

# Land Maintenance Division (LMD) Assessment Project

---

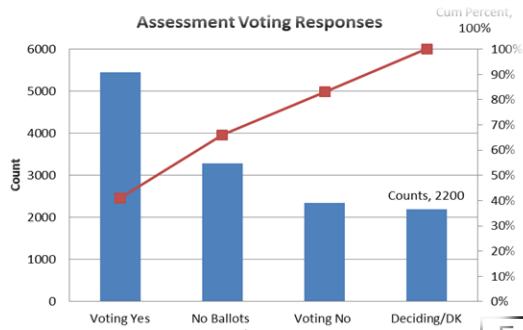
CEE, Incorporated Shows Six Sigma  
Works in the Public Sector



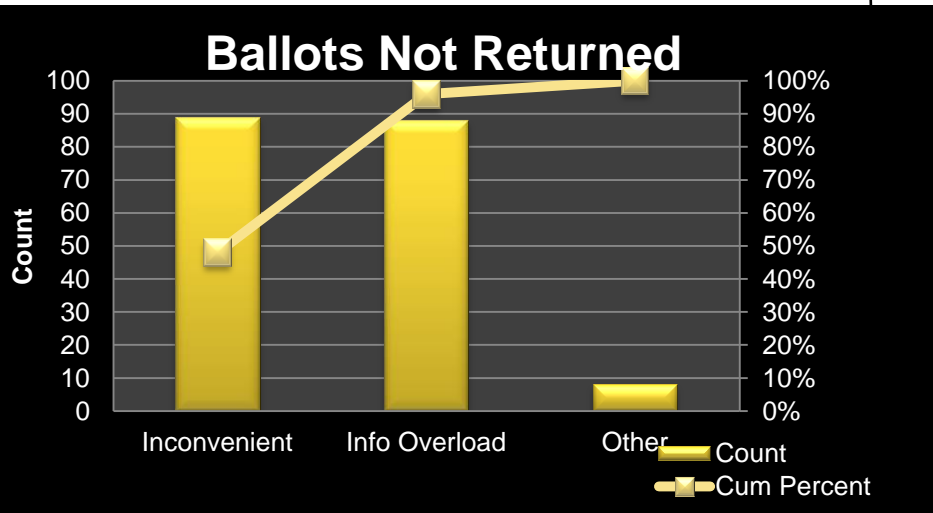
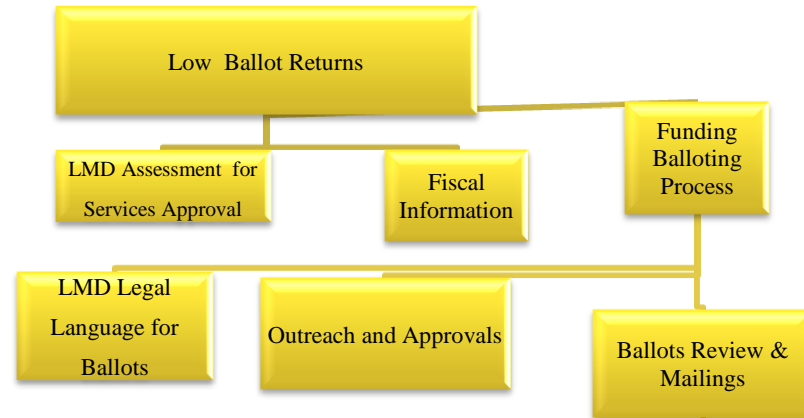


# Part I-Define Problem Using Trees with Pareto Analysis

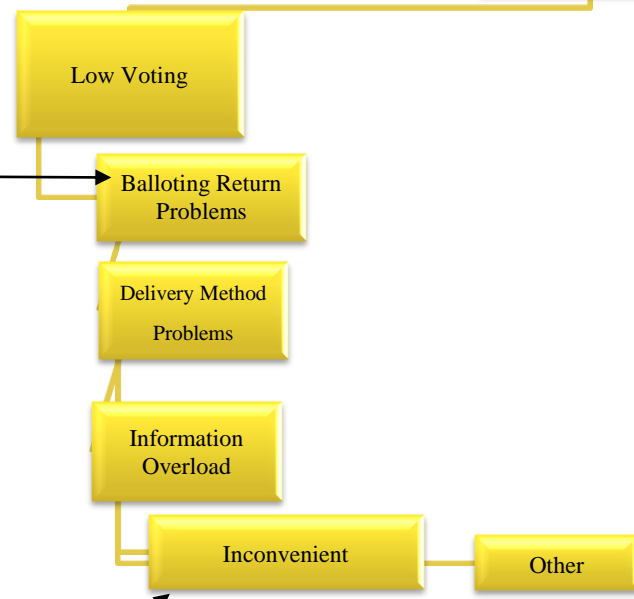
## Tree & Pareto Analysis and relative size of drivers of the LLD Problem.



Factor for drill down Pareto analysis



Pareto analysis of root causes (Xs)

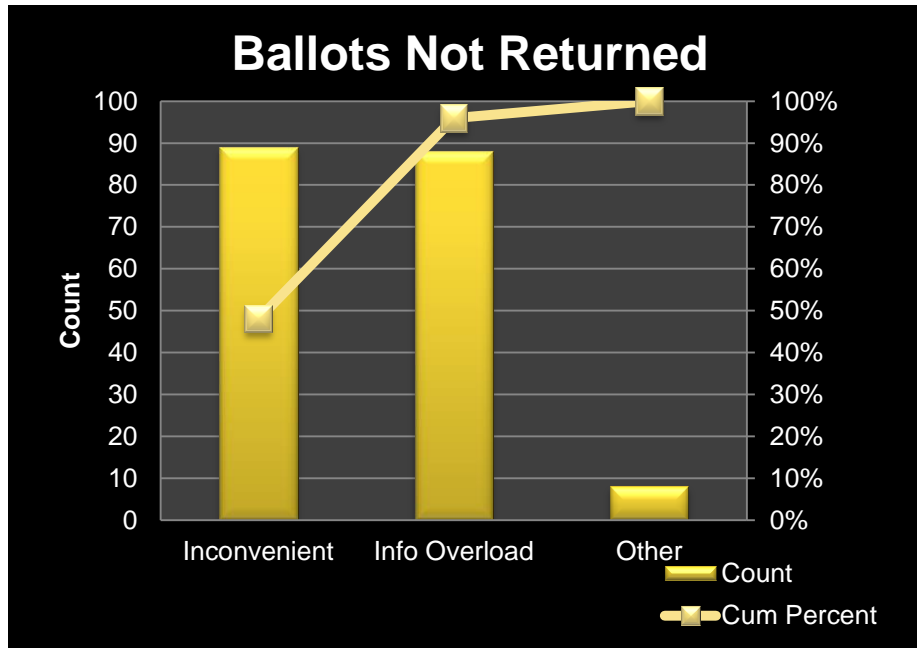




# Part 1 – Define The Project

## 2. LMD Balloting Charter and Project Plan

### 1. Review LMD Historical Data Land To Recognize the Opportunity

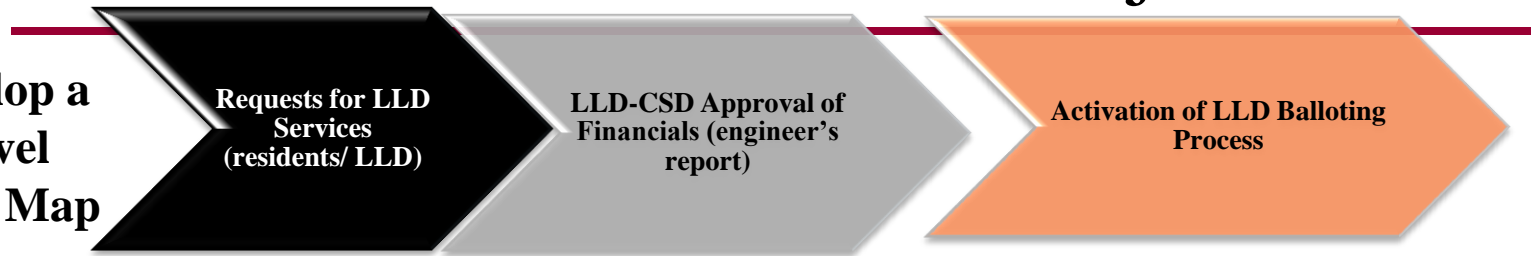


Land Maintenance Division, USA	Reduce the low LMD assessment balloting (returns), to greater than 30% and hard revenues exceeding \$500,000.
Opportunity/ Problem Statement:	There is dissatisfaction among the home owners and not returning assessment ballots. The opportunity to increase ballot returns.
Defect:	Balloting packets are excessive (3 pages) overloading voters and causing re-work or re-design.
Goal:	Adjusting Ballot Review stage to get < 3 pages to satisfy voters .

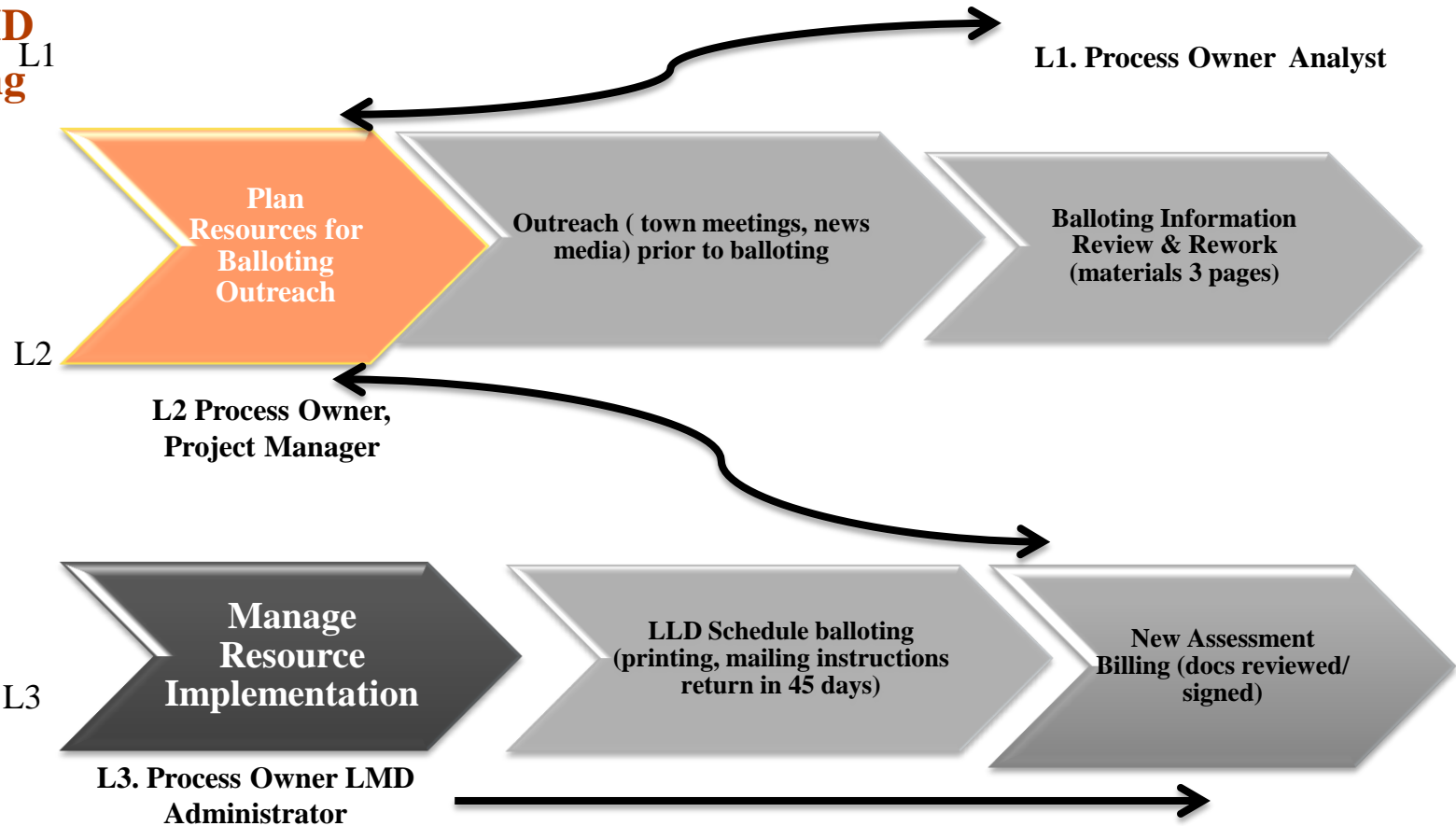


# Part 1 – Define The Project

## 3. Develop a High-level Process Map



## L1: LMD Balloting<sup>L1</sup>

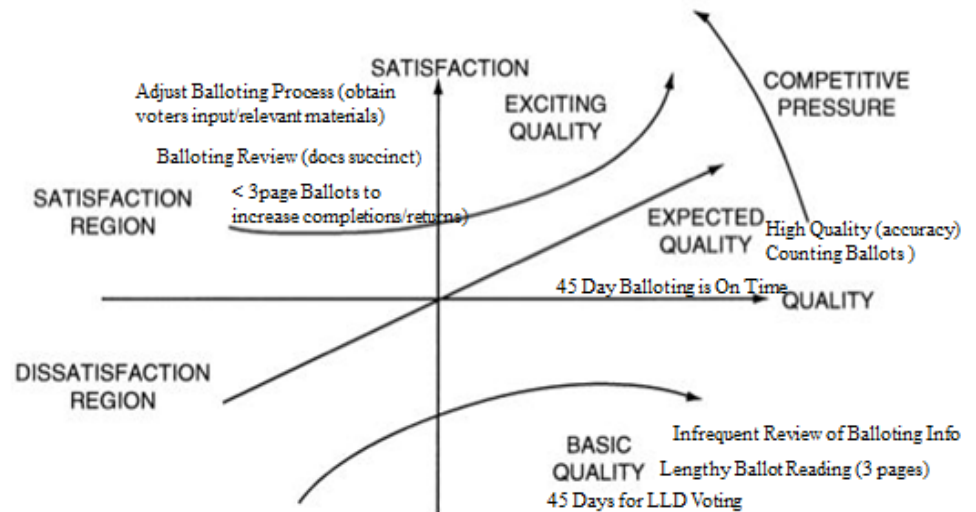




# Part 1 – Define and V.O.C.

## 4. Kano and voice of the customer

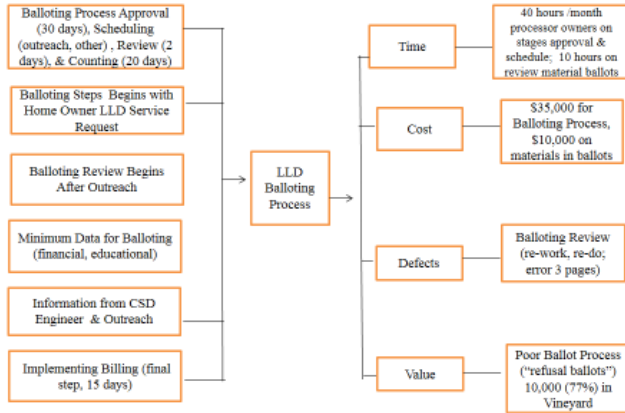
## 5. Stakeholder Analysis





# Part 2 – Validate Measurement System

## 1. Identify key metrics



## 3. Analyze Measurement System and Stratify Data

Pareto Not Shown Here

## 1. Complete SIPOC

## 2. SIPOC

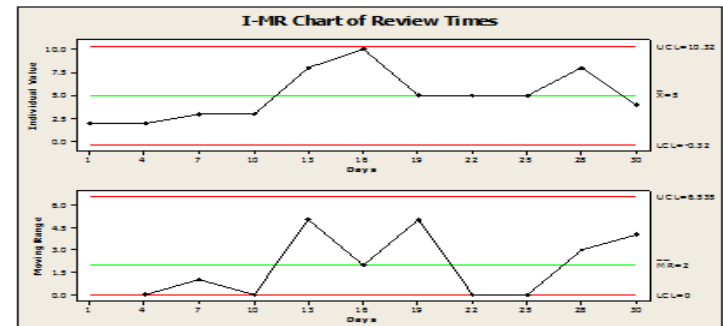
Supplier	Inputs	Process	Output	Customer
<ul style="list-style-type: none"> <li>Home Owner Request for LLD Services</li> <li>CSD Agency (LLD, parks)</li> <li>Stakeholders (youth groups, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>Balloting Requirement s in Proposition 218 &amp; LLD Assessment laws</li> <li>Engineer Report (votes/financial data)</li> <li>Petition for Balloting</li> <li>Raw Balloting Materials (paper, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>Ballot Approval</li> <li>Plan Resource For Outreach</li> <li>Ballot Review (materials, pages)</li> <li>Schedule Balloting (mat, count)</li> <li>Implement New Assessment Billing</li> </ul>	<ul style="list-style-type: none"> <li>LLD Services Calls (beautiful lawns)</li> <li>Balloting</li> <li>New LLD Billing Formula</li> <li>Outreach</li> <li>Town Hall Meetings (voter input)</li> <li>Happy Voters</li> </ul>	<ul style="list-style-type: none"> <li>Home owner (voters)</li> <li>Stakeholders (users of lands)</li> </ul>

**C.T.I.Q.s.**

- **Cost-efficient LLD services**
- **Balloting returns by residents**
- **Effective Balloting Review**
- **New balloting assessment billing documents approved**
- **Customer satisfaction**

## 4. Establish Process Baseline

Chart of Review Times

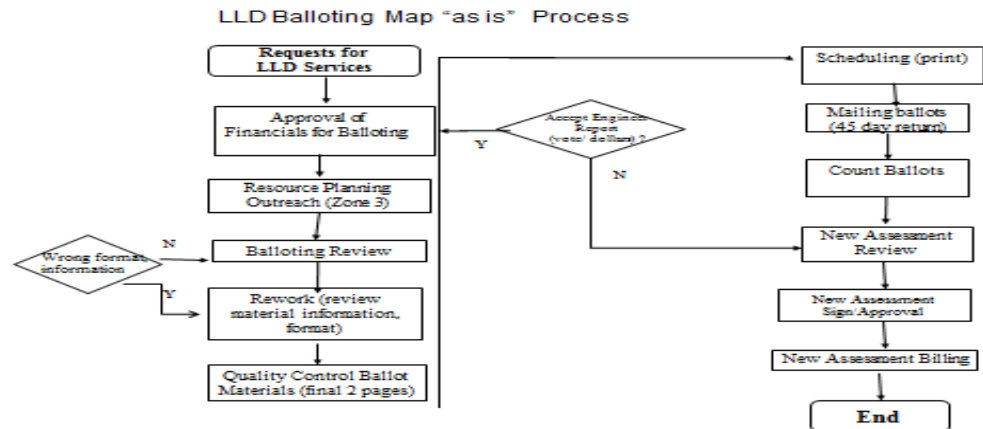


## 5. Set 5. Process Goals , change ballot review times



# Part 3 – ID Key Levers

## 1. Model Detailed “As-Is” Process



## 2. Analyzed the existing process concluding:

- Agency without written balloting process procedures
- Regulations
- Experimentation with re-worked ballot materials failure
- Preparing balloting packets is ineffective

## Cause and Effect Diagram

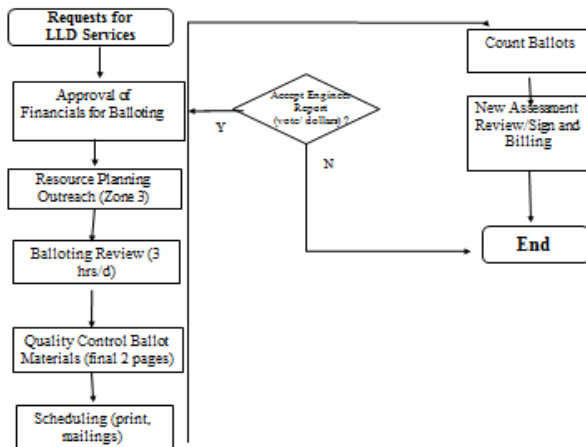




# Part 4 – Determine Improvement Strategy

## 1. Set improvement goals and Map the To-be Process

LLD Balloting Map "to be" Process



## 3. Assessed improvement plan risk and developed contingencies by updating the FMEA

## 2. Developed improvement plan

For example:

1. Establish set review time (hrs./ds) of materials with assigned staff.
2. ???
3. ???





# Part 4 – Determine Improvement Strategy

---

## 3. Execute Pilot

1. Implement new balloting review with established times
  - Record times actually took
2. Assign staff to work on review step (without reworks)
  - Document feedback from supervision control
4. Use new balloting packets on sample in Vineyard
  - Record results (comments)

## 5. Improvement Benefits

## 4. Improvement Results

Item	Revenue (balloting)	Cost Avoidance/FY
------	------------------------	-------------------

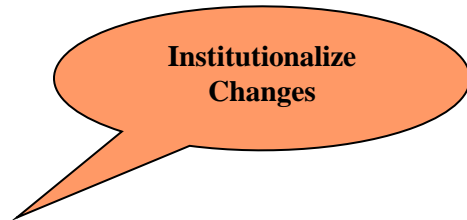
# Cost Savings



# Part 5- Control Plans and New SOPs

Change Control Mechanism	Changes
LLD Policy Changes	Develop a policy for the balloting process and the review step including dissemination of 2 page balloting materials to voters and standard review time. Develop policy for new staff assignment balloting review.
New Standards	Create the standard for making the 2 page balloting. Create a quality review standard for management control (supervision).
Procedure Changes	Develop a procedure for the creation of the balloting packets. Reference any packet formats agreed upon by team. Include work planning changes in the procedure. Show PDPC diagram to explain to staff how to troubleshoot problems making the new balloting packets.
Modified quality appraisal and audit criteria	Change the quality review section to include quality control standards for balloting review time and creating the packets. Produce tests quality and audit procedures.

Change Control Mechanism	Changes
Work planning changes	Update balloting guidelines to manage the increased duties review stage changes will cause. Change related documentation to show the new balloting review assignment. Develop PDPC to bullet proof the new process.
Budget revisions	Revise the balloting review budget to reflect savings/cost avoidance from packet changes.
Accounting systems changes	No changes
Workforce changes	Update workforce training on new budgeting process and changes to the review step; and, packet size.
Information systems changes	No change



Using FMEA Information and implementing changes



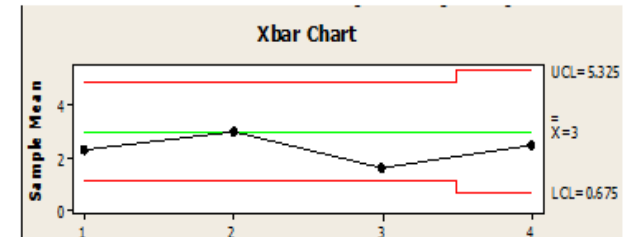
# Part 5 – Make Permanent Improvements

## 4. Validate new measurement system

- Balloting Review Step:
  - Established review hours

Validation of New Balloting Review Step

## 5. Transfer Ownership Process is in Control



## Dashboard

Data Collection on New Process			2 <sup>nd</sup> Collection on New Process			3 <sup>rd</sup> Collection on New Process		
Time	Review times	Reasons	Days (every 3)	Review times	Reasons	Days (every 3)	Review times	Reasons
1	3	follow guidelines	1	0	absent	1	3	follow gui
4	3	follow guidelines	4	3	follow guidelines	4	3	follow gui
7	2	ran out of time	7	2	ran out of time	7	2	ran out of
10	0	absent	10	2	out of time	10	3	follow gui
13	4	lots of materials	13	1	lots of materials	13	3	follow gui
16	3	Back on schedule	16	3	Back on schedule	16	3	Ovocation
19	3	follow guidelines	19	3	follow guidelines	19	3	follow gui
22	3	good	22	0	absent	22	3	follow gui
25	2	Don't know	25	3	follow guidelines	25	2	N/A
28	3	follow guidelines	28	3	follow guidelines	28	3	follow gui
30	3	follow guidelines	30	3	follow guidelines	30	3	follow gui



## 6. Dashboard Validate Benefits

Standardized Review Times

On time review times (during sampling period)

New process does produce shorter balloting packet (2 pages)



## Tools Used

---

The LMD project was a success! Six Sigma Quality Control tools can be used in public agencies. CEE, Inc.....*your problem solvers!*

Call us! 916.844-2331. [Ceeservices.Org](http://Ceeservices.Org).