



ZEF ENERGY

Building a Zero Emissions Future



TWIN CITIES - DC FAST CHARGING

ZEF ENERGY

YOUR CLEAN TECHNOLOGY DEVELOPMENT PARTNER

"PER CAPITA, MINNESOTA IS AMONG THE TOP 10 STATES WITH THE HIGHEST NUMBERS OF ELECTRIC VEHICLES IN THE COUNTRY"

"... SALES OF THE EMISSIONLESS VEHICLES HAVE SPIKED 500 PERCENT IN PAST TWO YEARS, ACCORDING TO ENVIRONMENT MINNESOTA"

<http://insideevs.com/minnesota-among-top-10-us-states-plug-electric-vehicle-registrations/>

DC FAST CHARGING – WHY THE FUSS?

CHARGER PROGRESSION

- SHORTER CHARGING TIMES MEAN USERS ARE MORE LIKELY TO MAKE USE OF THE SURROUNDING FACILITIES
- SHORTER CHARGING TIMES ALLOW FOR GREATER TRAFFIC ON THE SYSTEM, AND THE ABILITY TO CHARGE HIGHER FEES FOR THE CONVENIENCE
- THE THEORETICAL MAXIMUM DAILY INCOME IS 15 TIMES LARGER, BY FAR MAKING UP FOR THE LARGER CAPITAL OUTLAY

	CHARGING POWER	TIME TO FULLY CHARGE	RANGE PER PER HALF HOUR OF CHARGING	MAXIMUM
LEVEL 1	1.4 KW	21 HOURS	3 MILES	1
LEVEL 2	6.6 KW	4 HOURS	12 MILES	6
DC FAST CHARGER	50 KW	50 MINS	60 MILES	36

Note: These figures are based on Nissan Leaf 24kWh model

DC FAST CHARGING - 2014

BARRIERS TO EV ADOPTION

- NO FAST CHARGING OPPORTUNITIES IN MN FOR ELECTRIC VEHICLE OWNERS
- ONLY UNITS CURRENTLY IN MN ARE TESLA SPECIFIC

OPPORTUNITY

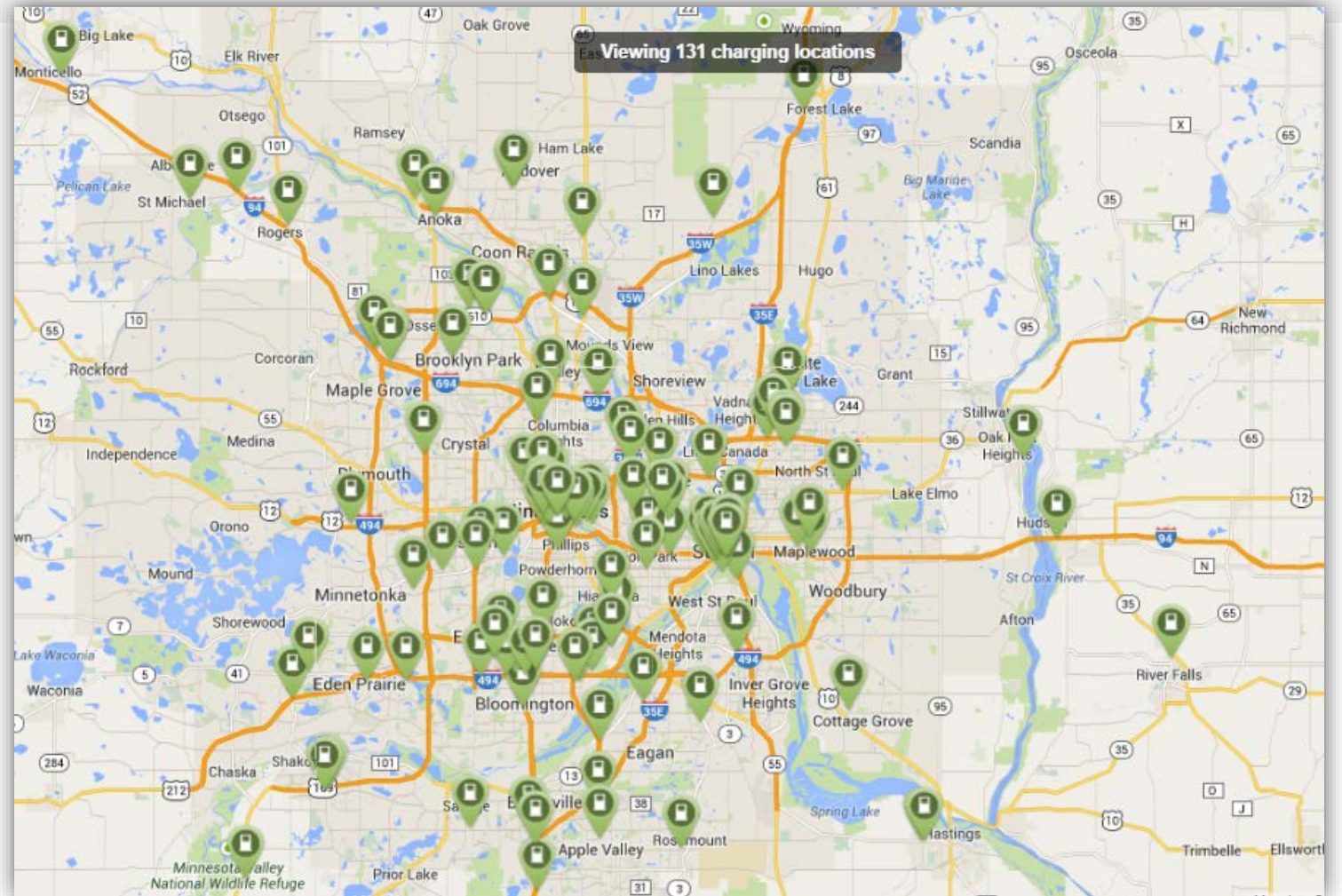
- TO BE PART OF THE FIRST SET OF ORGANISATIONS IN MN TO OPERATE FAST CHARGERS (20/30 MIN VS 4 HOUR CHARGE)
- GREAT OPPORTUNITY TO OFFER ELECTRIC VEHICLE CHARGING TO CUSTOMERS & THE PUBLIC WITH A STRONG EV CHARGING OFFERING



TWIN CITIES CHARGING BD (BEFORE DC!)

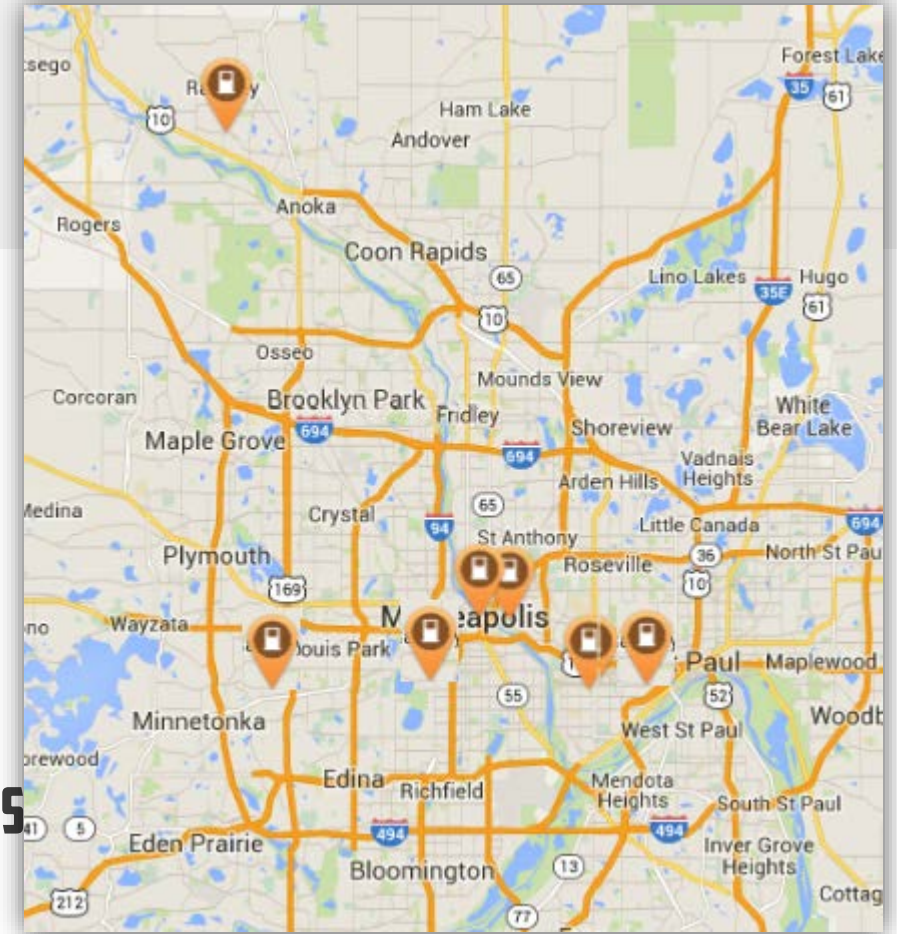
CURRENT CHARGING OPPORTUNITIES

- **131 CHARGERS IN THE TWIN CITIES METRO**
- **69 LEVEL 1 = 21 HOURS TO CHARGE TO 100%**
- **62 LEVEL 2 = 4-7 HOURS TO CHARGE TO 100%**
- **0 DC FAST CHARGER = 40 MINUTES TO 100%**

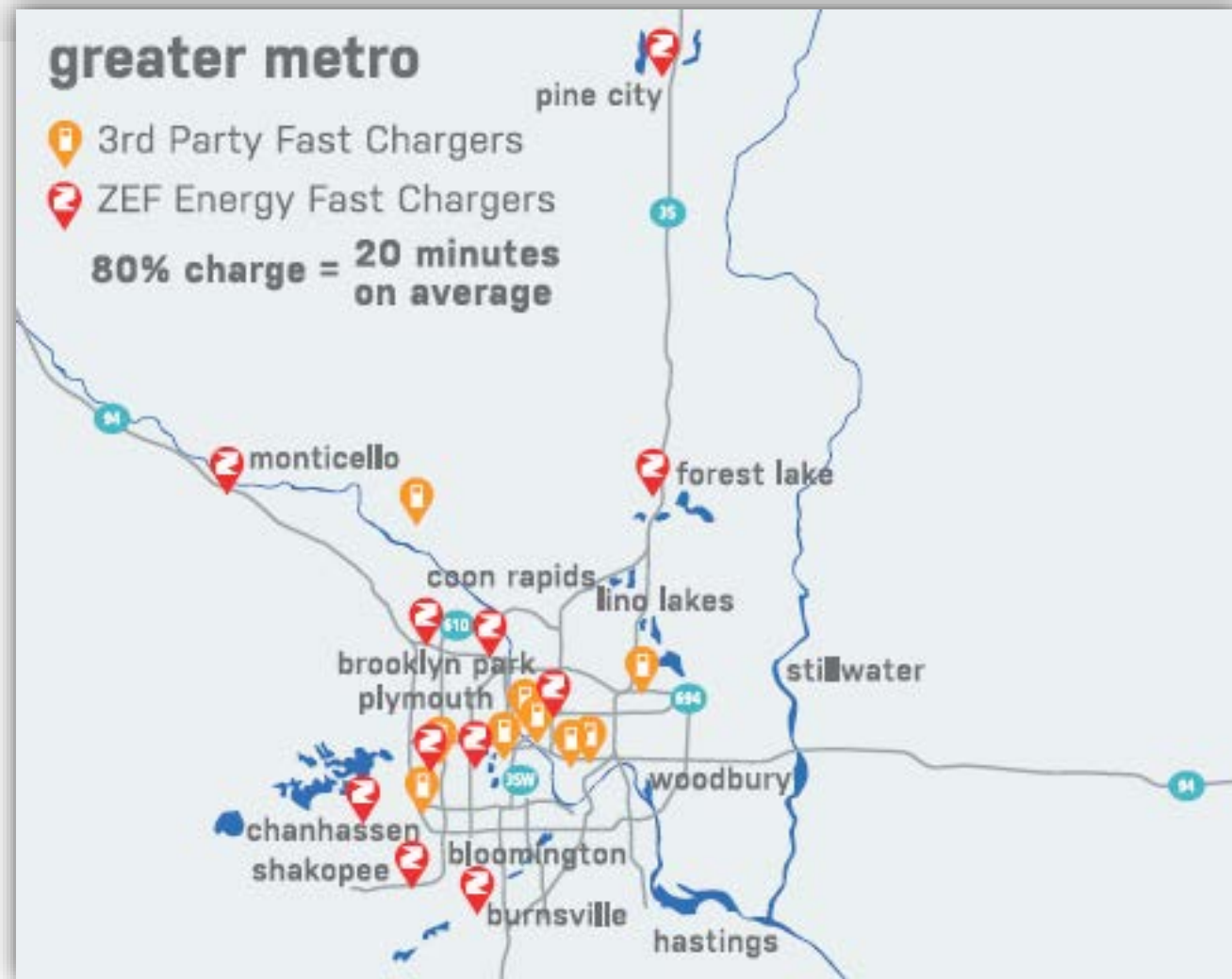


DC FAST CHARGING – 2015 Q1

- CONNEXUS ENERGY – RAMSEY
- 36TH & LYNDAL AVE – SOUTH MINNEAPOLIS
- UMN – HARVARD AND WASHINGTON - MINNEAPOLIS
- UNITY CHURCH – UNITARIAN – ST. PAUL
- MACALESTER COLLEGE – ST. PAUL
- GREENROCK APARTMENTS – 11TH & WASHINGTON – DOWNTOWN MINNEAPOLIS
- ZEF ENERGY - DRISKILLS PARKING LOT – HOPKINS



COMING SOON



**- 19 TOTAL DC CHARGERS!
- BY END OF Q2 2015**

PAYMENT

CHARGING NETWORKS

- GREENLOTS
- CHARGEPOINT

PAYMENT COSTS

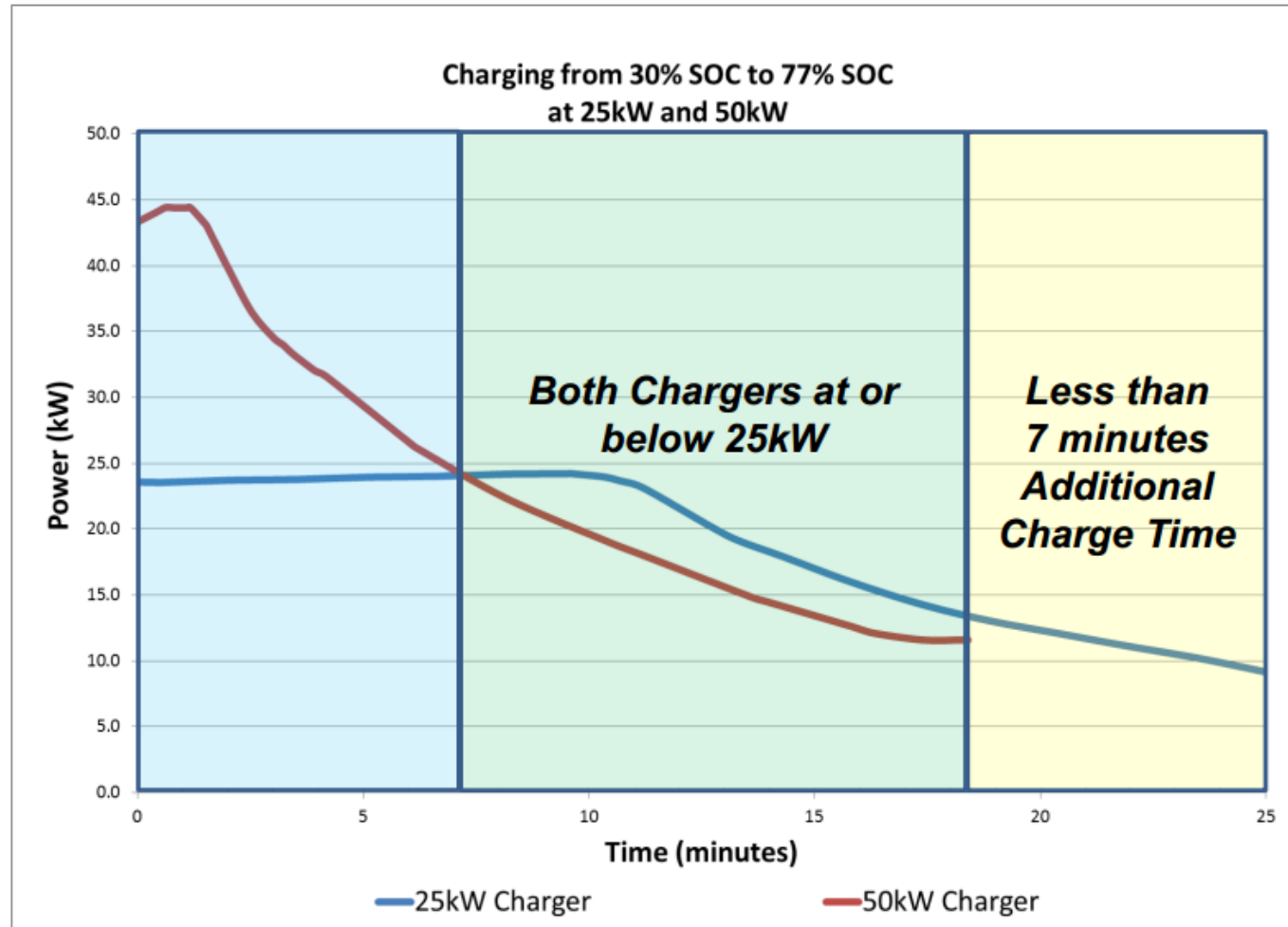
- UMN FREE
- ROUGHLY \$3.50 FOR AN AVERAGE CHARGE
- SUBSCRIPTIONS AVAILABLE IN Q2/Q3 2015

PAYMENT METHODS

- RFID KEYFOB
- MOBILE APP:
 - QR CODE SCAN
 - STATION ID
 - MAP SELECTION



CHARGING PROFILES



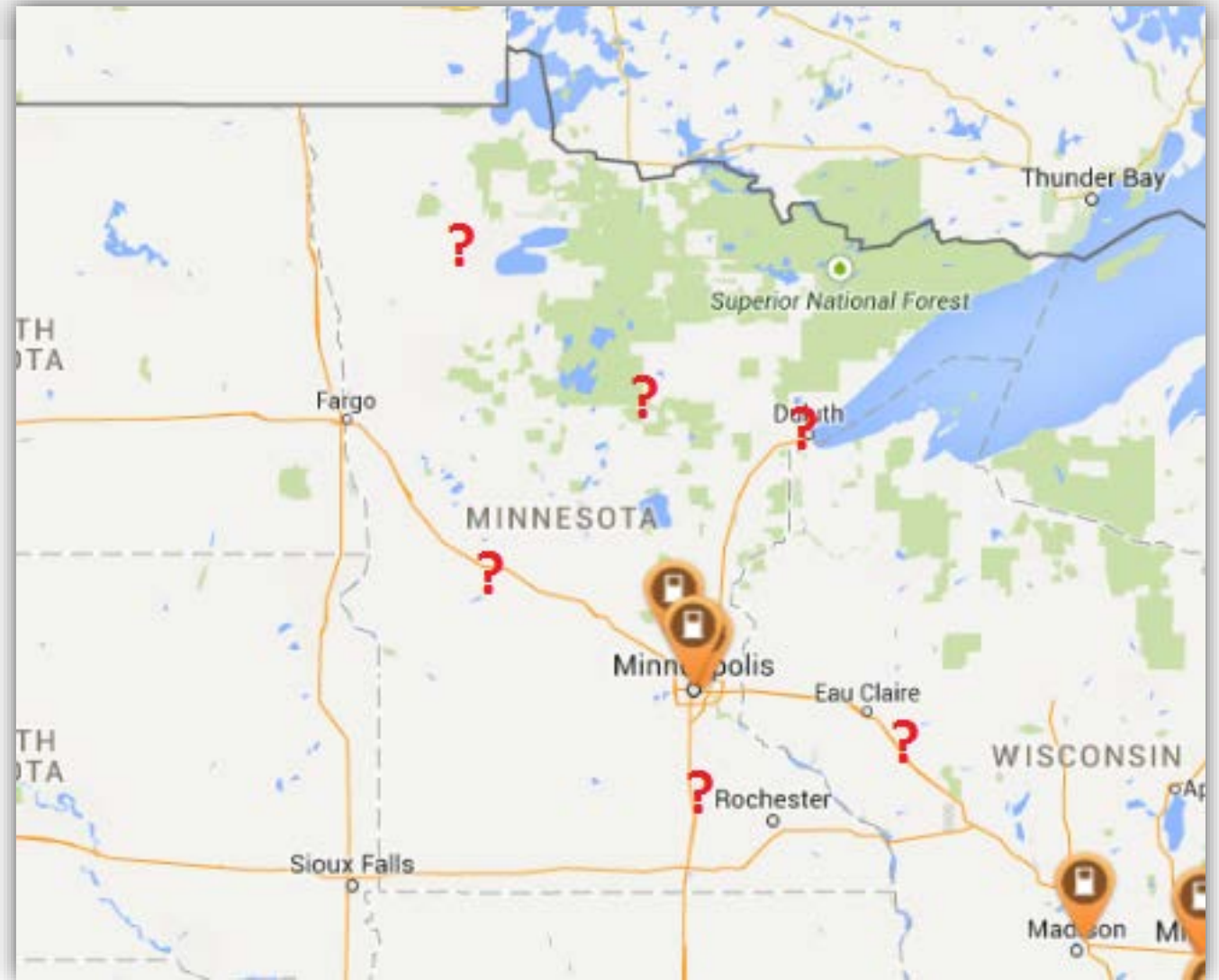
LETS TALK ABOUT THE WEATHER!



SEARCHING FOR PARTNERS!

WE NEED YOUR HELP!

- ZEF NETWORK IS EXPANDING
 - MAIN CORRIDOR COVERAGE IS REQUIRED
 - PROFIT SHARING PARTNERSHIPS ARE NEEDED
- AT THE FOLLOWING LEVELS:
- CITY
 - UTILITY
 - BUSINESS



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