Social Services Integrated Reporting System

NACO 2011 Technology Summit:
Using Analytics and Business Intelligence to Improve Service

2010 NACO Achievement Award

2010 Computerworld Laureate and 21st Century Achievement Award for Government
2010 Computerworld Laureate

Computerworld’s 21st Century Achievement Award Winner for Government

http://vimeo.com/12773141
Topics of Discussion

- Alameda County Social Services Agency (SSA)
- The SSA Challenges and Drivers
- Meeting the Challenge
- Social Services Integrated Reporting System (SSIRS)
  - The Client Experience
  - SSIRS Data Sources
  - Principals of Development
  - Under the Hood
  - Dashboards and Reports
- Mechanizing Social Services
About Alameda County Social Services

- Population of Alameda County, California:
  - 1.5 million people
- 9,000 County Employees
- 2,200 Social Service Agency Employees
- 5 major departments
  - Economic Benefits (state & Federal Welfare)
  - Employment Services (Welfare-to-Work)
  - Children and Family Services
  - Adult & Aging (supports the elderly & disabled)
  - Administration & Finance
About the Clients We Serve

- 20,192 California Welfare Clients
- 78,496 Medicaid Cases (healthcare services)
- 35,010 Food Stamp Cases
- 6,451 General Assistance Clients
- 2,896 Children Served
- 18,404 Adult & Aging Clients
  - Elderly & Disabled
The SSA Challenges and Drivers

- Need for alignment and tracking of departmental performance to key strategic objectives
  - 2005 Deficit Reduction Act
  - Title IV-E Waiver

- Data Rich Information Poor
  - Managers and executives want information now!
  - Track and report on the key performance indicators

- Uneven gaps between actions required and actions taken

- Disparate Systems and Tools
  - Siloed and outdated programs and applications

- Inability to respond quickly to an ever changing work environment
  - Constantly added new Local, state, federal mandates

- Economic Reality
SSIRS’ Multi-Task Capabilities

- Production Reporting
- Dashboard and Drill Down
- Identity Matching and de-duplication
- Interoperable with other systems, programs, and services
- Monitoring
- Communication
- Fraud Detection and Prevention
The Client Experience:

Clients

Enrollments

Activities

Providers

Case Workers

Stages/Statuses

Programs

- Employment
- Child Welfare
- Elder Care

- Request
- Investigation
- Placement

- Trainers, Employers
- Foster Parents
- Medical Providers

Training, Search, Interview
Anonymous Tip, Home Visit
Medical Checkup, In-home Svcs
SSIRS Data Sources

- Systems currently feeding SSIRS:
  - Temporary Assistance Needy Families (TANF)
  - Child Welfare
  - Probation (Juvenile)
  - Employment Services (welfare-to-work)
  - In Home Supportive Services (state system for the Elderly and Disabled)
  - County Adoptions System
  - One-E-App: AC Health Care’s online Medicaid application program
  - Child Care
Oakland, Ca. Housing Authority

Systems Coming Soon:

- Public Health: Birth & Death records
- Income Eligibility Verification System (IEVS)
- The Agency’s Employee Database
- Change of Address Verification System (Postal Address Verification)
- Corpus (Sheriff’s incarceration database)
SSIRS Data Sources

On the Horizon:

- Medicaid downloads from state
- Child Support
- DMV records
- Alameda County Office of Education (ACOE)
  - Data Share from the 17 AC school districts
- Adult Probation
Sharing The Common Client

- Child Welfare
- Foster Care
- Adult Welfare Benefits
- Health Care Administrative Services
- Public Health
- Behavioral Health Services
- Employment Services
- Adult and Aging Services
- Public Safety
- Housing Authority
- School Districts
- Child Support Services

Common Client
Information Sharing In Alameda County

- Child Support Services
- Health Care Services Administration
  - Behavior Health Care
  - Clinics and County Hospitals
  - Public Health
- Adult Probation
- Sheriffs Department
- Alameda County K-12 Schools
Integration of Services

**HEALTH**

- Health Care Services
  - Behavior Health
  - Public Health
  - CBO, Clinics, and Hospitals

- **Public Education**
  - School Districts
  - Public Safety
  - Juvenile Probation
  - Adult Probation

- **Social Services**
  - Child Welfare
  - Foster Care
  - Welfare Services
  - Support Services
  - Child Support Services

**Safety & Education**

**Self Sufficiency**
Goal of Client Information Sharing

- Identify our common clients
- Gain better insights regarding how our common clients use our collective services
- Improved client tracking
- Improve client outcome
- Improve service delivery
- Reduce fraud and abuse of services
- Reduce cost
# Benefits of Information Sharing Using SSIRS

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Description</th>
<th>Data Sources</th>
</tr>
</thead>
</table>
| **Reduce amount of benefits given to ineligible recipients** | SSIRS integrates information to help ensure that recipients/applicants are eligible and receiving the correct grant amount  
SSIRS integrates information to determine if there are any other income sources they should be utilizing | Medicaid (MEDS)  
Income Eligibility Verification System (IEVS)  
Child Care providers  
Adult Probation |
| **Reduce fraudulent claims for child care, transportation and ancillary costs in welfare-to-work** | SSIRS to provide data matching and more information about recipient to make it easier to detect fraudulent activity | Child care providers |
| **Identify & deter fraudulent activity by employees** | SSIRS to integrate employee address information to help identify fraudulent activity  
Identify cases where there is no quarterly or annual renewal document but benefits are being issued | Employee database |
| **Improve healthy outcomes of children and adults through collaboration between Healthcare, and Social Services** | Integrate information with SSIRS to immediately identify clients’ active or inactive status for medical benefits  
Help promote meaningful use initiatives:  
Eliminate multiple immunizations of children  
Reduce number of over prescriptions of medicine  
Provide better tracking of diagnoses, treatments  
Provide better information on the different doctors who have treated a child in Social Service care | Medicaid state system  
TANF state system  
Child Welfare System (state)  
School District databases  
Probation databases  
Public and Behavioral Health databases |
What’s Under the Hood

- IBM D5000 Pre-configured and Pre-Balanced BI Data Warehouse
- Identity Insight System
- DB2 Engine
- Cognos Reporting, Charting, Dashboarding
- Linux Operating System
- 200 Concurrent Users
- Web Enabled
Centralized Reporting

**Data Sources**
- Welfare Benefits
- Child Welfare
- Juvenile Probation
- Elderly & Disabled
- Welfare to Work & Adoptions

**Transformation & Resolution**
- Reporting Server
  - Match clients across data silos
  - Enabling cross program reporting

**Tools and Databases**

**Analysis**
- Reporting Tools
- Standard and Ad Hoc Reporting
Alameda SSIRS Data Flow Chart
Powering SSIRS

- Resolved Identity Repository
- Identity Longitudinal View
- Resolved Family View
- Individual, Family & Relationships* View
  - Across the Enterprise of programs, partners, providers & services
- Real-time Enterprise Reporting & Dashboards
- Drill down Views to client activities & dates
The Identity & Relationship Repository

- Semantic Identity Directory (best knowable accuracy) always on-line - never needs refresh
- One search returns information about an entity - regardless of data source location or availability
- Search data is cleansed by the same rule set that cleanses loaded data - wild card searches rarely needed
- Persistent searching automatically feeds information to proper personnel as soon as it is known - queries are treated as data
- Searches are inherently faster and more accurate than federated solutions because data is placed in context when its loaded.
- Self-correcting capability mitigates False-Positives and False-Negatives

“Ask Every Smart Question, Every Day - Automatically.”
Nicknames, *Drew, Manny, Cat*  
Shortened names, *Andy, Eman*  
Prefixes, *Abdul, Fitz, O’, De La,*  

Name Order, *Hussein, Mohammed Abu Ali*  
Titles, *Dr., Rev, Haj, Sri., Col*  

Andras, André, Andre, Drue, Ohndrae, Ohndre  
Mohammad, Mohammed, Imhemmed, Mohammd, Mohamod, Mohamud,  
Eman, Emanual, Imanuel, Immanuele, Manny, Manual,  
Cait, Caitey, Katalin, Katchen, Kate, Katerinka,
The Power of Relationship Resolution ("Who Knows Who")

Finding patterns through degrees of separation

Maria Elena Garcia
Applied for Childcare assistance

Tom Sinclair
Listed father of her daughter Amanda

Katherine Thomas
Who also listed Tom as the father of her daughter Mandy

Dana Bowie
Who also listed Tom as the father of her daughter Mandita

And they are all at the same address!
IIS VISULIZER (The Brains Behind SSIRS)
Longitudinal and Single Client Overview
Continuous Support and Service

... what happened after foster youth aged out?

Public Assistance, Food Stamps, Health Care... homelessness

Find out to what degree emancipated foster youth in the child welfare case management system ...

- End up in emergency homeless shelters
- End up in other Welfare programs
- Over what time frames..

After they became emancipated!
## Employment Services - Engagement Summary

<table>
<thead>
<tr>
<th>WTW Engageable</th>
<th>In Process</th>
<th>Activity Placement Process</th>
<th>Acquiring Supportive Services</th>
<th>Deferred/Good Cause</th>
<th>Clients</th>
<th>% of Base</th>
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<tbody>
<tr>
<td></td>
<td>Assessment/Appraisal</td>
<td>Appraisal</td>
<td>Appraisal</td>
<td>10</td>
<td>0.66%</td>
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<tr>
<td></td>
<td>Non-Compliance Process</td>
<td>Conciliation-Curing Sanction</td>
<td>Conciliation-Curing Sanction</td>
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<td></td>
<td>Subtotal</td>
<td></td>
<td></td>
<td>699</td>
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<td>Participating</td>
<td>Non-Qualified Activities</td>
<td>Education</td>
<td>Adult Basic Education</td>
<td>85</td>
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<tr>
<td></td>
<td>Other Activities</td>
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<tr>
<td></td>
<td>Treatment / Counseling</td>
<td>Mental Health Services</td>
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<td></td>
<td>Substance Abuse Services</td>
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<td></td>
<td>Qualified Activities</td>
<td>Employment</td>
<td>Unsubsidized Employment</td>
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<td>Job Search / Job Readiness</td>
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<td>133</td>
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<td></td>
<td>Other Work</td>
<td>Community Services</td>
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<td></td>
<td>WRV-Work Experience</td>
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<td>Work Study</td>
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<td>36</td>
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<tr>
<td></td>
<td>Training</td>
<td>Progress in Secondary School</td>
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<td>1</td>
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<td></td>
<td></td>
<td>Vocational Training/Education</td>
<td></td>
<td>623</td>
<td>5.27%</td>
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<td>Subtotal</td>
<td></td>
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<td>1,406</td>
<td>11.89%</td>
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<td>Sanctioned</td>
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<td>Curing Sanction</td>
<td>Curing Sanction</td>
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<td>Subtotal</td>
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<td>1,085</td>
<td>9.17%</td>
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<td>Unengaged</td>
<td>Unengaged</td>
<td>Unengaged</td>
<td>Unengaged</td>
<td>7,500</td>
<td>63.42%</td>
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<tr>
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<td>Subtotal</td>
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<td>11,876</td>
<td>100.00%</td>
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</table>

### Engagement Rate = Engaged Clients / Engageable Clients

<table>
<thead>
<tr>
<th>Engagement Rate</th>
<th>Engaged Clients</th>
<th>Engageable Clients</th>
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</thead>
<tbody>
<tr>
<td>11.84%</td>
<td>1,266</td>
<td>10,690</td>
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</tbody>
</table>

### Office Comparison - Engagement Category Percentage

- 63% of clients engaged in Adult Basic Education
- 6% in Community Services
- 5% in Vocational Training/Education

### CalWIN Update Aging

<table>
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<tr>
<th>Client Count</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<th>7</th>
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<th>9</th>
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<th>11</th>
<th>12</th>
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<td>Benefits Center</td>
<td>22</td>
<td>3</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastmont</td>
<td>942</td>
<td>260</td>
<td>140</td>
<td>107</td>
<td>85</td>
<td>105</td>
<td>94</td>
<td>65</td>
<td>38</td>
<td>37</td>
<td>30</td>
<td>32</td>
<td>33</td>
<td>1,225</td>
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<td>Enterprise</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
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<tr>
<td>Hayward</td>
<td>1,375</td>
<td>402</td>
<td>168</td>
<td>154</td>
<td>138</td>
<td>148</td>
<td>110</td>
<td>86</td>
<td>73</td>
<td>43</td>
<td>45</td>
<td>67</td>
<td>43</td>
<td>1,461</td>
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<tr>
<td>North Oakland</td>
<td>805</td>
<td>280</td>
<td>123</td>
<td>86</td>
<td>58</td>
<td>71</td>
<td>50</td>
<td>30</td>
<td>41</td>
<td>47</td>
<td>42</td>
<td>31</td>
<td>1,207</td>
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<td>Unassigned</td>
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<td>7</td>
<td>1</td>
<td>2</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>889</td>
</tr>
</tbody>
</table>
## Eligibility Caseload Management Report

**Office:** Hayward  
**Unit:** P170  
**Total Cases:** 600

<table>
<thead>
<tr>
<th>Case Number</th>
<th>CalWORKs/RCA</th>
<th>Food Stamps</th>
<th>General Assistance</th>
<th>Medi-Cal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Approved</td>
<td>Pending</td>
<td>Approved</td>
<td>Pending</td>
</tr>
<tr>
<td>P171</td>
<td>131</td>
<td>2</td>
<td>318</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Programs</strong></td>
<td><strong>131</strong></td>
<td><strong>2</strong></td>
<td><strong>318</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

**Pending Programs**  
- CalWORKs: 2  
- Food Stamps: 6  
- General Assistance: 0  
- Medi-Cal: 1

**Available Reports**  
- QR7/MSR in "Not Received" Status: 55  
- RRR due in Current Month: 23  
- Household member turns 18: 1  
- Unborn Due: 8  
- SSA Alert (Age 62): 0  
- IPV Tracking: 0

Data as of: Jul 7, 2011
### Employment Services - Case Activity History

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>SSN:</th>
<th>CWIN:</th>
<th>Office: Eastmont</th>
<th>Eligibility Worker</th>
<th>Case No</th>
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</thead>
<tbody>
<tr>
<td>Last Name</td>
<td>First Name</td>
<td>SSN:</td>
<td>CWIN:</td>
<td>Approved Date</td>
<td>Activity Description</td>
<td>Activity Status Post Date</td>
</tr>
<tr>
<td>12/29/08</td>
<td>Registered</td>
<td>3U</td>
<td>Approved</td>
<td>10/26/07</td>
<td>Employment Full Time</td>
<td>2/25/09</td>
</tr>
<tr>
<td>12/29/08</td>
<td>Registered</td>
<td>3U</td>
<td>Approved</td>
<td>10/26/07</td>
<td>Employment Full Time</td>
<td>2/25/09</td>
</tr>
<tr>
<td>12/29/08</td>
<td>Registered</td>
<td>3U</td>
<td>Approved</td>
<td>10/26/07</td>
<td>Orientation</td>
<td>10/24/08</td>
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<td>12/29/08</td>
<td>Registered</td>
<td>3U</td>
<td>Approved</td>
<td>10/26/07</td>
<td>Assessment and Interview</td>
<td>2/3/09</td>
</tr>
<tr>
<td>12/29/08</td>
<td>Registered</td>
<td>3U</td>
<td>Approved</td>
<td>10/26/07</td>
<td>Assessment and Interview</td>
<td>2/3/09</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>SSN:</th>
<th>CWIN:</th>
<th>Approved Date</th>
<th>Activity Description</th>
<th>Activity Status Post Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/29/08</td>
<td>Exempt</td>
<td>3U</td>
<td>Approved</td>
<td>10/18/07</td>
<td>English as a Second Language</td>
<td>2/3/09</td>
</tr>
<tr>
<td>12/29/08</td>
<td>Exempt</td>
<td>3U</td>
<td>Approved</td>
<td>10/18/07</td>
<td>English as a Second Language</td>
<td>2/3/09</td>
</tr>
<tr>
<td>12/29/08</td>
<td>Registered</td>
<td>3U</td>
<td>Approved</td>
<td>10/18/07</td>
<td>English as a Second Language</td>
<td>2/3/09</td>
</tr>
<tr>
<td>12/29/08</td>
<td>Registered</td>
<td>3U</td>
<td>Approved</td>
<td>10/18/07</td>
<td>Assessment and Interview</td>
<td>2/3/09</td>
</tr>
</tbody>
</table>

**Table Notes:**
- **ES Status Date:** Date of Employment Status Change
- **Benefit Program:** Type of benefit program
- **Benefit Program Status:** Status of benefit program
- **Activity Description:** Description of the activity
- **Scheduled Hours:** Total hours scheduled for the activity
- **Scheduled Hours Unit:** Unit of measurement for scheduled hours
- **Activity Status:** Status of the activity
- **Activity Status Post Date:** Date of the activity status
- **Engagement (for Activity):** Type of engagement

**Filters:**
- Fact Date: Most Recent
- Case No
## Client Activity Program and Benefit Status

### Client Overview:

<table>
<thead>
<tr>
<th>CalWIN - CIS</th>
<th></th>
</tr>
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<tbody>
<tr>
<td>Clients</td>
<td></td>
</tr>
<tr>
<td>Programs</td>
<td></td>
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<tr>
<td>Benefits Issuance</td>
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</table>

<table>
<thead>
<tr>
<th>Relation</th>
<th>Last Name</th>
<th>First Name</th>
<th>SSN</th>
<th>Program Type</th>
<th>Aid Code Desc</th>
<th>Benefit Begin Date</th>
<th>Benefit End Date</th>
<th>Issue Amt</th>
<th>Issuance Count</th>
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</thead>
<tbody>
<tr>
<td>Principal</td>
<td>Smith</td>
<td></td>
<td></td>
<td>CalWORKs</td>
<td>CalWORKs-One Parent Family</td>
<td>5/2/07</td>
<td>8/31/09</td>
<td>$16,331.00</td>
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<td>Food Stamps</td>
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<td>4/11/08</td>
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<td>CalWORKs-Two Parents-State Only</td>
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<td>1/31/09</td>
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<td></td>
<td></td>
<td>CalWORKs-One Parent Family</td>
<td>6/5/07</td>
<td>8/31/09</td>
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Mechanizing Social Services

- Analyze
- Alert
- Report
- Performance

SSIRS

CIS
- Respect
- Extracts
- Downloads

Client/Worker Communication/Notice

Intake & Response

Discontinue & Sanction Benefits

IVR/NRU

CMIPS

CWS/CMS

TANF

Client Programs

Worker Input to Original Source Systems

Regularly Updated Information
Summary

- Improve outcomes of Children and Families
- Reduces the Action Required Action Taken Gap across Programs
- Improves Business Process
- Reduces Cost
- Seeks Revenue Opportunities
  - Grants
  - Private Public Partnerships
Contact Information

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- (510) 645 9350
Thank You

Using Technology to Break Down Silos to Better Serve Citizens

2010 Computerworld 21st Century Achievement Award in Government
2009 IBM Information on Demand Innovation Award, Government Sector