



Lean 6-Sigma Green Belt Project



California Energy Commission

Rachel Grant Kiley
(Project Greenbelt)

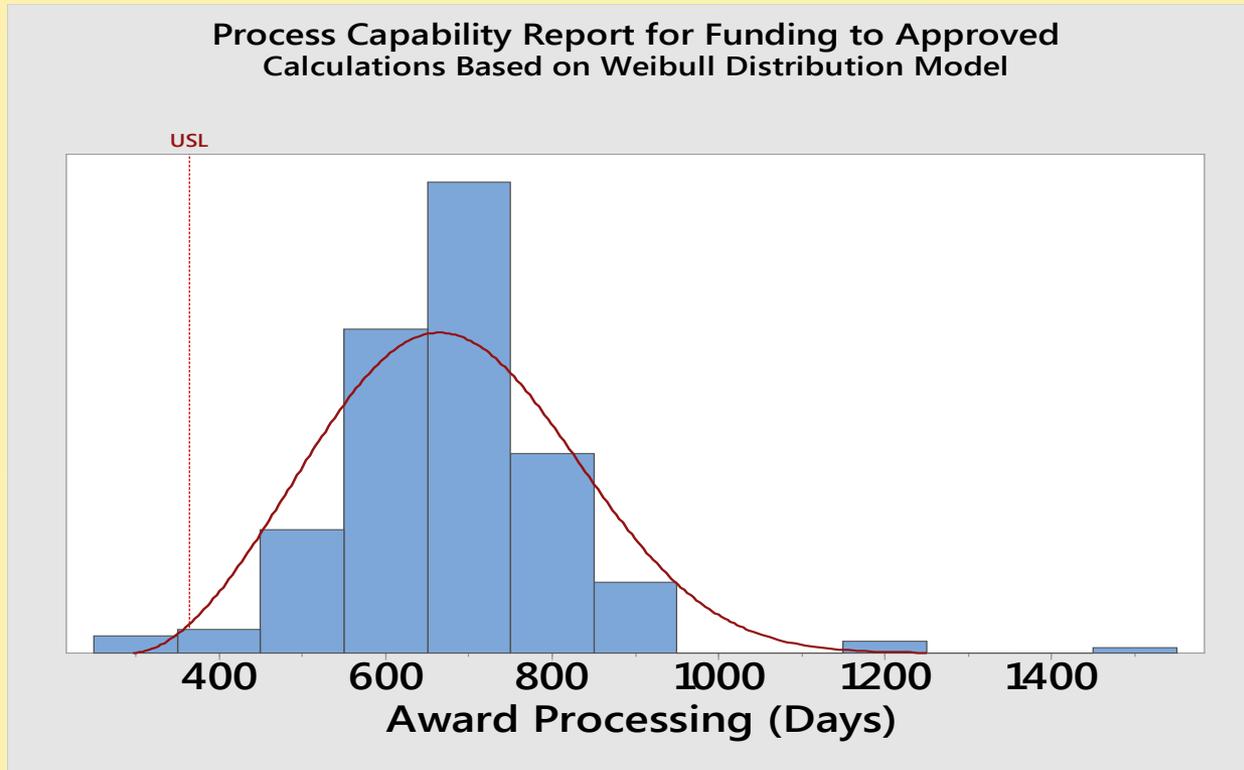
Drew Bohan
(Project Champion)

Reduction in CEC Grant Processing Time

- ❖ **Problem Statement:** Our current agreement awarding process takes an average of 23 months and a maximum of 51 months. We annually award about \$100 million in advanced transportation funding designed to shift us away from our primary fuel source for the last century, and about \$150 million in energy research and development for technologies and strategies that will save energy and money for ratepayers. The sooner the money is awarded, the sooner the public can benefit from the fruits of our investments.
- ❖ **Objective:** To reduce the processing time such that 95% of the grants are awarded in less than 12 months
- ❖ **Project Team:**
 - ❖ *John Butler*– Fuels & Transportation Division–Office Manager
 - ❖ *Virginia Lew*– Research & Development Division–Office Manager
 - ❖ *Allan Ward*– Assistant Chief Counsel, Transactions

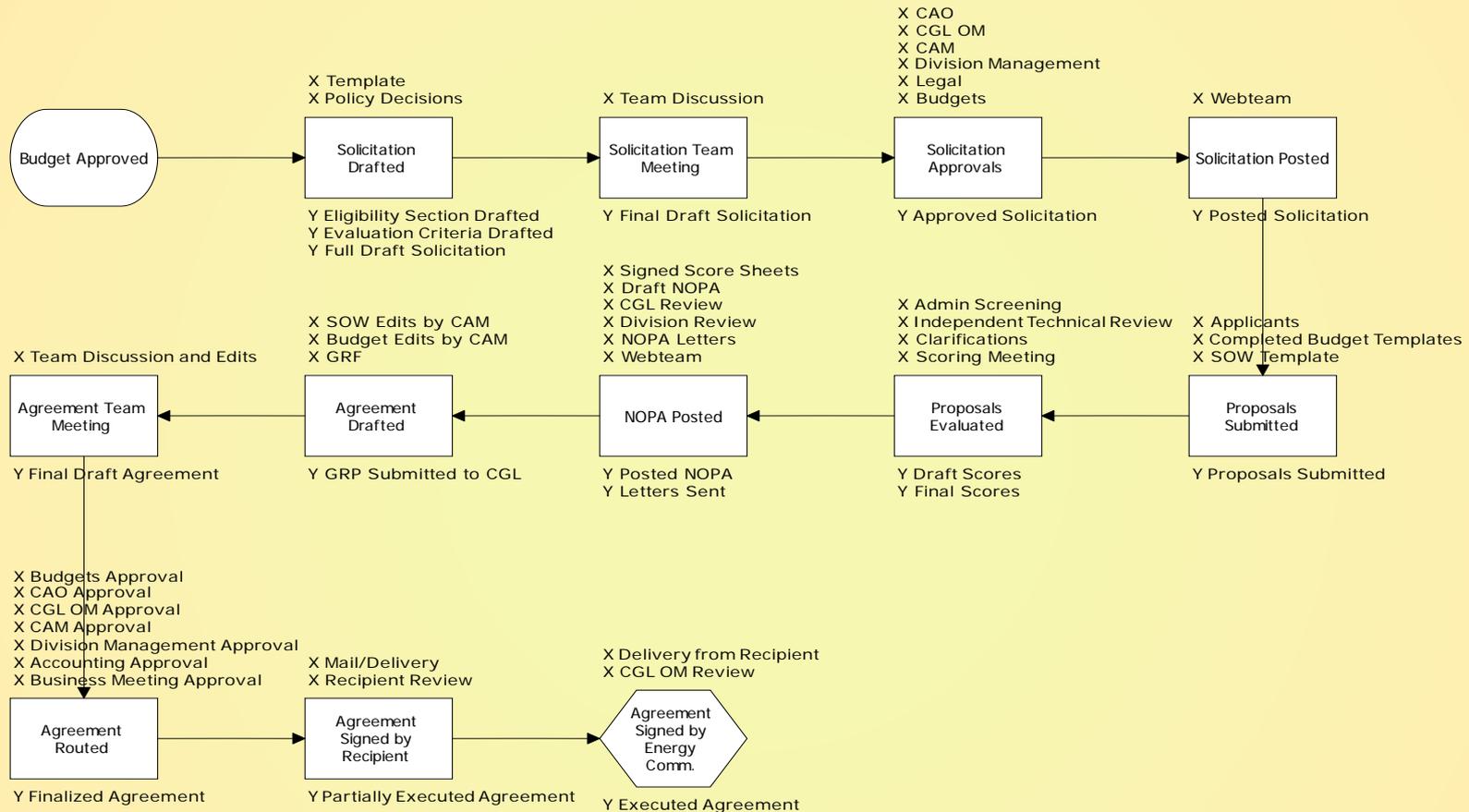


Baseline Capability



- ❖ Current Average: 684 days or about 23 months
- ❖ Current Maximum: 1541 days or over 4 years
- ❖ % Within Spec: Less than 2%

Process Map



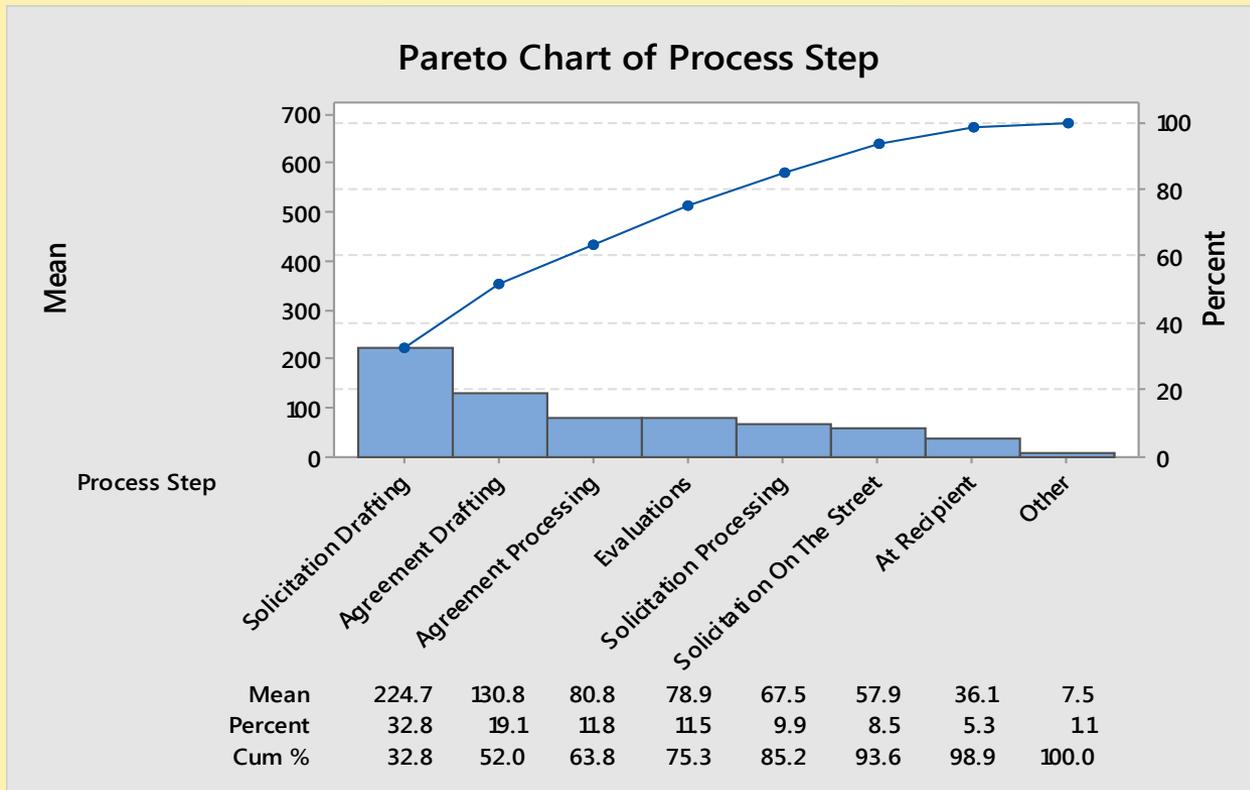
- ❖ Multiple approval steps with many different levels of review
- ❖ Re-work at the Agreement Drafting stage

Analysis Tools

- ❖ Capability Analysis
- ❖ Fishbone Diagram
- ❖ Pareto Charts
- ❖ Box Plots
- ❖ Multi-vari Analysis
- ❖ FMEA

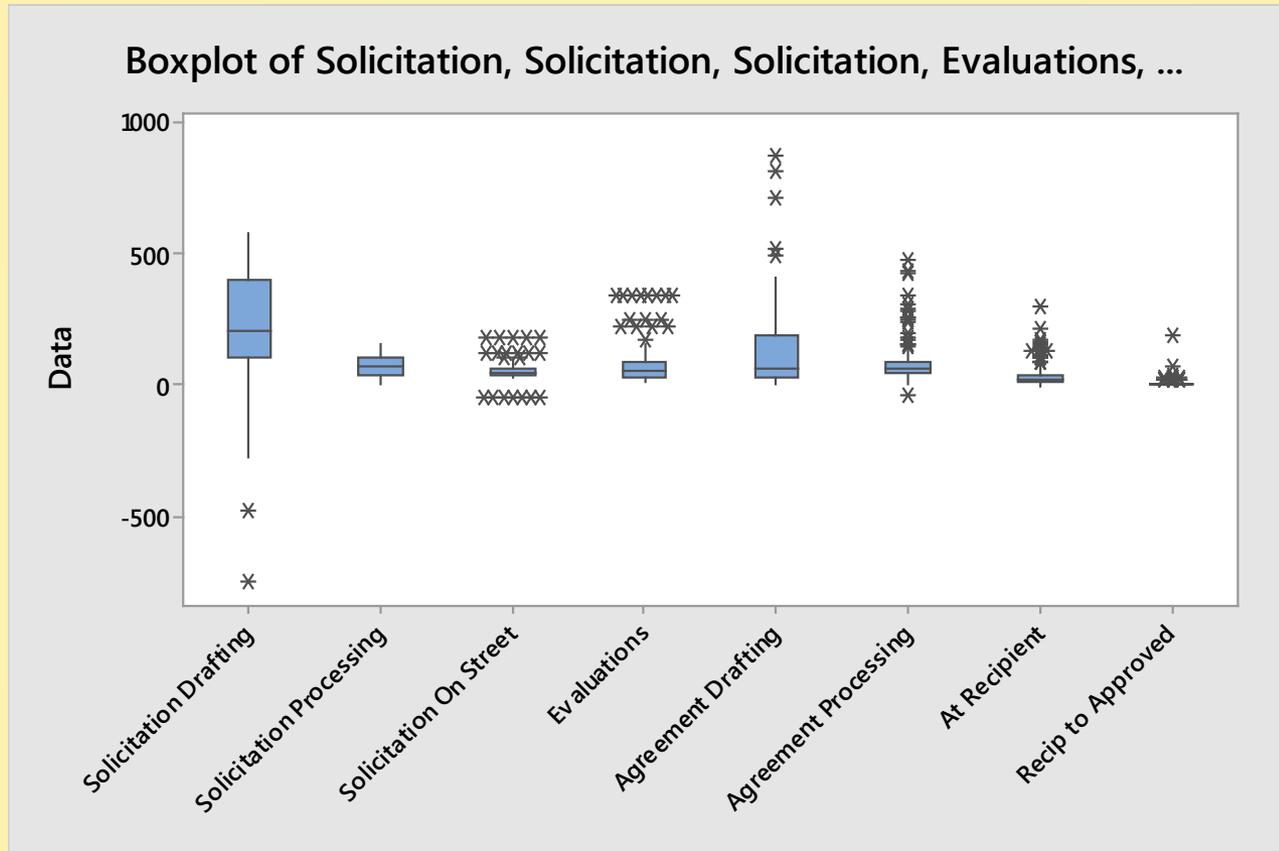


Pareto Chart of Processing Time



- ❖ Identified 3 process steps that account for nearly 64% of the overall process

Boxplot of Process Steps



- ❖ This boxplot shows that the steps that take the most time also have the most variance.

Critical x's

❖ Solicitation Drafting

- ❖ From budget approval to submission of solicitation draft to administrative staff
- ❖ 32.8% of overall process

❖ Agreement Drafting

- ❖ From Notice Of Proposed Award (NOPA) to draft agreement to administrative staff
- ❖ 19.1% of overall process

❖ Agreement Processing

- ❖ From agreement draft submitted to administrative staff to agreement sent to recipient for signature
- ❖ 11.8% of overall process



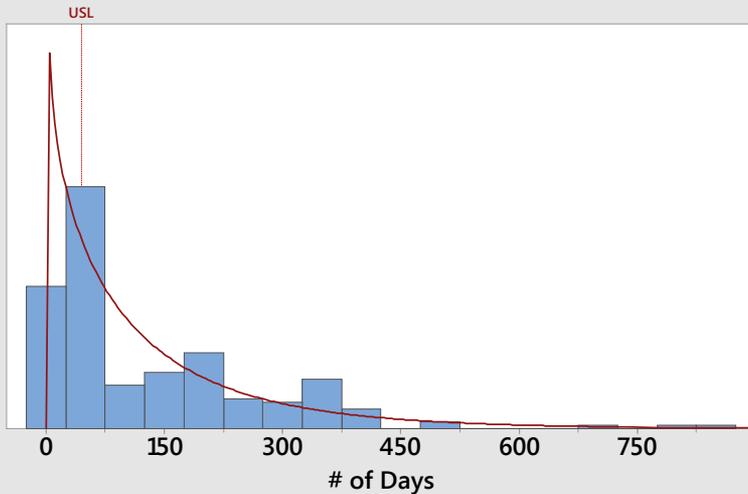
Improvement Techniques

- ❖ New expectations
 - ❖ Current process had no expectations of timeframe for staff to complete solicitation drafting or agreement processing other than meeting encumbrance expiration
 - ❖ The new process will identify target timeframes for each step of the process as well as have an accountability plan for holding staff and management to the new timeframes
- ❖ Master Solicitation Plan
 - ❖ Identifies deadlines for each solicitation, preset by the new expectations for each process step
 - ❖ Stagger each solicitation to allow for level loading
 - ❖ Executive Office will approve the plan by August 15th each year
 - ❖ Will significantly affect the Solicitation Drafting to Award Schedule as deviations from the plan will require approval by the Executive Office
 - ❖ Will make it easier to identify opportunities for additional improvements at each step
- ❖ Adoption of New Budget Templates with Online Training
 - ❖ Easier for recipients to complete (removed some complexities)
 - ❖ Training will decrease, and possibly eliminate, delays in agreement drafting by assisting Applicants in completing the forms correctly earlier in the process



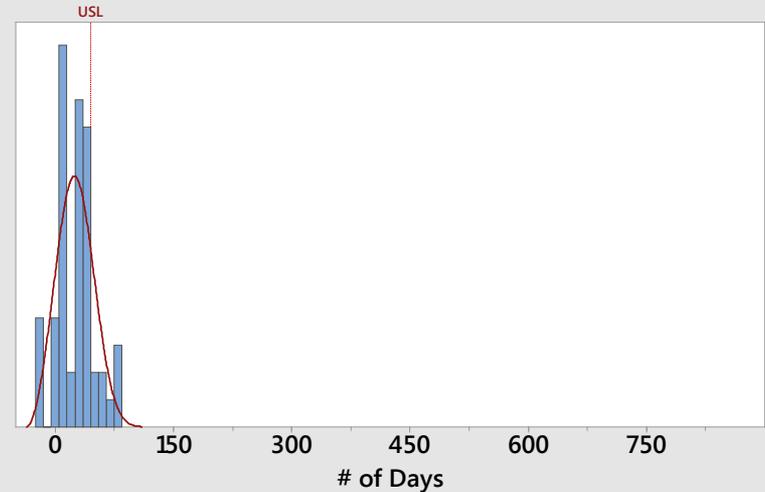
Agreement Drafting Capability Analysis

Process Capability Report for Agreement Drafting
Calculations Based on Weibull Distribution Model



- ❖ Baseline Capability
 - ❖ Mean: 130.8
 - ❖ Maximum: 872
 - ❖ Within Spec: 42%

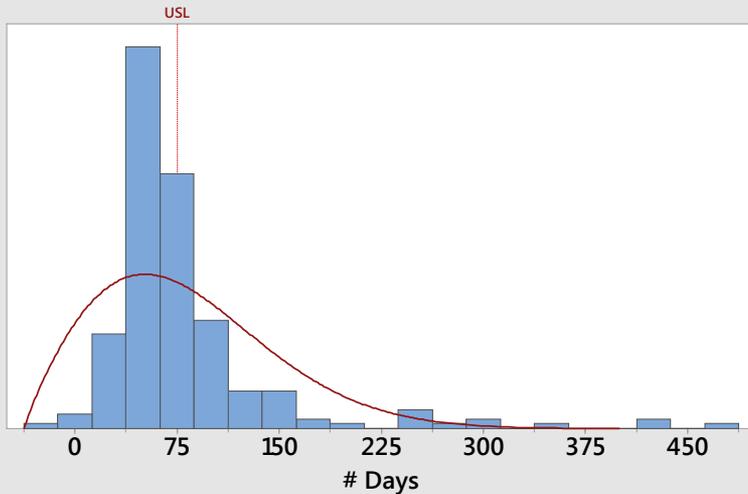
Process Capability Report for Agreement Drafting
Calculations Based on Weibull Distribution Model



- ❖ New Capability
 - ❖ Mean: 25.8
 - ❖ Maximum: 76
 - ❖ Within Spec: 85%

Agreement Processing Capability Analysis

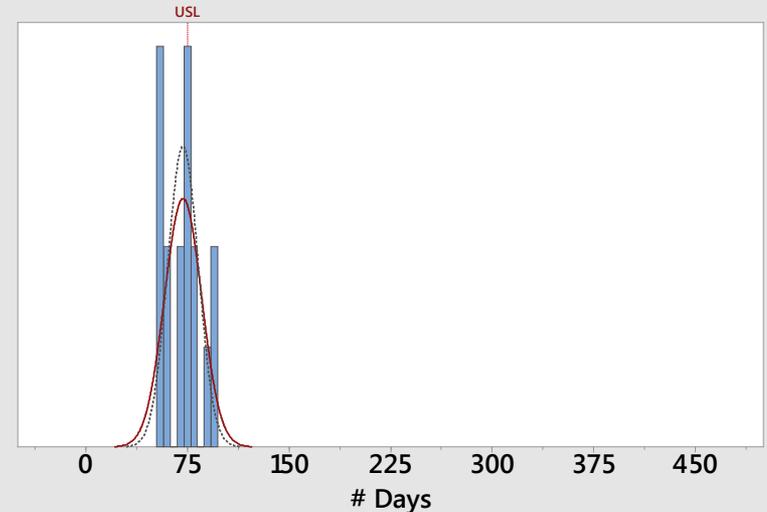
Process Capability Report for Agreement Processing
Calculations Based on Weibull Distribution Model



❖ Baseline Capability

- ❖ Mean: 80.9
- ❖ Maximum: 476
- ❖ Within Spec: 64%

Process Capability Report for Agreement Processing



❖ Agreement Processing – 75 days

- ❖ Mean: 71.8
- ❖ Maximum: 95
- ❖ Within Spec: 70%

Control Plan

- ❖ Flowcharts and Process Descriptions:
 - ❖ Solicitation Drafting – Master Solicitation Plan (including tracking to targets)
 - ❖ Who does what by when?
 - ❖ Agreement Drafting
 - ❖ Documentation of new expectations including who monitors and how
- ❖ Annual Reviews and Updates:
 - ❖ Agreement Management Training and Materials
 - ❖ Includes Flowcharts and Process Descriptions
 - ❖ Budget Templates
 - ❖ Budget Template Training
 - ❖ Monitor Master Solicitation Plan targets and identify further improvements
- ❖ Lean 6 Sigma Continuation Plan
 - ❖ Continuing Agreement Team
 - ❖ Quarterly Meeting Dates
 - ❖ Future Projects for other steps in the Agreement Process
 - ❖ Diving deeper into solicitation drafting and agreement processing
 - ❖ Future Projects for the Energy Commission



Additional Benefits

- ❖ Agency (Energy Commission) Benefits:
 - ❖ Establish staff performance expectations for overall agreement process to ensure timely completion
 - ❖ Level Loading workload to avoid peak workload at the end of the fiscal year
 - ❖ Using data to identify necessary process improvements
 - ❖ A different process view from management potentially leading to future Lean 6-Sigma Projects
- ❖ Customer (Recipient and the General Public) Benefits:
 - ❖ Project results available quicker thereby helping Californians and decision-makers
 - ❖ Reduce lag time between proposal and funding awards which increases likelihood that project will be completed on time
 - ❖ Better customer project experience that fosters better working relationships, better project results, and a stronger desire to interact with the Energy Commission in the future.



Greenbelt Contact Information

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