

# County Connection

2477 Arnold Industrial Way    Concord, CA 94520-5326    (925) 676-7500    countyconnection.com

## BOARD OF DIRECTORS MEETING AGENDA

**Thursday, March 19, 2015  
9:00 a.m.**

**CCCTA Paratransit Facility  
Gayle B. Uilkema Memorial Board Room  
2477 Arnold Industrial Way  
Concord, California**

The County Connection Board of Directors may take action on each item on the agenda. The action may consist of the recommended action, a related action or no action. Staff recommendations are subject to action and/or change by the Board of Directors.

- 1) Call to Order/Pledge of Allegiance
- 2) Roll Call/Confirm Quorum
- 3) Public Communication
- 4) Consent Calendar
  - a. Approval of Minutes of Regular Meeting of February 19, 2015\*
- 5) Report of Chair
  - a) Recognition of Jack Weir for his Service on CCCTA Board of Directors
  - b) Nomination and Election of Board Secretary
  - c) Report on Washington, DC Trip
- 6) Report of General Manager
  - a) Recognition of Retiring Employees
- 7) Report of Standing Committees
  - a. Administration & Finance Committee  
(Committee Chair: Director Don Tatzin)
    - 1) Authorization for the General Manager to direct Gillig and BAE Systems to Proceed with Detailed Mechanical Design of Walnut Creek Trolleys \*  
Resolution No. 2015-024\*\*  
(The A & F Committee recommends that the Board approve Resolution No. 2015-024 authorizing the General Manager to release a purchase order to Gillig for the purchase of four electric trolleys.. Cost not to exceed \$4,212,860. Contingent of approval from the Federal Transit Administration.)

Clayton • Concord • Contra Costa County • Danville • Lafayette • Martinez  
Moraga • Orinda • Pleasant Hill • San Ramon • Walnut Creek

**CENTRAL CONTRA COSTA TRANSIT AUTHORITY**

- 2) Authorization for the General Manager to direct Wavetech to Proceed with Inductive Charging Infrastructure Engineering for Walnut Creek and Concord Facilities for Support of the Electric Trolley Project\*  
Resolution No. 2015-025\*\*  
(The A & F Committee recommends that the Board adopt Resolution No. 2015-025 authorizing the General Manager to release a purchase order to WAVE Inc. for the purchase of the WAVE system.)

- 8) Board Communication

Under this item, Directors are limited to providing information, asking clarifying questions about matters not on the agenda, responding to public comment, referring matters to committee or staff for information, or requesting a report (on any matter) be made at another meeting.

- 9) Closed Session:

Conference with Labor Negotiator (pursuant to Government code Section 54957.6)

Employee Organizations:

Amalgamated Transit Union, Local 1605

Machinists Automotive Trades District Lodge No. 1173

Teamsters Union, Local 856, AFL-CIO, Transit Supervisors

- 10) Open Session:

- 11) Adjournment

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\*Enclosure

\*\*It will be available at the Board meeting.

## General Information

Possible Action: The Board may act upon any item listed on the agenda.

Public Comment: Each person wishing to address the County Connection Board of Directors is requested to complete a Speakers Card for submittal to the Clerk of the Board before the meeting convenes or the applicable agenda item is discussed. Persons who address the Board are also asked to furnish a copy of any written statement to the Clerk. Persons who wish to speak on matters set for Public Hearings will be heard when the Chair calls for comments from the public. After individuals have spoken, the Public Hearing is closed and the matter is subject to discussion and action by the Board.

A period of thirty (30) minutes has been allocated for public comments concerning items of interest within the subject matter jurisdiction of the Board. Each individual will be allotted three minutes, which may be extended at the discretion of the Board Chair.

Consent Items: All matters listed under the Consent Calendar are considered by the Board to be routine and will be enacted by one motion. There will be no separate discussion of these items unless requested by a Board Member or a member of the public prior to when the Board votes on the motion to adopt.

Availability of Public Records: All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body, will be available for public inspection at 2477 Arnold Industrial Way, Concord, California, at the same time that the public records are distributed or made available to the legislative body. The agenda and enclosures for this meeting are posted also on our website at [www.countyconnection.com](http://www.countyconnection.com).

Accessible Public Meetings: Upon request, County Connection will provide written agenda materials in appropriate alternative formats, or disability-related modification or accommodation, including auxiliary aids or services, to enable individuals with disabilities to participate in public meetings. Please send a written request, including your name, mailing address, phone number and brief description of the requested materials and preferred alternative format or auxiliary aid or service so that it is received by County Connection at least 48 hours before the meeting convenes. Requests should be sent to the Board Clerk, Lathina Hill, at 2477 Arnold Industrial Way, Concord, CA 94520 or [hill@countyconnection.com](mailto:hill@countyconnection.com)

Shuttle Service: With 24-hour notice, a County Connection LINK shuttle can be available at the North Concord BART station for individuals who want to attend the Board meetings. To arrange for the shuttle service, please call Robert Greenwood – 925/680 2072, no later than 24 hours prior to the start of the meeting.

### Currently Scheduled Board and Committee Meetings

Board of Directors:	Thursday, April 16, 9:00 a.m., County Connection Board Room
Administration & Finance:	Wednesday, April 1, 9:00 a.m. 1676 N. California Blvd., Suite 620, Walnut Creek
Advisory Committee:	TBA, County Connection Board Room
Marketing, Planning & Legislative:	Thursday, April 9, 8:30 a.m., 100 Gregory Ln, Pleasant Hill, CA 94523
Operations & Scheduling:	Friday, April 3, 8:00a.m., Supervisor Andersen's Office 309 Diablo Road, Danville, CA

**The above meeting schedules are subject to change. Please check the County Connection Website ([www.countyconnection.com](http://www.countyconnection.com)) or contact County Connection staff at 925/676-1976 to verify date, time and location prior to attending a meeting.**

**This agenda is posted on County Connection's Website ([www.countyconnection.com](http://www.countyconnection.com)) and at the County Connection Administrative Offices, 2477 Arnold Industrial Way, Concord, California**

# County Connection

2477 Arnold Industrial Way

Concord, CA 94520-5326

(925) 676-7500

countyconnection.com

Agenda Item No. 4.a.

## CCCTA BOARD OF DIRECTORS

### MINUTES OF THE REGULAR MEETING

February 19, 2015

#### CALL TO ORDER/ROLL CALL/CONFIRM QUORUM

Chair Dessayer called the regular meeting of the Board of Directors to order at 9 a.m. Board Members present were Directors Andersen, Hudson, Manning, Noack, Schroder, Simmons, and Storer. Director Hoffmeister arrived after the meeting convened. Directors Tatzin and Worth were absent.

Staff: Ramacier, Chun, Barnes, Barrientos, Bowron, Carroll, Casenave, Churchill, Dean, Gaston, Hill, Martinez, Mitchell, Moran and Muzzini

**PUBLIC COMMENT:** None

#### CONSENT CALENDAR

**MOTION:** Director Manning moved approval of the Consent Calendar, consisting of the following items:  
(a) Approval of Minutes of Regular Meeting of January 15, 2015: Director Schroder seconded the motion and it received the following vote of approval:

Aye: Directors Andersen, Dessayer, Hudson, Manning, Noack, Schroder, Simmons and Storer  
No: None  
Abstain: None  
Absent: Director Hoffmeister, Tatzin and Worth

#### REPORT OF CHAIR:

Chair Dessayer reported that with Jack Weir's departure from the Board, it will be necessary to nominate a Board member to serve as the Secretary. Chair Dessayer and the Nominating Committee will meet to discuss nomination of a new secretary.

#### REPORT OF GENERAL MANAGER:

##### Recognition of Employees of the 4<sup>th</sup> Quarters, 2014

Kandi Gaston-Administration

Marcel Longmire-Maintenance

Patria Aguilar-Transportation

Esperanza Cordova-Smith-Transportation

Chair Dessayer thanked the employees for their great service and expressed appreciation for all of their hard work.

Director Hoffmeister arrived.

### Update on the Applicability of PEPRA to Public Transit Employees in California

General Manager Rick Ramacier explained that the latest development in the litigation involving the applicability of PEPRA, the California Public Employees' Pension Reform Act, to public transit employees, is that the U.S. Department of Labor is holding up the release of all federal transit grants in California, under the certification process required by the labor protection provision known as 13(c) in federal transit law. A California bill was passed that would exempt public transit employees from PEPRA until a court decision was made on the applicability of PEPRA to them. On December 30, 2014, the federal district court ruled that the Department of Labor had over stepped its authority in refusing to certify pending federal grants. Accordingly, PEPRA became applicable to new public transit employees as of 12/31/2014. However, it appears that the Department of Labor is still not certifying the grants as it considers whether to appeal the court decision. Rick and CCCTA's attorneys will continue to monitor the proceedings to evaluate their effect on CCCTA's employees and federal grants.

## **REPORT OF STANDING COMMITTEES**

### **Administration & Finance Committee**

#### Authorization to Apply for Cap and Trade Funds to Support Martinez Shuttle, Resolution No. 2015-022

Director Manning stated that the Cap and Trade Funds are a grant that County Connection can use to help fund the Martinez Shuttle. Anne Muzzini explained that in order to qualify for this grant it has to benefit disadvantaged service areas. After some Board discussion, Director Manning made a motion.

**MOTION:** Director Hoffmeister moved approval of Resolution No. 2015-022, Authorize Execution of the Certifications and Assurances for the Low Carbon Transit Operations Program, which will enable staff to apply for \$185,881 in Cap and Trade funding to offset the operating cost for the Martinez Shuttle. Director Manning seconded the motion and it received the following vote of approval:

**Aye:** Directors Andersen, Dessayer, Hoffmeister, Hudson, Manning, Noack, Schroder, Simmons and Storer  
**No:** None  
**Abstain:** None  
**Absent:** Director Tatzin and Worth

### **Marketing, Planning & Legislative Committee**

#### Draft County Connection 2015 Federal Legislative Program

Director Schroder summarized County Connection's 2015 Federal Legislative Program brochure. The MP & L Committee has added the new bus colors and some new information regarding Amtrak to the brochure. He turned the meeting over to Kristina Martinez. She stated that the legislative program has very minor changes, the format is similar to last year, and it supports the reauthorization of MAP-21 and full funding of the FY 2016 appropriations bill. She opened the floor to any questions or concerns to the Board Members.

Director Hudson suggested that the brochure could include new pictures regarding greenhouse gases and the bike sharing program. Director Simmons does not want to change anything for this year but next year thought the brochure should emphasize transit's correlation to jobs and the effect public transit has on the local economy. He pointed out as examples County Connection's quick and efficient provision of bus bridges for BART in emergencies, and County Connection's special service arrangements with Bishop Ranch and the Walnut Creek Trolley. Chair Dessayer would like the committee to make the pamphlet much shorter to a one page document that highlights 2 main positions, keep it simple and specific.

**MOTION:** Director Schroder moved approval of the County Connection 2015 Federal Legislative Program. Director Simmons seconded the motion and it received the following vote of approval:

**Aye:** Directors Andersen, Dessayer, Hoffmeister, Hudson, Manning, Noack, Schroder, Simmons and Storer  
**No:** None  
**Abstain:** None  
**Absent:** Director Tatzin and Worth

### **Operations & Scheduling Committee**

#### Upgrade and Installantion of Security Gates, Resolution No. 2015-023

Director Andersen reported that the O&S Committee concluded that County Connection needs to replace all three security gates at its facilities. The Committee considered whether the old gates could be repaired instead. Scott Mitchell, Director of Maintenance explained that the gates have been in place since 1982 and it is now time to replace them. County Connection sent out requests for bids and received three different quotes. We will have two electric gates and one manual one. After a brief Board discussion, Director Andersen made a motion.

**MOTION:** Director Andersen moved that the Board approve Resolution No. 2015-023, Authorizing Award of Contract to Electronic Innovations, Inc., for Upgrade and Installation of Security Gates, which authorizes the General Manager to execute a contract with Electronic Innovations, Inc, in the amount of \$78,010.77. Director Storer seconded the motion and it received the following vote of approval:

**Aye:** Directors Andersen, Dessayer, Hoffmeister, Hudson, Manning, Noack, Schroder, Simmons and Storer  
**No:** None  
**Abstain:** None  
**Absent:** Director Tatzin and Worth

**BOARD COMMUNICATION: None**

**ADJOURNMENT:** Chair Dessayer adjourned the regular Board meeting at 9:38 a.m.

Minutes prepared by

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Lathina Hill  
Assistant to the General Manager

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Date

To: Board of Directors

Date: March 9, 2015

From: J. Scott Mitchell  
Director of Maintenance

Reviewed by:

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**SUBJECT: Authorization for the General Manager to direct Gillig and BAE Systems to Proceed with Detailed Mechanical Design of Walnut Creek Trolleys**

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**BACKGROUND:**

At the September 10, 2014 Board of Directors' meeting, the Board authorized the General Manager to release a purchase order to Gillig Corporation for construction of four (4) chassis for the electric trolley project. At that time, staff was still researching power options for this project.

**SUMMARY OF ISSUES:**

After researching multiple options and manufacturers to do this work, County Connection staff and Gillig have determined that BAE Systems will be the best option for this project.

BAE SYSTEMS

Production HybriDrive Series-E hybrid has all the required components for an electric vehicle:

- Delete Engine/Generator, replace hybrid battery with larger battery
- Everything else stays the same: Traction Motor, Inverter, APS, SCU and accessories

4500 fielded Series Hybrid Electric systems with over 600 million revenue service miles.

Selected by IVECO as systems integrator for Paris Hybrid and electric vehicle bus program with three (3) different ESS solutions and three (3) different charging solutions.

Working with inductive charging supplier IPT, on an Alexander Dennis project in the UK.

Buy America Compliant System.

Engineering Depth and Capability:

- Hybrid Drive Systems Group – 250 full-time employees. 100 which are engineering
- Extensive dynamometer cells, engineering labs and vehicle integration facilities
- Extensive vehicle integration experience including simulation capabilities
- Direct access to the range and depth of BAE Systems corporate resources
- Established service and support capabilities through the production HEV product line

This system will utilize medium size battery and charge inductively at a low rate. This will:

- Optimize battery life
- Driving range margin maintained throughout the day and life of the battery
- No moving parts on inductive system
- Non-obtrusive charging infrastructure piece

**FINANCIAL IMPLICATION:**

Preliminary cost to add electric drive.  
Per vehicle:

\$549,992  
          4  
\$2,199,968

Cost to add electrical drive to chassis:	\$549,992
Adjusted cost per chassis:	+ \$416,830
Total cost per bus:	\$966,822
	<u>          4</u>
Total cost for four buses:	\$3,867,288

Federal Grant CA588-0018:	\$4,320,000
Local Match:	+ \$864,000
	<u>          </u>
	\$5,184,000

County Connection has \$5,184,000 to fund four (4) buses and infrastructure for this project.

The chassis have already been competitively bid on County connection RFP #2012-MA-02.

RECOMMENDATIONS:

The A&F Committee recommend that the Board of Directors at its March 19, 2015 meeting, adopt a resolution authorizing the General Manager to release a purchase order to the Gillig Corporation for the purchase of four (4) electric trolleys. Cost not to exceed \$4,212,860. Contingent on approval from the Federal Transit Administration (FTA).



To: Board of Directors

Date: March 9, 2015

From: J. Scott Mitchell  
Director of Maintenance

Reviewed by:

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**SUBJECT: Authorization for the General Manager to direct WAVE Inc. to Proceed with Inductive Charging Infrastructure Engineering for Walnut Creek and Concord Facilities for Support of the Electric Trolley Project**

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**BACKGROUND:** The County Connection Board of Directors has authorized the purchase of four (4) electric trolleys for the Walnut Creek Trolley project. This project will require in-route charging infrastructure in Walnut Creek and at the Concord facility.

**SUMMARY OF ISSUES:** The trolleys are being designed by Gillig with integration and drivetrain provided by BAE Systems. County Connection staff did extensive research on various in-route charging systems for this project. County Connection staff believes that an inductive charging system provided by WAVE Inc. is the best option for this project.

WAVE uses a 50 kw in-ground inductive charger. This will be installed in Walnut Creek. This system provides a wireless power transfer solution. It is fast charging and efficient. It uses an in-ground primary charging pad which provides for minimal infrastructure at the site with no moving parts, making it a very low maintenance system. Using in-route charging allows the vehicle to use smaller batteries and reduces the weight of the vehicle without losing range.

WAVE installed this system at the University of Utah in early 2014. Monterey-Salinas Transit is using WAVE for their electric trolley project. There are plans to use this system in Long Beach, California and McAllen, Texas.

WAVE is an American company and meets all Federal Transit Administration (FTA) Buy America guidelines.

WAVE will work with County Connection to understand the infrastructure requirements for the initial primary in-ground charger. WAVE and County Connection will establish a schedule for infrastructure development (i.e., utility hookup, permitting, etc.) needed to meet the deployment schedule for the Gillig trolleys.

**FINANCIAL:** Cost not to exceed \$1,015,000.

**RECOMMENDATIONS:** Contingent on approval from the FTA, the A&F Committee recommend that the Board of Directors at its March 19, 2015 meeting, adopt a resolution authorizing the General Manager to release a purchase order to WAVE Inc. for the purchase of the WAVE system.



# Enabling Electric Vehicles

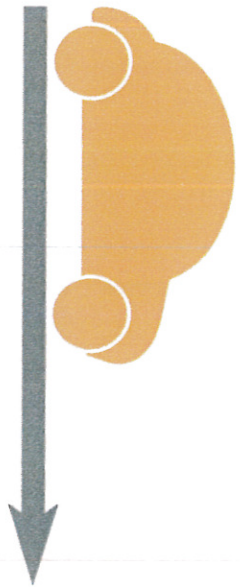
by solving the charging problem

## CCCTA

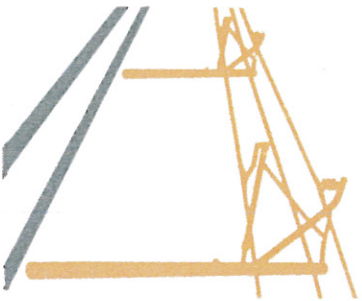
1 WAVE Confidential & Proprietary – Do Not Distribute



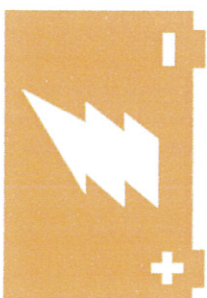
# All-Electric Transportation | Market Pain



Limited Range



Ugly & High Maintenance

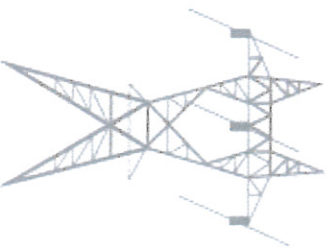


Heavy & Expensive Batteries

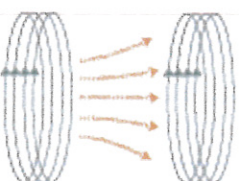


Impractical

# Wireless Power Transfer | The Solution



Electric Grid



Wireless Charger



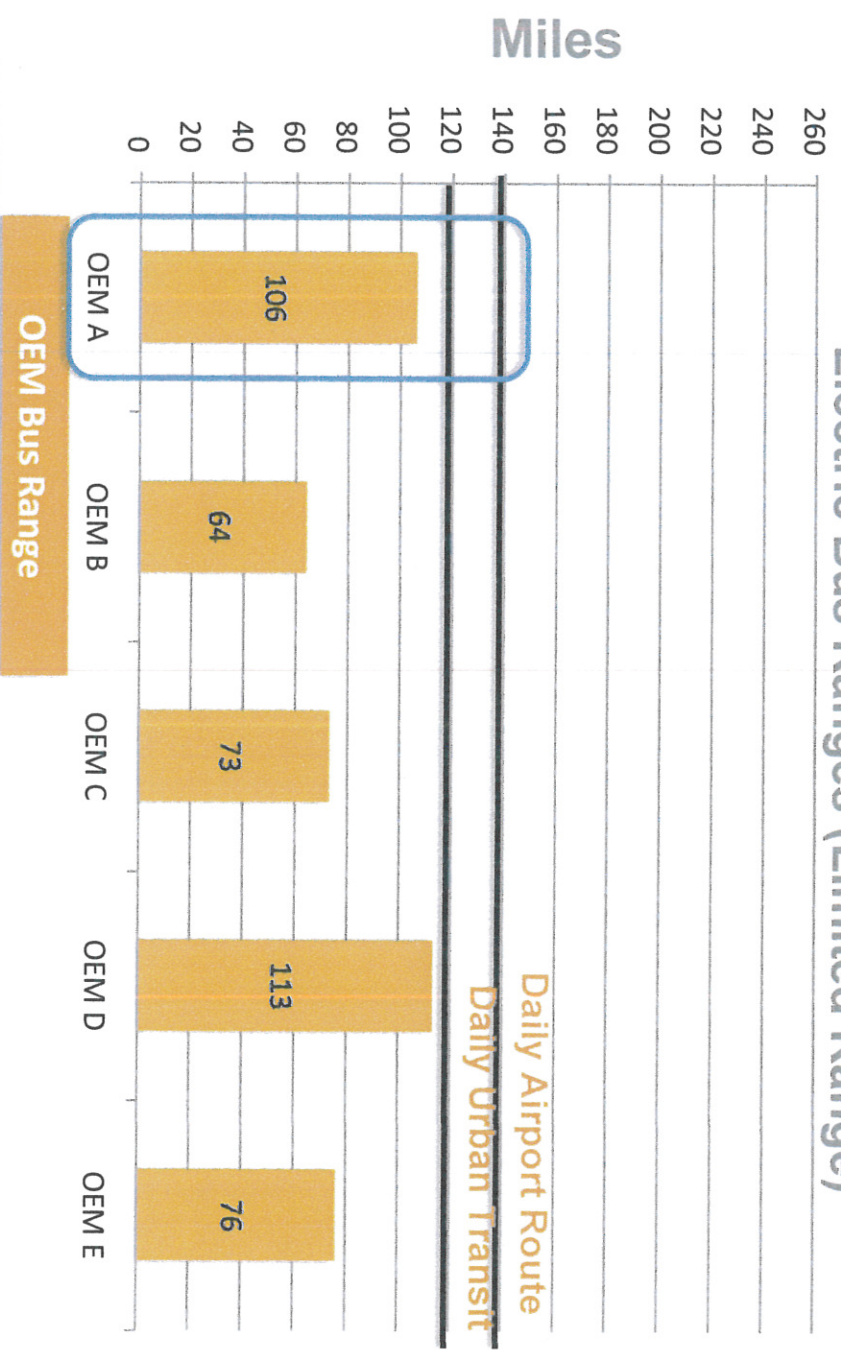
Vehicle

## WAVE Technology:

- ✓ Safe Power Transfer through Road & Weather
- ✓ Fast Charging
- ✓ Large Air Gap – No Mechanical Movement
- ✓ Efficient > 90%

# Electric Buses | Market Pain

Electric Bus Ranges (Limited Range)

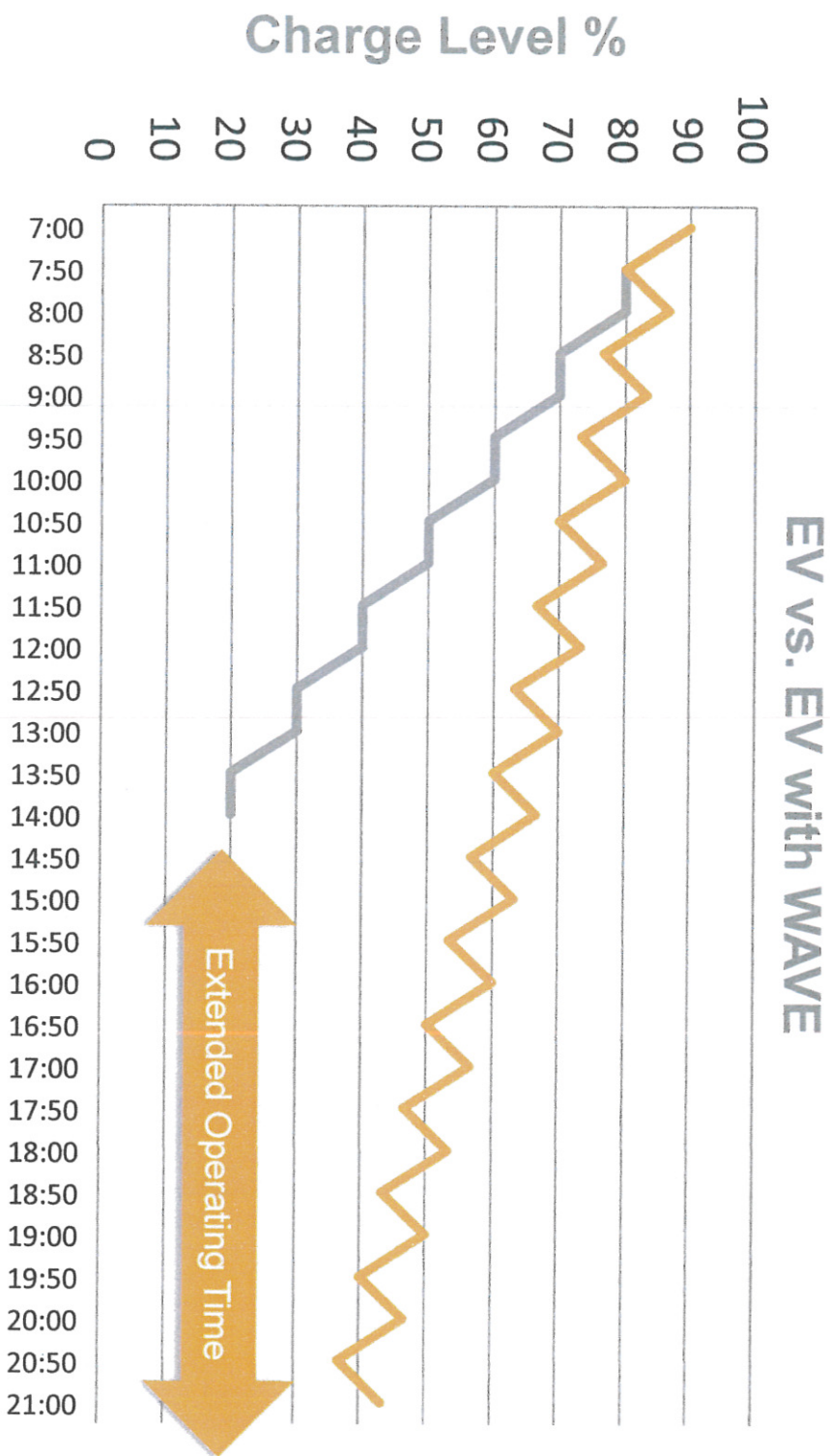


# Range Extender™ | Range Extension – 50 kW

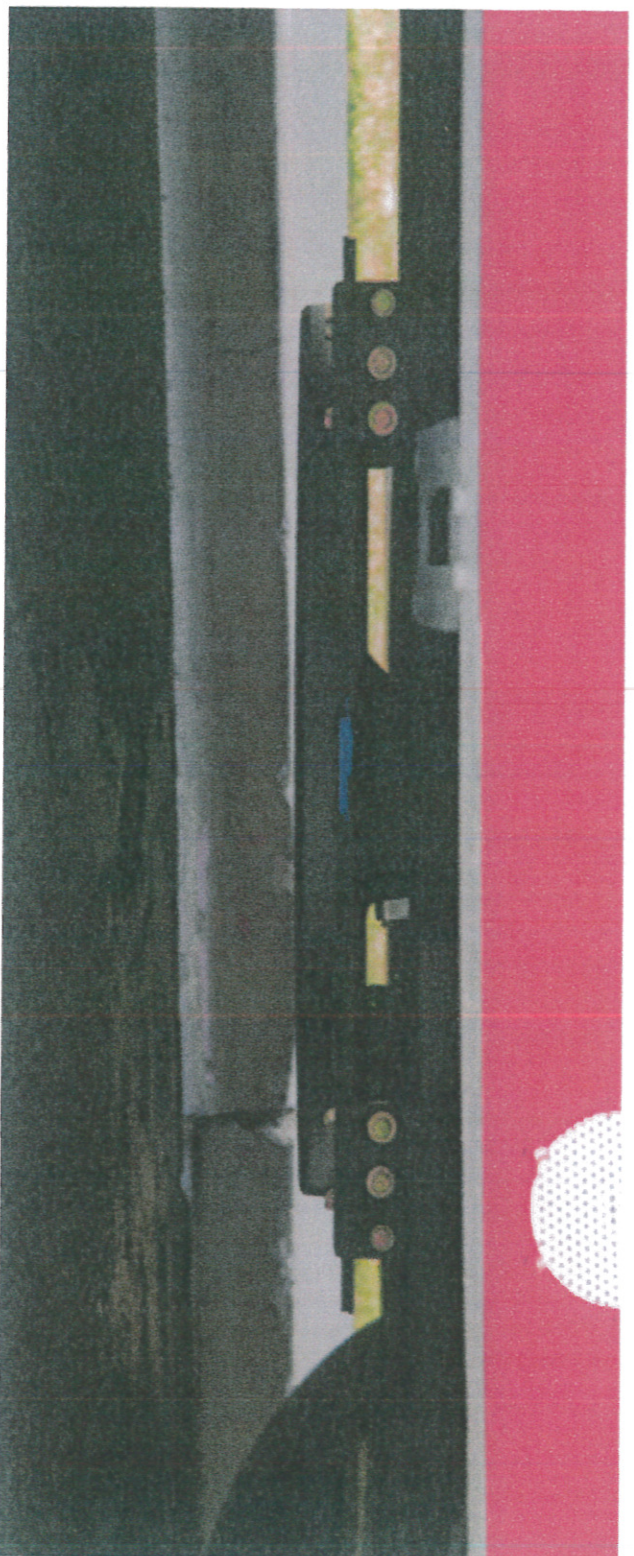
## Electric Bus Ranges with Range Extender™



# Opportunity Charging | Range Extension – 100kW



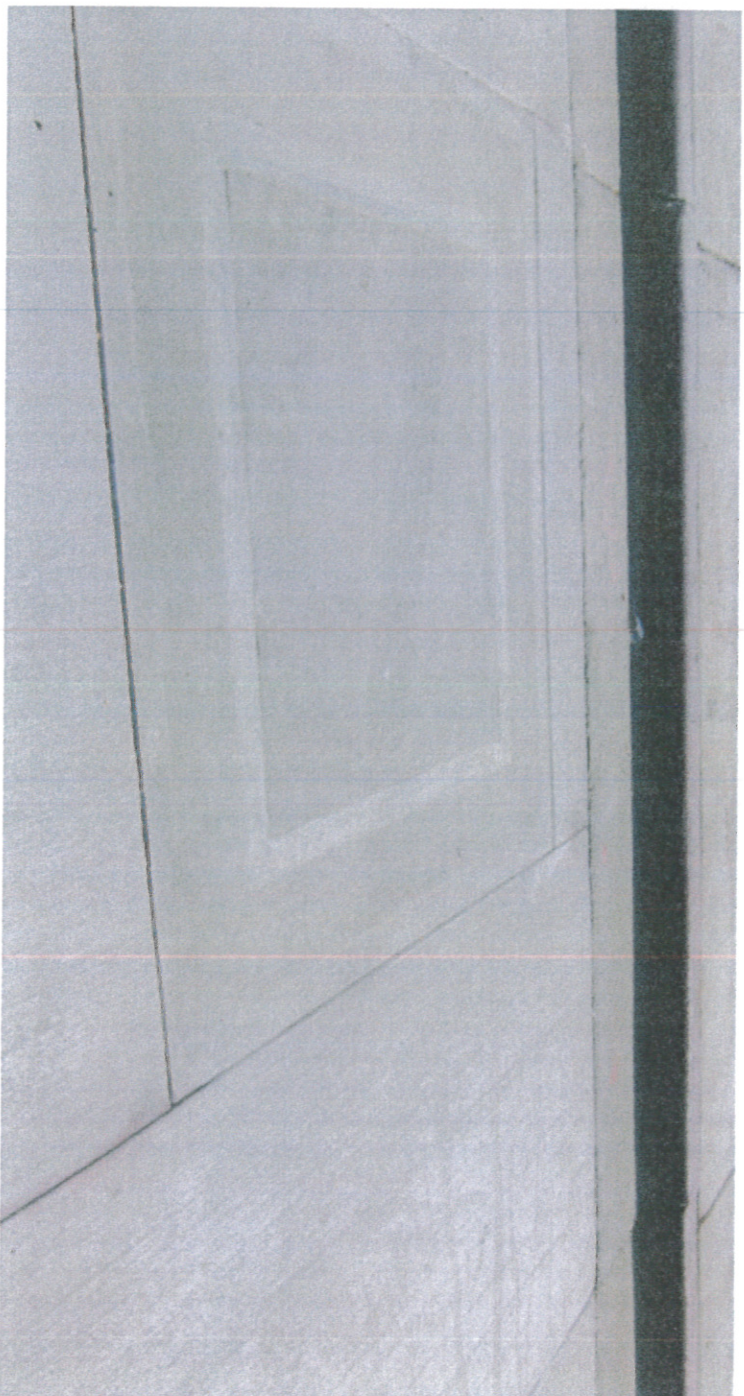
# An Elegant Solution | Minimal Infrastructure on Vehicle



*WAVE's Secondary Pad on Underside of Vehicle*

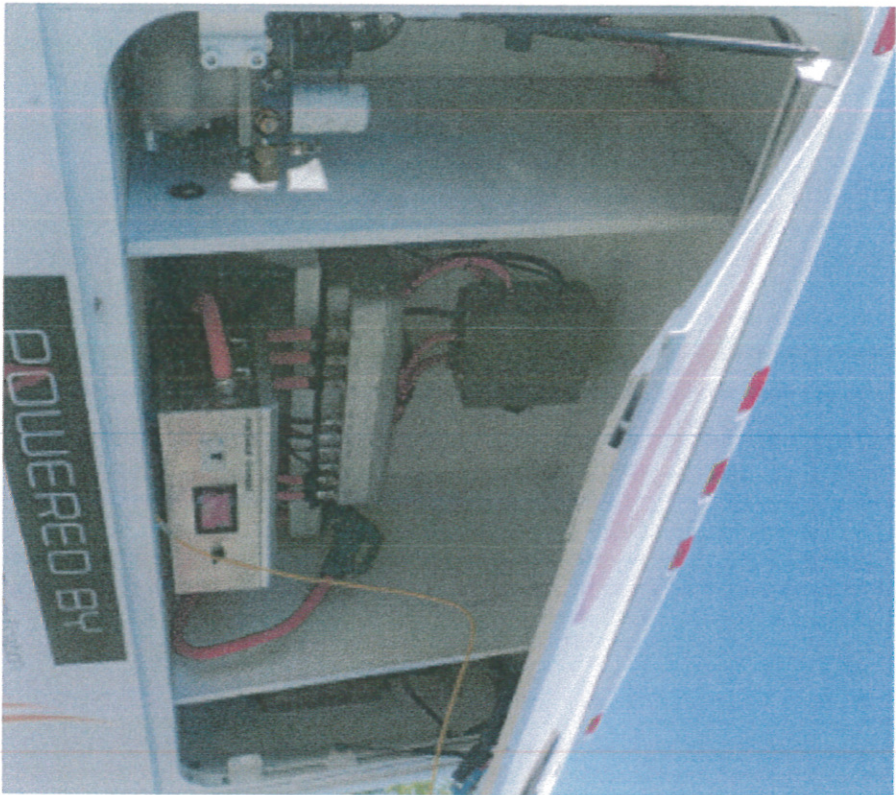


# An Elegant Solution | Minimal Infrastructure on Road

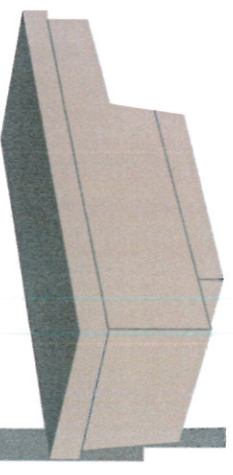


*WAVE's In-Ground Primary Charging Pad*

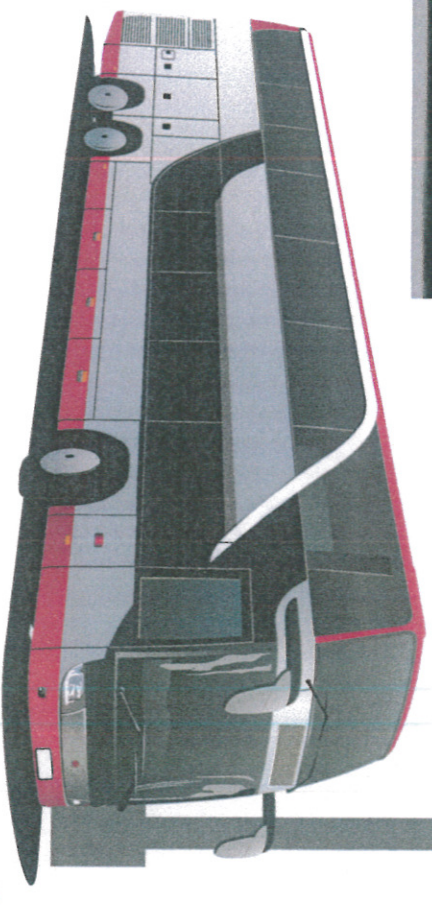
# An Elegant Solution | Small Footprint on Vehicle



# Competitive Landscape | Flawed All-Electric Charging Options



- ☑ Large
- ☑ Unappealing
- ☑ Mechanical Failures
- ☑ Long Connection Time



# Utah Transit Authority | First Commercial Deployment

- \$3.2M project, fully-funded
- 50 kW charging system
- Feeder shuttle off of UTA's light rail "TRAX" system
- Operational Q1 2014



Remanufactured All-Electric ZEPS Bus from CCM



Charging System Primary Pad  
(bottom left corner)

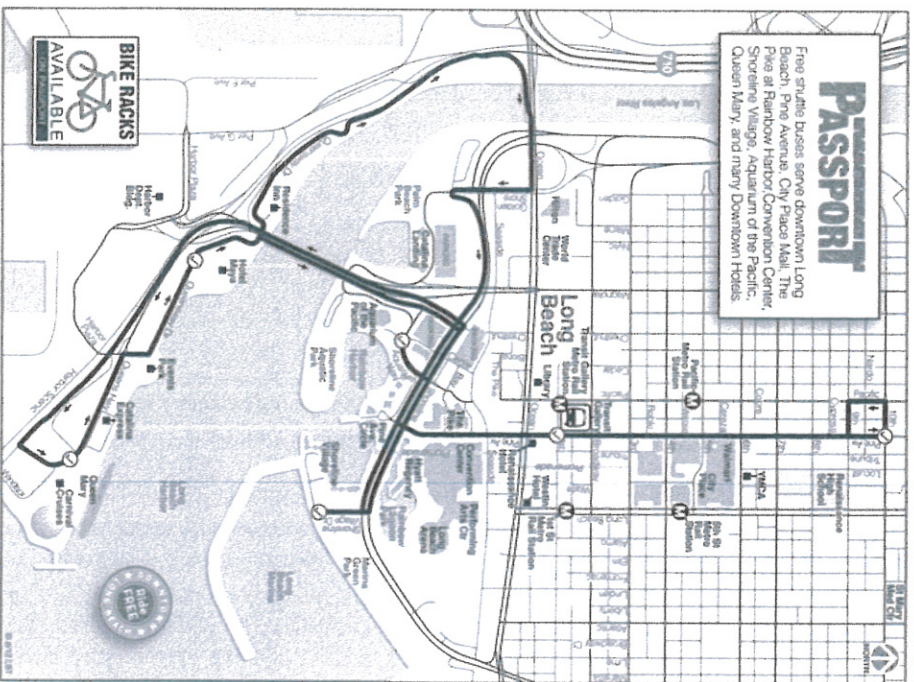
# Monterey Salinas Transit | Waterfront Trolley Route



- \$2.1M project, fully funded
- All-electric trolley replaces current diesel trolley
- 4.5 mile route
- 50 kW charging system (at Aquarium)



# Long Beach Transit Authority | Queen Mary 'Passport' Route



- \$2M project, fully funded
- Downtown Long Beach hotels, convention center, restaurants and attractions
- Two 50 kW charging systems (at the Queen Mary)
- System powers BYD Motors all-electric fleet (10 buses)

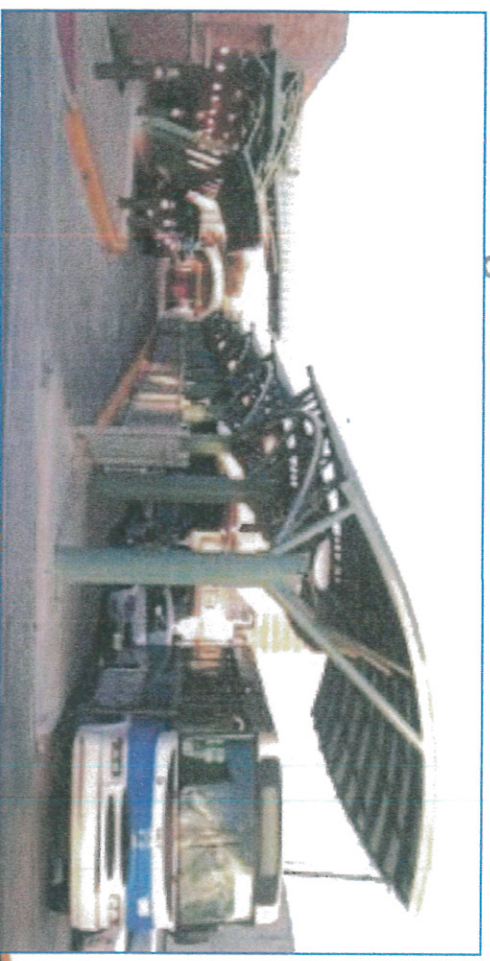


## City of McAllen | A Green Route in Texas

- Prime Contractor of a \$2M project, fully funded
- Route will provide all electric service to the airport, hospital and shopping center
- A 50 kW charging system for two Complete Coach Works “ZEPS” Buses
- Awarded the grant after a competitive bidding process



metro  
McAllen, Texas



# Team



**Michael Masquellier**  
**CEO & CTO**

Serial entrepreneur and technology expert in wireless, power electronics and sensors with 11 issued and pending patents including Motorola Labs



**Wesley Smith**  
**Chief Development Officer**

20 years business development and startup experience: Goldman Sachs funded company & JV with IBM Global Solutions



**Guy Letendre**  
**Chief Operating Officer**

Autoliv Director of Engineering & Airbag Manufacturing Plant, Supply Chain management; B.S. Mechanical Engineering; MBA



**Hunter Wu**  
**Chief Scientist**

Co-inventor of University of Auckland WPT system; Ph.D Electrical Engineering; Chief Scientist at Utah State University



**John English**  
**Director**

Former Utah Transit Authority CEO, national leader in transit industry

Contact: **Wesley Smith CDO**

+1 435 731 0308

[wesley@waveipt.com](mailto:wesley@waveipt.com)