SPO Technical Capacity Review

June 24, 2015

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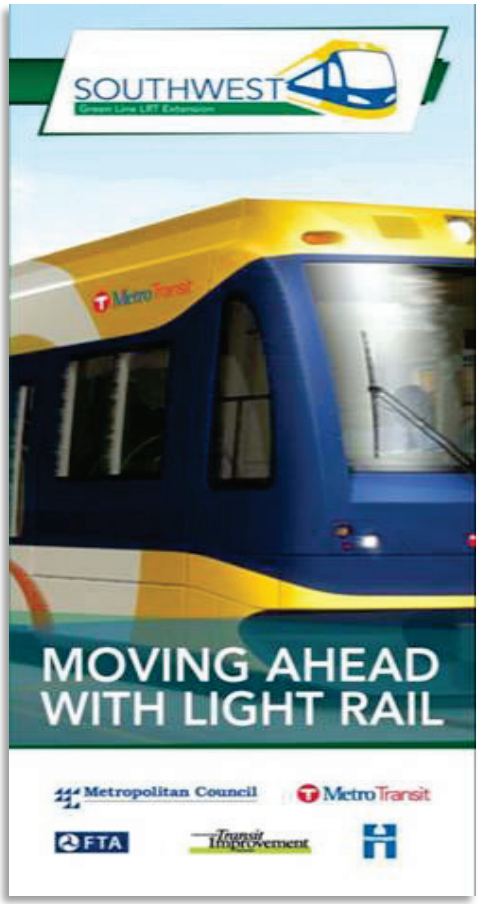
Southwest Project Context

The Southwest Light Rail Transit (LRT) project (METRO Green Line Extension) will operate from downtown Minneapolis through the communities of St. Louis Park, Hopkins, Minnetonka, and Eden Prairie, passing in close proximity to Edina

The proposed alignment includes:

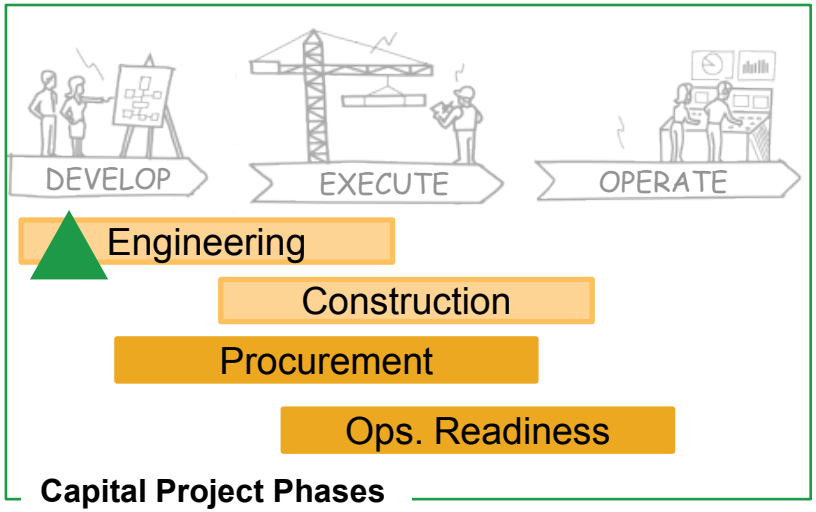
- 17 new stations
- Approximately 16 miles of double track

It will be part of an integrated system of transitways, including connections to the METRO Blue Line, the Northstar Commuter Rail line, bus routes and proposed future transitways



Southwest Project High Level Timeline

The history of the Southwest LRT Project began with initial environmental studies in 2009 and the project has continued to gather momentum since then



Beginning of project

September 2011
~1% Design Complete
30% Contingency
$1.25 Billion

September 2014
~30% Design Complete
27.8% Contingency
$1.65 Billion

Scope change element impacting budget:

Freight Rail Co-location

Project Progress Delay

April 2015
~35% Design Complete
27.8% Contingency
$1.99 Billion

Current State

Estimate refinement impacting budget:

Updated Survey & Environmental Data

Project Progress Delay

Future Estimates
60% Design Complete
90% Design Complete
Final Design Complete

Technical Capacity Assessment Objectives

Accenture, at Met Council request, has conducted an independent review on the Southwest Project Office. The review included an assessment to evaluate SPO Project Services Capabilities against leading practices, to identify gaps and to propose recommendations for further improving Project Services Team Capabilities

The review focused on the following 2 functional areas:

1. Review of current SPO Organizational Structure

2. Review of Project Management Processes and Systems

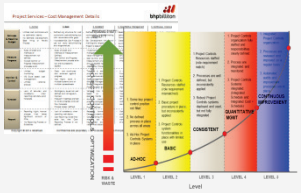
Technical Capacity Assessment Approach

The review was conducted through stakeholder interviews, high level document validation, *Capabilities Assessment Model (CAM)*, and gap & opportunity identification. A total of 13 interviews comprising of 19 different team members/partners across four different organizations were conducted to investigate project service capabilities and better understand technical & functional adequacy and adoption

Stakeholder Interview

Document Validation

Capability Assessment Model Evaluation



Gap & Opportunity Identification

Project Capability Evaluation Areas

- Organizational Structure
- Scope Management
- Risk and Issue Management
- Cost Management
- Schedule Management
- Document Management

Technical Capacity Assessment Overview

Our high-level observation is the SPO Team has the right capabilities and are operating at a level expected for a project this size. We recommend further defining and standardizing processes and procedures to better facilitate communication and introduce technology to reduce repetitive and manual activities

Recommendations align to one of the following 4 focus areas:

- Process & Methodologies
- Tools & System
- Organization
- Communication & Training

Organizational Structure Assessment

Definition: High level review of project organization approach, team qualifications and communication with project stakeholders and partners

Key Findings

- Appropriate skill sets based on project scope
- Integrated project team consisting of staff from Metropolitan Council, Hennepin County, Minnesota Department of Transportation, Design Partner (AECOM)
- It was unclear how risk management, mitigation, assumptions and reporting were transitioned from the County to SPO
- Significant demand for numerous, labor-intensive reports to multiple parties results in dedication of substantial resources as well as the potential to risk confusion
- Project partners have differing expectations on how decisions should be made

Organizational Structure Assessment

Recommendations

1. Lessons Learned Workshops with County and CTIB to develop standard procedures
2. Standardize communication and reporting timelines
3. Hold Partnering Sessions with all SPO Funding Partners and Stakeholders to define clear roles by responsibility, accountability, support, consult and informed (RASCI), add to Project Management Plan (PMP)

Scope Management Assessment

Definition: Scope Management is the capability of identifying all project work required, breaking it down into logical manageable pieces and controlling it across all areas through final delivery and acceptance

Key Findings

- Baseline scope was defined by the county and handed over to SPO project team with 1% of the design completed
- Cost breakdown structure requires manual intervention to manage funding source dollars with each individual tasks
- Estimate when moving between phases of the project (gating system) does not consistently including variance for accuracy
- Scope Change is a manual process executed within the project team defined by the technical design directives (DD)

Scope Management Assessment

Recommendations

1. Define, document and communicate process to move between phases of the project (gating system)
2. Define, document and communicate scope change process
3. Build on existing scope change process to include end-to-end traceability and communication

Risk & Issue Management Assessment

Definition: Risk Management aims to enhance the impact of positive events and to decrease the probability & consequences of events adverse to the project

Key Findings

- SPO follows the Federal Transit Administration's standard Risk Assessment process however many team members are unware of the process
- Risk register currently being formalized
- Project Risk Manager role not defined

Risk & Issue Management Assessment

Focus Areas

- Process & Methodology ☑
- Tools & Systems ☐
- Organization ☑
- Communications & Training ☑

Recommendations

1. Continue development of project team Risk and Contingency Management Plan to include a risk mitigation
2. Educate internal & external parties of the risk register and risk management approach
3. Formalize a Risk Manager position/role

Cost Management Assessment

Definition: Set of integrated processes required to manage the estimating, planning, budgeting, monitoring and controlling of costs to complete a project within an approved budget and timeframe, inclusive of cost analysis, variance management and reporting

Key Findings

- Cost Management tool is currently in excel with inadequate integration to the schedule
- No defined progress measurement metrics for the current phase (project development)
- Standard FTA monthly reports produced; however manual reports to multiple parties risks confusion of project cost
- Cost is currently managed and reported at a high level and needs more granularity

Cost Management Assessment

Recommendations

1. Implement a robust Cost Management Tool and integrate with current scheduling tool, Primavera P6
2. Define, document and communicate progress measurement metrics
3. Document and implement clear processes and procedures around cost management including reporting

Schedule Management Assessment

Definition: Capability to help achieve project completion within the established timeframe, process of defining, grouping and sequencing work activities to produce defined work outputs in an integrated and coordinated sequence, along the schedule critical path, managing schedule float / contingencies and buffer consumption

Key Findings

- Schedule is in Primavera P6 and is rebaselined at each stage of design; additional resource planning detail typically seen on a project of this size
- Schedule update process is manual following design change/update decision
- Manual integration with cost management tool
- Multiple schedules are maintained by the project team and are manually combined within a master schedule

Schedule Management Assessment

Recommendations

1. Communicate the schedule change process and integrate into the design directive workflow
2. Improve schedule change visibility and tracking by defining and implementing key performance indicators (e.g. progress measurement metrics, earn vs burn, earned value)
3. Maintain a single fully integrated project schedule

Document Management Assessment

Definition: Document Control System facilitates submission, document review, revision/version control, workflow management and searching and retrieval of documents. Document Control works as a repository for documents and facilitates visualization of documents for review and retrial process

Key Findings

- There is a defined and implemented three step process for document control and management: project network, eBuilder, Applicationxtender
- Project retains extensive documentation to support public record retention and compliance policies
- Project team consistently uses document management tools; advanced document searches are possible

Document Management Assessment

Recommendations

1. Determine if a single document management system is necessary/appropriate by validating document traceability
2. Validate that document management process is adequately understood by full project team

Summarized Recommendations

1. Develop system to define and move between transition/phases of the project

2. Continue to design, document and communicate processes and methodology

3. Implement a cost tool and integrate with schedule management tool

4. Further develop Risk Management Plan and formalized Risk Manager Position/Role

5. Standardize communication, reporting and traceability

Thank you