# Sustainable Transportation Access Rating System (STARS)

Lake Arrowhead October 18, 2010

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North American Sustainable Transportation Council



### Sample Project Scorecard

| STARS    | Project  | Version  | 0.6  |  |              |             |  |
|----------|----------|----------|--|--|--------------|-------------|--|
| D '      | <b>.</b> |          |  |  |              |             |  |
| Project  | Name: _  | <u> </u> |  |  |              |             |  |
| Contac   | t:       |          |  |  |              |             |  |
|          |          |          |  |  |              |             |  |
| Yes      | ?        | No       |  |  |              |             |  |
|          |          |          | Project Totals   |  |              |             |  |
|          |          |          | One Star points, Two Star points, Three Star points, Four Star |  |              |             |  |
|          |          |          |  |  |              |             |  |
| Yes      | ?        | No       | _  |  |              |             |  |
|          |          |          |  | grative Process  |              | ase(s)      |  |
|          |          |          | IP 1   | Comprehensive Pojrect Goals & Objectives (purpose & need)    | Planning     |             |  |
|          |          |          | IP 2   | Multi-Discipline Project Team                                | All          |             |  |
|          |          |          | IP 3   | Public Stakeholder Engagement                                | All          |             |  |
|          |          |          |  |  |              |             |  |
| Yes      | ?        | No       |  |  |              |             |  |
|          |          |          | Access   |  |              |             |  |
| Required | d        |          | A 1  | Establish Mode Split Goal                                    | Purpose &    | Need        |  |
|          |          |          | A 2  | Evaluate Expanded TDM Strategies                             | Alternatives | Analysis    |  |
|          |          |          | A 3  | Evaluate Expanded TSM Strategies                             | "            | II          |  |
|          |          |          | A 4  | Evaluate Expanded Transportation Options                     | "            | II .        |  |
|          |          |          | A 5  | Evaluate Expanded Land Use Strategies                        | "            | II .        |  |
|          |          |          | A 6  | Implement Expanded Options, TDM, TSM and Land Use Strategies | Design, Imp  | olementatio |  |
|          |          |          | A 7  | Access Performance   | Operation    |             |  |
|          |          |          |  |  |              |             |  |

#### What is STARS?

Sustainable Transportation Access Rating System

"LEED for Transportation"

Framework for designing and/or rating transportation:

**Projects** 

**Employer Programs** 

Plans



Voluntary, national system for public agencies & private sector consultants

#### What is STARS?

Performance-based system focused on:

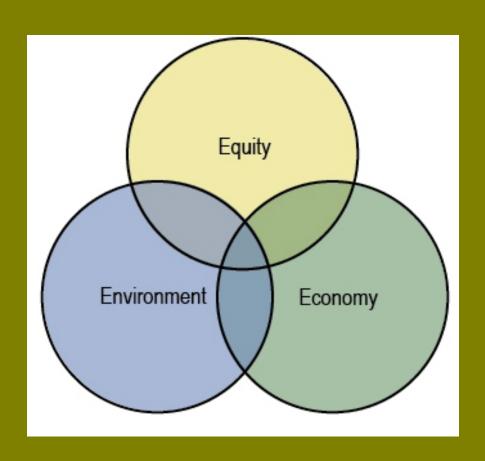
- Access
- Climate + Energy
- Cost Effectiveness

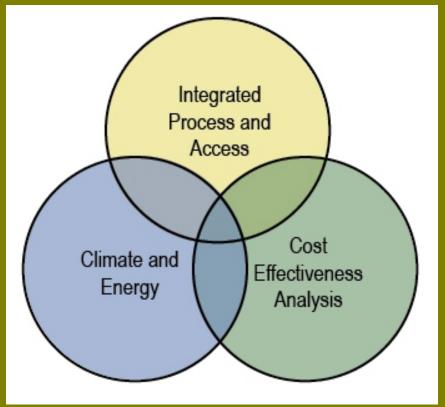
Multimodal: Compares performance across all modal strategies

Full life cycle (unlike other systems)

STARS-Project Under development ("Version 0.98")

#### **STARS:** Grounded in Sustainability





#### **STARS Credit Development**

Santa Cruz County Highway 1

Currently 4 lane freeway

Proposal to add 2 HOV & 2 auxiliary

lanes over 9 miles

Desire evaluate sustainability of various strategies



# Who Is Developing STARS? North American Sustainable Transportation Council

- ☆ CH2M HILL: six Portland staff
- → Parsons Brinckerhoff: Portland, Seattle & San Francisco staff
- ☆ Confluence Planning: Kelly Rodgers
- ★ ECONorthwest: Terry Moore
- ☆ Bill Creger, David Evans & Associates
- ☆ Nicole Isle, Brightworks
- ☆ Eric Hesse, TriMet
- ☆ Paul Horton, Evergreen State College
- ☆ Peter Hurley, Portland Bureau of Transportation
- ☆ Several peer reviewers (PSU, PDOT, WSDOT)

#### **STARS Framework**

**Set Goals** 

**Evaluate Strategies** 

Select Alternatives

Implement

**Monitor Performance** 

#### **STARS Goals & Performance Metrics**

Access

Climate + Energy

Cost Effectiveness

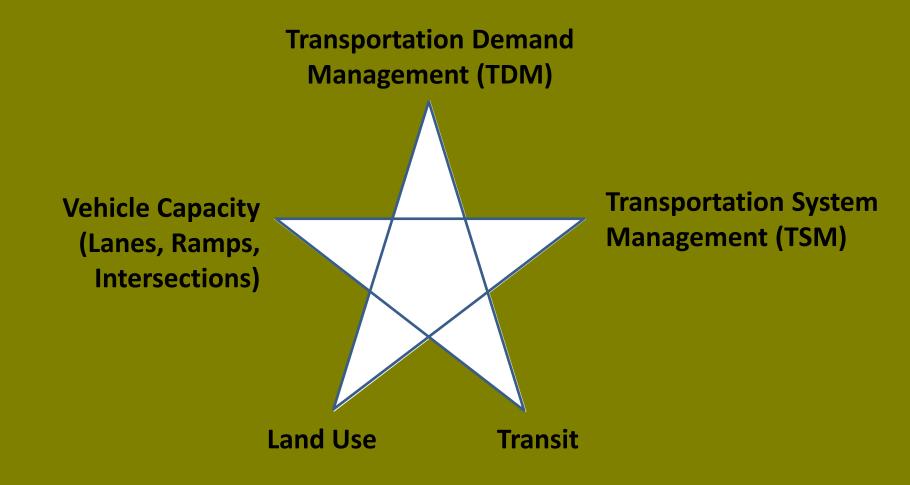


# "Boomerang Dollars"

24.3 Median commute miles per day for 33 most populous US metro areas 20.3 Average daily miles for Portland area commute Miles saved compared to median Transportation costs saved compared to median \$15 per hour Estimated value of time spent commuting 100 million hours less traveled per year saves Total savings per year



#### **Evaluate Strategies**



#### **Status & Next Steps**

- Pilot Project Application Manual
- Santa Cruz Highway 1
- Seeking Pilot Projects
- **Certification & Training**
- National Launch



#### **Questions?**

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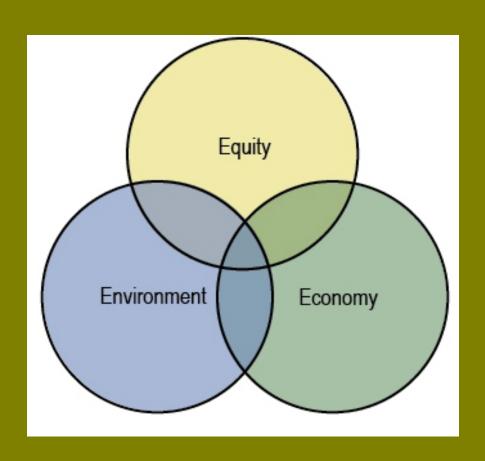


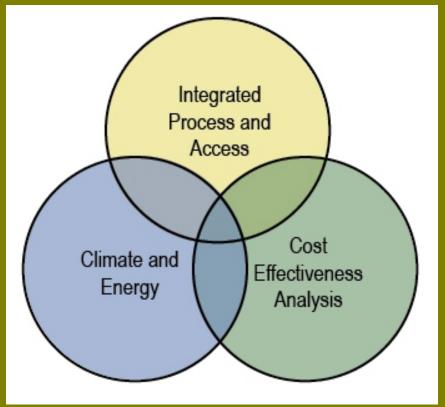






#### **STARS:** Grounded in Sustainability





#### **Sustainable Transportation**

What's the Problem?

What is STARS?

**How Does STARS Work?** 

Status & Next Steps



# "113 Degree Record in Los Angeles"





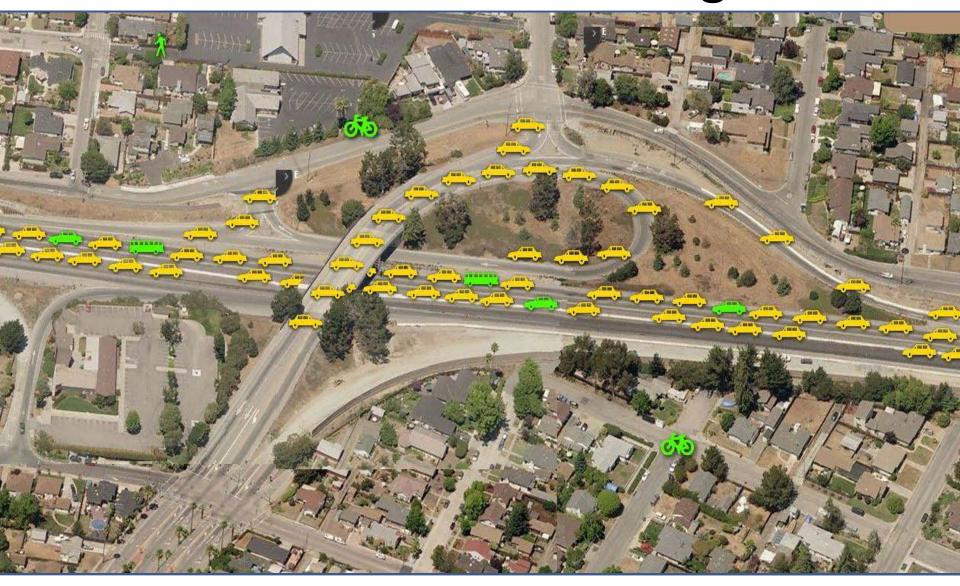
#### **STARS Goals**

# Transform transportation industry practice in order to:

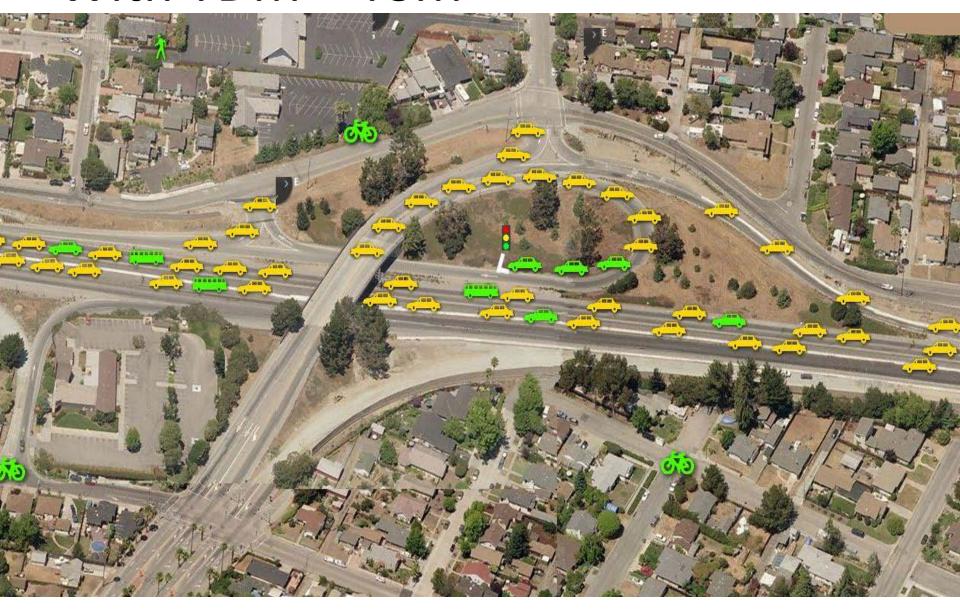
- Improve access for all people
- Cut oil dependence and climate pollution
- Maximize cost effectiveness
- Move toward true sustainability



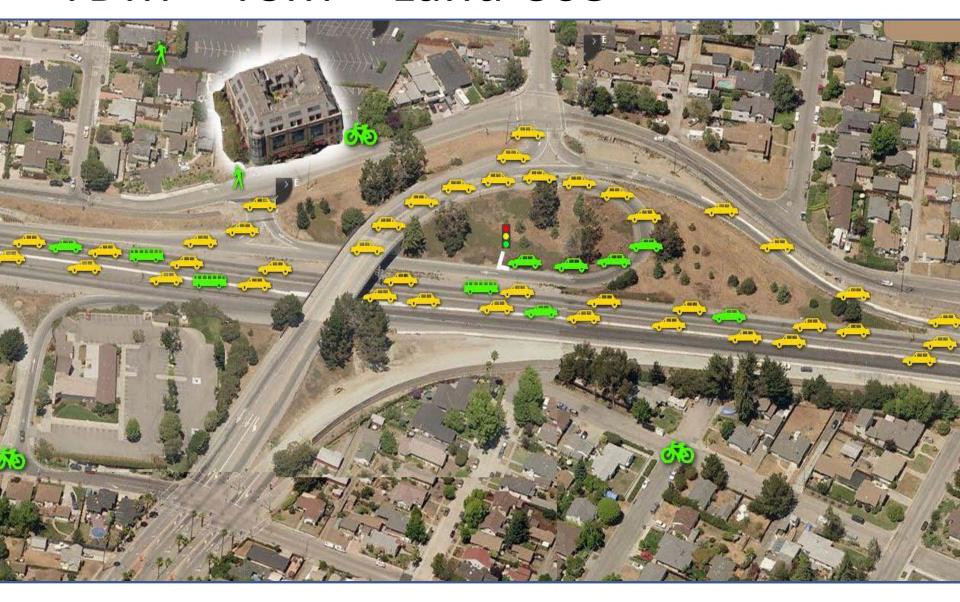
# With Travel Demand Management



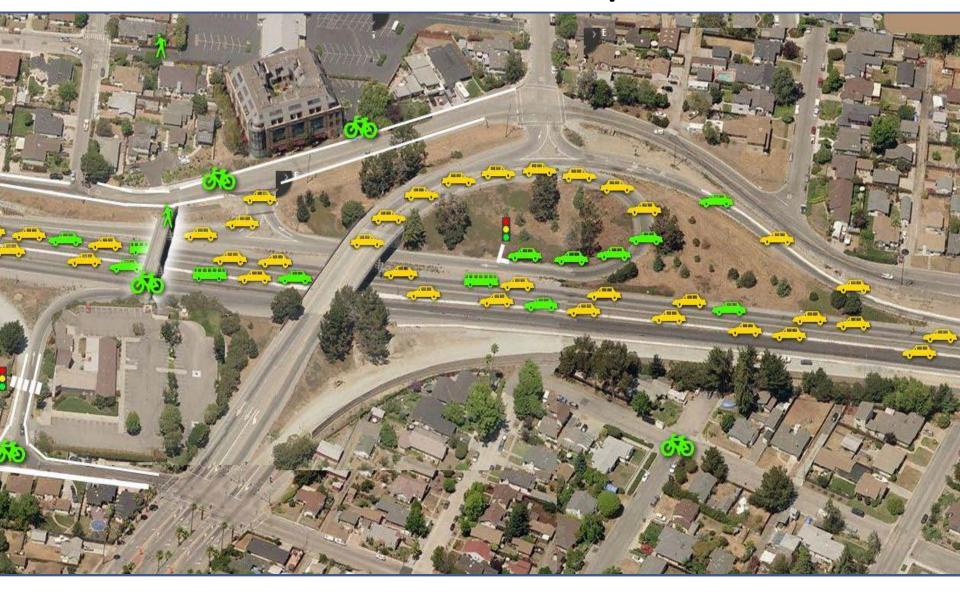
# With TDM + TSM



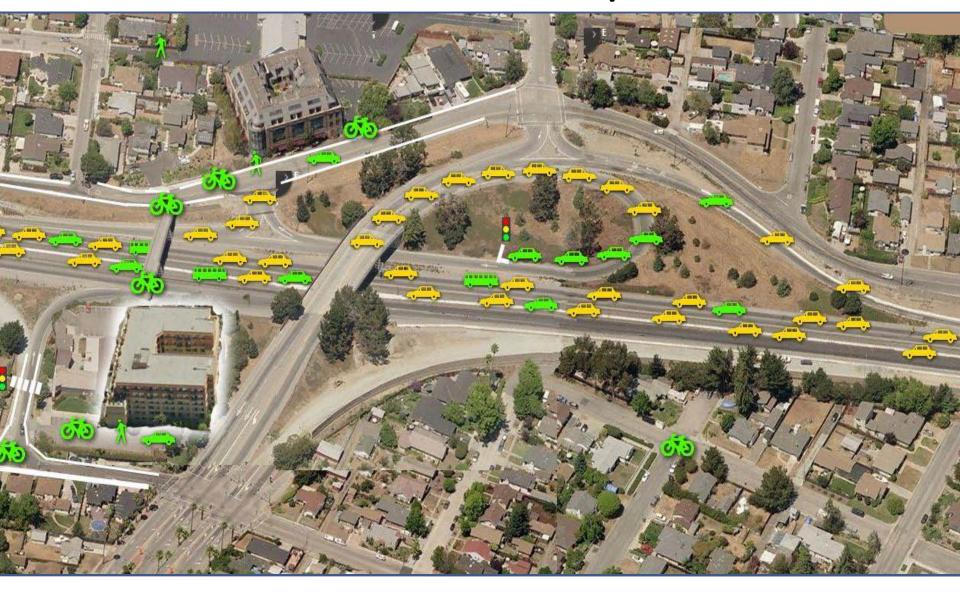
# TDM + TSM + Land Use



# TDM + TSM + LU + Bike/Ped

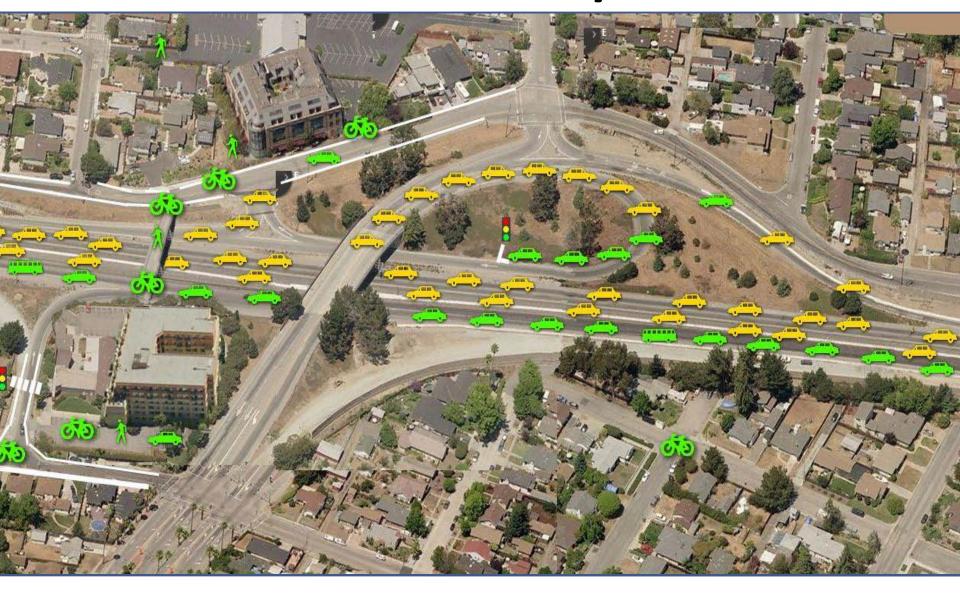


# TDM + TSM + LU + Bike/Ped



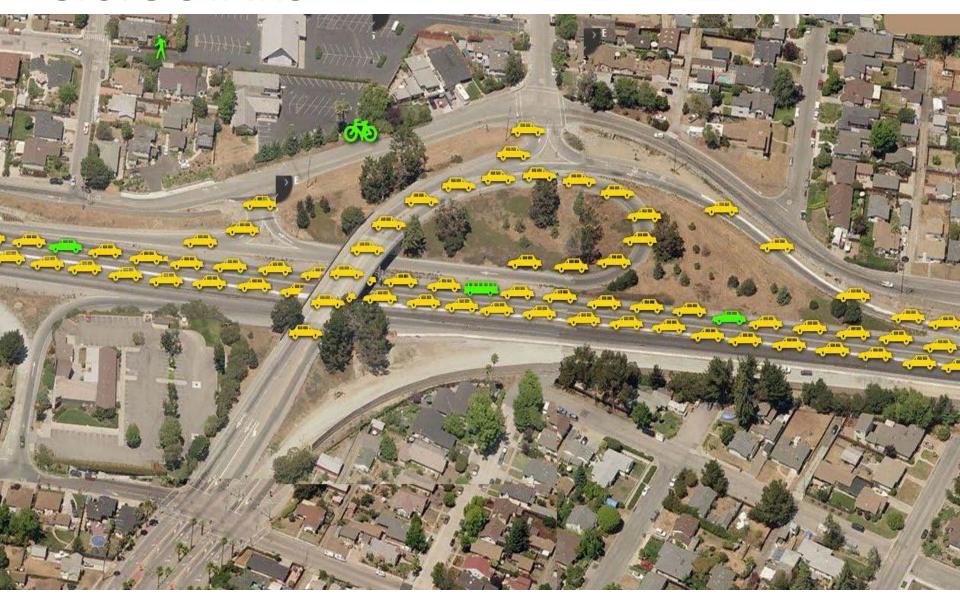
# Pricing image

# TDM + TSM + LU + Bike/Ped + Lanes



# Recongested corridor image

## **Before STARS**



# **After STARS**

