
M E M O R A N D U M

DATE: January 5, 2007
TO: City Council Members
FROM: Gary Mumford
RE: Engineering Division Audit Response

In May 2006, the City Council received the written report from Citygate Associates on a management and performance audit of the City's Engineering Division. In a verbal presentation, the auditors stated that in their professional judgment, the City's Engineering Division is more sophisticated, has better internal coordination, gives more attention to meeting schedules, and is more cost effective in its work than most similar operations they have reviewed or with which they are closely familiar. Although the report was overall very positive, the auditors did provide a short list of opportunities for improvement in anticipation of needs of the future. The Division is already addressing many of the recommendations and provided a response to each audit recommendation.

Summary: There were a total of 30 recommendations.

- a. The Division completely agrees with 22 of the recommendations and has taken action or is in the process of taking action. Some aspects require funding. The Division may be able to absorb some of the costs in its current budget; other costs may be phased in or included in future annual budget requests.
- b. The Division disagreed with 4 of the recommendations because of a shift in current policy. See below.
- c. The Division somewhat agrees with 4 of the recommendations and is in the process of taking action. See list below.

Audit recommendations to which the Engineering Division disagreed:

The Council may wish to discuss these recommendations with the Administration as to whether there should be a shift in policy. (Note: The responses below are abridged. For a complete response, see the attached transmittal from the Engineering Division.)

Recommendation VII-1 (Cost Allocation): If the City is interested in full cost accounting of construction projects, consider adding overhead costs from other department (accounting, payroll, human resource management, attorney, mayor, council, etc.) to the engineering costs that are charged to CIP projects.

Division response: Any additional costs charged to projects will reduce the actual dollars available for construction unless the CIP allocation from the general fund is increased.

Recommendation X-1 (Geographic Information System): Hire a consulting firm very familiar with all aspects of GIS to provide the City with an evaluation of the capabilities of the current system, the limitations, and evaluate the short and long-term capability/value of alternatives to the present system, along with a range of cost for any alternatives.

Division response: The use of a consultant at this time does not appear to be warranted since problem areas have been identified and improvements are underway.

Note: The Council may wish to request that the information that has been identified by the Engineering Division be included in a comprehensive GIS report that is tentatively scheduled for the Council in February or March. Currently the Council does not have information on projected costs for addressing all of the City's GIS needs. Council staff believes that full benefit from GIS will take a significant additional financial investment.

Recommendation XII-1 (Permit Process & Enforcement): Hire a consultant to evaluate the overall City data management system and recommend changes that will provide sufficient flexibility and real time data over the next decade.

Division response: In cooperation with IMS, the Engineering Division is presently evaluating processes, making changes, and implementing new GIS software to achieve real time maps and data. The use of an outside consultant does not appear to be warranted at this time since the data management concerns expressed in the report are being addressed.

Recommendation XII-2 (Permit Process & Enforcement): Performance goals should be established with regards to the time it takes to issue a permit and respond to a request for inspection.

Division response: The permit issuance time is minimal and handled "on the spot" in a manner of minutes, not hours or days.

Audit recommendations to which the Engineering Division somewhat agrees:

Recommendation XIII-2 (Community Relations/Customer Relations & Services): Revise the monthly citywide performance & measurement report to contain information on the number of survey questionnaires completed and the average score on each of the questions.

Division response: The Engineering Division already tracks this information for in-house use.

Recommendation XIII-3 (Community Relations/Customer Relations & Services): The Division should review the work activities of each function and select performance measures that can be easily administered and that relate directly to the provision of services.

Division response: Existing performance measurements were created under the direction of a consultant retained to ensure value in the measurement process. The Engineering Division will evaluate existing and possible new measurements to determine the value of revising existing or adding new measurements.

Recommendation XIII-4 (Community Relations/Customer Relations & Services): Results of the survey responses on construction projects should be included in the monthly citywide performance & measurement plan and share an annual summary with the City Council.

Division response: The Engineering Division already tracks the information for in-house use. If the City Council finds some value in receiving this information, the Engineering Division can provide any desired reports.

Recommendation XIV-3 (Reporting to the City Council): The Engineering Division should develop a series of performance measures that communicate useful information to the City Council, that serve as management and analytical tools for the Engineering Division, and generally meet the standards in the performance measurement scheme described in this report.

Division response: Existing performance measurements were created under the direction of a consultant retained to ensure value in the measurement process. The Division will evaluate possible changes in measurements to provide additional value added measurements. If the City Council finds some value in receiving this information, the Engineering Division can provide any desired reports.

Reporting to the City Council

The auditors recommended that the Engineering Division provide a monthly CIP status report to the City Council. The Division currently produces a monthly CIP report that is distributed to various other departments and divisions by email. (See attached example for the month of October 2006.) The auditors recommended that the report be redesigned in cooperation with the City Council so that the Division is providing the information that the Council needs in an easily understandable format. The City Engineer would like to check with the Council to begin the process of determining the types and amount of information that the Council would like to receive. For example, perhaps the comment column can be expanded to include a more complete project history and current status. Perhaps Council Members would prefer to routinely review a report for projects only in his/her district with the complete report on a request basis.

The City Engineer is willing to change the format, add information or make any other changes that would be helpful. The Council may wish to request that the City Engineer work with Council staff in this endeavor. The revisions could be an evolving process as the Council begins to receive and use the reports. Does the Council wish to receive the CIP status reports? Does the Council wish to receive the reports on a monthly basis or on some less-frequent basis? Do Council Members prefer to receive the report by email or hard copy?

RICHARD GRAHAM
PUBLIC SERVICES DIRECTOR

SALT LAKE CITY CORPORATION

ROSS C. "ROCKY" ANDERSON
MAYOR

DEPARTMENT OF PUBLIC SERVICES COUNCIL TRANSMITTAL

RF
TO: Rocky Fluhart
Chief Administrative Officer

DATE: October 25, 2006

FROM: Rick Graham, Director of Public Services *RG*

STAFF CONTACT: Max Peterson, City Engineer 535-6231
Lynn Jarman, Salt Lake City Engineering 535-6016

DOCUMENT TYPE:

Engineering Division's responses to the Citygate Management Audit Recommendations.

RECOMMENDATION:

Distribute Engineering's audit recommendation responses to members of the City Council.

BUDGET IMPACT:

No budget impact.

BACKGROUND and DISCUSSION:

Under direction of the City Council, Citygate Associates audited the Engineering Division in 2006. The management audit report was overall very favorable, but did present several improvement recommendations. Engineering is already addressing many of the recommendations presented in the audit report. Responses to each audit recommendation are provided including a statement of actions already taken or programmed.

PUBLIC PROCESS:

No public process is required.

Salt Lake City Public Services / Engineering Division
Responses to Citygate Management Audit Recommendations

October 2006

AUDIT RECOMMENDATION	AGREE OR DISAGREE	ENGINEERING COMMENTS	ACTION TIMELINE	FUNDING IMPACT
<p><u>Recommendation II-1 (Priority B):</u> The Engineering Division should review the long term CIP every few years and discuss priorities with the City Council. While the CIP is usually reviewed annually in looking at the proposed one-year CIP in the annual budget, every few years a broader long-term review should be done to make sure future projects are prioritized by the City Council. This is particularly important since some projects have several years of planning, public input, etc. before construction can begin.</p>	<p>Agree</p>	<p>Engineering will coordinate with the Council Staff to determine discussion format and information desired.</p>	<p>To be determined following discussions with Council staff (24 months)</p>	<p>No additional funding needed</p>
<p><u>Recommendation II-2 (Priority B):</u> Particular attention should be paid to scheduling future Building and Architectural workload to ensure that in-house staff is fully utilized.</p>	<p>Agree</p>	<p>Engineering will annually review the Building and Architectural workload to ensure the in-house staff is fully utilized.</p>	<p>Annual review</p>	<p>No additional funding needed</p>
<p><u>Recommendation III-1 (Priority B):</u> Succession Planning for the Project Team Leaders needs to begin, since the senior project managers are expected to be retiring at or near the same time.</p>	<p>Agree</p>	<p>Engineering is re-structuring, training personnel, and implementing new processes and procedures to facilitate succession planning.</p>	<p>Underway (36 months)</p>	<p>No immediate additional funding needed</p>
<p><u>Recommendation IV-1 (Priority A):</u> The Engineering Division should report project priority and the estimated schedule to the City Council in a report shortly after approval of the Annual Budget and CIP.</p>	<p>Agree</p>	<p>Engineering will work with the City Council staff to determine overall project information desired and develop appropriate reporting forms. Engineering is evaluating CIP tracking software packages that provide real time project information</p>	<p>Following adoption of next CIP (12 months)</p>	<p>No immediate additional funding needed</p>
<p><u>Recommendation IV-2 (Priority C):</u> The Monthly CIP Project Status Report should be modified, as recommended elsewhere in this report, to include a continual update on the project status compared to the original schedule.</p>	<p>Agree</p>	<p>Engineering will work with the City Council staff to determine overall project information desired and develop appropriate reporting forms. Engineering is presently evaluating software options for CIP tracking and reporting that include present status and historical data.</p>	<p>Following agreement with Council on reporting forms (12 months)</p>	<p>No additional funding needed</p>

<p><u>Recommendation V-1 (Priority C):</u> Develop a formal list of all potential stakeholders, and when a project scope is developed, use the list to check off affected parties and send a formal documented communication alerting them to the project scope and schedule. Develop a mechanism by which they can respond if they have interest or questions. A shorter version of the list should receive plans for comment once they are completed in draft form, as occurs now.</p>	<p>Agree</p>	<p>Stakeholder lists already exist. Engineering will adopt a more formal approach based on specific discipline areas (buildings, parks, street projects) to improve the process of identifying and involving all potential stakeholders.</p>	<p>Underway Stakeholder lists are being developed in conjunction with new projects (12 months)</p>	<p>No additional funding needed</p>
<p><u>Recommendation V-2 (Priority C):</u> All communication among agencies, whether formal or informal, should be documented in the project file.</p>	<p>Agree</p>	<p>Engineering is already documenting communications with other agencies; however, a stronger emphasis will be made to ensure the importance of documentation is understood by all Engineering personnel.</p>	<p>Underway (Discussion held with Engineering personnel)</p>	<p>No additional funding needed</p>
<p><u>Recommendation V-3 (Priority B):</u> A revision in the GIS service and installation of the Hummingbird program should be used as an opportunity to provide real time on-line access to all files by both engineering functions: utility and streets.</p>	<p>Agree</p>	<p>Engineering is working with IMS to convert GIS to an operating system that will provide real time access to GIS databases. This improvement will be coordinated with efforts to add a GIS document locator to the Hummingbird Document Management System to provide map access to all files coded with an address.</p>	<p>Underway (36 months)</p>	<p>Additional funding for software and implementation needed</p>
<p><u>Recommendation V-4 (Priority C):</u> There is little cost or operational improvement to be gained by combining the Utility engineering function and the Public Services Engineering Division, because they serve two separate functions and different customer groups.</p>	<p>Agree</p>	<p>Engineering agrees with the auditor's recommendation.</p>	<p>No action or time-line required</p>	<p>No additional funding needed</p>
<p><u>Recommendation VI-1 (Priority D):</u> If the City Council continues to be concerned about underestimation of project costs, the Engineering Division should consider either putting a professional cost estimator on staff or subcontracting for cost estimating on all building and specialized projects along with all high dollar value projects.</p>	<p>Agree</p>	<p>Engineering will obtain the services of a cost estimating consultant through a term contract to support the existing process for CIP cost estimating on specialized projects when Engineering does not have a history of applicable unit costs.</p>	<p>Underway (8 months)</p>	<p>Increased cost would be included in the CIP project budget request</p>

<p><u>Recommendation VI-2 (Priority C):</u> Regular training should be provided to all staff estimating projects.</p>	<p>Agree</p>	<p>Engineering has started and will provide training on a regular basis to ensure estimating is as accurate as possible given the dynamic nature of the marketplace.</p>	<p>Ongoing</p>	<p>No additional funding needed</p>
<p><u>Recommendation VI-3 (Priority C):</u> Establish and maintain a historical database of both Engineering Division and outside agency cost and bid data to assist in future Division estimating, project management and cost control.</p>	<p>Agree</p>	<p>A historical cost database would be of value. Software is needed to easily accomplish this task. Engineering will evaluate available software and associated costs in coordination with Capital Planning to determine the best software program.</p>	<p>Dependent on acquisition of software (18 months)</p>	<p>Additional funding needed for software</p>
<p><u>Recommendation VI-4 (Priority B):</u> Establish criteria to identify bids in excess of the engineer's estimate and/or the budget estimate, which should be taken to the City Council for discussion regarding change in scope or appropriation of additional funds. This will permit the City Council to participate in the consideration of changing the scope to something other than what they anticipated when they approved the project. They can then participate in the consideration of the use of added funds, which will reduce funding available for other future projects and programs.</p>	<p>Agree</p>	<p>This already occurs in the sense that any change in CIP project scope or budget goes to the City Council for approval. Engineering will work with the Council staff to determine ways to improve the information exchange. Engineering is evaluating CIP planning software that can provide immediate access to status and budget information on all CIP projects, providing Council and others with real time updates.</p>	<p>Dependent on discussion with Council staff (18 months)</p>	<p>Additional funding needed for software</p>
<p><u>Recommendation VII-1 (Priority D):</u> If the City is interested in the full cost of constructing projects, it should consider adding a component to its cost allocation formula that recognizes the support services provided to the Engineering Division by other City Departments.</p>	<p>Disagree</p>	<p>Any additional costs charged to a project will reduce the actual dollars available for construction unless the CIP budgets are increased to support costs of other City departments. Engineering will discuss this issue with Council staff. The proposed change requires a shift in current City policy.</p>	<p>Dependent on discussion with Council staff</p>	<p>Additional funding for construction to cover costs charged for support services</p>
<p><u>Recommendation VII-2 (Priority B):</u> The Engineering Division should either adopt the California Benchmark Study standards as its guideline to measure the appropriateness of engineering expenses on projects or conduct its own study to establish benchmark standards that more closely reflect the local cost and contracting environment of Salt Lake City.</p>	<p>Agree</p>	<p>Engineering will utilize the California Benchmark Study as its standard for engineering expenses. An additional study would be costly and may not provide information of any significant value beyond that which already exists.</p>	<p>Complete, unless Council desires further study (12 months, if additional study requested)</p>	<p>If a study is performed, funding will be needed for consultant services</p>

<p><u>Recommendation VII-3 (Priority A):</u> The Engineering Division should allocate funds to reform its present cost allocation reporting system so that it can provide information in a flexible manner to meet the needs of users at many levels and be able to provide easily unique reports in response to future management and policy needs.</p>	Agree	Engineering will evaluate available software that can track cost allocations and generate various reports. This evaluation will be coordinated with IMS, Accounting, and Capital Planning to determine the system that best meets the project information needs of all departments.	Underway (18 months)	Additional funding will be needed for software
<p><u>Recommendation IX-1 (Priority A):</u> The City needs to substantially accelerate the conversion of old plans/drawings to electronic format and to ensure steady progress toward implementing the "Hummingbird" system with the objective of having all historical records digitally captured in the system within five years. If the City does not do this, then it is imperative that they provide proper protection from fire or other natural disasters for the current hardcopy records.</p>	Agree	Engineering received a personnel increase of one office technician in Records Management to accelerate the electronic formatting of all engineering drawings and the important historical maps and plats. A large scanner is presently used to convert old drawings to electronic format. This effort will take at least four years. After old drawings are converted to the electronic format, they will be stored off site in a environmentally sound storage area for record preservation.	Underway (48 months)	Additional funding may be needed for off site storage
<p><u>Recommendation X-1 (Priority A):</u> The City, possibly through the Engineering Division budget, should hire an outside consulting firm very familiar with all aspects of GIS. This firm should provide the City with an evaluation of the capabilities of its current system, the limitations, and evaluate the short and long-term capability/value of alternatives to the present system, along with a range of cost for any alternatives.</p>	Disagree	Engineering, in a cooperative effort with IMS, is evaluating the existing GIS program and making changes to improve work processes and enhance the citywide GIS effort. The use of a consultant at this time to evaluate the GIS program does not appear to be warranted since problem areas have been identified and improvements are underway.	Underway (12 months)	Additional funding may be needed for new software
<p><u>Recommendation XI-1 (Priority B):</u> Establish a citywide policy regarding who is responsible to ensure that special ADA accommodations are made in public places.</p>	Agree	This recommendation is beyond the purview of City Engineering. The City's ADA coordinator (position in the Mayor's Office) is responsible for citywide oversight of ADA needs. An in-house committee with representatives from all City departments already coordinates identification and resolution of ADA issues.	No action or timeline regarding Engineering's involvement in this recommendation	No additional funding needed

<p><u>Recommendation XI-2 (Priority A):</u> Adopt a single standard for sidewalk ramp detectable warnings.</p>	Agree	A single standard already exists regarding public way detectable warnings for sidewalk ramps in Salt Lake City. Engineering is coordinating with other government agencies and the private sector to develop a statewide standard that meets all federal guidelines. The new APWA standard will be published before the end of 2006.	Underway (3 months)	No additional funding needed
<p><u>Recommendation XII-1 (Priority A):</u> As noted elsewhere in this report in discussing GIS, the City should consider having an outside consultant evaluate the overall City data management system and recommend changes that will provide sufficient flexibility and real time data over the next decade.</p>	Disagree	Engineering will coordinate with IMS and other departments regarding City GIS data management and the development of a long term plan to address all issues. In a cooperative effort with IMS, Engineering is presently evaluating processes, making changes, and implementing new GIS software to achieve real time maps and data. An enterprise GIS is being created that ties many technologies together. Map Layers and data are presently being added and tested to ensure data integrity. The use of an outside consultant does not appear to be warranted at this time since the data management concerns expressed in the audit report are being addressed.	Underway - IMS / Engineering (12 months)	Additional funding may be needed for software
<p><u>Recommendation XII-2 (Priority B):</u> Performance goals should be established with regards to the time it takes to issue a permit and respond to a request for inspection. The Division should then measure this "time" and report periodically to the City Council.</p>	Disagree	The permit issuance time is minimal and handled "on the spot". The value of determining the average number of minutes required to issue a permit is questionable, since this effort is accomplished in a matter of minutes, not hours or days.	No action or time-line required	No additional funding needed
<p><u>Recommendation XII-3 (Priority C):</u> Specific questions on the customer survey should address the various aspects of permit issuance and management so that the Division can determine its level of performance and whether changes need to be made.</p>	Agree	Engineering will evaluate the existing customer feedback form and make appropriate revisions to facilitate performance measurement.	Underway (2 months)	No additional funding needed
<p><u>Recommendation XIII-1 (Priority C):</u> Develop a proactive plan to encourage both external customers and other City departments to complete the survey forms at regular intervals.</p>	Agree	Engineering will evaluate options to increase the rate of return regarding customer feedback forms from both internal and external customers.	Underway (6 months)	No additional funding needed

<p><u>Recommendation XIII-2 (Priority C):</u> Revise the Monthly Scorecard report to contain information on the number of survey questionnaires completed and the average score on each of the questions.</p>	Somewhat Agree	The performance measurement reports were created through an extensive Public Services Department endeavor under the direction of a consultant to ensure value in the measurement process. Engineering already tracks the stated information for in-house use. If the City Council finds some value in receiving this information, Engineering can provide such.	Ongoing performance measurement can be reported to Council if wanted	No additional funding needed
<p><u>Recommendation XIII-3 (Priority B):</u> The Division should review the work activities of each function and select performance measures that can be easily administered and that relate directly to the provision of services to internal and external customers. These measures should be included in the Division Monthly Scorecard.</p>	Somewhat Agree	The performance measurement reports were created through an extensive Public Services Department endeavor under the direction of a consultant retained to ensure value in the measurement process. Engineering will evaluate existing and possible new measurements to determine the value of revising existing or adding new measurements.	Underway (12 months)	No additional funding needed
<p><u>Recommendation XIII-4 (Priority C):</u> Results of the survey responses on construction projects should be included in the Monthly Scorecard and annual a summary shared with the City Council.</p>	Somewhat Agree	The performance measurement reports were created through an extensive Public Services Department endeavor under the direction of a consultant to ensure value in the measurement process. Engineering already tracks the stated information for in-house use. If the City Council finds some value in receiving this information, Engineering can provide any desired reports.	No action or timeline required	No additional funding needed
<p><u>Recommendation XIV-1 (Priority A):</u> The CIP Monthly Status Report needs to be restructured substantially, with the design done in cooperation with the City Council so they are provided with the information they feel they need in an easily understandable format. An evaluation should be made as to whether several reports might be better, each providing a different perspective; and elective officials might choose to review those of interest to them more frequently than the other reports. Each report could provide a different perspective on CIP projects. Consideration should be given to including both the Construction and Design Phase information on one "legal sized page" so the report user can see the full history and current status of a project.</p>	Agree	Engineering will coordinate with Council Staff to determine information that will be of value and create reports that will provide the desired information. Additionally, Engineering is involved in a long-range project that will facilitate the presentation of CIP project information on-line. This would provide status and budget information regarding all CIP projects. A CIP planner and management software program may be helpful in bringing all desired information together. Engineering will evaluate available softwares that can track cost allocations and generate various reports. This evaluation will be coordinated with IMS, Accounting, and Capital Planning to determine the best system to meet the project information needs of all stakeholders.	Following meetings and decisions with Council staff (6 months)	No additional funding needed, unless a software program is purchased

<p><u>Recommendation XIV-2 (Priority A):</u> A monthly report to the City Council should alert Council to those projects where a change in scope or transfer of funds is being contemplated based upon a significant change in the project. This will give the City Council the opportunity to inquire and discuss the issue prior to a decision being made.</p>	<p>Agree</p>	<p>Engineering will coordinate with Council Staff to determine information that will be of value and create reports that will provide such. CIP planning software that would be beneficial in providing the Council with real time information regarding projects and alerts regarding scope and budget issues is under evaluation.</p>	<p>Following meetings and decisions with Council staff (6 months)</p>	<p>No additional funding needed, unless a software program is purchased</p>
<p><u>Recommendation XIV-3 (Priority B):</u> The Engineering Division should develop a series of performance measures that communicate useful information to the City Council, serve as management and analytical tools for the Engineering Division, and generally meet the standards in the performance measurement scheme described in this report.</p>	<p>Somewhat Agree</p>	<p>The performance measurement reports were created through an extensive Public Services Department endeavor under the direction of a consultant to ensure value in the measurement process. Engineering will evaluate possible changes in measurements to provide additional value added measurements.</p>	<p>Underway (12 months)</p>	<p>No additional funding needed</p>