# Construction of Smooth Asphalt Pavements

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#### **Presentation Outline**

- Introduction
- Data Collection
- Evaluation
- Summary

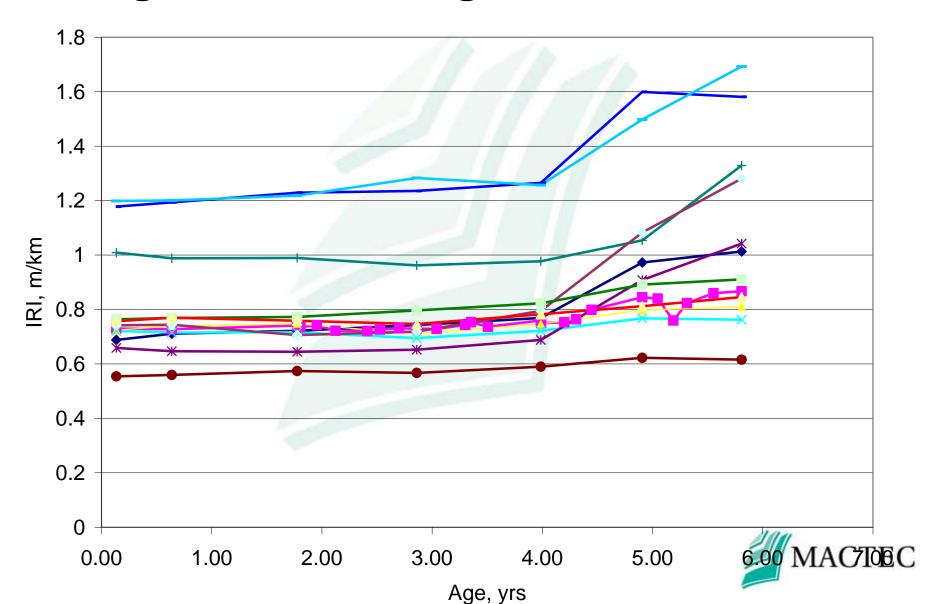


## **Background**

- Smooth pavements last longer and provide improved fuel efficiency
- A number of agencies have transitioned to IRI-based smoothness specifications
- Smoothness specifications identify minimum ride quality expectations for new pavement surfaces



## Progression of Roughness on New AC



## Sheldon G. Hayes Award

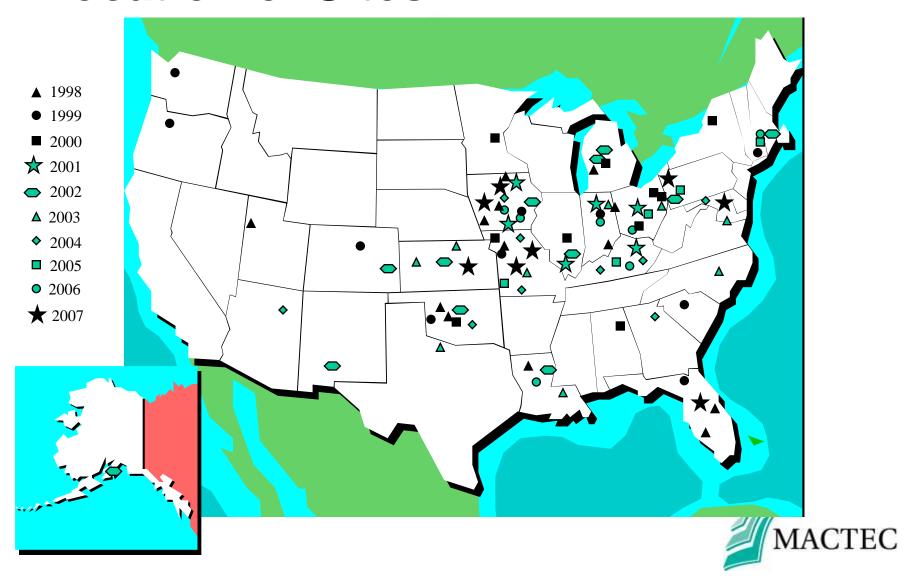
- NAPA presents Sheldon G. Hayes award each year to a construction contractor and owner agency
- Each year 5 to 15 nominees are selected from Quality in Construction sites
- Entries are evaluated by a committee for further evaluation
- Sites include new or overlay construction of any road, highway, airport, or commercial construction

#### Site Evaluation

- Evaluation of the sites are performed approximately 1 year after opening to traffic
- Since 1998 evaluation has included ride quality
- Profile collected at 6-inch intervals with a minimum of 2 passes of each lane included in the construction



### **Location of Sites**



## **Data Collection Vehicle**

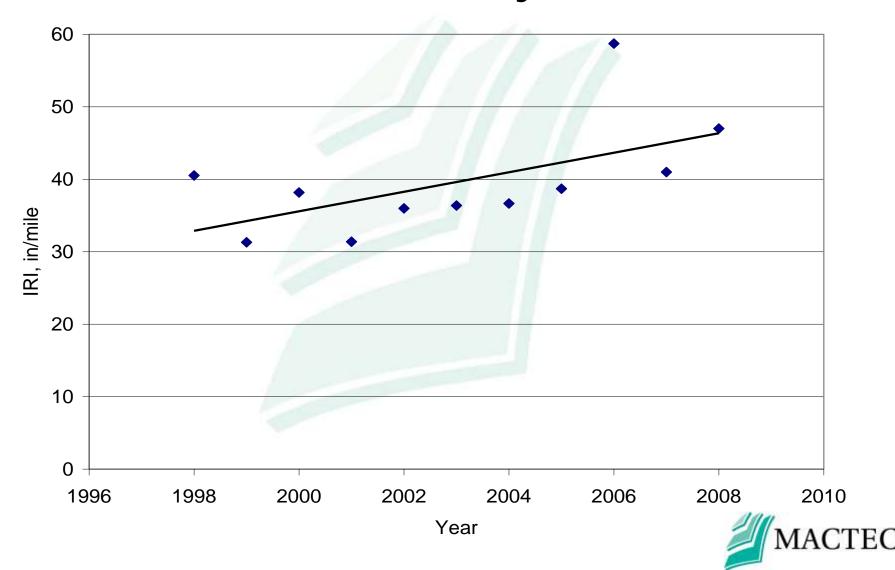




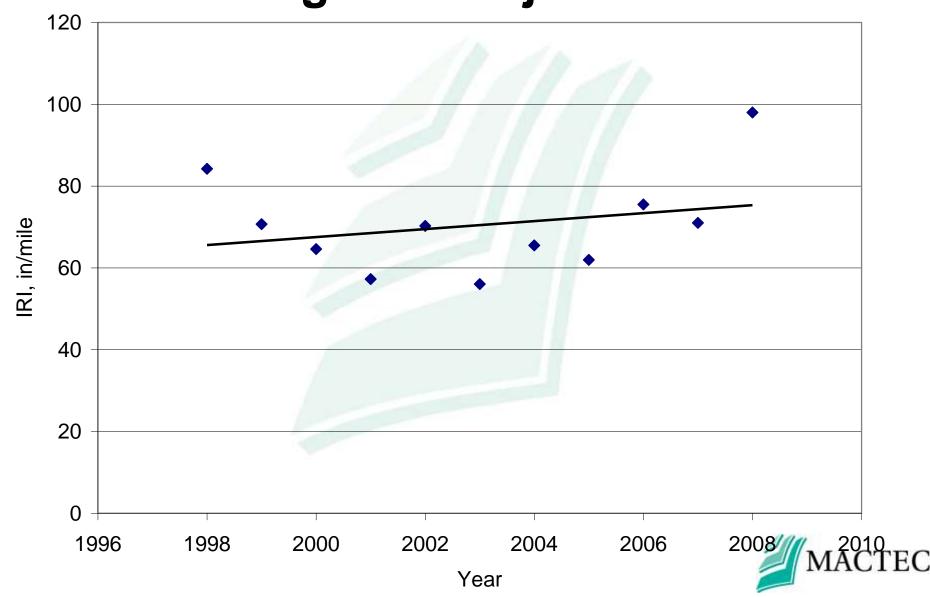
#### **IRI Values from Sites**



## **IRI of Smoothest Projects**



# **IRI of Roughest Projects**



#### **Conclusions**

- Smooth pavements last longer and provide a more satisfactory ride to users
- Over time a number of State agencies have transitioned to IRI-based specs
- The Sheldon G. Hayes nominee projects do not show a definitive improvement in ride quality



# **Questions**

