Finance Department

Presentation to the City of Houston
Budget and Fiscal Affairs Committee

Enterprise Data Warehouse Demo and
Appropriation of Funding for Infrastructure

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Enterprise Data Warehousing

Objectives

Data Warehousing Objectives

1. Enable Citywide reporting and analysis of accounts receivable and collections revenues
   - Citywide consolidated dashboard
   - Dashboard by revenue stream
   - Vendor management scorecards
   - Ad hoc reporting capabilities

2. Apply data warehousing industry best practices

3. Provide the architecture and infrastructure to support the City’s current and future business intelligence needs

Data Warehousing Definitions

- Data Warehouse: The complete end-to-end environment including data marts and business intelligence. The systems helps manage the business for tracking, monitoring, analysis, exception reporting and planning

- Data Mart: A collection of data that is organized for end user ease of use and performance.

- Business Intelligence: Interactive, flexible environment to support business decision making, which can present results in variety of formats (report, spread sheet, chart, map …)
Enterprise Data Warehousing
AR Data Mart

Current Vendor Management Scorecards
1. The dashboard has standard and ad hoc report capabilities
2. Reports can be generated across all revenue streams (i.e. data sources) or for a specific revenue stream
3. Scorecards are configured to track the performance of each collection vendor
4. The dashboard generates a set of Standard reports across revenue streams as well as revenue specific reports
Burglar Alarm Debt Collection Scorecard Example

- Vendor scorecard generated by selecting:
  - Revenue Stream (i.e. the data source)
  - Revenue Type (e.g. Parking citation, Boot/Tow)
  - Collection Vendor
  - Month in Review

- Standard charts track:
  - Outstanding AR and AR Aging
  - Monthly Payments
  - Collection Rate Trends
Burglar Alarm Debt Collection Scorecard Example

Each revenue stream has a tab that contains charts that are only applicable to that specific revenue stream.
Ad Hoc Reporting

- The ad hoc reporting environment allows each department to generate additional reports not available on the scorecards.
- The user has full control of what data to include or exclude from the report.
- Reports can be exported to Excel, PDF, HTML.
This ad hoc report shows the number of Parking citations issued at a particular incident address in FY13.
AR Data Mart: Results to Date

Data Requests and Analysis Results*

1. Parking true-up between source system and the collection vendor
2. Ad Valorem Reports
   a) Information about railroad and railroad-related accounts to assist with researching during the Legislative Session
   b) Information about airline accounts per Councilmember’s budgetary request
   c) Information about over-65 exemptions per Councilmember’s budgetary request
   d) Valuation trends for Houston HOPE/LARA project sites

Financial Results*

1. ARA – Burglar Alarm Penalties $347,671
2. HFD – Fire Alarm Penalties $143,665
3. HFD – Fire Alarm Permits $256,858
   TOTAL: $748,194

* Results to date obtained by performing manual ad hoc analyses based on data extracts and integrated dimensional model that the AR Data Mart can supply once live.

Note: Revenue impact of AR Data Mart will increase significantly with inclusion of Ad Valorem Property Taxes, EMS Transport Fees, Municipal Courts Fines and Fees, and Utility Billing and Collections
Enterprise Data Warehousing
Next Steps: Phase II

Next Steps

1. AR Data Mart and Data Warehousing infrastructure
   - Upgrade Data Warehouse infrastructure (approved in Capital Improvement Plan)
   - Integration with City GIS environment
   - Incorporation of FIN Ad Valorem Property Tax data into AR data mart

2. Kickoff Governance to identify future Data Mart projects
   - Plan for revenue streams (EMS, HHS, HPL, and MCD) when new systems go live
   - Prioritization of non-AR Data Mart projects (e.g. parking meter revenues, fleet, etc.)

3. Build the Data Warehousing Center of Excellence

RCA for Data Warehousing Infrastructure Funding

Recommend appropriation of $404,000.00 for Data Warehousing infrastructure. This funding will support hardware (servers), software (database and business intelligence software licenses), project management and necessary training.
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Questions?