

City of San Diego  
MAYOR JERRY SANDERS

M E M O R A N D U M

DATE: April 20, 2007  
TO: Honorable Council President Scott Peters and Members of the City Council  
FROM: Rick Reynolds, Assistant Chief Operating Officer  
SUBJECT: Business Process Reengineering Study Reports

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As we entered Fiscal Year 2007, we were aware that we would have to look critically at methods to improve the efficiency of our operations in order to balance the Fiscal Year 2008 budget. Accordingly, we looked for opportunities to streamline our organization as quickly as possible. We set some conservative targets for our Departments to hit in position reductions and we gave our Departments the tool of Business Process Reengineering (BPR) as a way to dramatically improve efficiency and effectiveness. Our Departments that embarked on BPR studies right away identified methods to achieve significant savings as well as to improve the effectiveness of our City services.

***Background on Business Process Reengineering***

In our BPR Guide, we provide the following explanation of what BPR is and is not:

***What Business Process Reengineering Is***

*BPR is the redesign of work processes (activities, services or functions) to achieve substantial improvement. In the City of San Diego, the work processes undergoing redesign will occur within and between divisions and departments.*

*Reengineering focuses on rethinking a process—starting with a clean slate—and finding ways to improve efficiency. It focuses on optimizing efforts and getting rid of non value-added activities. Reengineering is about getting to the root of things and inventing completely new ways of accomplishing work.*

***What Business Process Reengineering Is Not***

*Business process reengineering is not about incremental improvement or superficial changes; it is about dramatic leaps in performance.*

In light of the above definition, it should come as no surprise that many of our BPR studies are completed in phases and that our reengineering processes will be implemented over time, recognizing that when reengineered processes will rely upon organizational and/or personnel changes, these changes can't happen appropriately overnight.

**As we conduct our reengineering studies, we have found that in some instances, it makes sense to bring a “Phase I” interim study report forward to the Council for action.** Phase I reports are the result of having identified ready targets for reform for which immediate positive results are possible. An example of an early Phase I report was that provided for our Information Technology reform effort, wherein we were able to recognize improved effectiveness from implementing the reorganization phase of our work, even before we had completed the full process redesign phase.

**After Council has approved a BPR study, its implementation takes time—no change can happen appropriately overnight.** We are typically implementing by utilizing a three-stage approach. In stage 1, we recognize “quick wins” to improve efficiency or effectiveness. These types of improvements might be relatively easy changes fully under the purview of a Department’s leadership—an example might be more fully utilizing a staff scheduling software to minimize scheduling problems and the need for overtime. These improvements also include relatively straightforward changes that have budgetary impacts and that, as a result, require Council approval—an example of this type of change is recognizing the cost savings realized through eliminating a vacant position. In stage 2, we undertake the reorganization and retraining required to move us toward our reengineered state. Just as some stage 1 changes have budgetary impacts and require Council approval, many stage 2 changes will have budgetary impacts—an example of this type of change might be coordinating provision of a single type of service throughout the City and, as a result, consolidating all providers of a service into a single department. Stage 3 of reengineering implementation is the stage in which we begin to operate in our recommended more efficient and effective state, having made all of the necessary personnel changes (e.g., retraining, reductions, reorganizations), leadership changes, and process changes. With stage 3, we will be delivering services more effectively, to the level identified through reengineering our processes, and we will be able to claim the full benefit of our improvements to efficiency.

#### ***Realizing Cost Savings Associated with BPR***

In order to support our efforts to move toward fiscal health, we asked Departments undergoing BPR studies to realize efficiencies as soon as they were identified as viable. In some instances, this resulted in mid-year budget reductions. In other instances, this manifests itself as realizing savings through cutting vacancies in the Fiscal Year 2008 budget. In many cases, we will see a blended approach to savings realization—some early cuts and additional reductions after a first reorganization milestone is achieved. Regardless of the method for realizing savings—whether they are shown as “Five Year” target savings that were realized early on or BPR savings at the completion of a first milestone—**they work because they are informed by our BPR activities and they are evidence of our real progress in reforming the delivery of our City services.**

***Information Attached to this Package***

Attached to this package you will find BPR reports for studies that are underway and/or have recently been completed. These include:

- Metropolitan Wastewater (MWWD)
- Engineering
- Streets (managed competition information redacted)
- Fleet Services
- Publishing Services (managed competition information redacted)
- Police, Phase I (limited report addressing only vacancy eliminations)

BPR is a management initiated undertaking to improve operational efficiency as part of the Managed Competition process. Impacts to wages, hours and working conditions resulting from BPR are subject to Meet and Confer. As of today, we have completed Meet & Confer for the Fleet Services BPR and we are nearing completion of Meet & Confer for MWWD. In addition, we intend to meet and confer regarding BPR organizational changes and reductions beyond the vacancy cuts that appear in the FY08 budget for Streets, Publishing Services, and Engineering.



Rick Reynolds  
Assistant Chief Operating Officer



THE CITY OF SAN DIEGO  
**REPORT TO THE CITY COUNCIL**

DATE ISSUED: April 26, 2007 REPORT NO: 07-081  
ATTENTION: Council President and City Council  
Agenda of April 3, 2007 (Budget Hearing)  
SUBJECT: Engineering Business Process Reengineering  
REFERENCE: Engineering Business Process Reengineering Final Report

REQUESTED ACTION:

Accept the Report from the Mayor on the Engineering Business Process Reengineering (BPR) Study and approve the study's recommendations, including those in the proposed FY08 Budget Submittal.

STAFF RECOMMENDATION

Accept the Report on Engineering BPR and authorize implementation of the organizational changes, including those incorporated in the proposed FY 08 Budget.

BACKGROUND

The Mayor has commenced BPR efforts to improve efficiencies, reduce the cost of City government and to maximize the services offered to our residents. BPR focuses on optimizing the efficiency and effectiveness of operational processes and functional work groups. The Engineering BPR Study was a comprehensive assessment of engineering core functions and processes spread among various departments. Over a six month period, the Engineering BPR team of more than 100 City employees and others examined the existing processes across the varied engineering functions performed throughout the City of San Diego. The detailed process review was completed for five functions (asset planning, design, construction, development support and operations & maintenance) over five asset classes (pipelines, buildings, parks/non-buildings, transportation/roadways, and process facilities like water and sewer treatment plants, pump stations, and reservoirs). They developed a new consolidated structure including an innovative matrix organization with a new project implementation and technical services function, streamlined processes, drafted key performance measures, and identified the implementation actions required to put the BPR recommendations into place.

Engineering BPR activities included business process mapping, process analysis, development of improvement ideas, benchmarking with other agencies, developing performance measures, and

examination of best business practices. Along with employees, labor representatives from MEA participated and contributed to this comprehensive review.

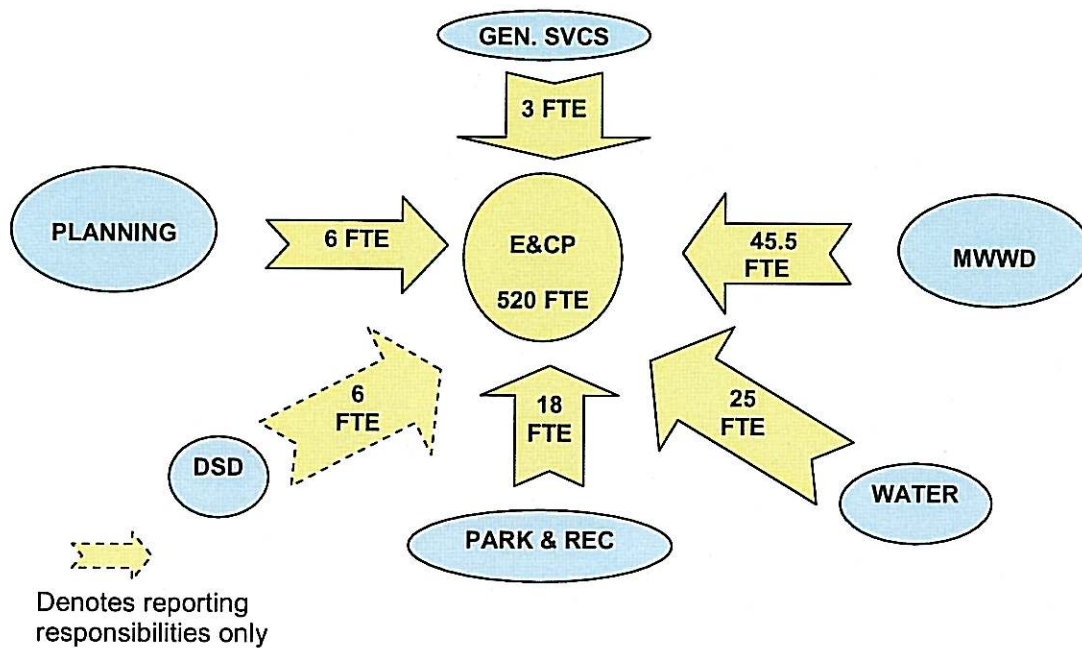
With full implementation of the BPR recommendations, the result will be a more effective and streamlined organization with centralized processes and enhanced service levels. The new organization will be poised to manage a widely varying workload level, without the staffing disruptions/turmoil experienced over the last few years due to decreases in CIP funding, and to provide improved control and coordination of projects in the City's right-of-way and enhanced transportation system engineering and operations.

Appendix A contains a list of the key recommendations from the Engineering BPR Study.

Proposed Staff Transfers to E&CP:

The Engineering BPR study has resulted in a reorganization plan that will consolidate most engineering services and support into a centralized Engineering & Capital Projects Department (E&CP). The consolidation will affect staff in five departments: Engineering & Capital Projects Department, General Services Department, Metropolitan Wastewater Department, Park & Recreation Department, Planning Department, and Water Department. Current engineering staff located in these departments will transfer to Engineering & Capital Projects Department. This will allow the elimination of redundant supervisory and support positions for CIP related engineering functions. Additionally, six senior engineering staff who serve as Deputy City Engineers are currently located/budgeted in Development Services Department. To increase the accountability of these personnel to the City Engineer, organizationally, the six positions will be moved to the Engineering & Capital Projects Department. However, the six staff will continue to work in Development Service Department as part of the one-stop shop concept of operations.

The following depicts the planned transfers to Engineering & Capital Projects Department:



Due to budget submittal deadlines, the full organizational changes of the BPR recommendations were not reflected in the proposed FY 08 budget submittal. The remaining position reductions and relocations and changes to the Engineering & Capital Projects Department organizational structure in the budget, will be part of the FY08 mid-year adjustment.

The following is a comprehensive list of the engineering positions being relocated to Engineering & Capital Projects Department.

DEPARTMENT	CLASSIFICATION	FTE
MWWD	Account Clerk	1.00
	Administrative Aide II	1.00
	Assoc Engineer-Electrical	2.00
	Assoc Engineer-Civil	14.00
	Assoc Engineer-Mechanical	1.00
	Assoc Planner	2.00
	Asst Engineer-Civil	9.00
	Asst Engineer-Electrical	1.00
	Principal Engineering Aide	3.00
	Project Officer I	1.00
	Senior Engineer-Elect	1.00
	Senior Engineer-Mech	1.00
	Deputy Director	1.00
	Sr Civil Engineer	1.00
	Sr Clerk/Typist	2.00
	Sr Planner	1.00
	Sr Structural Engineer	1.00
	Student Engineer	0.50
	Word Processor Operator	2.00
	Water	Assoc Engineer-Civil
Asst Engineer-Civil		9.00
Principal Engineering Aide		2.00
Sr Civil Engineer		2.00
Word Processing Operator		2.00
Administrative Aide II		1.00
Assoc Management Analyst		1.00
Assoc Planner		1.00
Park & Recreation	Public Info Officer	1.00
	Project Officer II	3.00
	Project Officer I	2.00
	Assoc Engineer-Civil	6.00
	Park Designer	4.00
	Principal Engineering Aide	1.00
Development Services *	Assoc Management Analyst	2.00
	Sr Engineering Geologist	1.00
	Sr Land Surveyor	1.00
	Sr Traffic Engineer	2.00
	Sr Civil Engineer	2.00

<b>DEPARTMENT</b>	<b>CLASSIFICATION</b>	<b>FTE</b>
Planning	Asst Engineer-Traffic	2.00
	Assoc Engineer-Traffic	2.00
	Sr Traffic Engineer	2.00
General Services	Sr Planner	1.00
	Assoc Planner	1.00
	Public Works Supervisor	1.00

\* 6 FTE (deputized City Engineers) from DSD will have only reporting responsibilities to E&CP.

The proposed FY08 budget reflects the 80.5 vacant position savings as shown in Appendix B and transfer of 18 Park & Recreation positions to Engineering & Capital Projects Department as identified in above table.

In addition to the relocation and reduction of positions, 15 positions will be reclassified to meet the staffing needs of the new organization. The following lists the positions to be reclassified:

<b>CURRENT POSITION CLASSIFICATION</b>	<b>PROPOSED POSITION CLASSIFICATION</b>
Asst Engineer-Civil	Asst Engineer-Traffic
Asst Engineer-Civil	Asst Engineer-Traffic
Asst Engineer-Civil	Asst Engineer-Traffic
Asst Engineer-Civil	Asst Engineer-Traffic
Asst Engineer-Civil	Assoc Engineer-Structural
Asst Engineer-Civil	Assoc Engineer-Traffic
Asst Engineer-Civil	Scheduler I (Asst Engineer)
Asst Engineer-Civil	Sr Drafting Aide
Asst Engineer-Civil	Sr Drafting Aide
Deputy Director	Assistant Department Director
Land Surveying Asst	Sr Mgmt Analyst
Project Assistant	Principal Engineering Aide
Project Officer I	Scheduler II (Assoc Engineer)
Sr Civil Engineer	Senior Mgmt Analyst
Sr Planner	Supervisory Mgmt Analyst

The net result of the proposed recommendations is an engineering organization with enhanced processes and structure, and with 89.5 fewer positions than the pre-BPR engineering organizations. The additional 9 positions that will be reduced with the rest of the organizational changes are shown in Appendix C. The proposed organization chart is shown in Appendix D.

Position Reductions & Annual Savings:

Vacant positions to be cut in FY08 Budget: 80.5 FTE (See Appendix B)

Annual savings beginning in FY08 will be as follows:

Baseline PE funding:	\$62,876,123/year
<u>Proposed PE cuts/reclassifications:</u>	<u>\$ 6,834,939/year</u>
Total Proposed PE funding:	\$56,041,184/year

Baseline NPE funding:	\$12,328,549/year
<u>Proposed NPE cuts:</u>	<u>\$ 0/year</u>
Total Proposed NPE funding:	\$12,328,549/year

TOTAL FY08 COST SAVINGS: \$ 6,834,939/year

Additional position cuts (FY08 mid-year adjustment): 9.0 FTE (See Appendix C)

Additional annual savings to be realized upon full implementation of the BPR recommendations:

Proposed PE cuts/reclassifications:	\$ 994,109/year
<u>Proposed NPE cuts:</u>	<u>\$ 358,000/year</u>

TOTAL ADDL COST SAVINGS: \$ 1,352,109/year

GRAND TOTAL COST SAVINGS: \$ 8,187,048/year



## Performance Measures

During the BPR study, the team started the development of the Department Management Program for Engineering & Capital Projects Department. During this effort, the team developed the re-engineered department's mission and vision statements and strategic goals and objectives. From the strategic objectives, the department's new performance measures and standards were developed. The following are key performance measures developed for the new organization:

### 1. Customer Satisfaction

Measure: Customer Satisfaction as measured through customer surveys

Standards:

- 80% of respondents giving rating of 4 or better (out of five)
- Increase by 2% per year until 90% of respondents give rating of 4 or better

### 2. Project Delivery - Cost

Measure: Percent deviation of actual cost as compared to estimated cost

Standards:

- For total project cost, less than 20% deviation
- For the project's soft costs (Design, CM and Project Delivery), less than 10% deviation

### 3. Project Delivery - Timeliness

Measure: Percent of projects delivered within the project's baseline schedule

Standard: 80% of actual project schedules meet or shorter than the baseline schedule

### 4. Project Quality

Measures:

- Planning Quality – Project scope changes during design
- Design Quality – Change orders during construction

Standard:

- No scope changes required during design
- Change order rate less than 5% of construction cost

## SUMMARY

The BPR proposal will reduce the centralized engineering organization by 80.5 full time equivalents (FTE) positions from the FY 2007 in the FY 2008 budget. An additional 9 positions will be eliminated during FY08, and will be removed during the mid-year adjustment. The staffing reductions/reclassifications are accomplished while maintaining all core services and creating enhanced service levels in the areas of CIP preliminary and technical engineering services, transportation system engineering and operations, life cycle asset management, and centralized general requirements contracting among others.

Core engineering and management processes will be standardized across the department through the development of standard operating procedures, and improved project delivery methodology facilitating consistency and greater efficiencies with improved customer services delivered.

The functional consolidation of divisions, and consolidated centralization of engineering functions enables the elimination of several supervisory and administrative support positions along with other positions identified as redundant or unnecessary based on projected baseline CIP workload in the proposed structure.

Reductions (includes all proposed eliminated positions):

➤ Senior Supervisory Positions	8.0 FTE ( 9%)
➤ Mid-Level Supervisory Positions	12.5 FTE (12%)
➤ All Other Positions	<u>69.0 FTE</u> (77%)
➤ Total	89.5 FTE

FISCAL CONSIDERATIONS:

Budgetary Impacts: The annualized savings in FY08 related to recommendations of this BPR proposal is estimated at \$6,834,939. Additional annual savings of \$1,239,432 are expected upon full implementation of the BPR recommendations.


PREVIOUS COUNCIL and/or COMMITTEE ACTION: None

COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS:

The Departments included the labor union (MEA) in the BPR effort, as well as a number of external stakeholders with background and familiarity with the Department's operations. The Department also conducted benchmarking on many aspects of operations.

KEY STAKEHOLDERS AND PROJECTED IMPACTS:

As this BPR proposes position reductions and changes in working conditions, this proposal will go through Meet and Confer with MEA. The BPR proposal has not been finalized in all aspects and is subject to the outcome of Meet and Confer.

  
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Patti Boekamp  
Engineering & Capital Projects Department Director

  
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R. F. Haas  
Deputy Chief of Public Works

- Attachments: A. Summary of BPR Recommendations  
B. Summary of Position Reductions in FY08 Budget  
C. Summary of Additional Position Reductions (not in FY08 Budget)  
D. E&CP Proposed Org. Chart