



SWEDE 2018

Outsourcing Project Design

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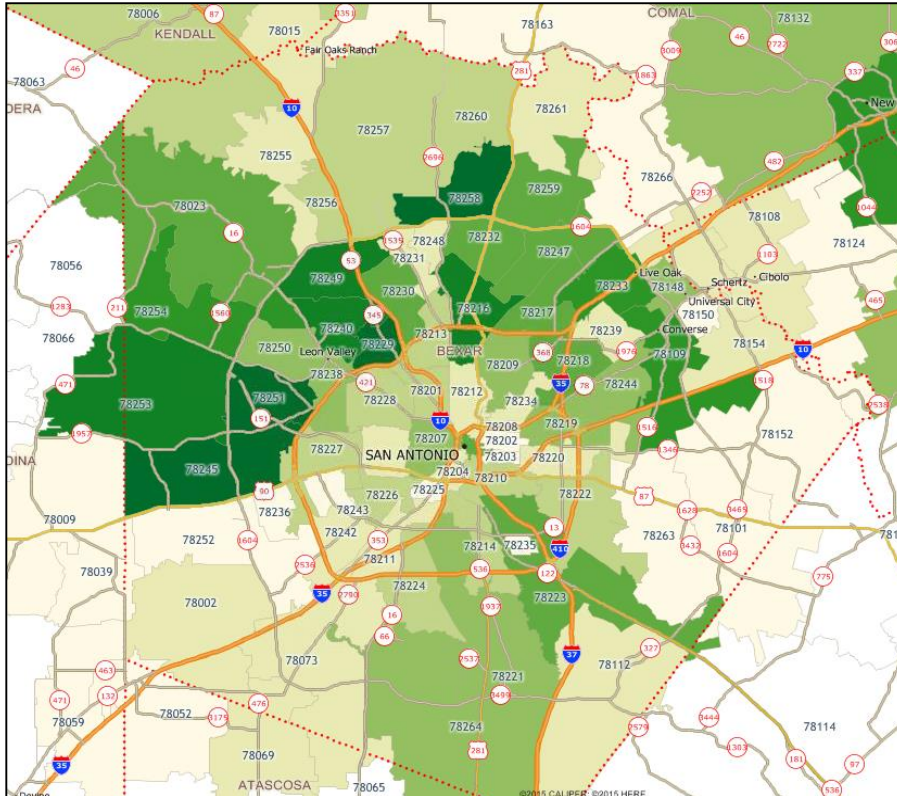
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About CPS ENERGY



- Municipally owned electric and natural gas company in San Antonio, TX.
- Customers as of Jan 31, 2017.....804,675
- Employees as of Jan 31, 2017.....3,167
- Overhead lines.....7,866 mi
- Underground lines.....5,476 mi
- Electric retail service area (1,515 sq. miles) includes Bexar County and small portions of adjacent counties: Atascosa, Bandera, Comal, Guadalupe, Kendall, Medina and Wilson.

A GROWING COMMUNITY



San Antonio MSA projected to add 0.5 Million new residents in the next 10 years* and 1.1 million new residents by 2040**.

Sources:
* IHS Global Insight
** Claritas

Design Areas



Distribution Engineering

- Overhead Engineering
 - Underground Engineering
 - Network Engineering
- **Primary responsibilities on system related activities and civic improvements.

Responsibilities

- Design/Manage beginning to end
- Permits
- Coordination between design areas
 - Example OH to UG
- Customer experience is limited to interactions while working on/near customer property
- Quality control
- Schedule control (On-Time-Completion)

Customer Engineering

- Large Commercial
 - Medium/Small Commercial
 - Residential
 - Subdivision
- **Primary responsibilities center on customer requests.

Responsibilities

- Design only
 - Contractors do not make field visits or have direct contact with the customer
- Permits
- Quality control
- Schedule control (Design On-Time-Completion)
- Project Tracking

Contracting Strategy



- Leverage contractors to offset high/low in market/budget demands
 - Position workforce to adapt to rapid changes in market
- Provide adequate service level to customers while training new designers (reduce impacts of retirements/aging workforce)
- Reduce FTE to support overall operating budget

Meters Per Year



Lessons Learned/Challenges



- Training
 - Develop plan on training new contractors
 - Ensure the training program can support training of new contractors
 - Formal design standards for uniform design of systems
- System Access
 - Determine level of contractor access into utility system
 - Method of access (On-site, VPN, other)
- Quality control (and Resubmission)
 - Tracking mechanism
 - Establish protocol for incorrect/substandard designs
- Schedule control
 - Tracking on-time completion, delays, % complete, etc.
- Performance
 - Establish metrics to rate/score designers
 - In-house vs. Contractor
 - Contractor vs. Contractor
 - Contractor Performance Reviews



Thank You..

San Antonio, Texas