The State of Orange County’s Infrastructure 2010
A Little Bit of Background

- **Third Time Around**: 2002, 2005 & 2010
- **Professional Association**: American Society of Civil Engineers, OC Branch
- **Academics**: UCI Civil & Environmental Engineering Affiliates
- **Business**: Orange County Business Council
- **Volunteer Effort** - Over 100 Individuals
- **Individuals**: Engineers, public agency managers, business leaders, environmentalists
Why is a Report Card Important?

• Self-Imposed, not mandated by anyone
• The Power of Honest Self-Appraisal
• Track Trends & Forecast Future
• Take Time to Envision a Better Future
• Fully Inform the Public & Policy Makers
• Establish Community Expectations
• Embolden Policy Makers
• Leadership Begins with the Professionals and Stakeholders
The Declaration of the OCIRC Committee

- **Knowledgeable**: factually-based, informed, data to back it
- **Truthful**: complete and impartial
- **Equanimity**: resist undue influence
- **Relevant** to our audiences
- **Communicated** clearly
- **Disseminated** widely
Impartial Analysis & Independent Review

- 10 Standing Chapter Committees
- 10 Review Committees
- Executive Committee for continuity and executive summary
- Results reported openly and transparently
Evaluation Criteria

- General condition of the infrastructure
- Capacity vs. Demand
- Operation and functionality
- Resiliency to extraordinary events
- Sustainability (Resources & Funding)
- Estimated Cost
“Report Card” as the Paradigm

• Good News: simple and familiar
• Easy and quick to understand
• Useful for Spotting Overall Trends
• Sound bites are what we’re used to
• Bad News: Too broad, too simple
• Lumps too much and misses details
• May mislead and confuse
• A grade isn’t enough to tell the story
• Read the grade and read the report
## Report Cards

<table>
<thead>
<tr>
<th></th>
<th>US ’09</th>
<th>CAL ’06</th>
<th>OC ’02</th>
<th>OC ’05</th>
<th>OC ’10</th>
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<tbody>
<tr>
<td>Aviation</td>
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<td>C-</td>
<td>C+</td>
<td>B</td>
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<tr>
<td>Energy</td>
<td>D+</td>
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<td>C+</td>
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<tr>
<td>Flood Control</td>
<td>D-</td>
<td>F</td>
<td>D</td>
<td>C-</td>
<td>C-</td>
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<tr>
<td>Ground Transportation</td>
<td>D-</td>
<td>D+</td>
<td>C</td>
<td>C+</td>
<td>B-</td>
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<tr>
<td>Parks/Rec/Environment</td>
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<td>D+</td>
<td>C</td>
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<tr>
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<td>C+</td>
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<td>B+</td>
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<tr>
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<td></td>
<td>D</td>
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<tr>
<td>Wastewater</td>
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<td>C+</td>
<td>C+</td>
<td>C+</td>
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<tr>
<td>Water Supply</td>
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<td>C+</td>
<td>C</td>
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<td>B-</td>
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<td>Orange County Overall</td>
<td></td>
<td></td>
<td>C</td>
<td>C+</td>
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<td>Annual Cost (billions)</td>
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Aviation: B

• JWA excellent condition. Little repair backlog
• Fee-based income & other sources cover costs
• Terminal expansion will add convenience
• 10.8 million passenger capacity at JWA
• 25 million passenger demand by 2020
• Must use other airports
• High speed rail to regional airports is the solution
Energy: C+

- SCE, SDG&E and Anaheim serve OC
- CPUC regulates them
- Reliability through interties, repairs and standards
- Much better than average reliability
- CPUC-approved rate increases insufficient
- System is aging with inadequate replacement rates
- Condition and reliability will degrade in next 5 years
Flood Control: C-

- Available funding is decreasing
- Costs for projects are increasing
- Mitigation costs rival project costs
- $2.5 billion in unmet capital needs
- 90 years to address backlog with existing spending rates
- OC flood threats for decades
Ground Transportation: B-

- $3.1 billion from 1990 Measure M gave major transportation system upgrades
- 2.6 million OC Metrolink riders (start ’94)
- 30% of pavement is poor or very poor poor
- 2006 Measure M will provide $11.8 billion (or less) for improvements
- OC Long Range Transportation Plan: $40.9 billion
- We need Federal, State & Local funds
Parks, Recreation and Environment: C+

- Bonds funded parks and parklands from 2005 to 2008
- OC lost $70 million for 110 projects in 2009
- “Economy” trumps “environment” in most polls
- OC saw 2 catastrophic wildfires since 2005
- Urban/wildland interface must be better planned
- Conditions will degrade without adequate funding
School Facilities: C+ (?)

- 500,000 students, 600 schools, 28 districts
- Enrollment leveling or shrinking helps overcrowding
- New schools built 2005-09 with capital sources, but 2010 is now very bad news
- M&O funding is lagging
- $525 million in deferred maintenance and getting worse
- Condition of school facilities are degrading
- Schools are in financial freefall
Solid Waste: B+

• Robust disposal and recycling system
• 50% recycling rate meets State’s AB 939
• Tipping fees match capital & operating costs
• Capacity meets demand
• Long-term sustainability is likely
Surface Water Quality: D

• Untreated polluted urban runoff drains to streams & beaches
• Regional Water Quality Control Board regulations require major improvements
• 97% of OC beaches rated A or B by Heal the Bay. But two rated F
• California stopped funding 8 Clean Beach Initiatives
• New community habits and source control essential to clean up urban runoff
Wastewater: B

- Water conservation = less wastewater
- Less sewage spills since 2005 because of better maintenance and FOG control
- 1940s & 1950s sewers need replacement
- Wastewater treatment plants in good shape and in compliance
- Most cities and special districts have dedicated enterprise funds for sewers and treatment plants
- Continued improvement in future
Water Supply: B-

- In-County systems in good shape
- Income sufficient to support capital, M&O
- Conservation, recycling and desalination increasing and essential
- But, 50% of OC’s water comes from Colorado River and State Water Project
- CR continues in long-term drought
- SWP is vulnerable to disruption and court decisions limit water allocations
- State-wide reliability is degrading.
- We are in jeopardy!
An Observation about OC Infrastructure

Orange County Infrastructure is at its best with local initiatives, local ownership, local control, local public support and local funding.
What We Must Worry About: Water and Power

- Long-term reliability and adequate supply is essential
- In-County systems in good shape
- Regional and State-wide conditions will continue to degrade
- Long-term investment is essential
- Water Bond and CPUC Electrical Rate Adjustments
The Communication Challenge

- 2002 & 2005 Report Cards didn’t “stick”
- News cycles are 24-hours
- Our world is noisy and distracting
- 2010 strategy: sustained, tailored, frequent
- Take it to them
- Involve owners and stakeholders
- Enlist the Professionals in this Room
10 Ways for **YOU**
to make a difference!

1. Give us your contact information
2. Tell a colleague about this discussion
3. Make this a topic of dinner conversation
4. Subscribe to infrastructure newsletters
5. Add infrastructure topics to your meetings
6. Ask us to speak at your meetings
7. Assign this issue to someone in your office
8. Join our efforts, speak for us
9. Call or visit an elected public official
10. Provide us financial or logistical support
Future Presentations:

• May 17, Evening, Huntington Beach City Council
• May 20, All Day Workshop Sponsored by League of Cities
• Your organization, your place, your time
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