

REAL LIFE WITH SMART GRID: MLGW's Experience Then & Now

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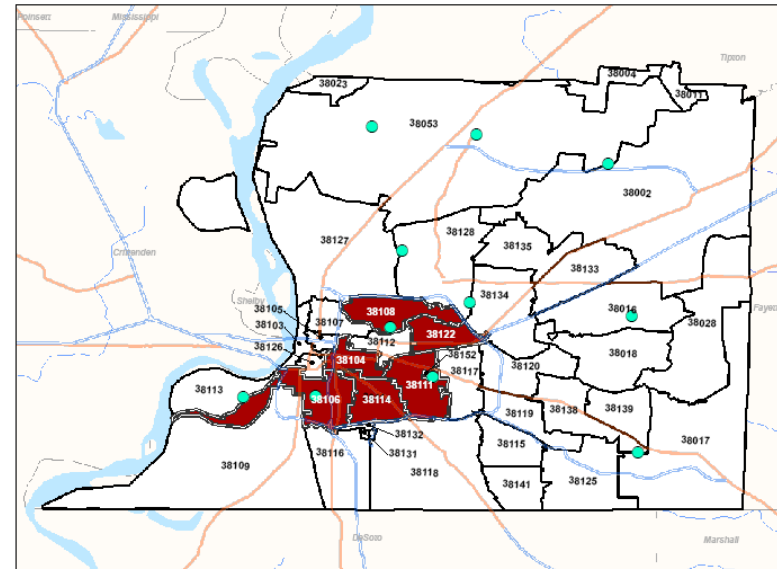
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THEN: 2009 Smart Grid Plan

- Developed plan to deploy smart meters for 70,000 customers in a 6-ZIP area
- Garnered early support from community, civic and business leaders through outreach
- Faced opposition for unfairly targeting areas with new technology
- Halted when DOE depleted Smart Grid Investment Grant funds prior to submittal



2009 Market Research

- Removed the phrase “Smart Grid” from the discussion, surveying on its expected benefits
- Confirmed overwhelming customer interest:
 - 95% prefer automatic outage notification to MLGW
 - 88% interested in viewing bill amount as it accrues
 - 65% “willing” to consider time-of-use rate (another 26% “maybe”)
 - 84% not bothered by providing Meter Reader access
 - Responses from all ZIP Codes
 - Within the original 6 ZIPs, responses were similar for all benefits—except greater reluctance to allow property access

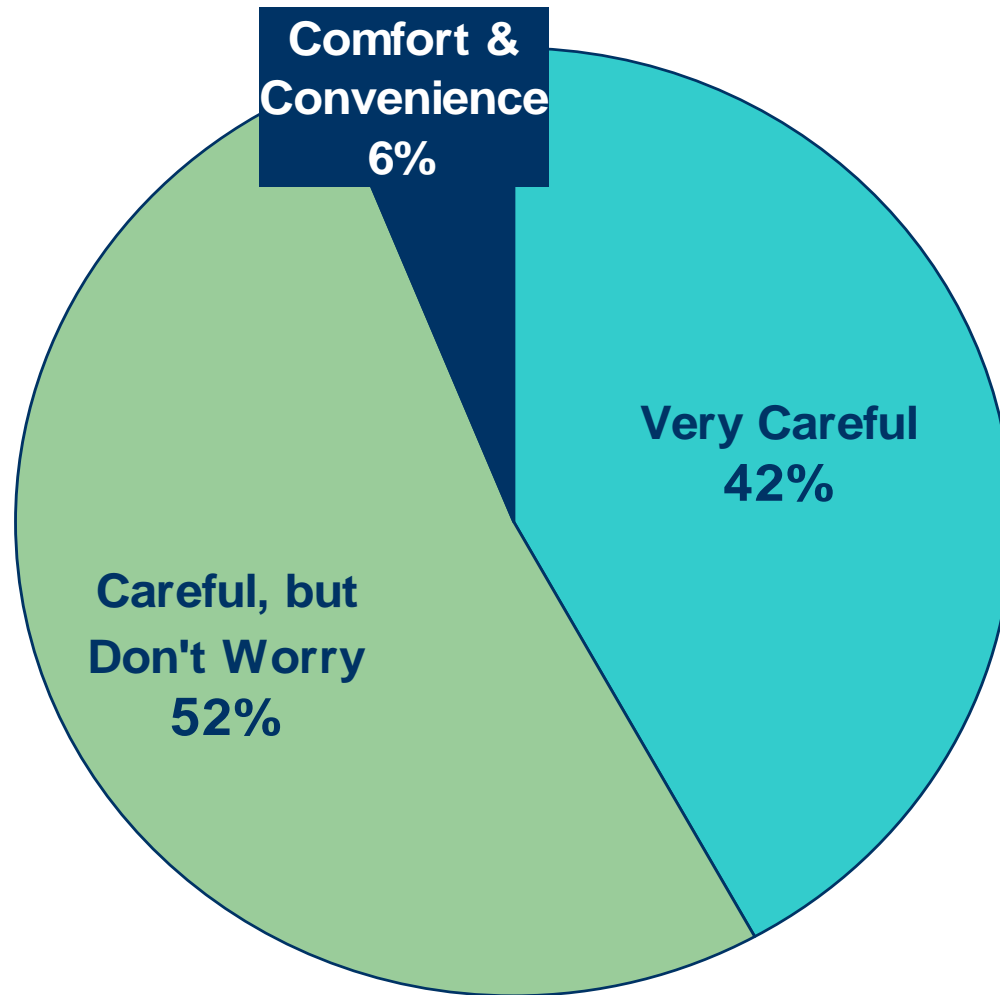
NOW: 2010 Demonstration

- Awarded vendor contract for 1,000-electric meter residential deployment
- Established objectives to demonstrate how Smart Grid will benefit MLGW customers
 - MLGW operational efficiencies
 - Customer service enhancements
 - Energy savings
 - New rate options
- Asked for volunteers

Volunteer Demographics

- Age: 70% age 45 and older
- Education: 71% college graduates
- Income: 75% earn \$50,000 or more
- Housing: 95% single-family homeowners
- Location: All ZIP Codes in territory
- Internet: 93% at home
- Email: 94% provided
- TOU rates: 84% some interest

Volunteers' Energy Habit Profile



Selected Participants

- Randomly selected by ZIP
- First participant survey (80% response rate)
 - Recent and planned energy improvements
 - Impression of household electric use compared to local and U.S. averages
 - Level of bill scrutiny: (57% always, 29% sometimes, 11% just glance)
 - 64% already use My Account web

Which of the following statements reflects your motivation(s) for participating in the Smart Grid Demonstration?

Interested in saving money by reducing electric use	95%
Interested in understanding home's electric use	87%
Interested in new technology and trends	84%
Prefer MLGW be alerted to outages automatically	79%
Want to help MLGW and TVA control rates by reducing need for new generation	73%
Interested in reducing carbon footprint/enviro'n'l impact	71%
Interested in exploring new rate opportunities	71%
Interested in teaching family about home's electric use	51%
Want to use experience to challenge others	47%
Interested in exploring billing/due date opportunities	38%
Prefer not to provide property access (gates/security)	11%
Prefer not to provide property access (pets)	6%
Other motivation	9%

Interest in Taking Action, by Benefit

(top 2 box responses)

	...to save ENERGY	...to save MONEY	...to improve COMFORT
Changing habits...	60%	76%	52%
Making low-cost energy Improvements...	64%	75%	58%
Making major energy improvements...	26%	30%	25%

**Money motivates more than energy or comfort;
Must shift customer expectations to energy use**

2010 Demonstration

- Empower and motivate participants
 - Interval data presentment (web)
 - Electric bill-to-date (web)
 - Optional Time-of-Use and Critical Peak Pricing rate offerings
 - Rate comparison tools (web)
 - In-Home Displays (50%)
 - Quarterly surveys
 - Communications

Marketing & Communications Plan

- Segment by motivation and interests to develop semi-tailored messages
- Utilize In-Home Displays, web and email for alerts
- Promote ongoing use of In-Home Display to extend “time to drawer”
- Encourage testimonials to update public on benefits
- Train call center staff to handle new types of billing questions
- Communicate milestones to lay foundation for future