

Capital Projects- A Life Cycle

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Agenda

Introduction

Capital Delivery Overview

Department Experience

Lessons Learned

Bond 101 Schedule



Feb 10th

March 22nd

April 7th

Late April

May

Debt Discussion

Life Cycle of Capital Project Update on Bond Programs Progress BEATF to attend
City Council
Meeting- Staff
Bond
Recommendations
presented

BEATF receives
Staff Bond
recommendations



Public Works Project Delivery



Public Works Capital Delivery Team



The Public Works Department manages the City of Austin's Capital Project Delivery projects through all phases of project from Preliminary Design through Construction.

Projects range from street reconstruction and water/wastewater infrastructure improvements to new fire stations and libraries.

Capital Project Delivery Team consists of five divisions that each play a unique role in ensuring the success of CIP projects all around Austin.

- Project Management Division
- Construction Services Division
- Quality Management Division
- Engineering Services Division
- Office of the City Architect



Public Works Delivery Team Project Management Division

The Project Management Division assigns a project manager to each project that oversees project delivery throughout the life of a project and works with the sponsor department to ensure project scope, schedule and budget are met.

Public Works Delivery Team Construction Services Division



The Construction Services
Division serves as the
owner's representative on
site during the construction
phase and serves the role of
quality assurance and
control.

Their focus is on ensuring the project is built to the agreed specifications and scope. They monitor contract compliance, record quantities, evaluate payment applications, and ensure quality in the constructed project.



Public Works Delivery Team Quality Management Division

The Quality
Management Division
provides design
quality assurance,
engineering reviews,
and surveying
services on City
projects.

Also provides
oversight on CIP
projects to limit
construction changes
and claims.



Public Works Delivery Team Engineering Services Division

The Engineering Services
Division provides design and
permitting for civil engineering
projects in the public right of
way.



TO PARTY IN THE PA

Public Works Delivery Team Office of The City Architect

The Office of the City Architect seeks to be a resource to all City departments in need of in-house architectural design and review to further their facility planning efforts.

In addition the OCA provides high level oversight and departmental coordination to help assure Capital Improvement Projects achieve the urban design and sustainability goals set by City Council. The Office collaborates on all vertical building projects and provides technical expertise.



Project Lifecycle



Project Lifecycle Key Points



Even though projects types can be similar, every project is unique in its characteristics, scope, and outcomes.

As a project works through each phase the sponsor and the capital delivery team refine the scope, schedule and budget based on the information gathered.

Some projects outcomes may only require completion of a phase, i.e. preliminary engineering, because the sponsor wants to determine the feasibility of the project or if it will really achieve its desired outcomes or to determine the actual budget need to complete the project.



Project Phases

Standard Time Frame 4-6 years

1-2 Years

Project Development

Preliminary Engineering

Design

Construction

Warranty

Project Phases "Project Development"



Project Development does not have a standard time frame because during this phase is where the project goes from a concept into the initial framework for a project. Key elements of this phase are:

Initial Project Scope, Goals, and Deliverables

Initial High Level Budget Estimate

Initial Milestone Schedule Estimate

Project Risks

Initial Project Delivery and Contract Method are decided

How much will it cost to maintain the asset once built

Project Phases "Preliminary Engineering"



The Preliminary Engineering phase is initiated once a sponsor decides to move forward with a project. This phase is usually between 6-12 months depending on the project scope. This is where the project scope, budget and schedule baselines are identified. The outcome from this phase is a preliminary engineering report. Key elements of this phase are:

- Project Scope, Goals, and Deliverables
- Revised Budget Estimate
- Revised Schedule Estimate
- Project Risks
- Delivery Method is decided

Project Phases "Design"



The Design phase is initiated once a sponsor decides to move forward with a project.

This phase is usually between 12-24 months depending on the project scope and usually has three distinct phases: 30% -60% -90% reviews.

The outcome from this phase is a final design for the project. Key elements of this phase are:

- Project Scope, Goals, and Deliverables are finalized
- Construction Budget finalized
- Construction Schedule finalized
- Construction Bid Package is developed





The
Construction
Phase is
where the
project
actually
comes to
fruition

This phase is usually between 12-36 months depending on the project scope. Key elements of this phase are:

Quality
Assurance /
Quality
Control

Construction Management

Construction completion

Project Phases "Warranty"



The Warranty Phase begins once the project is completed. This phase can last from 1-2 years.

During this phase the project is observed to make sure there are not any issues that arise on the project deliverable is in use.

Key elements of this phase are:

- Close out of contracts
- Corrections to deficiencies identified

Project Lifecycle Key Decisions



What is the desired outcome of this project or phase?

Does this project meet the Council and Department priorities?

What delivery method will be used?

Does the project need to be shelved?

What service impact will this project have?

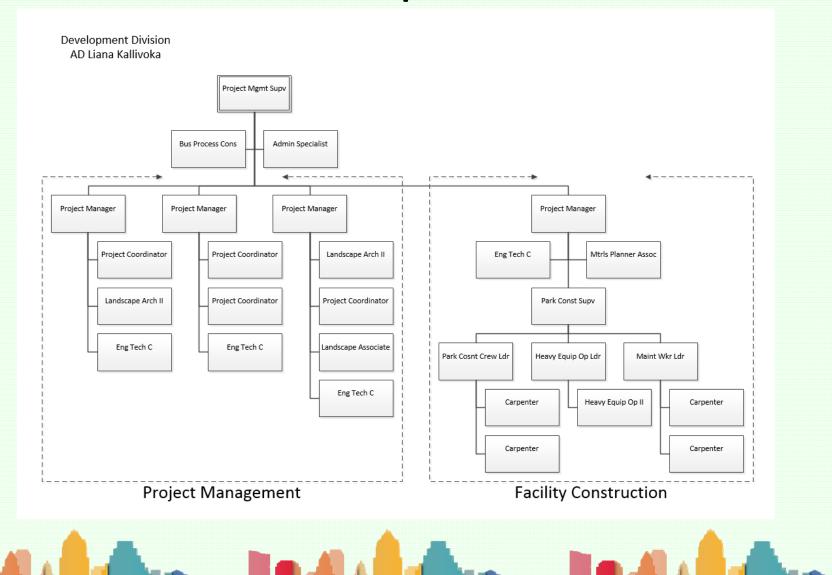


Department Experience- Parks and Recreation Department





PARD Development Team





PARD Development Team

70-100 active projects at one time

3 Project Management Teams

1 Facility Construction Team

Registered Professionals

- 1 Architect/Engineer
- 1 Engineer
- 1 Architect
- 4 Landscape Architects



Projects Managed by PW

Projects always have a PARD representative

Criteria for project managed by PW

- Generally over \$1m construction value
- Architect/Engineer oversight

Large-scale Vertical Construction

- Building New Construction
 - Montopolis Recreation and Community Center
- Building Expansions
 - Dove Springs Recreation Center Expansion

Large-scale Horizontal Construction

- New Trail Construction
 - Walnut Creek Trail System



Montopolis Community and Rec Center

- Primary Manager
 - Public Works
- Budget
 - \$15.5 M
- Scope
 - Demolition of existing rec center and development of a joint-use facility for PARD and HHSD





Gus Garcia District Park - Phase 3

- Primary Manager
 - Public Works
- Budget
 - \$1.56M
- Scope
 - Development of 100 space parking lot with rain gardens, irrigation upgrades, and picnic pavilion





Projects Managed by PARD

Medium- to small-scale projects

• Construction value \$50K - \$1M

Capital renewal projects

Landscape, Cultural, or other parks and rec specialization

Significant public engagement process

Project types

- Pocket Park Development
 - Tom Lasseter South Lamar Neighborhood Park
- Playscape Renovation
 - Dove Springs General Park Improvements
- Building Renovation
 - HVAC/Roof replacement
 - Interior Renovations



Kealing Playscape Replacement

- Primary Manager
 - Parks and Recreation
- Budget
 - \$220K
- Scope
 - Demolition of existing
 playscape and development
 of nature-themed play
 equipment with necessary
 connectivity improvements



Dove Springs District Park Improvements

- Primary Manager
 - Parks and Recreation
- Budget
 - \$1.31M
- Scope
 - Replacement of playscape
 with nature-based play
 equipment, perimeter trail
 with fitness equipment,
 lighting, irrigation upgrades,
 and sports field enhancement



