

### IMPLEMENTATION OF AN ELECTRIC ADVANCED METER SYSTEM AND METER DATA MANAGEMENT SYSTEM - UPDATE

#### **Riverside Public Utilities**

City Council March 12, 2019

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# BACKGROUND – UTILITY 2.0

CUSTOMER-FOCUSED	Directly influence customer experience and provide customer interaction
<ol> <li>Customer Information System (CIS)</li> <li>Customer Relationship Management (CRM)</li> </ol>	<ol> <li>Interactive Voice Response (IVR)</li> <li>Customer Web Portal (CWP)</li> </ol>
INFORMATION-BASED	Provide decision and analysis, data management and process implementation (primarily large databases)
5. Asset Management System (AMS) 6. Work Management System (WMS) 7. Warehouse Inventory System (WIS)	<ol> <li>Geographic Information System (GIS)</li> <li>Mobile Applications (Mobile Apps)</li> <li>Operational Data Management System (ODMS)</li> </ol>
OPERATIONAL	Provide real-time operation and control of water and energy delivery systems
<ol> <li>Network Communications System (NCS)</li> <li>Land Mobile Radio (LMR)</li> <li>Advanced Metering Infrastructure (AMI)</li> <li>Meter Data Management System (MDMS)</li> <li>Automatic Vehicle Location (AVL)</li> </ol>	<ol> <li>Distribution Automation (DA)</li> <li>Substation Automation (SA)</li> <li>Outage Management System (OMS)</li> <li>Supervisory Control and Data Acquisition (SCADA) and Advanced Distribution Management System (ADMS)</li> </ol>
OTHER	Additional projects identified after Strategic Technology Plan was issued
20. Dark Fiber 21. Talent Management System	22. LED Street Lights

## ADVANCED METERING INFRASTRUCTURE WHAT IS IT?

- 1. AMI is a system of:
  - a. smart meters
  - b. communications networks
  - c. data management
- 2. It allows **two-way communication** between a customer's meter and the utility. The system transmits near **real-time information** about water and energy usage.



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# **ADDRESSING THE COMMUNITY**

- 1. Communicating Benefits
- 2. Customer Portal
- 3. Minimizing perceived Health Concerns
- 4. Radio Frequencies dispelling the myths
- 5. Privacy and Security Concerns
- 6. Personal information protection

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ESTIMATED TIMELINE				
TASK	ESTIMATED DATE			
Phase 1 - Proof-of-Concept	February – July 2019			
Phase 2 - Expansion	July – December 2019			
Phase 3 - Full Implementation	January - December 2020			
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COSTS AND BENEFITS								
Category	18/19	19/20	20/21	21/22	22/23	TOTAL		
Tantalus AMI System	\$140,000	\$7,127,644				\$7,267,644		
SmartWorks MDMS	\$47,918	\$595,732	\$319,697	\$395,665	\$395,665	\$1,754,677		
Innovation & Technology Labor	\$50,000	\$230,000	\$20,000	\$0	\$0	\$300,000		
3rd Party Integrations (i.e. CIS)	\$100,000	\$275,000	\$0	\$0	\$0	\$375,000		
Meter Test, IT and other Equipment	\$150,000	\$100,000	\$0	\$0	\$0	\$250,000		
Customer Engagement Campaign	\$150,000	\$150,000	\$0	\$0	\$0	\$300,000		
Contingency	\$22,082	\$77 <i>,</i> 918	\$835,000	\$0	\$0	\$935,000		
TOTALS:	\$660,000	\$8,556,294	\$1,174,697	\$395,665	\$395,665	\$11,182,321		
<ul> <li>Return-on-Investment (ROI):</li> <li>Payback period of under 5 years</li> <li>34.5 million in savings over 10 years</li> </ul>								
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## **PROGRAM COMMUNICATIONS**

- 1. Letter to customers
- 2. Door hanger for service when required
- 3. Web page
- 4. 311 support
- 5. Social media
- 6. Videos

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