) prohibits MTS from implementing programs including race, ethnic or gender preferences related to its locally-funded contracts. However, MTS should monitor developments in a case involving San Francisco's implementation of a race- and gender-conscious program for its locally-funded contracts.¹⁵ At the time of this disparity study report, the issues raised in this case were under review by the California Supreme Court.

¹⁴ [http://www.fta.dot.gov/documents/March_23_FRN_pdf_\(website\).pdf](http://www.fta.dot.gov/documents/March_23_FRN_pdf_(website).pdf).

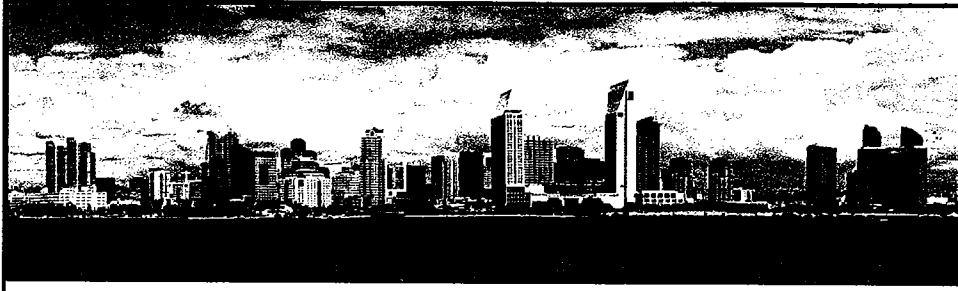
¹⁵ *Coral Construction, Inc. v. City and County of San Francisco*, 57 Cal.Rptr.3d 781 (1st Dist. 2007), review granted 167 P.3d 25 (Cal. Aug. 22, 2007).

Summary

Minority- and female-owned businesses bidding on MTS contracts received 80 percent of the FTA-funded contract dollars for May 2006 through December 2007, the period after it discontinued use of a DBE contract goals/good faith efforts program. MBE/WBEs bidding on locally-funded contracts obtained 25 percent of these contract dollars. However, MBE/WBE success in obtaining MTS contracts was limited to certain groups of minority-owned firms. There were disparities for women-owned firms and other minority groups.

To maintain its recent success in overall MBE/WBE participation, and attempt to extend opportunities to more MBE/WBE groups, MTS should consider additional race- and gender-neutral remedies that focus on prime contractors and vendors. FTA-funded contracts at MTS appear to have few opportunities for subcontracting, which limits the potential effectiveness of any type of subcontracting goals program.

MTS should also consider a higher overall annual aspirational goal for future DBE participation than the 1.72 percent level used for FFY 2010.



Disparity Study Briefing

Presented to:

MTS San Diego Metropolitan Transit System
1255 Imperial Ave., Suite 1000
San Diego, CA 92101
619-557-4512

Presented by:

BBC Research & Consulting
David Keen
Managing Director
BBC Research & Consulting
3773 Cherry Creek North Drive, Suite 850
Denver, Colorado 80209
303-321-2547 tel.
303-399-0448 fax

1

March 25, 2010

BBC Research & Consulting

Background

- Must comply with 49 CFR Part 26 and implement Federal DBE Program
 - Develop an annual aspirational DBE goal
 - Meet maximum feasible portion using neutral means
- Ninth Circuit in *Western States Paving v. Washington State DOT* requires:
 - Review of evidence of discrimination within own contracting market
 - Limiting race-conscious measures to affected groups
- MTS discontinued use of DBE contract goals in May 2006

2



Regional disparity study

- Began in December 2007
- Distributed draft report, held public forums in October 2009
- Report final in January 2010
- Jointly conducted with SANDAG, Metro, Metrolink and OCTA
- Analyzed 174 MTS contracts/subcontracts
- 2,480 firms in availability database for study
- Included qualitative information from 168 in-depth personal interviews and nearly 500 telephone interviews

3



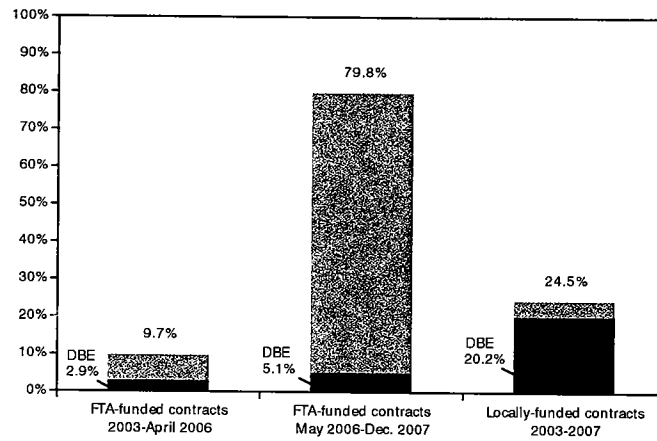
Overall annual aspirational goal

- MTS has 1.6% DBE goal for FFY 2009
- If include non-certified firms, can consider much higher DBE goal

4



MBE/WBE share of prime/subcontract dollars



5



Disparity analysis for MTS

- High overall utilization of MBE/WBEs
- Evidence of disparities for some minority groups and women

6



Neutral programs to help achieve DBE goal

- Subcontracting minimum (MSM) program
- Small business subcontracting goals program
- Small business prime contractor program
- More small procurements, if possible
- Further develop a comprehensive electronic bidders list
- Continue outreach, prompt payment, technical assistance and other MTS DBE Program components



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda

Item No. 45

JOINT MEETING OF THE BOARD OF DIRECTORS
for the
Metropolitan Transit System,
San Diego Transit Corporation, and
San Diego Trolley, Inc.

CIP 11171

March 25, 2010

SUBJECT:

MTS: CNG-HYBRID BUS DEMONSTRATION PROJECT PRESENTATION
(CLAIRE SPIELBERG)

RECOMMENDATION:

That the Board of Directors receive a report on MTS's CNG-Hybrid Bus Demonstration Project.

Budget Impact

None at this time.

DISCUSSION:

In cooperation with ISE Corporation, South Coast Air Quality Management District, San Diego Air Pollution Control District, California Air Resources Board, and New Flyer Corporation, MTS embarked on a project to demonstrate the viability of using natural gas fuel in a hybrid-propulsion-system bus. The initial report was provided to the MTS Board of Directors on November 9, 2006, which included documentation of the various grants secured from all of the parties. The initial project capital budget was \$1,050,000 from the various sources, and a total expenditure of \$982,437 was spent on the research project. ISE Corporation outfitted the bus with the hybrid equipment and managed the research and testing. MTS operated the bus throughout the test period—the test period results covered April 2008 through July 2009 or a 16-month test period following the conversion of the bus in 2007 and early 2008.



ISE Corporation has prepared a final report on the demonstration project and will make a presentation to the MTS Board of Directors at the its meeting on March 25, 2010.

The bus used for the demonstration was a 1997 40-foot transit bus manufactured by New Flyer (MTS Bus No. 1527) and is powered by compressed natural gas (CNG). The bus has reached its useful life for MTS service, and arrangements are being made to retire and transfer it to ISE Corporation for future research and development.

The project has been a successful partnership between a private company developing hybrid technology for buses, MTS bus operations, and air quality agencies. The bus was successfully tested in regular transit operations. ISE monitored and tested the bus over the demonstration period and concluded that CNG-hybrid technology can be accomplished on a regular heavy-duty transit bus.



Paul C. Jablonski
Chief Executive Officer

Key Staff Contact: Claire Spielberg, 619.238.0100, Ext. 6400, Claire.Spielberg@sdmts.com

MAR25-10.45. CNG-HYBRID BUS PRESENTATION.EHURWITZ.doc

Final Report

CNG Hybrid Electric Bus Program (CNGHEP)

Development and Demonstration of a Natural Gas Hybrid-Electric Transit Bus

Period of Operation: April 2008 – July 2009

California Air Resources Board (CARB)

San Diego Air Pollution Control District (SDAPCD)

San Diego Metropolitan Transit System (SDMTS)

South Coast Air Quality Management District (SCAQMD)

AQMD Contract #06182

Prepared for:

San Diego Metropolitan Transit System (SDMTS)



Transportation recharged.™



Revision Table

Revision	Description	Date	Author	Reviewed by
Draft 1	Initial version	Dec. 2009	EL	
Rev A	Released version	Feb. 2010	EL	JC



Legal Notice

General

This document provides information to aid in understanding, operating, and maintaining the applicable hybrid drive systems, subsystems, and related components ("**Products**") that are supplied by ISE Corporation ("**ISE**") to the purchaser of the applicable Products ("**Purchaser**"). Descriptions and specifications in this document reflect those in effect at the time of printing. Purchaser is responsible for obtaining any available errata, updates, and revisions from ISE's support department.

Proprietary & Confidential Information

The information disclosed in this document is proprietary to ISE and is the confidential information of ISE. The contents of this document constitute and shall be deemed to be ISE's "Confidential Information" within the meaning of any nondisclosure or confidentiality agreement between ISE and Purchaser, and shall be subject to the restrictions set forth in such nondisclosure or confidentiality agreement. If Purchaser is a federal, state, local, municipal, or other governmental agency, the contents of this document constitute the trade secret information of ISE within the meaning of any applicable statute, rule, regulation, and other law. No part of this document may be changed or altered, translated, reproduced, stored in a retrieval system, or transmitted in any form by any means (whether electronic, mechanical, photocopying, recording, or otherwise), without the prior written permission of ISE. Neither this document nor any part hereof may be used or disclosed to others for manufacturing or any other purpose except as specifically authorized in writing by ISE. **THIS DOCUMENT CONTAINS THE VALUABLE INTELLECTUAL PROPERTY OF ISE, AND YOUR INFRINGEMENT OR VIOLATION OF ISE'S INTELLECTUAL PROPERTY RIGHTS IS SUBJECT TO ALL OF ISE'S AVAILABLE RIGHTS AND REMEDIES UNDER APPLICABLE LAW.**

Documentation License; Termination

This document, whether provided as printed media, disk, read only memory, on any other media or in any other form, is licensed, not sold, by ISE to the Purchaser (for use only under the terms of this license, and ISE reserves all rights not expressly granted to purchaser). All physical copies of this document remain the exclusive property of ISE. The rights granted herein are limited to ISE's intellectual property rights in this document and do not include any other intellectual property rights.

Subject to the terms of this Legal Notice, ISE grants to Purchaser a non-exclusive, non-transferable (except as expressly provided below), revocable, non-sublicenseable right and license to use this document (and any modifications to it made by ISE) solely in connection with the Purchaser's authorized use of Products. Purchaser shall not copy, display, distribute, modify, create enhancements, or create derivative works of this document or any part of it, without ISE's prior written consent. Any and all other copies of this document made by Purchaser are in violation of this license.

ISE and/or its licensor(s) are and shall remain the sole and exclusive owners of all right, title, and interest in and to this document. Any and all modifications, enhancements, or derivative works of this document that are made without ISE's prior written consent (collectively "**Unauthorized Modifications**") shall be solely owned by ISE. If Purchaser makes any Unauthorized Modifications, Purchaser hereby irrevocably and unconditionally assigns to ISE all of Purchaser's right, title, and interest in such Unauthorized Modifications, including all intellectual property rights therein. Without limiting the foregoing, ISE may create derivative works from the Unauthorized Modifications for any purpose, and ISE shall own all rights, title, and interest in and to such derivative works, including all intellectual property rights therein.

All rights in this document not expressly granted above are reserved by ISE and/or its licensor(s), and no additional or other licenses (including without limitation any implied licenses) are granted by ISE to Purchaser or any other party through this document.

This license is effective until terminated. Purchaser's rights under this license will terminate automatically, without notice from ISE, if Purchaser breaches any term of this license or this Legal Notice. Upon termination of this license, Purchaser shall cease all use of this document and destroy all copies, full and partial, of this document.



Unless otherwise provided, the fees for this documentation license are included in the purchase price of the applicable Product. Any subsequent modifications or enhancements to this document made by ISE are, at ISE's option, subject to a fee.

Transfer

Purchaser shall not rent, lease, lend, transfer, assign, or sublicense this document or the information contained in this document. Purchaser may, however, make a one-time permanent transfer of all its license rights to this document to a third party purchasing the Products that are described in and provided by ISE to Purchaser with this document, provided that: (a) the transfer must be made in connection with the Products and include this entire document, including all of its component parts, original media, printed materials and this license; (b) Purchaser does not retain any copies of this document, full or partial, including copies stored on a computer or other storage device; and (c) the party receiving this document reads and agrees to accept the terms and conditions of this license. If a transfer satisfying the above requirements is completed, such third party shall have the same rights and obligations as Purchaser with respect to this document and the license, except it shall not have the right to further transfer this document and/or the license.

Disclaimer of Warranty

ISE AND ITS LICENSORS PROVIDE THIS DOCUMENT "AS IS" WITHOUT WARRANTY OF ANY KIND, WHETHER EXPRESS, IMPLIED, OR STATUTORY, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, COURSE OF DEALING, AND USAGE OF TRADE, TITLE, AND NON-INFRINGEMENT. ISE MAKES NO WARRANTY TO ANY CUSTOMER OF PURCHASER OR ANY OTHER THIRD PARTY, AND EACH SUCH CUSTOMER OR THIRD PARTY SHALL LOOK SOLELY TO PURCHASER FOR ANY WARRANTY.

Limitation of Liability

TO THE MAXIMUM EXTENT ALLOWED UNDER APPLICABLE LAW, IN NO EVENT SHALL ISE OR ITS SUPPLIERS OR LICENSORS BE LIABLE TO PURCHASER OR ANY OTHER PERSON OR ENTITY (INCLUDING PURCHASER'S CUSTOMERS) FOR THE COST OF SUBSTITUTE PRODUCTS, OR FOR COST OF CAPITAL OR INTERRUPTION OF BUSINESS, OR FOR LOSS OF USE, PROFIT, REVENUES, OR BUSINESS OPPORTUNITY, OR FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, INDIRECT, OR PUNITIVE DAMAGES, OR FOR ANY OTHER LOSS OR COST OF A SIMILAR TYPE, HOWEVER CAUSED, ARISING OUT OF OR RESULTING FROM THIS DOCUMENT OR THE INFORMATION CONTAINED IN THIS DOCUMENT, REGARDLESS OF THE FORM OF ACTION, WHETHER FOR BREACH OF CONTRACT, BREACH OF WARRANTY, TORT, NEGLIGENCE, STRICT PRODUCT LIABILITY, OR UNDER ANY OTHER LEGAL THEORY, AND WHETHER OR NOT ISE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THIS LIMITATION OF LIABILITY SHALL APPLY NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY PROVIDED HEREIN.

Patents

ISE's products are protected by one or more of the following patents and/or other patents pending: US 6,557,535; US 6,644,427; US 6,648,086; US 6,714,391; US 6,771,045; US 6,844,704; US 6,847,316; US 6,910,529; US 7,057,868; US 7,085,112; US 7,109,686; US 7,119,454; US 7,218,489; US 7,391,129; US 7,411,312; US D579,457; US D579,458; US 7,459,888; US 7,492,055; US 7,508,289.

Changes; Errors

ISE reserves the right to make changes in design and specifications, and/or make additions to or improvements to its Products and/or this document without notice and without imposing any obligations on ISE to update this document or take any other action. ISE disclaims all liability for errors or omissions contained in this document.

Copyright/Trademark Notice

ISE, the ISE logo, ThunderVolt, and Transportation Recharged are trademarks of ISE Corporation. Other brand or product names are trademarks of their respective holders.

Published by ISE Corporation

Copyright © 1995–2010 ISE Corporation. All rights reserved.

Version published February 2010.



Contents

Summary.....	7
Program Milestones	7
1: Glider Bus Delivery	8
Technical summary	8
2: Hybrid Drive Engineering	9
Technical summary	9
3: Hybrid Drive System Components and Assembly.....	10
Technical summary	10
4: Hybrid Drive System Installation	11
Technical summary	11
5: Engine Test and Characterization	12
Technical summary	12
6: Vehicle Optimization	13
Technical summary	13
7: Vehicle Support and Test	14
Vehicle availability data: summary	14
Vehicle fuel economy: summary	14
Vehicle service and maintenance: summary	14
Fuel Economy Data	16
Overall Vehicle Downtime: Causes	17
Hybrid System Downtime (overall downtime subset): Causes	18
System Reliability: Summary.....	19
8: Final Report – Conclusions	20
Summary and Explanation of Project Costs	21
Explanation of Costs and Comparison to Conventional Vehicles	22
Appendix 1. Scope of Work.....	23
Appendix 2. Two-Page Project Synopsis	25



Figures

Figure 1. Availability of CNG hybrid (1527), compared to standard CNG vehicle (1500) and fleet average.....	15
Figure 2. Detail of the reasons for vehicle downtime during the test period	17
Figure 3. Detailed explanation of reasons for <i>hybrid system</i> downtime (subset of Figure 2)	18
Figure 4. The hybrid vehicle engine compartment.....	25

Tables

Table 1. Fuel usage and miles traveled by the 1500-series CNG fleet, 4/1/2008 – 7/7/2009	16
Table 2. Project budget (taking account of cancelled task 5 – see p. 11)	21
Table 3. Detailed breakdown of actual project costs.	21

Summary

ISE/SDMTS CNG Hybrid Electric Bus Program (CNGHEP)

This project was undertaken because ISE has already proven the viability of hybrid drive systems (specifically gasoline electric hybrid systems) as a low-emissions option for transit applications. These gasoline-electric systems, developed in conjunction with the South Coast Air Quality Management District and the California Air Resources Board, set new lows for bus tailpipe emissions – 0.4g/hp-hr NOx.

However, some transit properties in the south coast region, including San Diego Metropolitan Transit System (SDMTS), Los Angeles County Metropolitan Transit Authority, Orange County Transit Authority, Santa Monica Transit, and SunLine Transit, have already invested heavily in CNG infrastructure and wish to lower their operating costs and further limit fleet emissions by employing hybrid-electric drive systems fueled by CNG. Since no such system is now available for commercial sale, the ISE team (ISE, SCAQMD, CARB, SDAPCD, and SDMTS) proposed to develop and test one.

The CNG Hybrid Bus pilot program was undertaken in collaboration with San Diego Metropolitan Transit Systems in order to assess the viability of a hybrid option to conventional clean-air CNG-fueled city buses. A standard 40' New Flyer CNG Glider vehicle was made available for modification to a configuration with a hybrid powertrain, with the intent of removing as many variables as possible when comparing hybrid and conventional CNG performance. This pilot program was established with the intent of assessing the potential commercialization of this new type of vehicle for the other south coast transit properties.

The CNG Hybrid Electric Bus Pilot Program has recently concluded, with positive preliminary results concerning fuel economy. This report presents a summary of the progress made toward each milestone, including activities undertaken during the vehicle's preparation and testing, as well as basic statistics regarding vehicle reliability, availability, and program cost. ISE's suggestions for improvements to future CNG hybrid designs are also summarized.

Program Milestones

1. Glider Bus
2. Hybrid Drive Engineering
3. Hybrid Drive System Components and Assembly
4. Hybrid Drive System Installation
5. Engine Test and Characterization
6. Vehicle Optimization
7. Vehicle Support and Test
8. Final Report



1: Glider Bus Delivery

Technical summary

This milestone was completed during the first quarterly reporting period, specific achievements related to this milestone included:

- Arranged and completed shipment of 40' chassis from project partner SDMTS
- Took measurements, begin engineering designs
- Negotiated scope of supply from SDMTS/ISE standpoints



2: Hybrid Drive Engineering

Technical summary

This milestone included background work necessary to enable integration of hybrid components into the existing Glider bus chassis. The two major tasks required were:

- Design, test and finalize an off-board charger for the nickel metal hydride battery packs in use on the hybrid vehicle.
- Change the communications standard from the 1997 CNG bus controls (an Allen Bradley PLC system) to ISE's CAN-style controls (using a J1939 CAN standard).

These tasks were completed and documented in Q1 – Q3 of the project.



3: Hybrid Drive System Components and Assembly

Technical summary

This milestone involved development of the design of the CNG engine-based hybrid-electric drive system and ordering of all major components of this system. Specifications for key subsystems and components have been provided in previous reports, and are available again upon request. Most of the new engineering work associated with this task dealt with the system controllers, the DC-to-DC converter, the battery charging system, and overall control of the CNG engine-based power generation subsystem.

This milestone was started and completed on schedule. Specific achievements included:

- Analyze and understand vehicle requirements
- Design, research, and procurement of “best fit” components for vehicle requirements
- Optimize system efficiencies as much as possible during the design phase
- Design and purchase material to manufacture/assemble hybrid components

4: Hybrid Drive System Installation

Technical summary

This milestone involved all activities necessary to install the hybrid drive system components onto the Glider bus chassis. One major redesign during the installation phase involved adding a coolant fill tank in the engine compartment, in order to minimize the need for rooftop access by providing a ground-level access point for servicing the cooling system. Another change involved adding a battery temperature management system that used ambient air from the vehicle cabin to maintain optimal battery temperature.

This milestone relating to engineering and assembly efforts of the hybrid system concluded during the 2nd quarter. By the end of June, all the hybrid components were installed, the bus moved to the QA inspection, and was available for the continuing software development. Specific achievements included:

- Finalizing of locations of all drive system components and all related interfaces
- Development using lessons learned from other projects
- Design/Implementation of battery cooling solution
- Documentation of component location and manufactured parts

5: Engine Test and Characterization

Technical summary

By mutual agreement between ISE and SDMTS, this milestone was dropped from the project (and funding allocated for it was not used). This decision was taken for several reasons:

- ISE lacks in-house equipment to undertake dyno testing of a drive system, and having such tests done by an outside vendor would be prohibitively expensive and would have adversely affected the program schedule
- The engine used on this project (the Cummins B Gas plus engine) will no longer be certified and sold by Cummins after 2009. As a result, all parties felt that it was economically unwise to invest significant resources in determining the precise power and emissions characteristics of this engine.

ISE feels that a better investment of the funding available for this milestone would be to support testing and data collection on an engine with a longer operational life. One such engine is the Ford V10 (WSG 1068), which is currently certified for off-road use with CNG. Achieving certification for on-road use of this engine with CNG would offer substantial flexibility in designing and implementing future CNG hybrid designs, which could then use an engine designed for gasoline (e.g. the Ford V10) or an engine designed for diesel (e.g. another Cummins model certified for CNG use). For various reasons detailed below (p.19), ISE recommends that the use of the Ford V10 engine in future builds.

6: Vehicle Optimization

Technical summary

This milestone involved several related tasks which improved the performance, drivability and reliability of the hybrid drive system. These tasks were undertaken in response to feedback obtained during the installation and initial testing phases. These tasks included:

- Optimizing the system control software to adapt for the unique demands of the hybrid drivetrain.

Since the engine in a series hybrid vehicle is only used to drive the generator, it can be operated in its ideal torque range. However, the de-coupling of the engine from the wheels means that the standard pedal input filtering mechanisms do not work properly, resulting in throttle delays and unnecessary ramping.

- Energy storage management optimization

There was an ongoing effort in adapting the vehicle control software to optimize the battery state-of-charge, battery cell balancing, load and charging of batteries while driving.

- Engine controls (for use with CNG)

Standard engine controls and settings developed for use with CNG were not optimized for the hybrid application, for reasons addressed in point 1. Therefore, in parallel with the energy storage management, software improvements were undertaken to make engine control more efficient and eliminate unnecessary ramping of engine speed.

7: Vehicle Support and Test

This section provides summaries of vehicle availability during the test period, as well as usage data (e.g. fuel economy) and maintenance requirements.

Vehicle availability data: summary

See Figure 1 (p. 15) for a summary of vehicle availability during the test period. Vehicle reliability notably improved during the test period as problems were identified and corrected. In addition, many of the problems experienced on this build are not expected to occur on future builds, for the reasons detailed on p. 18-19.

Vehicle fuel economy: summary

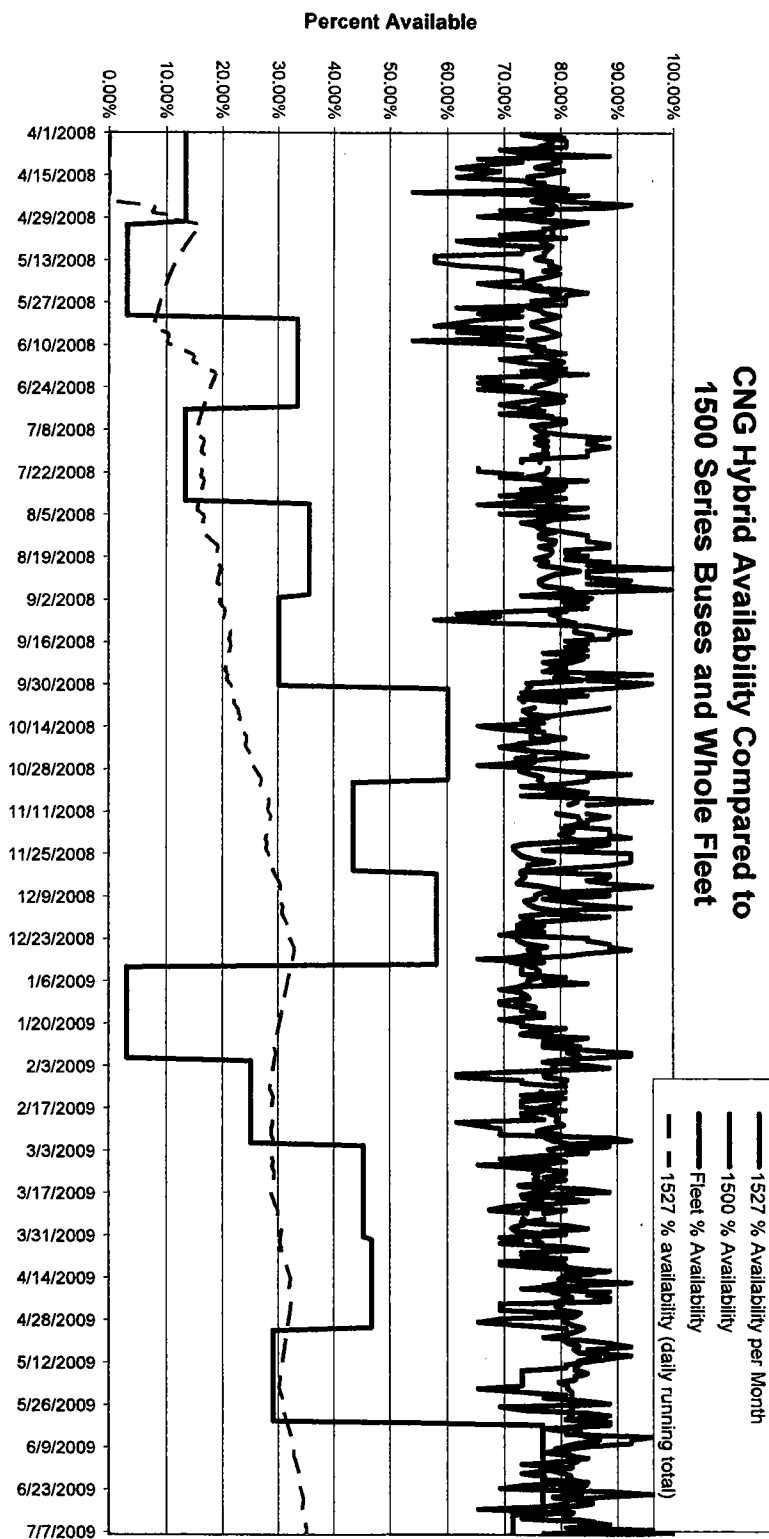
As this vehicle was in the early stages of development, there were several factors which negatively impacted fuel economy, including engine control problems and unnecessary ramping of engine RPM. Nevertheless, **the CNG hybrid vehicle achieved an 18% increase in fuel economy over the conventional CNG vehicles in use over the same period.** For detailed fuel economy information in comparison to the conventional CNG fleet, see Table 1, p.16.

Vehicle service and maintenance: summary

The vehicle was unavailable for service for considerable periods during the test period, primarily because of scheduled maintenance and inspections, standard wear-and-tear damage to the vehicle, and hybrid drive system faults. Of the 463 days of the test period, the vehicle was unavailable for 298, for a total availability of 35.6%

The 298 days of vehicle unavailability during the test period were about half due to hybrid system faults (141 days). However, of those hybrid faults, the vast majority (74%) were due to components that will not be used on future builds. The expected reliability of future builds is therefore much better than indicated in Figure 1 (p. 15). In addition, the other causes of vehicle downtime are expected to be significantly lessened in future builds (see explanations, p. 17)

For further details, see Figure 2 (p. 17) and Figure 3 (p. 18) as well as the explanations following each figure, and the summary on p.19.



Overall Hybrid Vehicle Availability: Averages

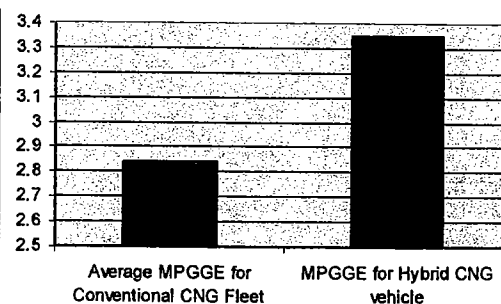
Figure 1. Availability of CNG hybrid (1527), compared to standard CNG vehicle (1500) and fleet average



Fuel Economy Data

Table 1. Fuel usage and miles traveled by the 1500-series CNG fleet, 4/1/2008 – 7/7/2009

	4/1/2008 - 7/6/2009		
	Fuel Consumption	Miles Traveled	Mi.P.G.G.E
1501	19,551.21	56,476.00	2.89
1502	19,077.07	51,986.00	2.73
1503	20,647.19	56,551.00	2.74
1504	21,766.82	61,783.00	2.84
1505	19,480.83	52,661.00	2.70
1506	21,033.42	60,469.00	2.87
1507	18,298.88	51,831.00	2.83
1508	21,348.99	59,513.00	2.79
1509	20,335.20	60,068.00	2.95
1510	22,253.57	63,958.00	2.87
1511	21,214.91	61,631.00	2.91
1512	20,417.65	58,794.00	2.88
1513	20,450.10	60,127.00	2.94
1514	20,202.74	56,393.00	2.79
1515	23,179.94	63,819.00	2.75
1516	21,210.23	61,227.00	2.89
1517	21,106.93	60,824.00	2.88
1518	19,831.75	59,303.00	2.99
1519	22,130.36	62,186.00	2.81
1520	21,096.28	61,629.00	2.92
1521	22,503.61	62,627.00	2.78
1522	20,044.00	58,392.00	2.91
1523	19,647.32	56,589.00	2.88
1524	17,972.21	51,502.00	2.87
1525	19,647.14	55,979.00	2.85
1526	20,144.31	53,371.00	2.65



Fuel economy for the hybrid vehicle (#1527) was 3.35 miles per gallon of gasoline equivalent, vs. 2.84 average for the conventional CNG fleet = **17.95% increase in fuel economy.**

Overall Vehicle Downtime: Causes

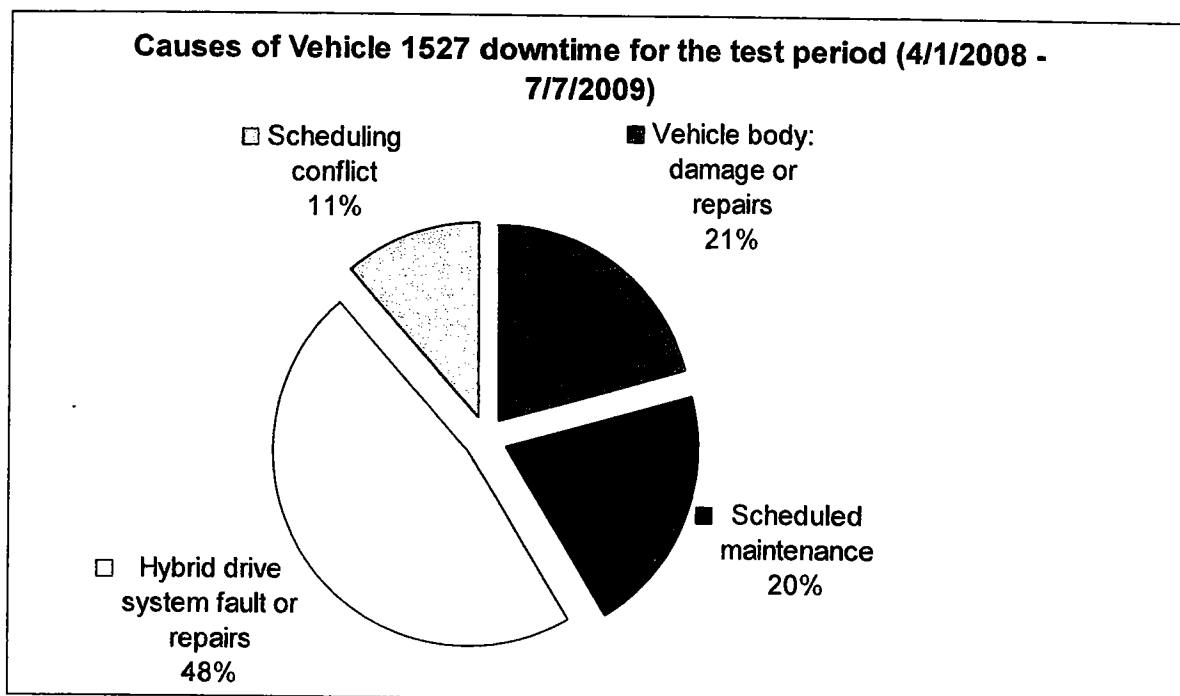


Figure 2. Detail of the reasons for vehicle downtime during the test period

- Scheduling conflict** This means that the vehicle was operational, but the transit agency did not operate the vehicle in revenue service because of driver scheduling, training/promotional events, etc.
- Vehicle body: damage or repairs** This category covers failures of other vehicle components (e.g. fare box, tires, etc.) that are unrelated to the hybrid drive system. This sort of failure is unavoidable with any vehicle, though if future builds use a new vehicle body and chassis (rather than re-building a used vehicle), these should decrease substantially.
- Scheduled maintenance** This category covers vehicle downtime for scheduled maintenance. This category is also expected to decrease as transit agencies become more familiar with the vehicle and the preventive maintenance schedule is reviewed and finalized.
- Hybrid drive system downtime** This category covers faults in the ISE-supplied drive system itself, as well as downtime related to securing replacement parts. For a more detailed explanation, see the following page.

Hybrid System Downtime (overall downtime subset): Causes

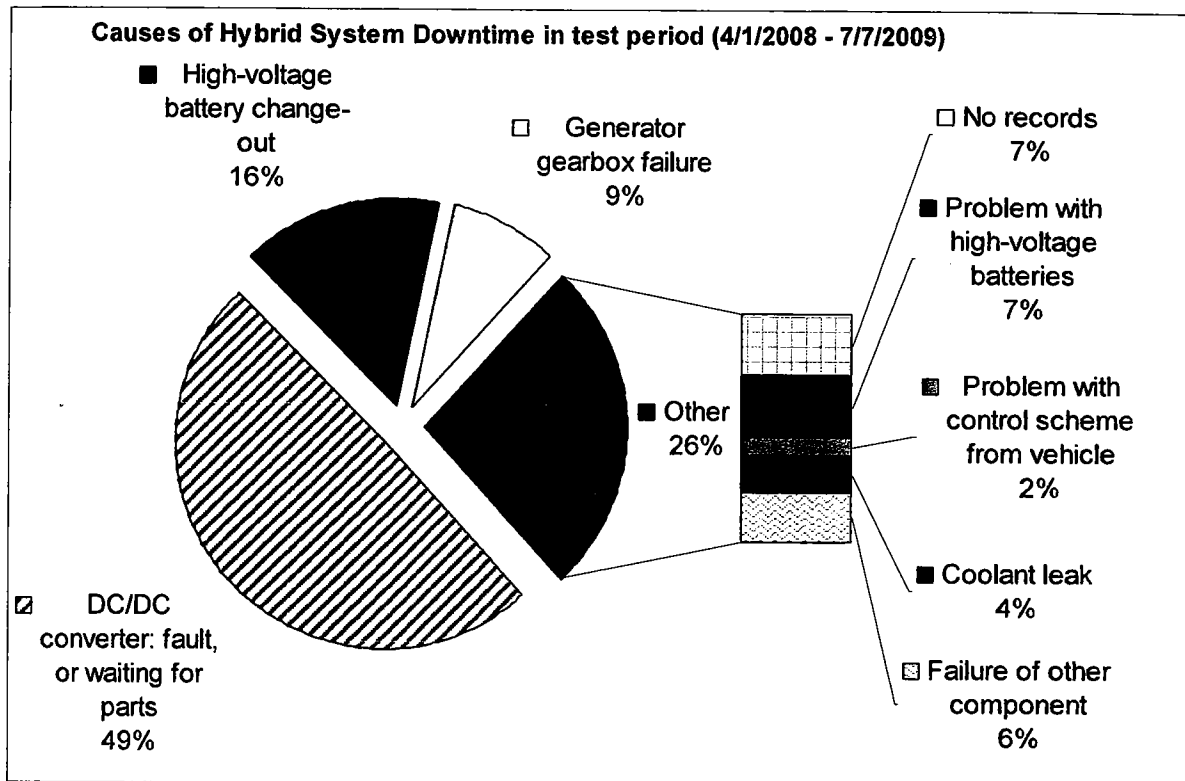


Figure 3. Detailed explanation of reasons for *hybrid system* downtime (subset of Figure 2)

Hybrid system downtime can be attributed to three main categories that are not expected to recur in a production vehicle, as well as one category that may recur in production builds.

DC/DC converter The vehicle was repeatedly down due to failures of the DC/DC converter that is used in place of an alternator to supply low-voltage power for vehicle systems. In addition, replacement converters were not always available, leading to extended downtimes while waiting for parts. The failures were determined to be a quality control issue with the DC/DC manufacturer, but there was no option to change the design, as ISE was told by the engine manufacturer that fitting an alternator to a CNG-powered engine would void the warranty. Shortly before the end of the test period, the engine warranty lapsed, so the ISE team removed the DC/DC converter and fitted an alternator, and this has been functioning without further problems. ISE recommends that **future builds of this drive system should not use the DC/DC converter** unless we can be satisfied that quality control issues have been resolved.



High-voltage battery changeout	The high-voltage batteries initially used on this vehicle were prototypes. Once the battery manufacturer released the final version, the prototypes were replaced with the production versions of the battery. This process took 22 days, but will not be needed on production vehicles using the mature version of the battery system.
Generator gearbox failure	The original design of this system used a 90-degree gearbox to transfer mechanical rotations from the engine to the generator. Experience with this project and other, similar builds has led ISE to recommend that this gearbox should not be used in future hybrid drive system designs . Several other drive system geometries are possible using direct-drive, thus eliminating the need for a gearbox in future builds.
Other	This category covers operating faults related to components that would be used in future builds of the drive system. These included battery setting errors, updates to the control software, a coolant leak from a rooftop tank, etc. There were comparatively few of these faults , totaling 37 days of downtime during the test period. To put this in perspective, these faults – in a prototype, proof-of-concept drive system – would have still allowed 92% availability of the vehicle during the test period – well above the average for CNG vehicles (see Figure 1, p. 15).

System Reliability: Summary

In summary, hybrid drive system problems accounted for roughly half of the total vehicle downtime during the test period. Additional vehicle downtime was due to non-hybrid-system causes such as vehicle body damage, preventive maintenance, and scheduling conflicts. The downtime necessitated by these various categories can be expected to decrease sharply in future builds using this drive system.

In particular, ISE recommends that future CNG hybrid designs feature a drive system configuration using a V10 Ford gasoline engine that has been certified for CNG use. This drive system configuration allows the use of an alternator and direct drive of the generator, thus eliminating potential problems with the DC/DC converter and the generator gearbox, which together caused most of the hybrid system downtime (82 days; 58%) during the test period. Use of a mature high-voltage battery technology and refined system controller settings will increase reliability even further, while also increasing fuel economy.



8: Final Report – Conclusions

The CNG Hybrid pilot program resulted in the successful integration of a CNG-fueled hybrid drive system into a conventional vehicle chassis, and the operation of this vehicle in revenue service over the period April 2008 – July 2009.

As a first-of-its-kind project, there were inevitably some difficulties and unexpected engineering challenges to be overcome, particularly regarding the battery management systems (and external charger) and the throttle control systems for the engine. ISE feels that CNG hybrid technology is definitely a viable hybrid technology, and that further development and the adoption of a different drive system layout (see p. 19) could bring the reliability and efficiency of this CNG hybrid system in line with our gasoline hybrid drive systems. This would mean overall vehicle reliability equal to, or better than, that achieved with conventional CNG vehicles.

With further development in vehicle management systems and on-board energy storage, the CNG hybrid drive system is expected to offer fuel savings of 20-30% over conventional CNG-powered vehicles. In addition, some vehicle maintenance intervals will be greatly increased. For instance, the test vehicle did not accumulate enough mileage to make this point apparent, but the 'regenerative braking' feature of the hybrid drive system increases fuel efficiency while reducing wear and tear on the service brakes, and ISE expects that CNG hybrid buses could expect a brake change interval similar to that found in our gasoline hybrid buses: up to 150,000 miles between brake changes.

Hybrid vehicles obviously require a certain level of investment for development and procurement, though **many of the unique costs for this CNG hybrid development have already been met through this pilot program, and further vehicles can be expected to have a lower per-unit cost (see p. 22). As a reference, future vehicle builds employing this CNG hybrid drive system (or a variant based on this development work) are expected to be ~40% less expensive than the prototype (see p. 22), and feature significantly increased reliability as described above (p. 18-19).** The benefits of hybrid vehicles in general are well-known to all the parties involved in this program: reduced greenhouse and particulate emissions, easier compliance with strict EPA standards, lower fuel costs, lower operating costs in general (when compared to a similar conventionally-fueled vehicle), and a strong PR presence in the fleet. The chief benefit of this CNG hybrid technology over other types of hybrid is its compatibility with existing CNG chassis and tank designs, and its utilization of existing CNG fueling infrastructure.

ISE regards this CNG hybrid pilot project as a notable success, which achieved an on-time, substantially on-budget delivery of a novel hybrid drive system, and gained valuable experience with the unique challenges of CNG hybrids. The program also highlighted areas where future gains can be made in vehicle efficiency and economy. This experience will prove useful if the project partners decide to pursue the many advantages of CNG hybrid technology and re-purpose their fleets to include additional CNG hybrid vehicles.



Summary and Explanation of Project Costs

Table 2. Project budget (taking account of cancelled task 5 – see p. 12)

Tasks	SDMTS	ISE (cost share)	CARB	SCAQMD	SDAPCD	Total
1.0 Glider Bus	\$ 250,000					\$ 250,000
2.0 Hybrid Drive Engineering		\$ 125,000			\$ 100,000	\$ 225,000
3.0 Hybrid Drive System Components & Assembly	\$ 70,000		\$ 50,000	\$ 100,000		\$ 220,000
4.0 Hybrid Drive System Installation					\$ 50,000	\$ 50,000
5.0 Engine Test & Characterization	-	-	\$ 50,000	\$ 100,000	-	\$ 150,000
6.0 Vehicle Optimization		\$ 50,000				\$ 50,000
7.0 Vehicle Support & Test		\$ 50,000			\$ 30,000	\$ 80,000
8.0 Final Report		\$ 25,000				\$ 25,000
Total Cost	\$ 320,000	\$ 250,000	\$ 50,000	\$ 100,000	\$ 180,000	\$ 900,000

Table 3. Detailed breakdown of actual project costs.

Tasks	Labor Costs	Material Costs	Total Costs
1.0 Glider Bus		\$ 250,000	\$ 250,000
2.0 Hybrid Drive Engineering	\$ 224,675		\$ 224,675
3.0 Hybrid Drive System Components & Assembly		\$ 212,847	\$ 212,847
4.0 Hybrid Drive System Installation	\$ 42,684	\$ 7,286	\$ 49,970
5.0 Engine Test & Characterization	-	-	-
6.0 Vehicle Optimization	\$ 50,000		\$ 50,000
7.0 Vehicle Support & Test	\$ 134,383	\$ 35,562	\$ 169,945
8.0 Final Report	\$ 25,000		\$ 25,000
Total Cost	\$ 476,742	\$ 505,695	\$ 982,437

Total overage: \$82,437, or approximately 9% of revised budget. See task 7.0.



Explanation of Costs and Comparison to Conventional Vehicles

As explained on p. 12 and shown in Table 2, task 5.0 was cancelled and the overall project budget was revised down from \$1,050,000 to \$900,000. As shown in Table 3, the eventual project cost was \$982,437, representing an overage of \$82,437, or 9%.

This overage was entirely due to much higher-than-expected labor and material costs for vehicle support (see task 7.0 in Table 3, above). As explained in sections 7 and 8 of this report, unique problems with a specific subset of vehicle components caused the majority of vehicle downtime and service costs. ISE believes these costs can be avoided by selecting different components for use in future CNG hybrid builds, and also believes that vehicles using future designs of the CNG hybrid drive system will be economically much more in line with gasoline hybrids, and be able to offer considerable operating savings and rapid return on investment, despite their higher initial cost.

For example, a sample second-generation CNG hybrid system using the alternate components detailed in this report would result in a considerably lighter vehicle that we estimate would provide a 30% fuel savings over conventional diesel buses (as compared to the 18% fuel savings achieved with this prototype vehicle). The initial purchase price of this second-generation CNG hybrid vehicle would be \$591,000. However, increased subsidies for hybrid vehicles, and considerably lower cost of ownership (calculated as fuel costs and brake maintenance) mean that the CNG hybrid could offer a lifetime operating cost savings of over \$230,000 when compared to a conventional diesel vehicle, giving a return on investment in 1.4 years. These figures are estimates, but reflect conservative figures for fuel costs, system cost, etc.



Appendix 1. Scope of Work

[The following text is taken from the SDMTS - ISE CNG Hybrid Bus Supply Agreement (10-1-06)]

SCOPE OF WORK AND GENERAL REQUIREMENTS

1. GENERAL

The San Diego Metropolitan Transit System (MTS) hereby contracts with ISE Corporation (ISE) to develop and demonstrate a hybrid bus utilizing a new Compressed Natural Gas (CNG) internal combustion engine (ICE) hybrid-electric drive system. ISE has the principal responsibility for the integration of a hybrid-electric drive system into a bus and the delivery of said bus to MTS. In its capacity as prime contractor, ISE shall receive a chassis for the bus from MTS, integrate a hybrid-electric power train into the chassis, and perform final testing of vehicle drivability and operations prior to delivering the bus to MTS. Following placement of the bus into operational service by MTS, ISE shall provide on-going product support services to MTS at no additional cost for a period of one year following delivery of the bus.

Tavin Tyler is designated as ISE Project Manager. He shall manage the ISE program and participate in all activities. Mr. Tyler shall oversee all staff assigned to the project and all reports. ISE shall not replace Mr. Tyler or other key proposed staff without written approval in advance by MTS.

In addition to MTS, it is noted that other agencies including the South Coast Air Quality Management District (SCAQMD), California Air Resources Board (CARB), and the San Diego Air Pollution Control District (APCD) are also partners in the program and plan to provide partial funding for the development and demonstration program.

2. PRODUCT DESCRIPTION

A. Description of the Bus. The bus to be converted to a CNG hybrid-electric drive and provided to the MTS upon completion of the conversion by ISE under this AGREEMENT is a standard "legal bus" manufactured by New Flyer, certified for operation with a conventional internal combustion engine. The bus shall be an existing MTS owned vehicle complete with the engine, transmission, and drive train less the farebox and radio. Appendix A, "Bus Specifications," identifies the bus including components provided by MTS for this project.

B. Description of the Drive System. ISE's principal task under this contract is to install an integrated CNG hybrid-electric drive system into the bus covered by this contract. For the purposes of this contract, the compressed natural gas hybrid-electric drive system shall be defined as the components permanently installed onboard the vehicle which are necessary to supply power for traction and electrical accessories, the hardware and software required for these components to function under normal bus operating conditions, and the hardware required for a safe and secure installation of the components into the bus.

C. Major Drive System Components (MDSCs). ISE's CNG hybrid-electric drive system shall consist of six (6) principal components defined under this contract as "major drive system components," or MDSCs. These are the: (1) main electric drive motors, (2) electronic motor controller, (3) internal combustion engine (or "ICE"), (4) alternator/generator, (5) energy storage, and (6) integrated vehicle control system. The components for the MDSCs are delineated in the ISE Proposal.

-30- B0470.0-07

D. Other Drive System Components (ODSCs). For the purposes of this AGREEMENT, all components of ISE's CNG hybrid-electric drive system not defined as MDSCs, shall be



defined as "Other Drive System Components," or ODSCs. ODSCs consist primarily, but not necessarily exclusively, of the following: (1) structural items used for mounting of MDSCs and other components into the vehicles, including motor mounts, engine/Auxiliary Power Unit (APU) mounts, and battery racks; (2) interface hardware, such as couplings between the engines and APUs; (3) wires, cables, and harnesses used to transmit power or data within the vehicle; (4) switches, relays, and other electromechanical devices; (5) hydraulic and pneumatic lines, if required; and (6) devices to enable electrical actuation of, and linkage of ISE's drive system with, vehicle accessories such as power steering, power braking, and heating, ventilation, and air conditioning.

Appendix 2. Two-Page Project Synopsis

Development and Demonstration of a Natural Gas Hybrid-Electric Transit Bus

AQMD Contract # 06182

February 2010

Contractor
ISE Corp.
Co-sponsors
San Diego Metropolitan Transit System (SDMTS) South Coast Air Quality Management District (AQMD) San Diego Air Pollution Control District (SDAPCD) California Air Resources Board (CARB)
Project Officer
Naveen Berry

Background

This project was initiated because several key transit properties in the south coast region have already invested heavily in CNG infrastructure and wish to lower their operating costs and further limit fleet emissions by employing hybrid-electric vehicles fueled by CNG.

Project Objective

As part of this project, ISE will develop, install, and optimize a CNG hybrid drive system using Siemens components and an ISE energy storage and vehicle control systems, modified to include a CNG-fueled engine. The CNG hybrid bus will be entered into revenue service by San Diego MTS for a minimum of one year, and its performance will be evaluated and compared to that of a conventionally-powered CNG bus.

Technology Description

The series hybrid drive system used in this project is based on ISE's proven gasoline hybrid design, and incorporates a fuel burning engine that turns a generator to produce electrical power. This power runs electric motors that drive the vehicle wheels. On-board electrical energy storage provides an "energy buffer" that improves vehicle performance and efficiency. ISE provides the necessary software, system controllers and additional components such as cooling systems, braking resistors, air and hydraulic compressors, etc.

Status

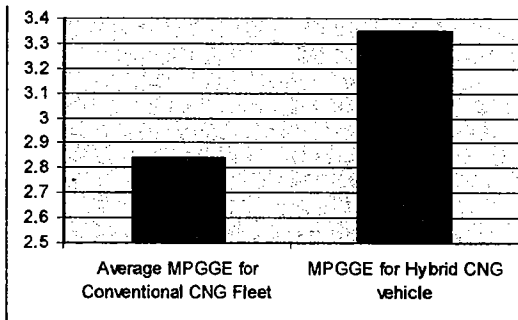
The CNG hybrid drive system was successfully developed and installed on an existing CNG bus chassis provided by SDMTS. The vehicle was in revenue service at SDMTS from 04/2008 until 07/2009.



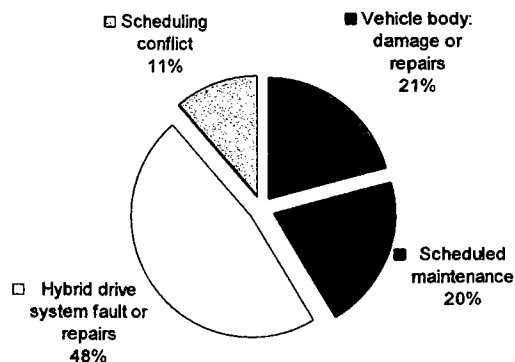
Figure 4. The hybrid vehicle engine compartment

Results

In general, the hybrid vehicle demonstrated superior fuel economy to a conventional CNG vehicle, with a calculated efficiency 17.95% better than the conventional CNG vehicle fleet average (miles per gallon of gasoline equivalent).



In general, the hybrid vehicle demonstrated inferior reliability to a conventional CNG vehicle: its average availability per calendar month varied between a low of 3% and a high of 77%. Of the 463 days in the trial period, the hybrid vehicle was unavailable for service on 298 days. Of the days when the vehicle was unavailable, 141 were due to hybrid system faults, 62 to vehicle body damage or repair, 61 to scheduled maintenance, and 34 to scheduling conflicts – i.e., 48% of vehicle downtime was due to the hybrid drive system. However, the vehicle's average reliability improved throughout the test period as hybrid system faults were identified and remedied.



Benefits

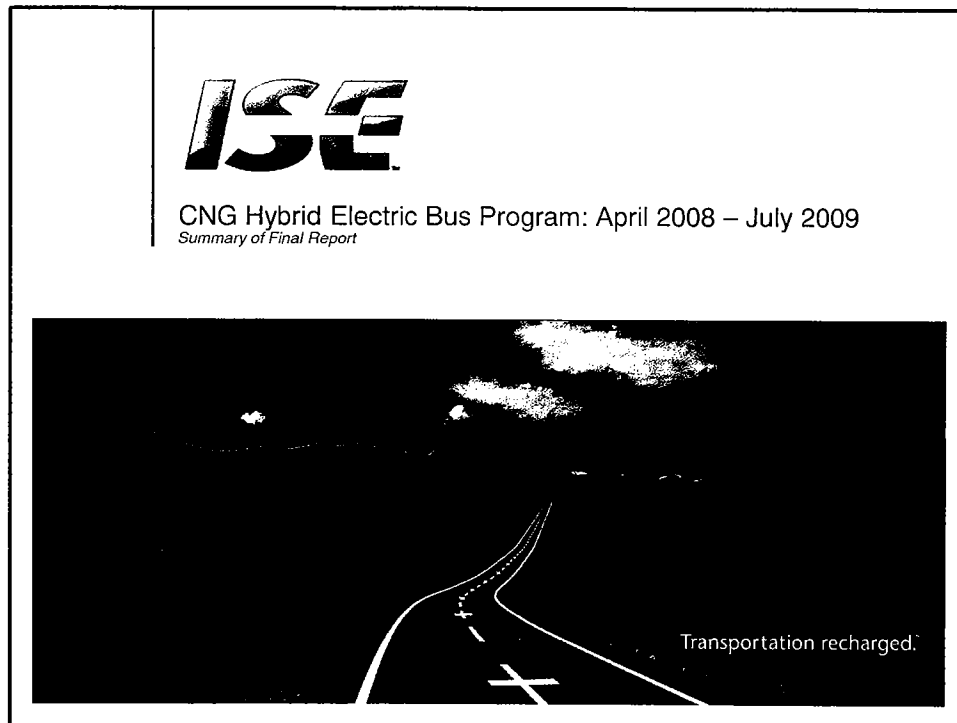
This project provides a solid foundation of experience with the development and refinement of a CNG hybrid vehicle. Demonstrated fuel savings are already impressive, and are expected to reach 25-30% savings over a conventional CNG vehicle after further refinement of the drive system.

Project Costs

This project was completed with costs 9% over the revised budget of \$900,000 (detailed in the final report).

Commercialization / Applications

This project has direct commercialization potential in replacing conventional CNG vehicles in transit service, leading to increased fuel economy, lower emissions and ultimately decreased vehicle operating costs. Many of the problems this vehicle experienced are expected to decrease radically over time, and as a result, average availability will increase. In particular, the components that caused the most problems will not be used on future builds, and the 'scheduled maintenance' downtime is not an intrinsic requirement of the hybrid system, but rather a result of this system's "first of a kind" status. One potential beneficial change would be to utilize a standard Ford gasoline engine modified for CNG, rather than the diesel engine used in this project (see p.12 of this report). ISE has an excellent track record in designing hybrid systems using this engine, and expects that such a change would be beneficial to the technology's ultimate commercial viability.



1

Overview
• ISE Company Overview
• Prototype CNG Hybrid Program Overview
• Program Milestones
• Vehicle Support and Test Data
• Financial Summary
• Conclusions

2



2

What Does ISE Do?

ISE is a San Diego company that designs and integrates its own energy storage systems, controls software and power electronics into a complete series hybrid-electric drive system optimized for heavy duty vehicles.

Core ISE Technologies

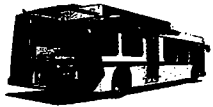
Energy Storage
The core of a hybrid vehicle - capturing and releasing energy

Controls Software
Manages the flow of energy between components efficiently

Power Electronics
Translates power requirements to various hybrid components

Product Offerings

Complete Heavy-Duty Hybrid Drive Systems



Energy Storage Systems ("ESS")



3

ISE
Transportation recharged.

3

Fast Facts

Corporate Headquarters
ISE Corporation
12302 Kerran Street
Poway, CA 92064-6884

Number of Employees
144 Employees, < 42 Engineers

Incorporated
1995

Installed Vehicle Base
Approx. 300 vehicles
Accumulated > 12 million operational fleet miles across ~ 19 agencies.

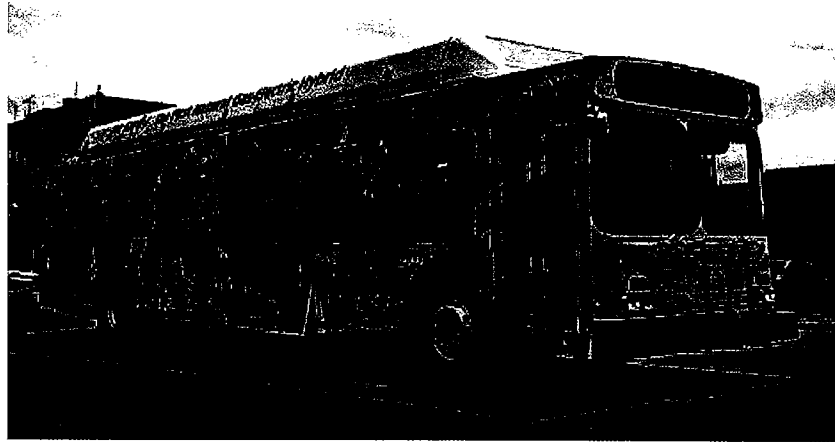
ISO 9001:2000 Registered

4

ISE
Transportation recharged.

4

ISE's Concept Demonstration Prototype
Hybrid CNG Bus with SDMTS



5

ISE
TRANSPORTATION RECHARGED

5

ISE/SDMTS CNG Hybrid Electric Bus Program Overview

• **Goals:**

- +Develop, build and demonstrate a proof of concept **compressed natural gas (CNG) hybrid transit bus**.
- +Demonstrate significant fuel economy improvement vs. the conventional SDMTS CNG fleet.
- +Analyze operation of the demonstration vehicle in regular transit fleet service.

6

ISE
TRANSPORTATION RECHARGED

6

ISE's **Prototype** Series Hybrid CNG Bus Experience

4/1/2008 - 7/6/2009

- **Team Members:** SDMTS, ISE, SCAQMD, CARB and SDAPCD.
- **Demonstration Achievements:**
 - + 1.3 years and 23,000 miles in revenue service. (April 2008 to July 2009)
 - + Highly visible and popular vehicle.
- **Fuel Economy (18% improvement over conventional CNG fleet.)**
 - + Higher fuel efficiency desired and possible.
 - The use of ultra capacitors instead of batteries has demonstrated significant efficiency improvements.
- **Operator Feedback**
 - + Electric motors offer almost instant acceleration response to help merge into traffic.

7



7

ISE's Concept Demonstration Prototype Hybrid CNG Bus (System Configuration)

- **Chassis:**
 - + New Flyer 40' CNG Glider (11 year old bus minus the engine and transmission).
- **Engine/Generator:**
 - + Engine: Cummins Westport B Gas Plus 5.9L six-cylinder CNG engine.
 - + Generator: Siemens 165kW (220HP) generator with 90 deg. speed increasing gearbox.
- **Electric Drive Motor:**
 - + 2 x Siemens AC induction motors +gearbox. 400HP/300kW (Peak)
- **Energy Storage: (Rooftop)**
 - + Cobasys NIMH batteries, 240kW Peak, 576 Volts (nominal), 9.6kWh
 - + Weight: 350kg (770lbs)
- **Accessories:**
 - + ISE's 230VAC electric hydraulic pump and air compressor. (Steering, brakes, suspension, etc.)
 - + ThermoKing 230VAC all electric air conditioning system.

8



8

Program Milestones

1. Glider Bus
 1. Took delivery of Glider bus for use in project
 2. Completed on-time, on-budget
2. Hybrid Drive Engineering
 1. Electrical and Mechanical design; control and communications implementation
 2. Completed on-time, on-budget
3. Hybrid Drive System Components and Assembly
 1. Procurement of components, assembly of drive system, further development of controls
 2. Completed on-time, on-budget
4. Hybrid Drive System Installation
 1. Installation of the drive system into the chassis
 2. Completed on-time, on-budget
5. Engine Test and Characterization
 1. Canceled by mutual consent since the engine used in the prototype build will no longer be certified after 2009, and ISE recommends use of a different engine. Thus, there was no need to spend money characterizing this engine in great detail.
6. Vehicle Optimization
 1. Testing and optimization of control schemes for the engine and energy storage
 2. Carried over into the service period of the vehicle.
7. Vehicle Testing and Support
8. Final Report

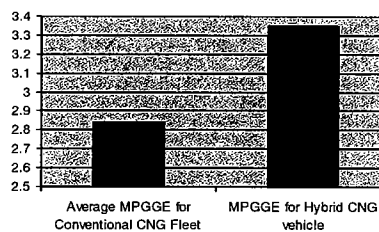
9

ISE
Transportation recharged.

9

Fuel Economy Data Represent 18% Increase in MPGGE

4/1/2008 - 7/6/2009			
	Fuel Consumption	Miles Traveled	MPGGE
1501	19,551.21	56,476.00	2.89
1502	19,077.07	51,986.00	2.73
1503	20,647.19	56,551.00	2.74
See Final Report for complete data set			
1517	21,106.93	60,824.00	2.88
1518	19,831.75	59,303.00	2.99
1519	22,130.36	62,186.00	2.81
1520	21,096.28	61,629.00	2.92
1521	22,503.61	62,627.00	2.78
1522	20,044.00	58,392.00	2.91
1523	19,647.32	56,589.00	2.88
1524	17,972.21	51,502.00	2.87
1525	19,647.14	55,979.00	2.85
1526	20,144.31	53,371.00	2.65
1527	19,888.14	56,227.00	2.86



Annualized Fuel Savings

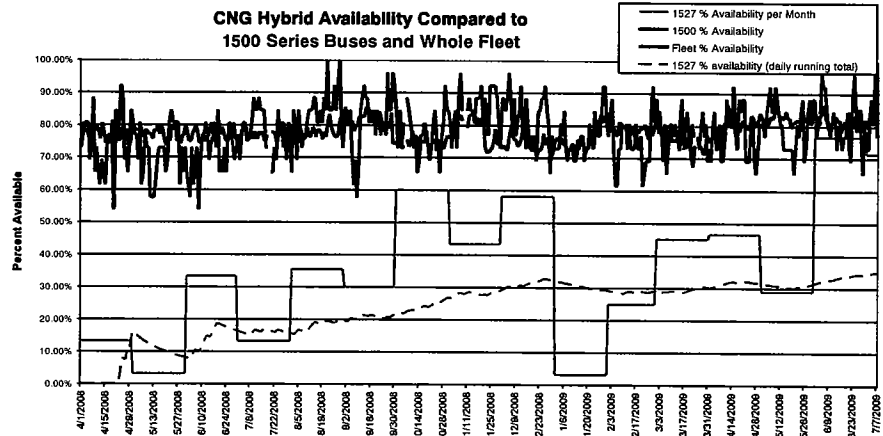
	Annual Miles	MPGGE	Therms	Fuel Cost
CNG	18582	2.83	4864	\$ 5,885
CNG Hybrid	18582	3.35	4109	\$ 4,972
Annualized Savings				\$ 914

10

ISE
Transportation recharged.

10

Vehicle Availability, Compared to Conventional Fleet



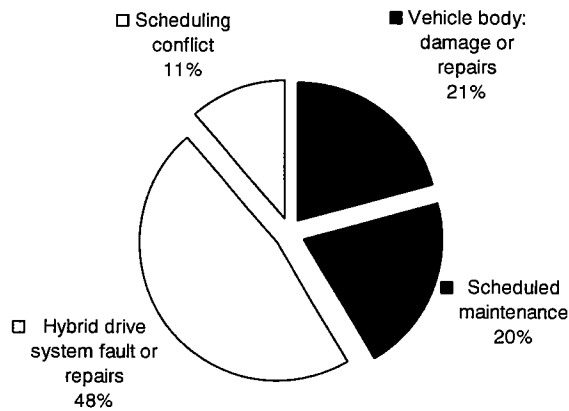
11

ICE
Transportation recharged.

11

Vehicle Downtime Overview

Causes of Vehicle 1527 downtime for the test period (4/1/2008 - 7/7/2009)

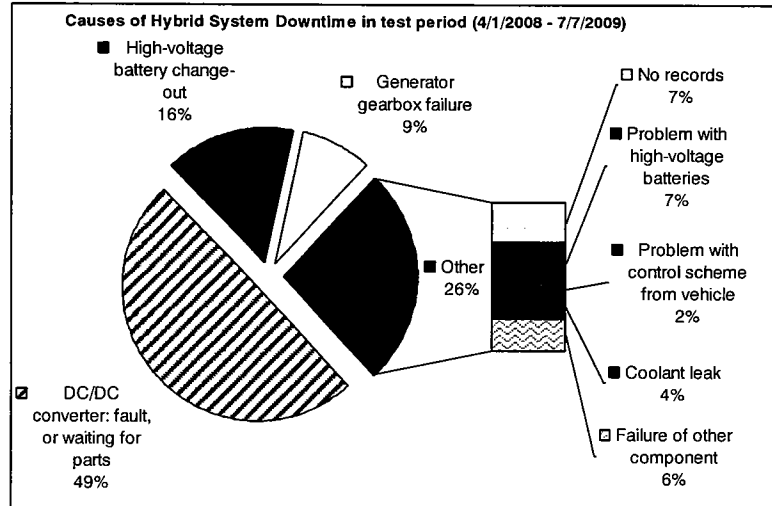


12

ICE
Transportation recharged.

12

Hybrid System Downtime (subset of previous slide)



13

ISE
Transportation recharged.

13

Program Budget

Tasks	SDMTS	ISE (cost share)	CARB	SCAQMD	SDAPCD	Total
1.0 Glider Bus	\$ 250,000					\$ 250,000
2.0 Hybrid Drive Engineering		\$ 125,000			\$ 100,000	\$ 225,000
3.0 Hybrid Drive System Components & Assembly	\$ 70,000		\$ 50,000	\$ 100,000		\$ 220,000
4.0 Hybrid Drive System Installation					\$ 50,000	\$ 50,000
5.0 Engine Test & Characterization			\$ 50,000	\$ 100,000		\$ 150,000
6.0 Vehicle Optimization		\$ 50,000				\$ 50,000
7.0 Vehicle Support & Test		\$ 50,000			\$ 30,000	\$ 80,000
8.0 Final Report		\$ 25,000				\$ 25,000
Total Cost	\$ 320,000	\$ 250,000	\$ 50,000	\$ 100,000	\$ 180,000	\$ 900,000

14

ISE
Transportation recharged.

14

Program Costs

Tasks	Labor Costs	Material Costs	Total Costs
1.0 Glider Bus		\$ 250,000	\$ 250,000
2.0 Hybrid Drive Engineering	\$ 224,675		\$ 224,675
3.0 Hybrid Drive System Components & Assembly		\$ 212,847	\$ 212,847
4.0 Hybrid Drive System Installation	\$ 42,684	\$ 7,286	\$ 49,970
5.0 Engine Test & Characterization	-	-	-
6.0 Vehicle Optimization	\$ 50,000		\$ 50,000
7.0 Vehicle Support & Test	\$ 134,383	\$ 35,562	\$ 169,945
8.0 Final Report	\$ 25,000		\$ 25,000
Total Cost	\$ 476,742	\$ 505,695	\$ 982,437

15



15

Conclusions

- Hybrid technology has achieved significant transit bus fleet success. The majority of these vehicles are diesel fueled.
- Conventional CNG transit buses achieve relatively low average fuel economy which can be significantly improved with the application of hybrid technology.
- Problematic prototype components used in this demonstration project have either been eliminated or redesigned. (e.g. generator gearbox and DC/DC converter)
- ISE is working on a next generation CNG hybrid transit vehicle product offering based on lessons learned from this project.
- SDMTS has experienced great success with its fleet of ISE gasoline hybrid drive systems powering its new Super Loop service.

16



16



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda

Item No. 46

JOINT MEETING OF THE BOARD OF DIRECTORS
for the
Metropolitan Transit System,
San Diego Transit Corporation, and
San Diego Trolley, Inc.

CIP 11171

March 25, 2010

SUBJECT:

MTS: MID-COAST CORRIDOR TRANSIT PROJECT (LESLIE BLANDA OF SANDAG)

RECOMMENDATION:

That the Board of Directors receive a report on the Mid-Coast Corridor Transit Project.

Budget Impact

None at this time.

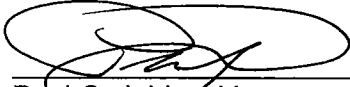
DISCUSSION:

The Mid-Coast Corridor Transit Project will extend transit service from the Old Town Transit Center to University City serving major activity centers, such as the University of California, San Diego, University Towne Centre, and downtown San Diego.

The San Diego Association of Governments (SANDAG) and the Federal Transit Administration (FTA) are preparing a Draft Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report (DSEIS/SEIR) for the Mid-Coast Corridor Transit Project. SANDAG will serve as the lead agency for the California Environmental Quality Act (CEQA), and the FTA will serve as the lead agency for the National Environmental Policy Act (NEPA).



The initial step in preparing the DSEIS/SEIR was the development and evaluation of preliminary conceptual project alternatives for consideration during CEQA scoping. The Draft Comparative Evaluation of Alternatives Report identifies the purpose and need for the Mid-Coast Corridor Transit Project; examines changed conditions since approval of the prior environmental documents for the project; defines and evaluates the alternatives considered; and recommends a set of alternatives for consideration during scoping. SANDAG staff will provide an update on this project.



Paul C. Jablonski
Chief Executive Officer

Key Staff Contact: Sharon Cooney, 619.557.4513, Sharon.Cooney@sdmts.com

MAR25-10.46.MIDCOAST.SCOONEY.doc



①

Mid-Coast Corridor Transit Project

- **Extend transit service from Old Town Transit Center to University City**
- **Serve major activity centers**
 - UCSD
 - UTC
 - Downtown San Diego

2



②

Mid-Coast Corridor Transit Project



- ***TransNet* Early Action Project**
- **Included in original *TransNet* Ordinance passed in 1987**
- **Remains uncompleted**
- **Under *TransNet* Extension Ordinance receives priority for implementation**

3 **SANDAG**

③

Mid-Coast Corridor Transit Project



- ***TransNet* Ordinance specifies:**
 - Project implementation relies on receipt of federal funds
- **FTA New Starts Program funds fixed guideway projects**
- ***TransNet* provides \$600 million in capital funds for project**
- ***TransNet* funds used to leverage \$600 million in FTA New Starts Program funds to make project a reality**

4 **SANDAG**

④

FTA New Starts Program



- Discretionary funding program
- Competition is high
- FTA evaluates projects on a “level playing field”
- New Starts funding applications based on FTA regulations and technical guidance
 - FTA technical review

5 SANDAG

5

FTA New Starts Program



- Mid-Coast Project expected to compete well
 - *TransNet* provides 50 percent match in capital funds
 - *TransNet* provides operating funds - 2048
 - Blue and Orange Line Rehabilitation Projects demonstrate a systemwide state of good repair

6 SANDAG

6

Current Development Phase



- **SANDAG and FTA are preparing a draft environmental document**
 - Draft Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report (DSEIS/SEIR)
 - Builds on prior planning and environmental studies and project approvals
- **SANDAG – Lead agency for CEQA**
- **FTA – Lead agency for NEPA**

7 **SANDAG**

⑦

Current Development Phase

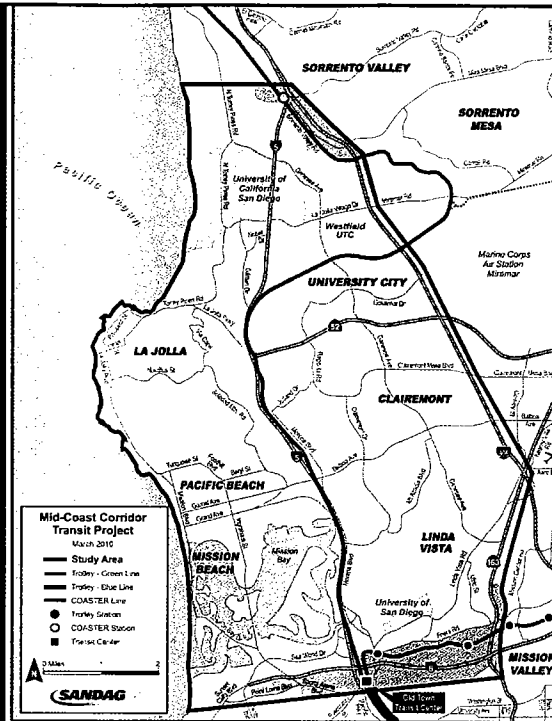


- **Initial Step:**
 - Develop and evaluate alternatives
- **Draft Comparative Evaluation of Alternatives Report**
 - Identifies project Purpose and Need
 - Examines changed conditions in corridor
 - Defines and evaluates alternatives
 - Recommends alternatives for Scoping

8 **SANDAG**

⑧

Mid-Coast Corridor Transit Project Study Area



9

9

Purpose and Need



- Expand transportation capacity
- Provide alternatives to congested highways and roadways
- Compliment and integrate with existing transit system
- Serve UCSD and University City effectively
- Support regional policies in RTP
 - Livability, Sustainability, Equity

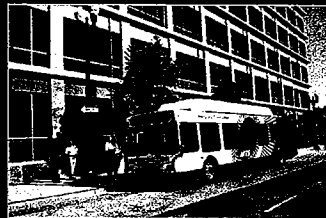
10 SANDAG

10

Mid-Coast Alternatives



- No-Build Alternative
- TSM Alternative



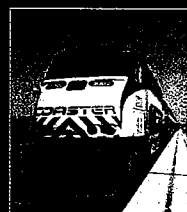
11 SANDAG

11

Mid-Coast Alternatives



- Build Alternatives:
 - Light Rail Transit (LRT)
 - Bus Rapid Transit (BRT)
 - Commuter Rail (CR)

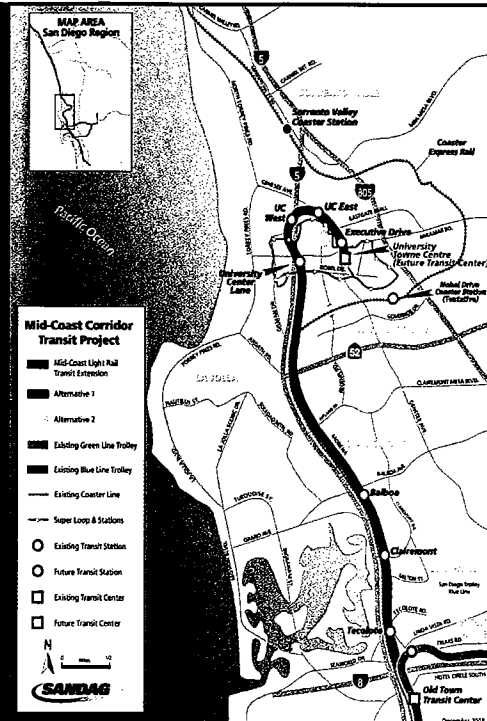


12 SANDAG

12

LRT Alternatives

- Current LPA



13

LRT Alternatives



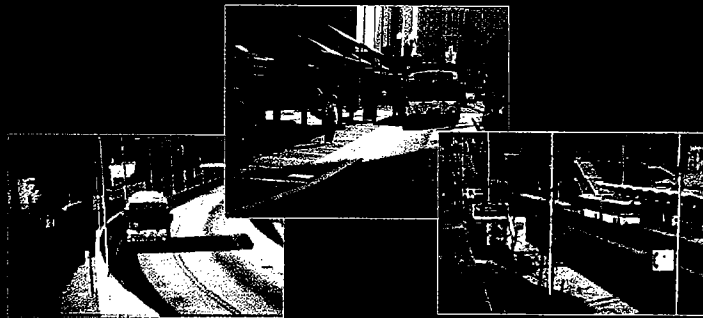
- 7 LRT alternatives providing for extension of Blue Line
- Developed to respond to changed conditions
 - Wider I-5 footprint
 - Proposed addition of DARS at Voigt Drive
 - Proposed realignment of Voigt Drive
- 4 LRT alternatives similar to LPA
- 3 LRT alternatives avoid Voigt Drive

14

BRT Alternatives



- 4 BRT alternatives
- Developed to determine effectiveness of BRT in serving corridor



15 SANDAG

15

BRT Alternatives



- BRT alternatives range from:
 - Exclusive guideway throughout corridor
 - Comparable to LRT
 - Highest capital cost
 - Exclusive guideway only in most congested areas
 - Lower capital cost
 - Minimal improvement over TSM alternative

16 SANDAG

16

CR Alternative



▪ CR alternative

- Use existing LOSSAN corridor heavy rail tracks
- Construct tunnel from LOSSAN ROW to UTC under Genesee Avenue
- Construct deep underground station at UTC



17 SANDAG

17

Regional Travel Demand Model



- Updated in accordance FTA standards for New Starts
- Based on regional residents' travel preferences and behavior
- Verified with current ridership and traffic counts
- Factors affecting ridership projections:
 - Travel times
 - Transfer wait times
 - Walk or drive access times

18 SANDAG

18

Ridership



2030 Daily New Boardings

▪ TSM	6,000
▪ LRT	18,000 – 20,000
▪ BRT	2,000 – 4,000
▪ CR	8,000

19 **SANDAG**

19

FTA Cost Effectiveness Indicator



Alternative	Total Capital Cost (1,000s)	Annual User Benefits (Hours)	Cost Effectiveness (Cost Per Benefit Hr)
TSM	\$62,066	725,291	\$16.49
LRT 1	\$1,188,290	3,570,752	\$24.84
LRT 2	\$1,227,343	3,503,232	\$26.22
LRT 3	\$1,247,592	3,412,197	\$26.59
LRT 4	\$1,220,133	3,622,859	\$24.91
LRT 5	\$1,175,235	3,640,155	\$23.87
LRT 6	\$1,165,966	3,556,357	\$24.21
LRT 7	\$1,061,775	3,214,240	\$24.11
BRT 1	\$2,111,496	876,992	\$184.51
BRT 2	\$1,128,883	370,629	\$251.24
BRT 3	\$745,030	187,627	\$371.81
BRT 4	\$1,045,013	434,149	\$208.09
Commuter Rail	\$1,170,591	619,680	\$135.17

20 **SANDAG**

20

FTA Cost Effectiveness Indicator



Cost per Benefit Hour

- TSM \$16.49
- LRT \$23.90 - \$26.60
- BRT \$184.50 - \$371.80
- CR \$135.20

Benefit Hours

(In Thousands)

- LRT 3,214 to 3,640
- BRT 187 to 877
- CR 620

21 SANDAG

21

Why is LRT Most Effective?



- Significantly higher number of new transit riders
- Direct service between major markets benefits existing and new transit riders
- Builds on investment in existing regional Trolley system
- Attractiveness of LRT: reliability, stations, and vehicles

22 SANDAG

22

Evaluation Alternatives Summary



Project Need	TSM	LRT 1	LRT 2	LRT 3	LRT 4	LRT 5	LRT 6	LRT 7	BRT 1	BRT 2	BRT 3	BRT 4	CRT
Effectiveness in Goal Achievement													
• Increase the overall capacity of the transportation system serving the study area	●	○	○	○	○	○	○	○	○	●	●	●	●
• Reduce auto-person trips and VMT and VHT	●	○	○	○	○	○	○	○	○	●	●	●	●
• Link study area transit services with existing transit facilities and services to improve regional connectivity and mobility	●	○	○	○	○	○	○	○	○	●	●	●	●
• Increase transit ridership and mode share	●	○	○	○	○	○	○	○	○	●	●	●	●
• Increase transit on-time performance	●	○	○	○	○	○	○	○	○	●	●	●	○
• Reduce the disparity between highway and transit speeds and travel times	○	○	○	○	○	○	○	○	○	○	○	○	○
• Provide fast and efficient transit service to the University City area	○	○	○	○	○	○	○	○	○	○	○	○	○
• Provide direct transit connections to the UCSD West Campus	○	○	○	○	○	○	○	○	○	○	○	○	○
• Provide high capacity and quality transit service to those parts of the study area with existing or planned density and other transit friendly characteristics	○	○	○	○	○	○	○	○	○	○	○	○	○
• Help shape local land use planning to help foster TOD near stations	○	○	○	○	○	○	○	○	○	○	○	○	○
• Maintain consistency with regional and local plans	○	○	○	○	○	○	○	○	○	○	○	○	○
• Reduce GHG emissions	○	○	○	○	○	○	○	○	○	○	○	○	○
• Limit impacts to sensitive habitats	○	○	○	○	○	○	○	○	○	○	○	○	○
• Improve access for low-income, minority, elderly, and disabled persons	○	○	○	○	○	○	○	○	○	○	○	○	○
• Avoid adverse impacts to low-income, minority, elderly, and disabled persons	○	○	○	○	○	○	○	○	○	○	○	○	○
Other Considerations													
• Potential environmental impacts	○	○	○	○	○	○	○	○	○	○	○	○	○
• Potential local traffic impacts	○	○	○	○	○	○	○	○	○	○	○	○	○
Cost Effectiveness													
• FTA Cost-Effectiveness Index	○	○	○	○	○	○	○	○	○	○	○	○	○
Financial Feasibility													
• Additional funding required above the <i>Regional Transportation Improvement Program (RTIP)</i>	○	○	○	○	○	○	○	○	○	○	○	○	○
• Likelihood of securing FTA New Starts funding	●	○	○	○	○	○	○	○	○	○	○	○	○

○ More effective ● Less effective

23

Alternatives for Scoping



- **Three LRT alternatives recommended for Scoping**
 - Effectively meet project goals
 - Improve regional mobility
 - Are cost effective, or most cost effective
 - Competitive for FTA New Starts funding

24

Recommended LRT Alternatives

-  LRT 1
(Combines 1, 4 and 5)
-  LRT 3
-  LRT 6



Transit Center



Transit Station

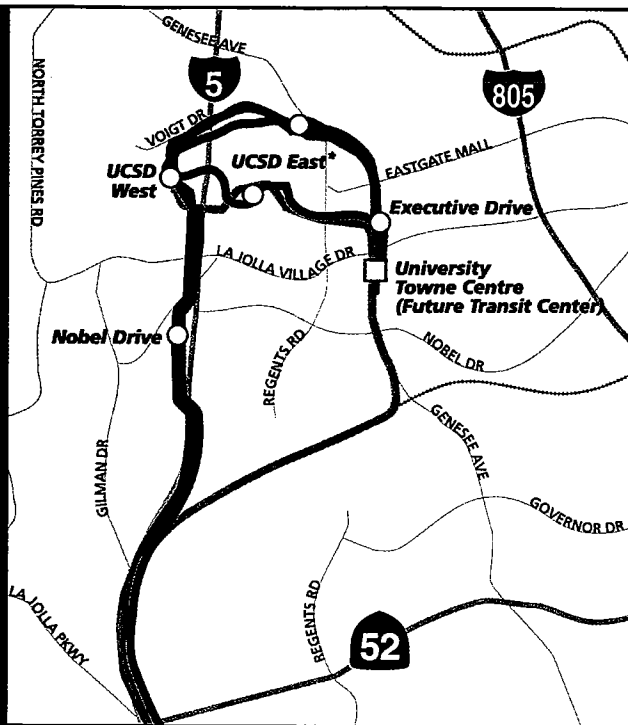
* UCSD East Station location
differs by alignment

Map not to scale

Stations are for illustrative purposes;
locations are not exact.

SANDAG

25



25

Mid-Coast Corridor Flyover



26

SANDAG

26

Meetings Prior to Scoping



- **PWG**
 - March 17
- **Transportation Committee**
 - March 19
- **PWG**
 - April 7
- **Independent Taxpayer Oversight Committee**
 - April 14 (Information)

27 **SANDAG**

(27)

Meetings Prior to Scoping



- **Transportation Committee**
 - April 16 (Recommend to Board Alternatives for Scoping)
- **SANDAG Board**
 - April 23 (Board Approval of Alternatives for Scoping)

28 **SANDAG**

(28)

Scoping Period Schedule



- **Scoping Period**
 - 30-Day Scoping Period
 - May 3 through June 1

29



29

Alternatives for DSEIS/SEIR



- **Once Scoping is complete**
 - Prepare final Comparative Evaluation of Alternatives report
 - Summary of Scoping comments
 - Responses
 - Revisions to alternatives
 - Recommendation on LPA or alternatives for draft environmental document

30



30

Alternatives for DSEIS/SEIR



- **SANDAG Board and FTA will make final decision on LPA or alternatives for draft environmental document**
 - July 2010

31 **SANDAG**

31

Mid-Coast Corridor Transit Project



Questions?

32 **SANDAG**

Mid-Coast Corridor Transit Project Briefing

March 2010



MID-COAST CORRIDOR
TRANSIT PROJECT



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda

Item No. 47

JOINT MEETING OF THE BOARD OF DIRECTORS
for the
Metropolitan Transit System,
San Diego Transit Corporation, and
San Diego Trolley, Inc.

FIN 310

March 25, 2010

SUBJECT:

MTS: OPERATIONS BUDGET STATUS REPORT FOR JANUARY 2010
(MIKE THOMPSON)

RECOMMENDATION:

That the Board of Directors receive a report on MTS's operations budget status for January 2010.

Budget Impact

None at this time.

DISCUSSION:

This report summarizes MTS's operating results for January 2010 compared to the fiscal year 2010 budget. Attachment A-1 combines the operations, administration, and other activities results for January 2010. Attachment A-2 details the January 2010 combined operations results, and Attachments A-3 to A-8 present budget comparisons for each MTS operation. Attachment A-9 details budget comparisons for MTS Administration, and A-10 provides January 2010 results for MTS's other activities (Taxicab/San Diego and Arizona Eastern Railway Company).



MTS NET-OPERATING SUBSIDY RESULTS

The enclosed information includes midyear budgetary adjustments that were approved by the Board of Directors at its March 11, 2010, meeting. Due to this midyear budget adjustment, budgetary variances for the month of January and year-to-date through January 2010 are relatively minimal.

As indicated within Attachment A-1, the year-to-date January 2010 MTS net-operating subsidy favorable variance totaled \$214,000 (-0.3%). Operations produced a \$74,000 (-0.1%) unfavorable variance, and the administrative/other activities areas were unfavorable by \$140,000.

MTS COMBINED RESULTS

Revenues

Year-to-date combined revenues through January 2010 were \$55,993,000 compared to the year-to-date budget of \$55,861,000, which represents a \$133,000 (0.2%) positive variance.

Expenses

Year-to-date combined expenses through January 2010 were \$123,679,000 compared to the year-to-date budget of \$123,333,000, which resulted in a \$346,000 (-0.3%) unfavorable variance.

Personnel Costs. Year-to-date personnel related costs totaled \$59,421,000 compared to a year-to-date budgetary figure of \$59,253,000, which resulted in an unfavorable variance of \$168,000 (-0.3%).

Outside Services and Purchased Transportation. Total outside services for the first seven months of the fiscal year totaled \$41,297,000 compared to a budget of \$41,214,000, which resulted in a year-to-date unfavorable variance of \$83,000 (-0.2%).

Materials and Supplies. Total year-to-date materials and supplies expenses totaled \$3,982,000 compared to a budgetary figure of \$3,956,000, which resulted in an unfavorable expense variance of \$26,000 (-0.7%).

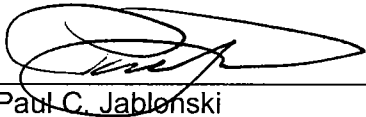
Energy. Total year-to-date energy costs were \$15,015,000 compared to the budget of \$15,026,000 resulting in a year-to-date favorable variance of \$11,000 (0.1%). Year-to-date diesel prices averaged \$2.431 per gallon compared to the midyear-adjusted budgetary rate of \$2.430 per gallon. Year-to-date CNG prices averaged \$1.200 per therm compared to the midyear-adjusted budgetary rate of \$1.290 per therm.

Risk Management. Total year-to-date expenses for risk management were \$2,889,000, compared to the year-to-date budget \$2,846,000, which resulted in an unfavorable variance totaling \$43,000 (-1.5%).

General and Administrative. Year-to-date general and administrative costs, including vehicle and facilities leases, were \$38,000 (-3.6%) unfavorable to budget totaling \$1,075,000 through January 2010 compared to a year-to-date budget of \$1,037,000.

YEAR-TO-DATE SUMMARY

The January 2010 year-to-date net-operating subsidy had an unfavorable variance of \$214,000 (-0.3%). As discussed above, with the midyear budgetary adjustment approved by the Board of Directors on March 11, 2010, variances within each of the revenue and expense categories diminished.



Paul C. Jablonski
Chief Executive Officer

Key Staff Contact: Larry Marinesi, 619.557.4542, Larry.Marinesi@sdmts.com

MAR25-10.47.OPS BUDGET JAN 10.MTHOMPSON.doc

Attachment: A. Comparison to Budget

SAN DIEGO METROPOLITAN TRANSIT SYSTEM

**MTS
CONSOLIDATED**

Att. A, AI 47, 3/25/10

COMPARISON TO BUDGET - FISCAL YEAR 2010

JANUARY 31, 2010

(in \$000's)

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	% VARIANCE
Passenger Revenue	\$ 52,069	\$ 52,066	\$ 3	0.0%
Other Revenue	3,924	3,795	129	3.4%
Total Operating Revenue	\$ 55,993	\$ 55,861	\$ 133	0.2%
Personnel costs	\$ 59,421	\$ 59,253	\$ (168)	-0.3%
Outside services	41,297	41,214	(83)	-0.2%
Transit operations funding	-	-	-	-
Materials and supplies	3,982	3,956	(26)	-0.7%
Energy	15,015	15,026	11	0.1%
Risk management	2,889	2,846	(43)	-1.5%
General & administrative	726	689	(37)	-5.4%
Vehicle/facility leases	349	348	(1)	-0.2%
Amortization of net pension asset	-	-	-	-
Administrative Allocation	(0)	(0)	-	0.0%
Depreciation	-	-	-	-
Total Operating Expenses	\$ 123,679	\$ 123,333	\$ (346)	-0.3%
Operating income (loss)	\$ (67,686)	\$ (67,472)	\$ (214)	-0.3%
Total public support and nonoperating revenues	1,389	(3,611)	5,000	-138.5%
Income (loss) before capital contributions	\$ (66,297)	\$ (71,083)	\$ 4,786	-6.7%

SAN DIEGO METROPOLITAN TRANSIT SYSTEM

OPERATIONS

Att. A, AI 47, 3/25/10

CONSOLIDATED OPERATIONS

COMPARISON TO BUDGET - FISCAL YEAR 2010

JANUARY 31, 2010

(in \$000's)

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	% VARIANCE
Passenger Revenue	\$ 52,069	\$ 52,066	\$ 3	0.0%
Other Revenue	407	370	37	10.0%
Total Operating Revenue	\$ 52,476	\$ 52,436	\$ 40	0.1%
Personnel costs	\$ 51,487	\$ 51,468	\$ (18)	0.0%
Outside services	35,649	35,619	(30)	-0.1%
Transit operations funding	-	-	-	-
Materials and supplies	3,974	3,948	(26)	-0.6%
Energy	14,653	14,666	13	0.1%
Risk management	2,602	2,567	(35)	-1.4%
General & administrative	219	200	(19)	-9.3%
Vehicle/facility leases	314	314	(0)	-0.1%
Amortization of net pension asset	-	-	-	-
Administrative Allocation	11,910	11,910	-	0.0%
Depreciation	-	-	-	-
Total Operating Expenses	\$ 120,806	\$ 120,692	\$ (115)	-0.1%
Operating income (loss)	\$ (68,330)	\$ (68,256)	\$ (74)	-0.1%
Total public support and nonoperating revenues	2,281	(2,719)	5,000	-183.9%
Income (loss) before capital contributions	\$ (66,048)	\$ (70,974)	\$ 4,926	-6.9%

SAN DIEGO METROPOLITAN TRANSIT SYSTEM
OPERATIONS
TRANSIT SERVICES (SAN DIEGO TRANSIT CORPORATION)
COMPARISON TO BUDGET - FISCAL YEAR 2010
JANUARY 31, 2010
(in \$000's)

Att. A, AI 47, 3/25/10

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	% VARIANCE
Passenger Revenue	\$ 16,071	\$ 16,071	\$ (0)	0.0%
Other Revenue	38	38	-	0.0%
Total Operating Revenue	\$ 16,109	\$ 16,109	\$ (0)	0.0%
Personnel costs	\$ 33,338	\$ 33,330	\$ (8)	0.0%
Outside services	1,069	1,060	(10)	-0.9%
Transit operations funding	-	-	-	-
Materials and supplies	2,478	2,475	(4)	-0.1%
Energy	4,116	4,116	0	0.0%
Risk management	1,158	1,123	(35)	-3.1%
General & administrative	77	69	(8)	-11.5%
Vehicle/facility leases	118	118	-	0.0%
Amortization of net pension asset	-	-	-	-
Administrative Allocation	4,189	4,189	-	0.0%
Depreciation	-	-	-	-
Total Operating Expenses	\$ 46,544	\$ 46,480	\$ (64)	-0.1%
Operating income (loss)	\$ (30,435)	\$ (30,371)	\$ (64)	-0.2%
Total public support and nonoperating revenues	(513)	(5,513)	5,000	-90.7%
Income (loss) before capital contributions	\$ (30,948)	\$ (35,884)	\$ 4,936	-13.8%

SAN DIEGO METROPOLITAN TRANSIT SYSTEM
OPERATIONS Att. A, AI 47, 3/25/10
RAIL OPERATIONS (SAN DIEGO TROLLEY, INCORPORATED)
COMPARISON TO BUDGET - FISCAL YEAR 2010
JANUARY 31, 2010
(in \$000's)

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	% VARIANCE
Passenger Revenue	\$ 19,309	\$ 19,309	\$ 0	0.0%
Other Revenue	333	333	-	0.0%
Total Operating Revenue	\$ 19,641	\$ 19,641	\$ 0	0.0%
Personnel costs	\$ 17,503	\$ 17,493	\$ (11)	-0.1%
Outside services	2,003	1,982	(21)	-1.0%
Transit operations funding	-	-	-	-
Materials and supplies	1,494	1,472	(22)	-1.5%
Energy	5,554	5,572	18	0.3%
Risk management	1,444	1,444	-	0.0%
General & administrative	123	126	3	2.4%
Vehicle/facility leases	111	111	(0)	-0.1%
Amortization of net pension asset	-	-	-	-
Administrative Allocation	7,103	7,103	-	0.0%
Depreciation	-	-	-	-
Total Operating Expenses	\$ 35,335	\$ 35,302	\$ (33)	-0.1%
Operating income (loss)	\$ (15,694)	\$ (15,661)	\$ (33)	-0.2%
Total public support and nonoperating revenues	-	-	-	-
Income (loss) before capital contributions	\$ (15,694)	\$ (15,661)	\$ (33)	0.2%

SAN DIEGO METROPOLITAN TRANSIT SYSTEM

OPERATIONS

Att. A, AI 47, 3/25/10

MULTIMODAL OPERATIONS (FIXED ROUTE)

COMPARISON TO BUDGET - FISCAL YEAR 2010

JANUARY 31, 2010

(in \$000's)

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	% VARIANCE
Passenger Revenue	\$ 13,467	\$ 13,465	\$ 2	0.0%
Other Revenue	37	-	37	-
Total Operating Revenue	\$ 13,504	\$ 13,465	\$ 39	0.3%
Personnel costs	\$ 141	\$ 141	\$ -	0.0%
Outside services	23,390	23,391	1	0.0%
Transit operations funding	-	-	-	-
Materials and supplies	1	-	(1)	-
Energy	3,775	3,770	(4)	-0.1%
Risk management	-	-	-	-
General & administrative	(0)	(0)	(0)	8.2%
Vehicle/facility leases	84	84	-	0.0%
Amortization of net pension asset	-	-	-	-
Administrative Allocation	491	491	-	0.0%
Depreciation	-	-	-	-
Total Operating Expenses	\$ 27,882	\$ 27,878	\$ (4)	0.0%
Operating income (loss)	\$ (14,378)	\$ (14,412)	\$ 35	0.2%
Total public support and nonoperating revenues	-	-	-	-
Income (loss) before capital contributions	\$ (14,378)	\$ (14,412)	\$ 35	-0.2%

SAN DIEGO METROPOLITAN TRANSIT SYSTEM
OPERATIONS
MULTIMODAL OPERATIONS (PARATRANSIT)
COMPARISON TO BUDGET - FISCAL YEAR 2010
JANUARY 31, 2010
(in \$000's)

Att. A, AI 47, 3/25/10

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	% VARIANCE
Passenger Revenue	\$ 1,042	\$ 1,041	\$ 1	0.1%
Other Revenue	-	-	-	-
Total Operating Revenue	\$ 1,042	\$ 1,041	\$ 1	0.1%
Personnel costs	\$ 90	\$ 90	\$ -	0.0%
Outside services	5,516	5,513	(2)	0.0%
Transit operations funding	-	-	-	-
Materials and supplies	-	-	-	-
Energy	954	954	-	0.0%
Risk management	-	-	-	-
General & administrative	0	0	-	0.0%
Vehicle/facility leases	-	-	-	-
Amortization of net pension asset	-	-	-	-
Administrative Allocation	14	14	-	0.0%
Depreciation	-	-	-	-
Total Operating Expenses	\$ 6,574	\$ 6,571	\$ (2)	0.0%
Operating income (loss)	\$ (5,531)	\$ (5,530)	\$ (1)	0.0%
Total public support and nonoperating revenues	-	-	-	-
Income (loss) before capital contributions	\$ (5,531)	\$ (5,530)	\$ (1)	0.0%

SAN DIEGO METROPOLITAN TRANSIT SYSTEM

OPERATIONS

Att. A, AI 47, 3/25/10

CONSOLIDATED CHULA VISTA TRANSIT OPERATIONS

COMPARISON TO BUDGET - FISCAL YEAR 2010

JANUARY 31, 2010

(in \$000's)

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	% VARIANCE
Passenger Revenue	\$ 2,180	\$ 2,180	\$ -	0.0%
Other Revenue	-	-	-	-
Total Operating Revenue	\$ 2,180	\$ 2,180	\$ -	0.0%
Personnel costs	\$ 226	\$ 226	\$ (0)	0.0%
Outside services	3,427	3,429	2	0.1%
Transit operations funding	-	-	-	-
Materials and supplies	1	2	1	60.8%
Energy	254	253	(1)	-0.5%
Risk management	-	-	-	-
General & administrative	19	6	(14)	-242.4%
Vehicle/facility leases	-	-	-	-
Amortization of net pension asset	-	-	-	-
Administrative Allocation	113	113	-	0.0%
Depreciation	-	-	-	-
Total Operating Expenses	\$ 4,039	\$ 4,028	\$ (12)	-0.3%
Operating income (loss)	\$ (1,860)	\$ (1,848)	\$ (12)	-0.6%
Total public support and nonoperating revenues	2,692	2,692	-	0.0%
Income (loss) before capital contributions	\$ 832	\$ 843	\$ (12)	-1.4%

SAN DIEGO METROPOLITAN TRANSIT SYSTEM

**OPERATIONS
CORONADO FERRY**

Att. A, AI 47, 3/25/10

COMPARISON TO BUDGET - FISCAL YEAR 2010

JANUARY 31, 2010

(in \$000's)

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	% VARIANCE
Passenger Revenue	\$ -	\$ -	\$ -	-
Other Revenue	-	-	-	-
Total Operating Revenue	\$ -	\$ -	\$ -	-
Personnel costs	\$ -	\$ -	\$ -	-
Outside services	89	89	-	0.0%
Transit operations funding	-	-	-	-
Materials and supplies	-	-	-	-
Energy	-	-	-	-
Risk management	-	-	-	-
General & administrative	-	-	-	-
Vehicle/facility leases	-	-	-	-
Amortization of net pension asset	-	-	-	-
Administrative Allocation	-	-	-	-
Depreciation	-	-	-	-
Total Operating Expenses	\$ 89	\$ 89	\$ -	0.0%
Operating income (loss)	\$ (89)	\$ (89)	\$ -	0.0%
Total public support and nonoperating revenues	103	103	-	0.0%
Income (loss) before capital contributions	\$ 14	\$ 14	\$ -	0.0%

SAN DIEGO METROPOLITAN TRANSIT SYSTEM

**ADMINISTRATION
CONSOLIDATED**

Att. A, AI 47, 3/25/10

**COMPARISON TO BUDGET - FISCAL YEAR 2010
JANUARY 31, 2010
(in \$000's)**

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	% VARIANCE
Passenger Revenue	\$ -	\$ -	\$ -	-
Other Revenue	2,691	2,642	49	1.9%
Total Operating Revenue	\$ 2,691	\$ 2,642	\$ 49	1.9%
Personnel costs	\$ 7,546	\$ 7,399	\$ (147)	-2.0%
Outside services	5,516	5,463	(53)	-1.0%
Transit operations funding	-	-	-	-
Materials and supplies	4	4	(1)	-20.7%
Energy	356	354	(1)	-0.4%
Risk management	267	259	(7)	-2.9%
General & administrative	448	430	(18)	-4.1%
Vehicle/facility leases	35	35	(0)	-1.1%
Amortization of net pension asset	-	-	-	-
Administrative Allocation	(11,953)	(11,953)	-	0.0%
Depreciation	-	-	-	-
Total Operating Expenses	\$ 2,219	\$ 1,991	\$ (227)	-11.4%
Operating income (loss)	\$ 472	\$ 651	\$ (178)	27.4%
Total public support and nonoperating revenues	(893)	(893)	-	0.0%
Income (loss) before capital contributions	\$ (421)	\$ (242)	\$ (178)	73.7%

SAN DIEGO METROPOLITAN TRANSIT SYSTEM

**OTHER ACTIVITIES
CONSOLIDATED**

Att. A, AI 47, 3/25/10

**COMPARISON TO BUDGET - FISCAL YEAR 2010
JANUARY 31, 2010
(in \$000's)**

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	% VARIANCE
Passenger Revenue	\$ -	\$ -	\$ -	-
Other Revenue	826	783	43	5.5%
Total Operating Revenue	\$ 826	\$ 783	\$ 43	5.5%
Personnel costs	\$ 388	\$ 386	\$ (3)	-0.7%
Outside services	132	131	(1)	-0.9%
Transit operations funding	-	-	-	-
Materials and supplies	4	4	-	0.0%
Energy	6	6	-	0.0%
Risk management	20	20	-	0.0%
General & administrative	60	59	(1)	-1.1%
Vehicle/facility leases	-	-	-	-
Amortization of net pension asset	-	-	-	-
Administrative Allocation	43	43	-	0.0%
Depreciation	-	-	-	-
Total Operating Expenses	\$ 654	\$ 650	\$ (4)	-0.7%
Operating income (loss)	\$ 172	\$ 133	\$ 39	-29.1%
Total public support and nonoperating revenues	-	-	-	-
Income (loss) before capital contributions	\$ 172	\$ 133	\$ 39	29.1%

Metropolitan Transit System FY 2010 - January 2010 Financial Review

MTS Board of Directors Meeting
March 25, 2010



COMBINED MTS TRANSIT OPERATORS COMPARISON TO BUDGET - JANUARY 31, 2010 - FY 2010 (in \$000's)

	YEAR TO DATE			
	ACTUAL	AMENDED BUDGET	VARIANCE	% VAR
Fare Revenue	\$52,069	\$52,066	\$3	0.0%
Other Revenue	407	370	37	10.0%
Total Operating Revenue	\$52,476	\$52,436	\$40	0.1%

Budget figures include mid year budgetary adjustments approved by the Board of Directors at the March 11, 2010 meeting

- Due to these adjustments, the monthly spreading of these figures, by design, produce very small budgetary variances for January YTD



COMBINED MTS TRANSIT OPERATORS COMPARISON TO BUDGET - JANUARY 31, 2010 - FY 2010 (in \$000's)				
	YEAR TO DATE			
	ACTUAL	AMENDED BUDGET	VARIANCE	% VAR
Personnel Costs	\$51,487	\$51,468	(\$18)	0.0%
Purchased Transportation	31,599	31,598	(0)	0.0%
Other Outside Services	4,050	4,021	(29)	-0.7%
Energy	14,653	14,666	13	0.1%
Other Expenses	19,018	18,938	(79)	-0.4%
Total Expenses	\$120,806	\$120,692	(\$115)	-0.1%



METROPOLITAN TRANSIT SYSTEM COMPARISON TO BUDGET - FY 2010 TOTAL REVENUE LESS EXPENSES (in \$000's)		
Combined Net Operating Variance		
MTS Operating Revenue	\$	40
MTS Operating Expenses		(115)
MTS Administration / Other Activities		(140)
Total Combined Net Operating Variance	\$	(214)





1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
619.231.1466 FAX 619.234.3407

Agenda

Item No. 62

Chief Executive Officer's Report

ADM 121.7

March 25, 2010

In accordance with Board Policy No. 52, Procurement of Goods and Services, attached are listings of contracts, purchase orders, and work orders that have been approved within the CEO's authority (up to and including \$100,000) for the period March 1, 2010 through March 15, 2010.

vicki.rogers/agenda item 62



Metropolitan Transit System (MTS) is comprised of the Metropolitan Transit Development Board (MTDB) a California public agency, San Diego Transit Corp., and San Diego Trolley, Inc., in cooperation with Chula Vista Transit and National City Transit. MTS is Taxicab Administrator for eight cities. MTDB is owner of the San Diego and Arizona Eastern Railway Company. MTDB Member Agencies include: City of Chula Vista, City of Coronado, City of El Cajon, City of Imperial Beach, City of La Mesa, City of Lemon Grove, City of National City, City of Poway, City of San Diego, City of Santee, and the County of San Diego.

REVENUE CONTRACT

Doc #	Organization	Subject	Amount	Day
L5713.0-10	ORTIZ CORP	JROE PERMIT NCTD SD CITY SEWER GRP 766	(\$3,000.00)	3/1/2010
L0929.0-10	CLEAR WIRELESS, LLC	LEASE AGREEMENT	(\$500.00)	3/15/2010
L0952.0-10	CESAR E CHAVEZ COMMUNITY	ROE PERMIT TO ALLOW CESAR E CHAVEZ MARCH	(\$500.00)	3/15/2010
L0937.0-10	GRAN FONDO USA, LLC	ROE PERMIT FOR GRAN FONDO BIKE MAR 7 10	(\$500.00)	3/4/2010
L0948.0-10	IN MOTION, INC.	ROE PERMIT FOR RACE FOR LITERACY XING	(\$500.00)	3/4/2010
S200-10-441	MOTOR TRANSPORT MUSEUM	LICENSE TO PLACE IMPROVEMENTS ALONG SD&A	(\$1.00)	3/8/2010

EXPENSE CONTRACT

Doc #	Organization	Subject	Amount	Day
G0980.1-06	SANDAG	EXTEND TIME OF CONTRACT	\$0.00	3/1/2010
G1078.4-07	RYAN MERCALDO & WORTHINGTON	LEGAL SERVICES GENERAL & TORT LIABILITY	\$30,000.00	3/1/2010
L0848.2-09	COUNTY OF SD PARK & REC	ROE PERMIT AMEND BIO SURVEY, FLAG, VEGET	\$0.00	3/1/2010
G1139.7-08	TROUVILLION, INVEISS & DEMARKI	LEGAL SERVICES WORKERS COMP	\$15,000.00	3/8/2010
L0943.0-10	SEDC	ROE PERMIT FOR MURAL PAINTING @ ENCANTO	\$0.00	3/8/2010
L0944.0-10	SEDC	LIC AGREE PLACEMENT WAL MURAL @ ENCANTO	\$0.00	3/8/2010
G1067.9-07	MCDUGAL LOVE ECKIS SMITH	LEGAL SERVICES - GENERAL & TORT LIABILIT	\$45,000.00	3/15/2010
G1080.6-07	LAW OFFICES OF MICHAEL E. RIPL	LEGAL SERVICES - GENERAL & TORT LIABILIT	\$25,000.00	3/15/2010
G1087.7-07	LIEBMAN, QUIGLEY, SHEPPARD	LEGAL SERVICES - GENERAL & TORT LIABILIT	\$30,000.00	3/15/2010
G1305.0-10	PLANET BIDS, INC.	E-PROCUREMENT SVCS 5YR OPTIONS 3YRS	\$99,770.00	3/15/2010
S200-10-442	KIMLEY-HORN	ROE PERMIT SANDAG CIP 130081 DESIGN CONS	\$0.00	3/15/2010
S200-10-443	AGUIRRE & ASSOC	ROE PERMIT SANDAG CIP 130081 GRAL TOPO	\$0.00	3/15/2010

PO

DATE	Organization	Subject	AMOUNT
3/1/2010	RIDOUT PLASTICS	VALNLINE CLEAR PLASTIC BOTTOM LOAD	\$270.24
3/4/2010	MORRISON METALWELD PROCESS CO	RECONDITION TRACKS BY WELDING	\$13,500.00
3/4/2010	ACCO ENGINEERING SYSTEMS	R/R COMPRESSOR & REVERSING VIVE	\$1,800.00
3/11/2010	THE GATES GROUP	4/1 COLOR MTS PROMO SCRATCH OFF DAY	\$2,499.08

WORK ORDERS

Doc #	Subject	Amount	Day
G1246.0-09.08	BIOLOGICAL MONITORING SANTEE MITIGA	\$35,100.00	3/15/2010
G1245.0-09.02	ENGINEERING SERVICES MISC. SURVEYIN	\$11,300.00	3/15/2010