# **CIVIL AND ENVIRONMENTAL** ENGINEERING DEPARTMENT

## A designated team created to assist public agencies in the management of medium sized public construction projects.

## **Background**

In many public construction projects, the organizational structure hinders fast-paced or broad-scoped efforts, causing delays as issues pass through multiple departments for review and approval. These delays incur costs, impact project progress, and cause frustration among stakeholders.

### **Project Goals**

- Improve coordination and communication on public projects in Baltimore City
- Create designated team to manage high priority items and address common issues

## Design Approach

- Conducted interviews with a variety of professionals in the construction industry including, Baltimore City employees, private contractors, and consultants
- Research costs associated with delays from common issues
- The team would be designed around projects with a 50 million dollar budget

## <u>Issues</u>

- Submittals, RFI reviews, other documents sitting on desks, unaddressed
- Lack of consistent meetings, information exchange, prompt coordination
- Unrealistic, poorly drafted schedules
- \$65 billion was spent to address rework issues throughout the construction industry with poor/lost data and miscommunication being the main drivers

<b>Optimal Activities</b>		
Project execution and coordination	11.2 Hours	27.7%
Acceptable Activities		
Communicating/interacting with project stakeholders	8.2 Hours	20.3%
Optimizing the job site and people	7 Hours	17.4%
Non-Optimal Activities		
Looking for project data/information	5.5 Hours	13.4%
Conflict resolution	4.7 Hours	11.6%
Dealing with mistakes/rework	3.9 Hours	9.6%

## Project Workflow Distribution

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## <u>Key Takeaways</u>

- resolutions to be addressed efficiently
- Turnover rate; inexperience, lack of expertise areas out of control but to be treated with contingency
- maintaining relatively within budget





## **Recommendations**

- long way
- reduce the time that it takes to resolve issues
- greatly improve coordination

## **Results**

- million dollars





- Unforeseen challenges on projects commonly arise, requiring
- Ensure on-time project completion as priority to owner,

# **Organizational Chart**

• Specific roles and responsibilities for what may seem to be a small task will go a

• Adding experienced project managers will make decision making easier and

• Strict meeting schedules will hold everyone accountable throughout the project and ensure communication is clear/strong between all parties involved • Splitting up tasks and designating responsibilities to multiple people/groups will

• Based on previous Baltimore City projects our overhead would run around 3.75

• A 2-3 year project would result in \$3,424 - \$5,136 of costs per day  $\circ$  Based on past city projects delays this could save ~\$462,240 • Optimizing non-optimal activities can save upwards of 45.5 - 68.25 days

