

So you want to install a charging station.....

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The Question is no longer “whether” they will come, but “how fast” and “where first”

**Roland Berger Strategy
Consultants**

Initial Questions:

- Who will be your target user?
- Will you charge for the power consumed?
- Where will the stations be located?
- How will you pay for this?
- Do you have a power connection near by?
- Do you want to have a hard wired or wireless data connection?
- How will you handle maintenance?
- How will you keep up with changes in technology?



How to get started:



- **Prepare a rock solid RFP (request for proposals)**
 - Do you want single or dual stations? (Level II, Dual is most cost effective)
 - Have a price lock for (1) year in case you want to buy more
 - Declare that the price must include shipping & transportation cost
 - Declare that the price will be fixed no matter how many units you purchase
 - Include requirements for credit card security protocol
 - Get a maintenance agreement for (2) years with (1) yr. options
 - Get flexibility in how you charge if you decide to use the credit card system. In other words, if you want to charge \$0 on Saturday, but \$2 per hour on Monday, make sure that is covered. Or if you want the first (2) hours to be free, and charge \$2 after that, make sure that is written.
 - Specify if you want a hard wire data line or wireless or both. Most come with wireless, but credit card security sometimes dictates a hard wire
 - Make sure the unit can obtain its own IP address, can be connected to

So how did we do?



– Our RFP results.....

- **(Yes)** Level II, Dual Charging Station
- **(Yes)** Have a price lock for (1) year in case you want to buy more
- **(Yes)** Declare that the price must include shipping & transportation cost
- **(Yes)** Declare that the price will be fixed no matter how many units you purchase. **Cost per unit was around \$7500.00 for each unit.**
- **(No- but they programmed it in later since we had it in the RFP)** Include requirements for credit card security protocol
- **(Yes)** Get a maintenance agreement for (2) years with (1) yr. options
- **(No- but they programmed it in later since we had it in the RFP)** Get flexibility in how you charge if you decide to use the credit card system. In other words, if you want to charge \$0 on Saturday, but \$2 per hour on Monday, make sure that is covered. Or if you want the first (2) hours to be free, and charge \$2 after that, make sure that is written.

So how did we do?

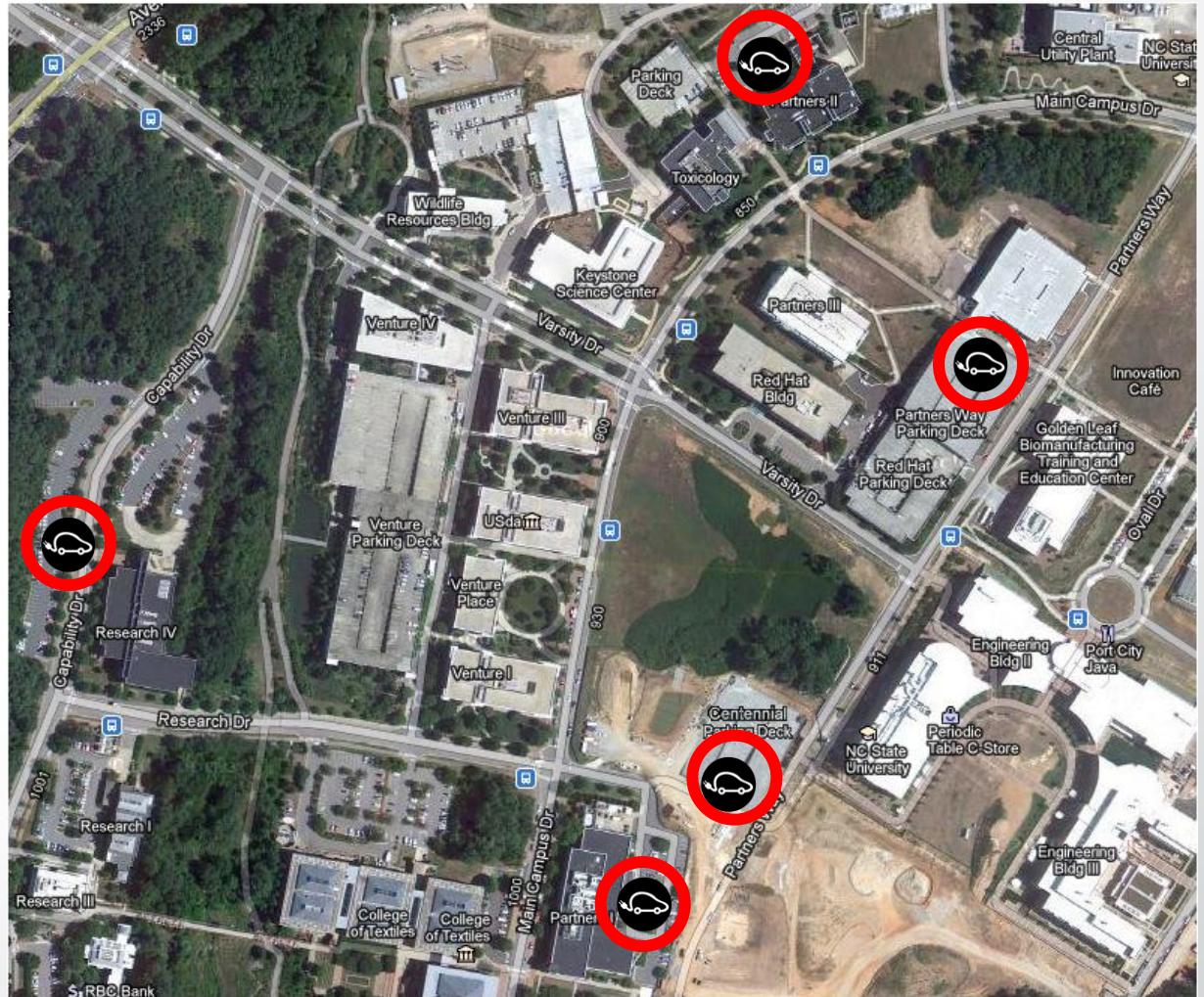
– Our RFP results (continued).....

- **(Yes- Hard wire only)** Specify if you want a hard wire data line or wireless or both. Most come with wireless, but credit card security sometimes dictates a hard wire
- **(Yes, but we had some coordination to make this work. Finally determined the right ways to get it to work)** Make sure the unit can obtain its own IP address, can be connected to a network, and will be able to supply data on how it is used
- **(Yes)** Get a system that the software can be updated at a reasonable cost.



Where are they Located?

- West Oval Deck
- Partners I
- Partners II
- Partners Way Deck
- Research IV



What did we get?



Partners & Cost?

- Advanced Energy Study & RFP assistance:
\$25,000.00
- Engineering drawings for data & electrical \$13,000.00
- Cost for (5) dual charging stations:
\$37,600.00
- Installation Cost for (5) dual charging stations:
\$47,000.00
- Data Connection Cost for (5) dual charging stations:
\$16,800.00
- PEP Station Data Service Plan \$7,771.00
- PEP Stations Data Collection Subscription
\$901.00
- **Total Cost**
\$148,072.00

Issues?

- Data modules went down on a few units, and were replaced at no cost.
- Units trip off from time to time. You have to flip the breaker to get the system to reboot, and it comes back up
- We have added these units to our routine maintenance for once a week to check the units to make sure they are running, flip the breaker, and coordinate with PEP. This adds about \$2500.00 in cost per year.

Questions?

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