EXISTING CHARGING LOCATIONS

1. There are total of 14 outlets on campus that can be converted into charging stations.

    10 stalls – Lot D

    4 stalls – Building 23

PROPOSED ELECTRIC VEHICLE (EV) CHARGING LOCATIONS

1. Five proposed locations for EV charging stations:
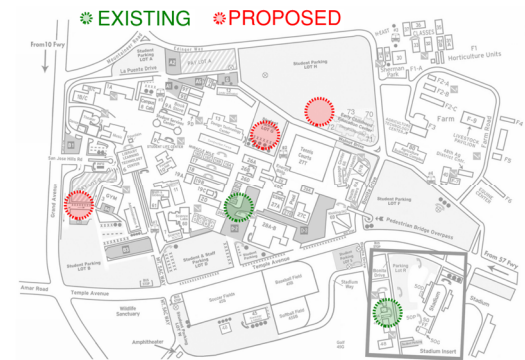
    10 stalls – Lot D (convert existing outlets)

    4 stalls – Building 23 (convert existing outlets)

    10 stalls – Lot B

    10 stalls – Lot G

    10 stalls – Lot H

FINDINGS

1. List of EV charging networks being considered:

    A   Chargepoint
    B   SemaConnect
    C   EV Connect

2. RATES:

    Typical rates are $2 per hour for the first two hours then increase to $4 per hour (Mt. SAC will set rates). The increase is to encourage drivers to free up the charging stations. Drivers will create their own accounts with the network provider, not with Mt. SAC.

    Some network providers charge the owner monthly cost $20-$40 per unit for network access fee, revenue sharing (10%), credit card billing/processing (4%), and maintenance.

3. INSTALLATION COSTS:

    EV charging unit cost varies with different manufacturers, ranging from $3500 to $6000 per unit, plus infrastructure costs (varies per site).

4. INCENTIVE/PROGRAMS:

    Southern California Edison (SCE) Incentive: SCE will pay 100% for the infrastructure plus 25% for charging stations. SCE requires owners to purchase all 10 charging stations and agree to a minimum 10-year contract with the network provider.

    California Public Utilities Commission (CPUC): This program (through the company NRG eVgo – settlement agreement) will pay for infrastructure costs up to $3,000 per unit, with a maximum of $30,000 per location for 10 charging stations. Buying all 10 charging stations is not required under this program.

DESCRIPTION	CHARGEPOINT	SEMACONNECT	EVCONNECT
CHARGER UNIT MFR	LEVITON	SEMACONNECT/ CHARGEPRO	GE
TYPE	LEVEL 2, PEDESTAL, **DUAL** STATION, W/ CABLE MGMT	LEVEL 2, PEDESTAL, **SINGLE** STATION W/ CABLE MGMT	LEVEL 2, PEDESTAL, **DUAL** STATION, RETRACTABLE CABLE
COMMUNICATION TYPE	WIFI, ONLY ONE UNIT W/ GATEWAY	WIFI, PER UNIT	CAT5 ETHERNET OR WIFI, PER UNIT
UNIT COST	$7,200 (gateway) / $6,700 (non-gateway)	$4,290	$3,800
NETWORK SERVICE FEE	$0	$20/UNIT/MONTH (AFTER 2-YRS)	$20-40/UNIT/MONTH
UNIT SERVICE FEE	$18.42/UNIT/MONTH	$13/UNIT/MONTH	$16.70/UNIT/YR
REVENUE SHARING	10%	0	10%
CREDIT CARD PROCESSING	0	4%	0
WARRANTY	1-yr	2-yrs	3-yrs
PROJECTED MONTHLY REVENUE	$352	$352	$352
MONTHLY OPERATING COST	$53.62	$65.08	$91.90
MONTHLY NET INCOME	$298.38	$286.92	$260.10
ANNUAL NET INCOME	**$3,580.56**	**$3,443.04**	**$3,121.20**

NOTES:

1. Monthly revenue based on 8-hour charging usage in 22 days per month, $2 per hour.
2. Chargepoint is the largest network (approx. 18,000 stations) of independently owned EV charging stations operating nationwide, with quarter of its stations located in California. They have stations in CSU, UC, and other local colleges and universities.
3. SemaConnect is a network (approx. 2,000 stations) of independently owned EV charging stations with greatest concentration in California, Maryland, Virginia, Washington, DC and Pacific Northwest.
4. ChargePoint and SemaConnect are both close network system. Meaning their charging units are only compatible with their network. If we decide to change network provider, we need to buy new EV charging units.
5. EV Connect is an open network system (Open Charge Point Protocol - OCPP) that can accommodate various manufacturers of EV charging units. They can supply GE WattStation, or another manufacturer, as long as it is an OCPP unit.
6. PlugShare is the world's largest electric vehicle (EV) charging network with a database of 26,000+ charging stations in the U.S. and Canada. ChargePoint, SemaConnect and EV Connect stations can be accessed through Plugshare network.