

METHODOLOGY FOR SLO COUNTY INFRASTRUCTURE REPORT CARD

Adopted By Full Committee 10/24/2007

The following is the methodology to be implemented by the SLO County Infrastructure Report Card Committee. The Committee is formed under the direction of ASCE's Region 9, Los Angeles Section, San Luis Obispo County Branch.

Mission Statement

The mission of the committee is - "To prepare an assessment of public infrastructure in San Luis Obispo County to build support for adequate funding to improve and maintain the infrastructure of the various jurisdictions."

Vision Statement

- Long Term: Provide a report on what is needed to sustain well-maintained, efficient, and safe and secure infrastructure facilities and systems, sufficient to meet the current and future needs of a growing County and protective of our quality of life.
- Short Term: Educate the public and political leadership so that they will be supportive of developing, enacting and implementing the practices and funding mechanisms needed to realize our long term vision.

Goals

Implementing the Mission Statement, the following goals are defined:

1. Action:

- a. To inform the public and policy makers about the critical nature of SLO County's infrastructure needs.
- b. To develop an ongoing guide for policy makers where funding needs are quantified and identified by infrastructure category.

2. Product:

- a. To Inform The Public and Policy Makers
 - I. To develop a credible, defensible, and easily explainable method of arriving at the condition of certain categories of infrastructure that can be reported as a report card grade.
 - II. To build relationships among regional groups to work together to support the mission statement
 - III. The report card would include:
 - i. Report Card
 1. A small card with grades and short description of categories.
 - ii. Executive Summary
 1. A two to three page overview for each infrastructure category supported by detailed data on file with ASCE

b. Legislative Scorecard

- Create a Legislative scorecard, reflecting the overall implementation of the Report Card recommendations annually beginning 1 year after the initial issue of the report card and a legislators and congressman’s scorecard showing how our local, state, and federal representatives vote on infrastructure issues.

The ASCE National report card evaluated 12 categories of infrastructure. The SLO County Infrastructure Report Card will evaluate the following listed 9 categories.

- Aviation
- Flood control/Levees
- Parks/Open Space
- Ports
- Solid Waste
- Transportation
 - Local streets and roads
 - Highways
 - Bridges
 - Transit
 - Rail
 - Goods movement
- Urban runoff
- Water
- Wastewater

3. Target Audience:

Use the report card information to raise the public’s awareness so they know the serious nature of the challenges policy makers face in revitalizing and maintaining public infrastructure. This report card will be distributed to the public, policy makers, and the media.

4. Desired Out Comes:

- Local agencies, the State legislature and U.S. Congress allocate funding for infrastructure at levels that meet the need identified by the SLO County Infrastructure Report Card.
- Local governments throughout the County fund and maintain infrastructure at levels that support economic growth and high levels of the people’s quality of life.
- SLO County voters support of infrastructure funding initiatives and fees.

Programmatic Task

To achieve the goals, programmatic tasks listed below will need to be completed by individual and multiple committees work efforts.

- Gather information that supports the report card grades

- Provide Education and be prepared to answer questions about the grades
- Facilitate Communication – Identify candidates in local city, county and state government and other areas to support response to infrastructure problem
- Encourage Networking – Universities, regional agencies, and others
- Establish resources needed to complete the mission
- Create Speakers’ bureau to continue the public’s education effort after the SLO County Infrastructure Report Card has been distributed.

The Process:

To achieve the development, publication, and communication of the County Wide Infrastructure Report Card the following process will be implemented. The time line will vary as tasks are accomplished.

SLO County Infrastructure Report Card Committee

Tentative Completion Dates	Task Number	Task Description	Infrastructure Working Committee	Communications Committee	Executive Committee XCOM
March 14, 2008	1	Finalize SLO County Infrastructure Committee under leadership of ASCE Region 9. Finalize Task Committees. Finalize Communications Committee	X	X	X
March 21, 2008	2	Work Committees establish report card criteria for each category and sub topics.	X		
April 30, 2008	3	Working Committees gather and evaluate data in response to “criteria.” Identify draft grades.	X	X	
May 15, 2008	4	Executive Committee (XCOM) critiques documentation and draft grades.			X
June 2008	5	Working committees present final results to XCOM, which normalizes the grades across categories.	X		X
July 10, 2008	6	Communications committee creates “Executive Summary” draft.		X	
July 30, 2008	7	XCOM produces complete draft of entire infrastructure report card.	X	X	X
August 2008	8	Print and “distribute” the report.		X	X
Aug’08/ Sept’08	9	Communications committee implements the communication plan.		X	X

Committee Structure

The report card will be developed through the efforts of four committees. As described in individual sections below, the committees will gather, evaluate, review and compile various pieces of data.

- The Infrastructure Working Committees
- The Communications Committee
- The Executive Committee / Review Committee

The makeup and responsibilities of each committee area as follows:

Infrastructure Working Committees

- a. Would consist of technical experts from field – both public and private sector. Each committee will be composed of approximately 4 to 6 people.
- b. Would develop detailed methodology for their specific category using the guidelines presented below:
- c. Would gather data – either review of existing data where available or surveys for new data. The kind of data collected would result in
 1. Assessment of infrastructure using the existing reported grades weighted by population.
 2. Cost of needed projects to reach an acceptable level of improvements in 2005 dollars
 3. Identify dollars needed for total need
 4. Identify dollars needed for unmet needs
 5. Percent capacity of problem
 6. Quantity of infrastructure
 7. Consequences of doing nothing
 8. Strategies for making a difference
 - National
 - Statewide
 - Regional
 - Local
- d. Compile and analyze the data, resulting in the development of a summary report, to be reviewed by the Review Committee. The following criteria will be used in presenting the data:
 - Executive Summary
 - Total need defined by dollars needed
 - Unmet needs defined by dollars needed
 - Percent of capacity represented by the problem
 - Quantity that the problem represents
 - Dollars required to reach baseline improvement and maintenance levels
 - Consequences of doing nothing
 - Strategies for making a difference

Detailed data will be collected and evaluated within the following four fundamental components:

- Condition of existing infrastructures
 - Capacity for future services delivery
 - Deferred maintenance
 - Security and safety
- c. Determine an initial grade.
- d. Develop a short (approximately two pages) report. The report, at a minimum, should summarize the methodology and criteria used, findings and results, and list the sources of data.

Review Committee (XCOM)

- a. The Review Committee work will be performed by the Executive Committee. Two or more experts in the specific category that sit on the Executive Committee will provide specific category reviews. Responsibilities of the Review Committee are to:
- i. Review and evaluate methodology
 - ii. Review and validate Infrastructure Working Committee Findings/Report
 - iii. Develop overall assessment statement and general overview statements of what grade means.
- c. The Review Committee will have the ability to adjust the grades up or down, based on information not considered by the Infrastructure Working Committee. For example, if review committee senior managers are aware of project capital improvement programs or funding commitments, that would improve the infrastructure, they could determine that this justifies a modification of the overall grade.
- d. Overall review by “Entire” Infrastructure Report Card Committee to “Normalize Grades.”

Communications Committee

The Communications Committee is responsible for planning and organizing the communications of the report card development, communication of the report card to the public, and the long term efforts required to inform the public and policy makers. The Communication’s Committee will be responsible for preparation of drafts of the Report Card Executive Summary. Communications Committee is responsible for planning press events and releases, publicity, and all other PR events in conjunction with the action/participation of Executive Committee at the various events.

Members of the communications committee will develop and implement an outreach and communications plan in support of the mission and goals established by the full report card committee. Implementation of the plan would mobilize participation and buy-in to the report card process, as well as communicate report card results to identified target audiences.

Specific Duties:

Members of the communications committee will:

1. Attend and actively participate in periodic meetings either in-person or via conference call throughout the report card process. The time commitment will vary but is likely to be heaviest during development of the initial plan, then again during the release.
2. Develop an outreach and communications plan that:
 - Identifies target audiences for both outreach about the process and communications about the report card results (e.g., elected officials, business organizations, media outlets, etc.)
 - Develops key messages for each target audience
 - Sets out strategies to reach and/or mobilize these audiences (e.g., peer-to-peer conversations, presentations at meetings, talking points, press releases, correspondence, events, etc.)
3. Draft the report card executive summary and review / edit the body of the report card documents.
4. Implement the Communications Plan
 - Develop supporting materials (e.g., power point presentation, talking points, press releases, letters to policymakers, etc.)
 - Organize and educate members of a speakers bureau
 - Identify and secure opportunities for spokespersons to deliver the key messages to target audiences
 - Plan and coordinate events

Executive Committee (XCOM)

The Executive Committee is responsible for organizing and guiding the report card effort. They are responsible for gathering the grades from the Review Committees for “Entire” Committees normalizing review, printing final report card, and distributing report card. The Executive Committee with support of ASCE Region 9 is responsible for hosting the press and publicity and all other PR events.

Development of Report Card Grades

In the development of Report Card Grades, four fundamental components of the infrastructure should be considered. These are:

Condition – What is the existing or near future condition of the infrastructure facility? In assessing the condition assessment of the infrastructure, it is recommended that one not only consider existing condition but the immediate future conditions (up to three years) particularly where future projects which would improve the conditions are either funded or in design.

Capacity – When considering capacity, again one should consider the existing as well as future capacity. In other words, one should be able to consider questions like: Are the current roads and bridges able to sustain the current population? Will the roads and bridges be able to support the community in ten years? Twenty years? The existence of master plans, funding plans, capital improvement programs are good starting points to gather this information.

Operation & Maintenance – Operations & Maintenance (O&M) can be difficult to evaluate. The working groups are encouraged to develop parameters applicable to their areas. Committees should consider whether the organizations have sufficient funding levels for their facility maintenance. Consideration should be made of infrastructure failures contributing to non-compliance with regulatory requirements.

Security and Safety

Security and Safety will be addressed in each category. The Working Committees are encouraged to develop parameters applicable to their categories. The security and safety elements addressed by the report card need to include those physical improvements required to assure asset protection from identifiable threats to the category of infrastructure.

Weighting Factor

The fundamental components each have an equal weight of 23% (a total of 92%). Because of the large degree of variability in the types of infrastructure and data availability of each, the remaining 8% of the grade should be allocated at the discretion of the Infrastructure Working Committee, either to be distributed in one or a combination of the four aforementioned components or a new discipline-specific component.

Grading Criteria

The SLO County Infrastructure Report Card effort will follow the ASCE national report card's approach of issued letter grades based on the criteria used to analyze the various infrastructure categories. The national report card grades were based on the following scale:

A = 90-100%

B = 80-89%

C = 70-79%

D = 41-69%

F = 40% or lower

Report Card Criteria – Water Infrastructure

Major Grouping	Category Description	Basis for Evaluation/ Criteria for Grading	Scoring
Condition	Condition of local distribution system facilities	Age of facilities. Condition of facilities. Known materials issues.	10 pts
	Condition of imported water delivery and treatment facilities	Age of facilities. Condition of facilities. Known materials issues.	10 pts
	Condition of groundwater basin and production facilities	Age and condition of production wells, seawater barrier, and spreading facilities.	10 pts
Capacity	Availability of adequate supply	Sufficient supply for next 20 year period (from SB 221/610). Risks to supply. Strategy/contingency plan for various components of local/imported supply.	6 pts
	Reliability of delivery systems	Storage, flexibility and redundancy to deal with planned or unplanned outages	6 pts
	Capacity of Local Facilities	Capacity to meet peak day and fire flow demands. Bottlenecks or needed upgrades.	6 pts
	Capacity of Regional Facilities	Capacity of imported water facilities to meet peak day demand. Capacity of basin wells to sustain pumping levels.	6 pts
Deferred Maintenance	Water quality	Compliance w/State/Federal drinking water quality regulations. Consumer confidence reports, etc.	23 pts
Security and Safety	Physical Security	Physical accessibility, fencing, alarm/detection systems, etc. of pipeline, storage, pump stations and treatment facilities	8 pts
	Chemical Security	Secured storage, point of use, and handling of hazardous materials for treatment processes.	7 pts
	Seismic Survivability	Ability to survive the maximum credible seismic event.	8 pts

SLO County Report Card

Draft Infrastructure Brief – Example Infrastructure System

Outline for the two to four page infrastructure report (references are not counted in the two to four pages).

- I. **Introduction:** (Developed by the Infrastructure Working Committee and finalized by the Review Committee)

Short paragraph why that particular infrastructure is important to the State

- II. **Overall SLO County Grade:** (Developed by the Infrastructure Working Committee and finalized by the Review Committee)

This is a short paragraph on the overall grade for this infrastructure for the State, and what it means.

- III. **Policy Options and Recommendations:** (Developed by the Review Committee)

This is the policy statement and recommendations developed by the Review Committee. This is the heart of their work.

- IV. **Infrastructure Assessment Methodology:** (Developed by the Infrastructure Working Committee)

In early pages of the overall report, there will be an explanation of the overall methodology. That explanation will address the four general areas of evaluation (condition, capacity, deferred maintenance and security/safety) and set the general definitions of these areas. In this section the Infrastructure Working Committee's will explain the specific criteria for each infrastructure system.

For example, for wastewater, the infrastructure was divided into two components, treatment system and collection system. Under collections, the condition criteria evaluated gravity pipes, force mains, pump stations and manholes, with facility age, the structure condition, and all notable grease and root problems are to be considered as information is available. The lack of information will also be telling as it will indicate the unknown status of the infrastructure.

For example, for drinking water systems, for condition assessment, the analysis will evaluate local, imported, and groundwater facilities. For capacity, the analysis will consider availability of adequate supply, reliability of delivery systems, capacity of local facilities, and capacity of regional facilities. And for operations, the investigation will consider ability to meet regulated water quality objectives, maintenance/repair and replacement funding levels, and water use efficiency (Best Management Practices Implementation). The actual write up will go into much more detail.

V. **Data Gathering and Sources:** (Developed by the Infrastructure Working Committee)
Listing of how the data was gathered and the sources of data.

VI. **Results and Conclusions:** (Developed by the Infrastructure Working Committee)
Summary section on the results of the findings and some general conclusions.

VII. References

Factoids – (Developed by Review Committee with assistance from Communications Committee)

Not included in report card Executive Summary, but factoids and media sound bites will be included in smaller version of report card.

Example – from National Report Card –

Navigable Waterways – The U.S. Army Corps of Engineers has a backlog of \$38 billion in active authorized projects. Transportation demand on waterways is expected to double by 2020, and serious performance problems are likely if current levels of investment continue.

Roads – One third of the nation’s roads are in poor or mediocre condition, costing American drivers an estimated \$5.8 billion and contribution to as many as 13,800 highway fatalities annually.