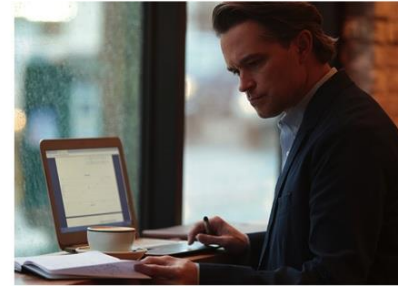
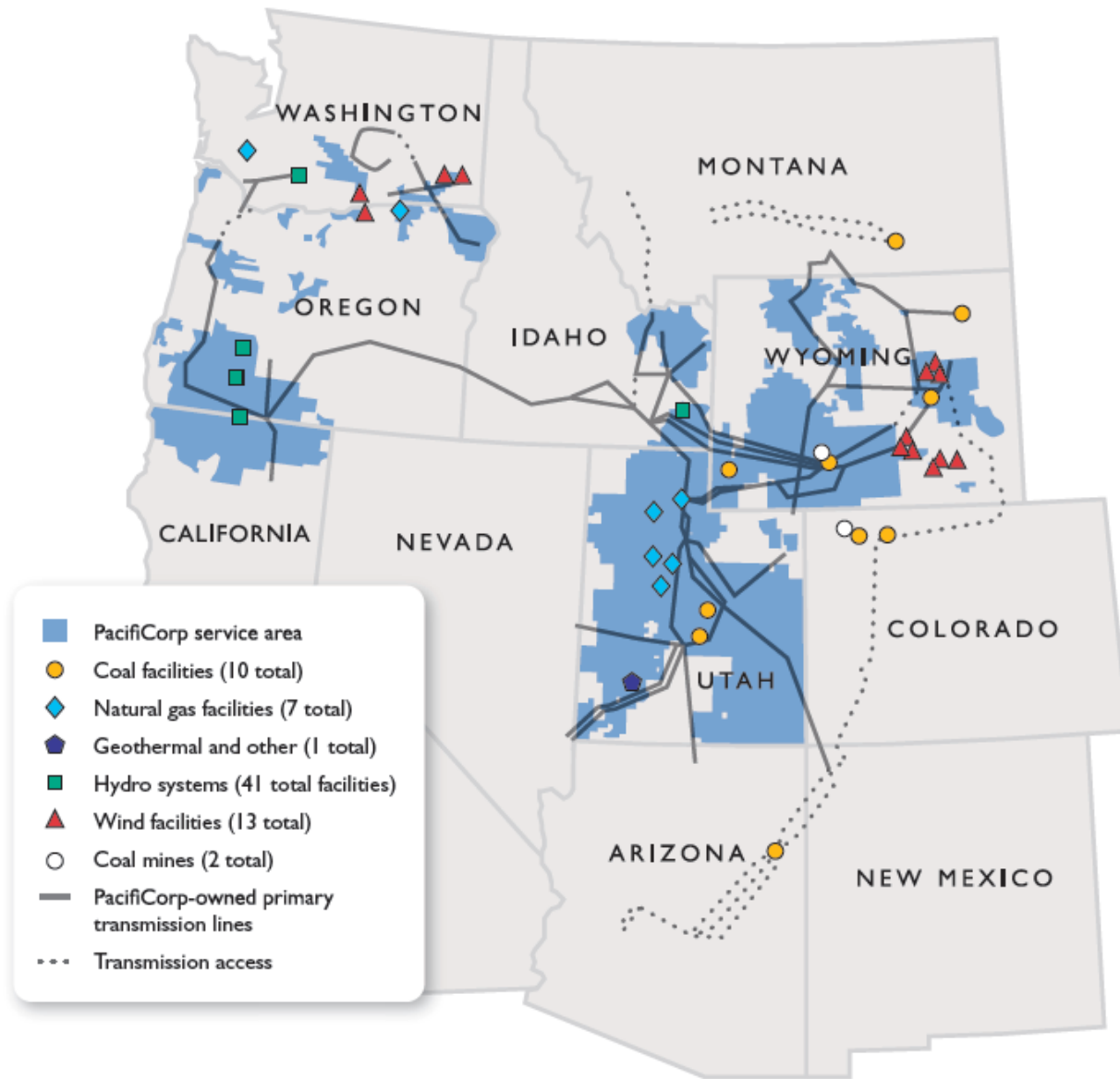


Energy Infrastructure Planning

Salt Lake County





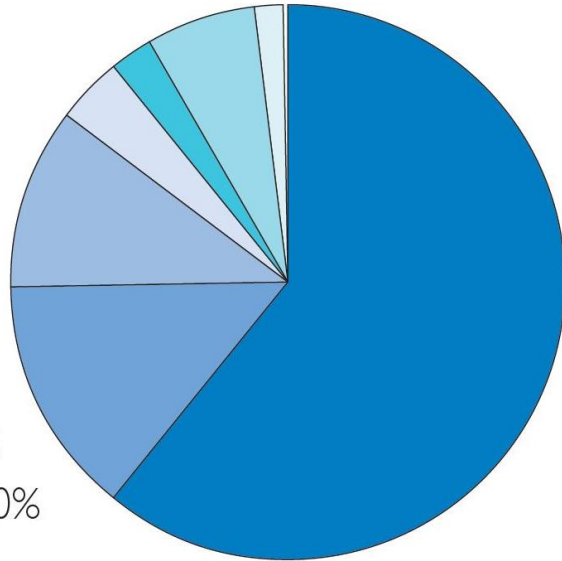
RMP Utah

- 892,849 customers
- 2,167 employees: \$224 million payroll
- State property taxes: \$69.1 million
- Net book value: \$7.3 billion

Energy resource portfolio

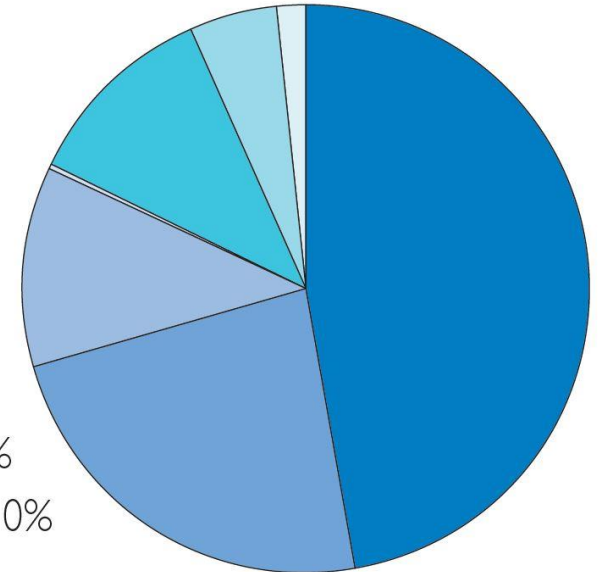
2017

- Coal - 58.7%
- Gas - 13.9%
- Renewable* - 15.0%
- Existing Purchases - 3.1%
- New Class 2 DSM*** - 2.0%
- Hydroelectric - 6.8%
- Front Office Transactions - 0.5%
- Class 1 DSM & Interruptibles - 0%

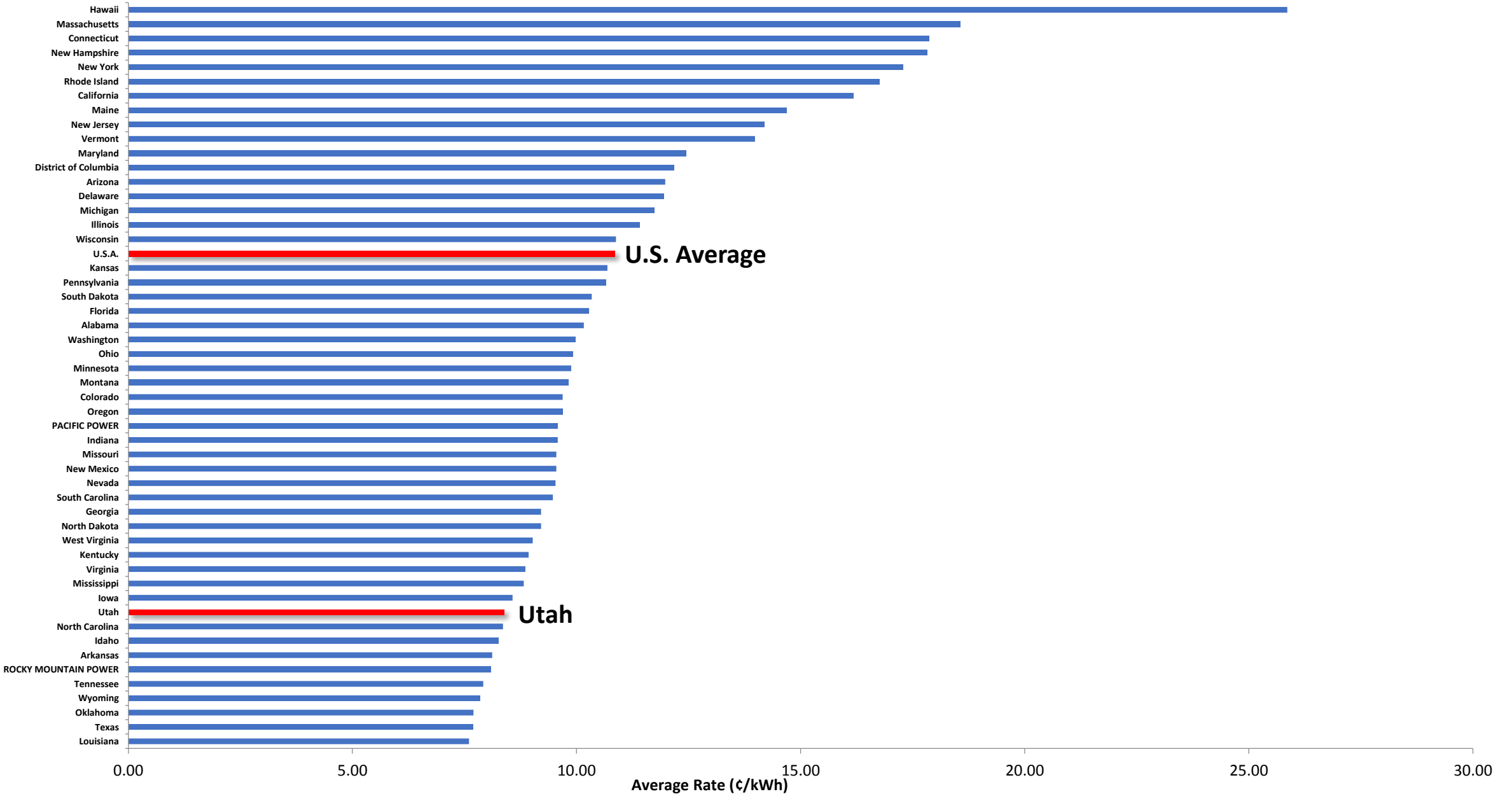


2027

- Coal - 47.0%
- Gas - 18.8%
- Renewable* - 19.4%
- Existing Purchases - 0.0%
- New Class 2 DSM*** - 9.1%
- Hydroelectric - 4.8%
- Front Office Transactions - 0.9%
- Class 1 DSM & Interruptibles - 0%



Average Electricity Price by State

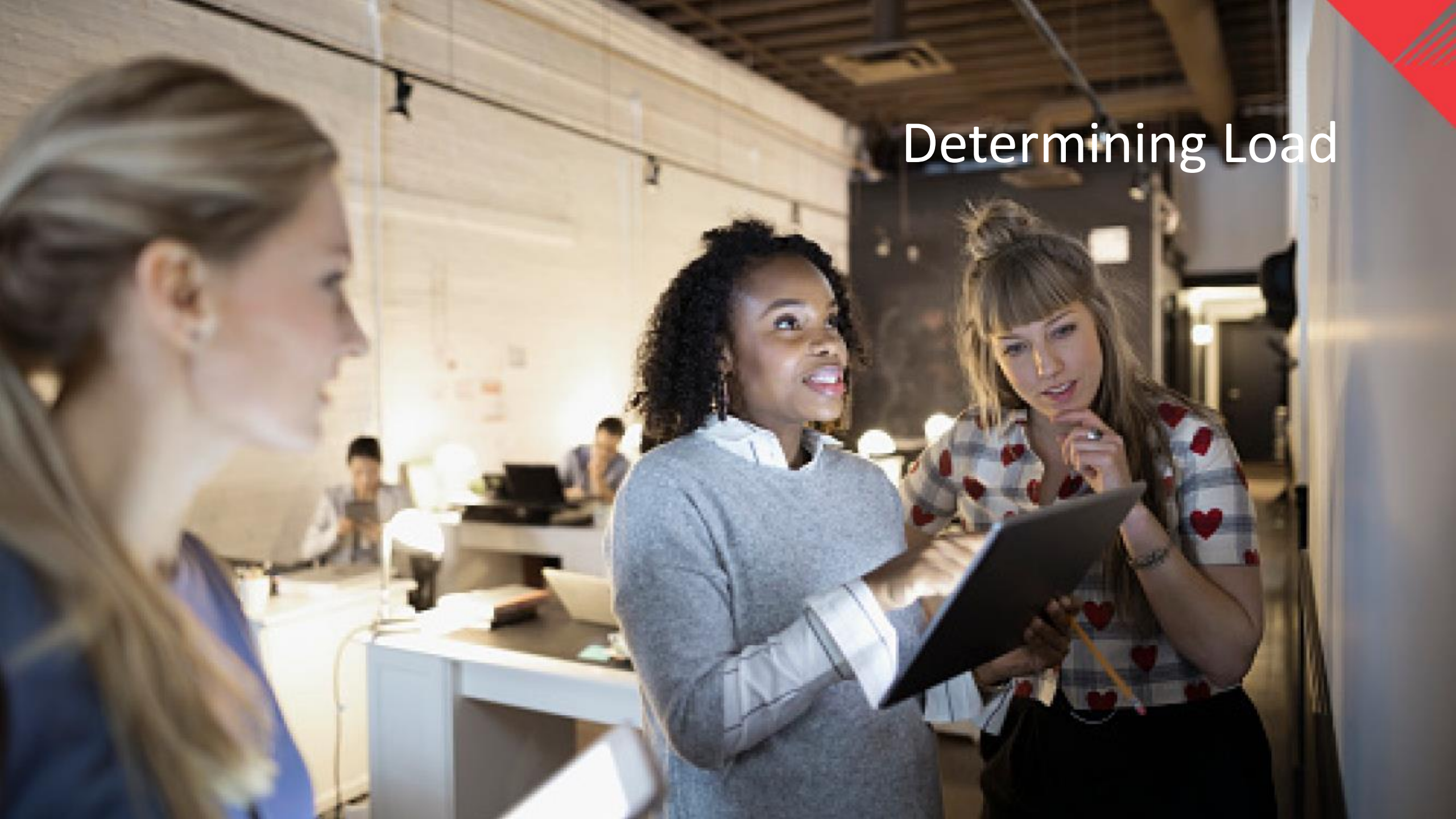


Regional & Community Planning

- Involve stakeholders
- Develop siting criteria for substations and transmission lines
- Identify location options based on siting criteria



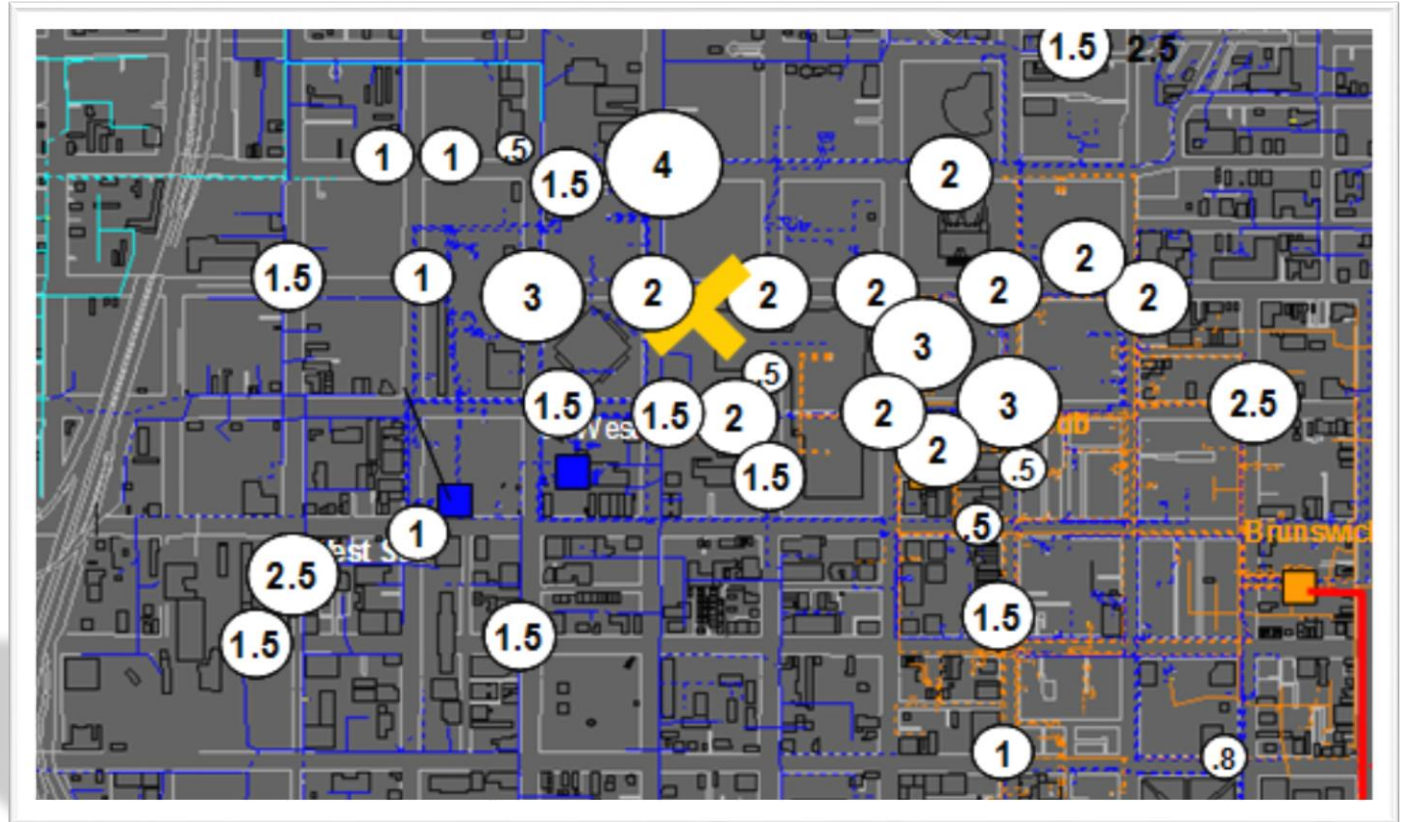
Determining Load



Determining Load

SUMMER				
Year	MVA Load	MVA Capacity	Percent Capacity	Actual PF
2013	18.759	22.400	83.7	0.988
2014	18.742	22.400	83.7	0.989
2015	20.072	22.400	89.6	0.996
2016	19.933	22.400	89.0	0.995
2017	19.577	22.400	87.4	0.992
2018	19.851	22.400	88.6	0.992
2019	20.125	22.400	89.8	0.992
2020	20.399	22.400	91.1	0.992
2021	20.673	22.400	92.3	0.992
2022	20.947	22.400	93.5	0.992

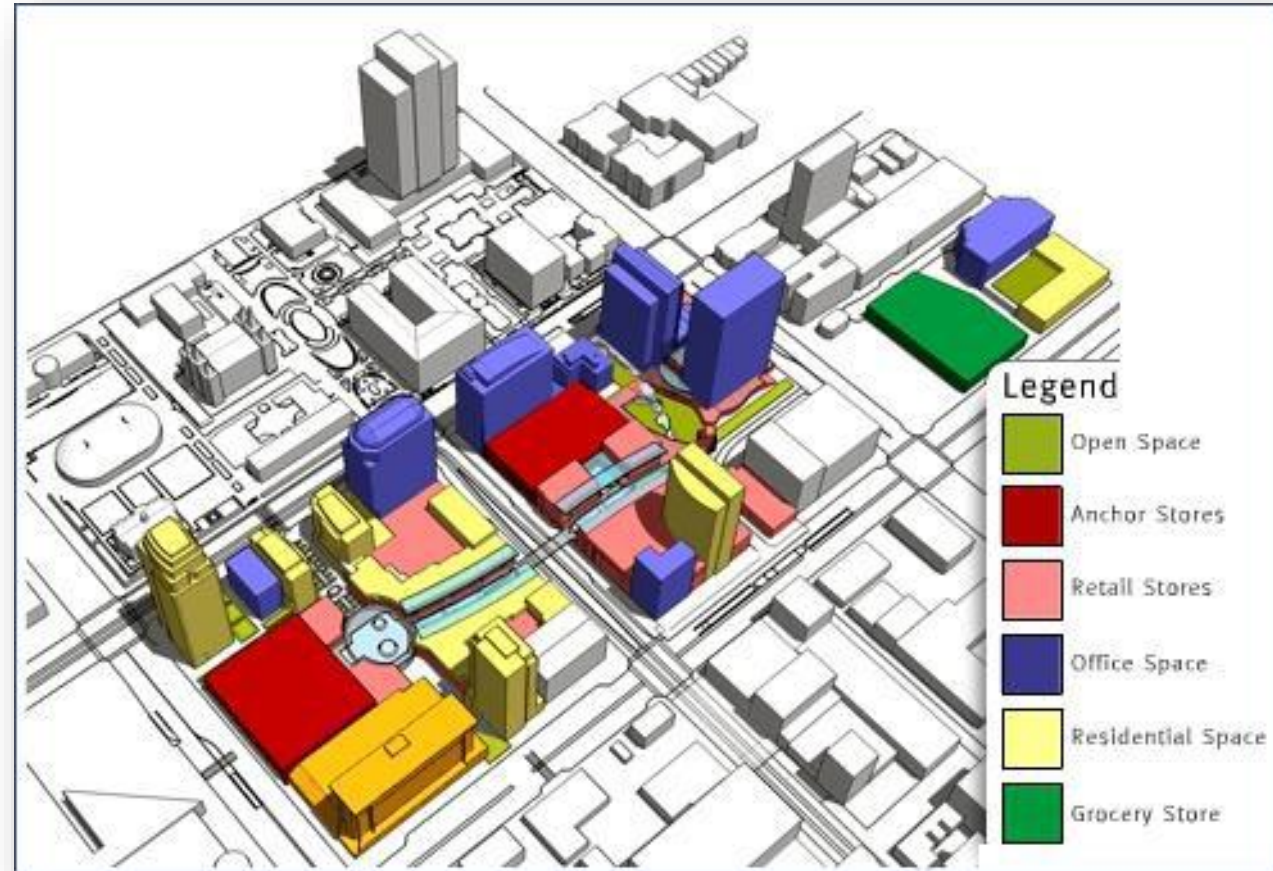
Straight Line R2 = 0.4966 - Ave. Hist. Ld. Growth 1.47%
 Exponential R2 = 0.5029 - Ave. Hist. Ld. Growth 1.48%
 The closer R2 is to 1.00 the better the curve fit.
 Forced Growth = 1.40%



Determining Load

City Creek Center – SLC

- 700,000 sq. ft. office/retail
- 300 urban residences
- 13 megawatts of load

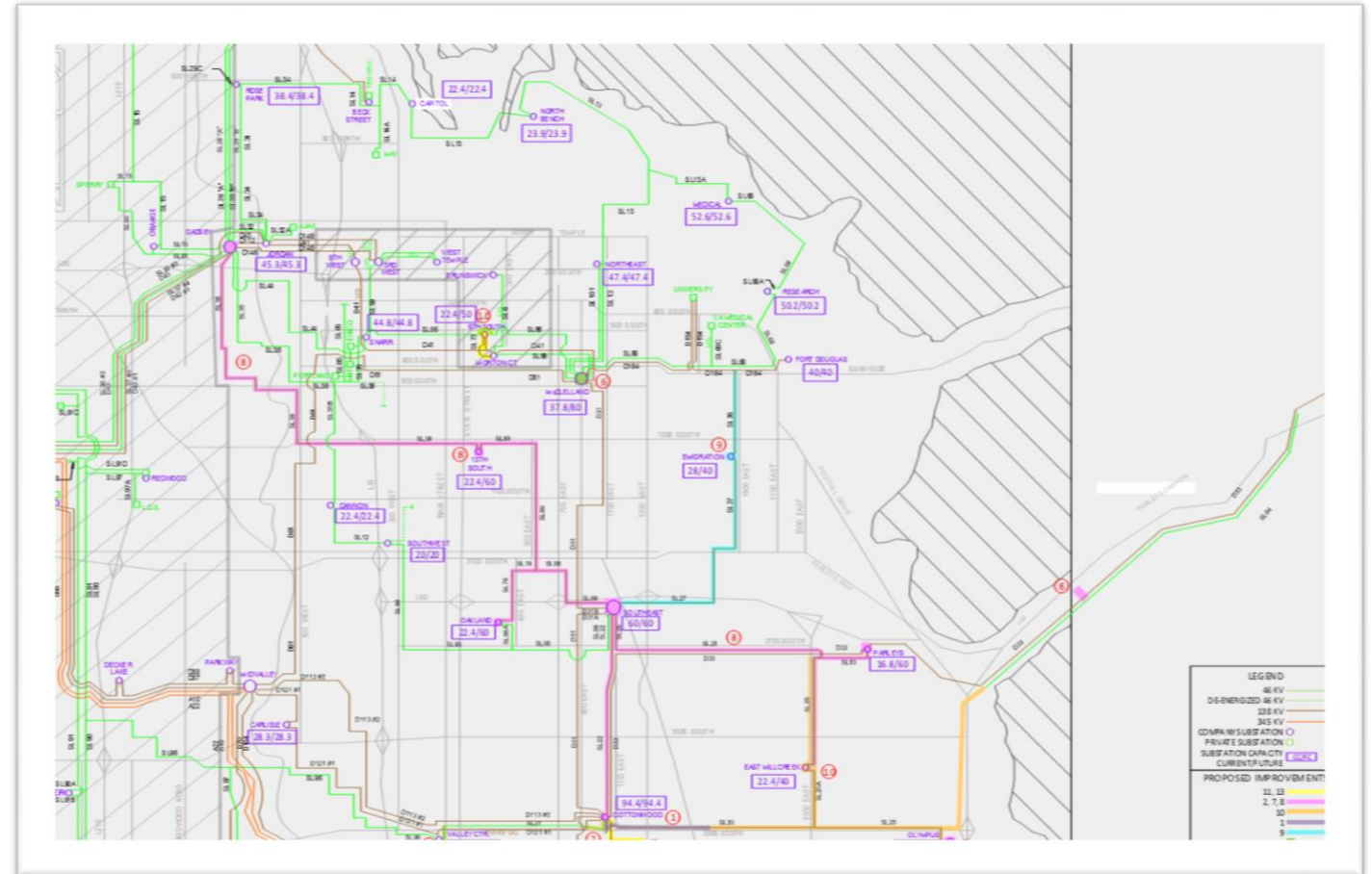




Master Planning

Master Planning

- Long-term plan providing conceptual layout for future growth and development
- Coordinates expansion of transmission system
- Develops solutions for improved reliability with the lowest community impact

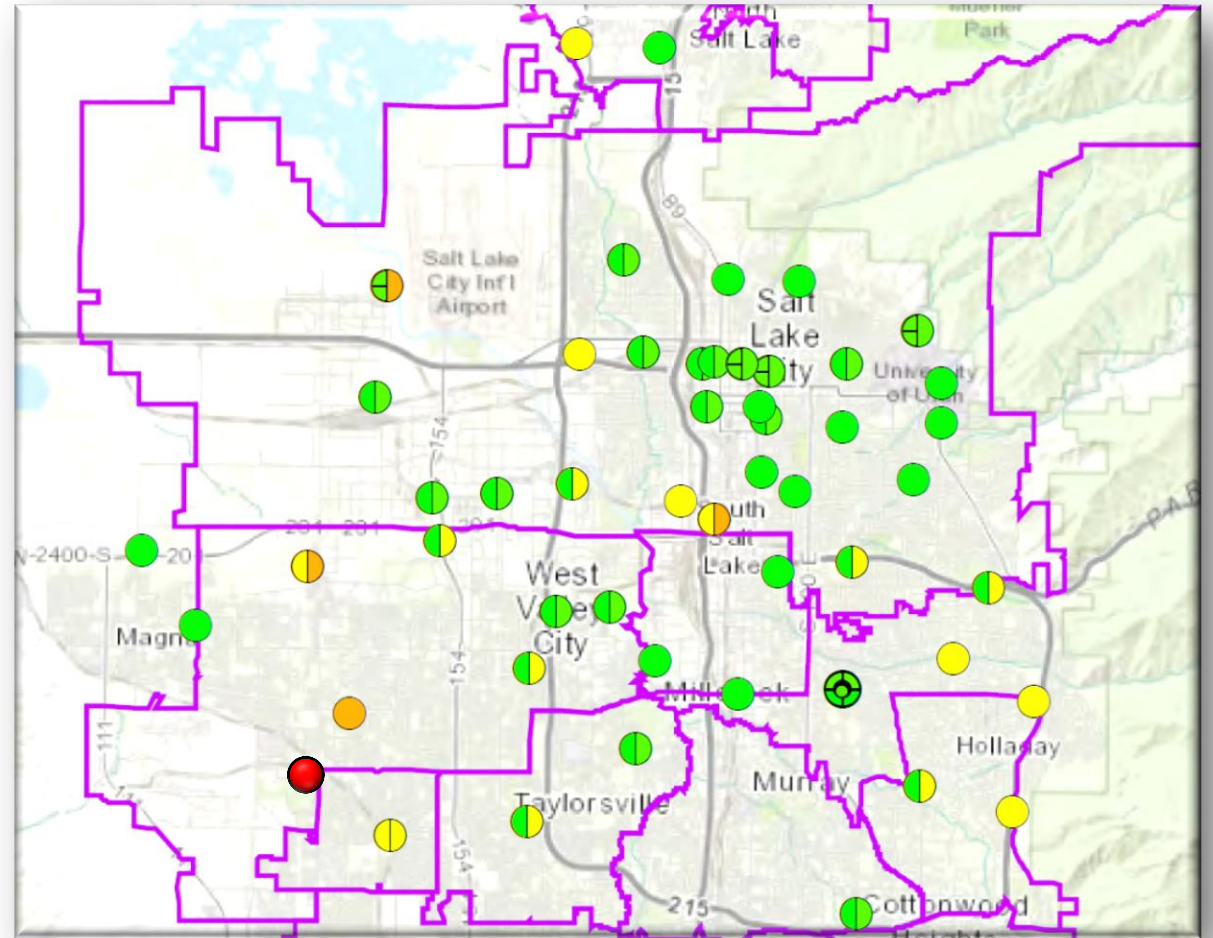


10 Year Planning



10 Year Planning

- Plan to address near-term area load growth
- Based on realized growth patterns
- Identify multiple solutions and evaluate each using guidelines from the local planning handbook
- Develop project scope



Development Planning

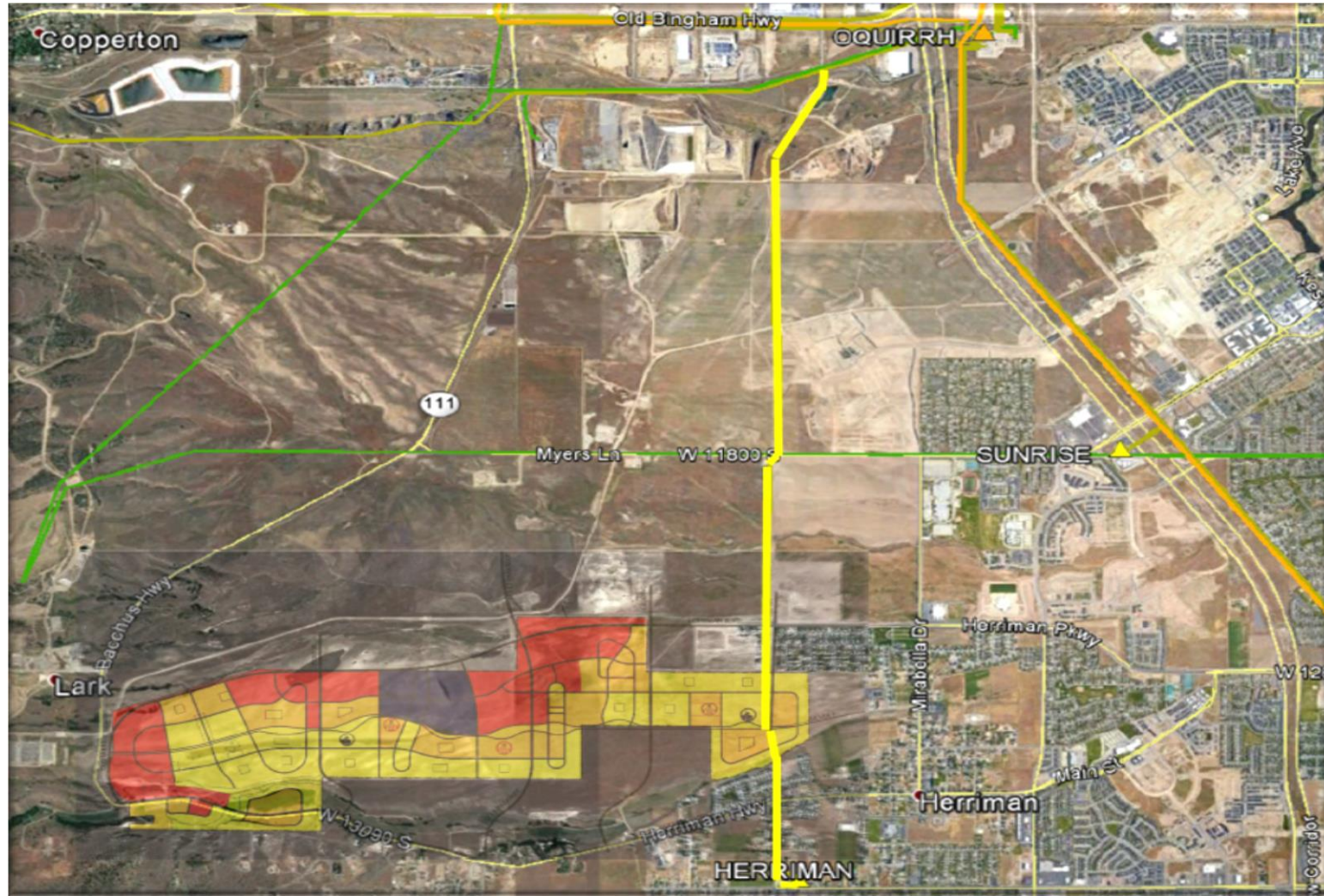


Development Planning

- Determine network upgrades to serve a defined load
 - Delivery voltage
 - In-service date
 - Load forecast
 - Load type
 - Site plan
 - Customer accommodations
- Plan provides a reasonable least-cost solution to serve the development



Development Planning



Other Considerations

- Substation Siting
 - Availability of property
 - Distance from existing infrastructure
 - Space for transmission and distribution circuits
 - Access for large equipment
- Large concentration vs. small dispersed substations
 - Community impact
 - Reliability impact

