

2010 Clean Air Plan

Chapter 2

Local Air Quality

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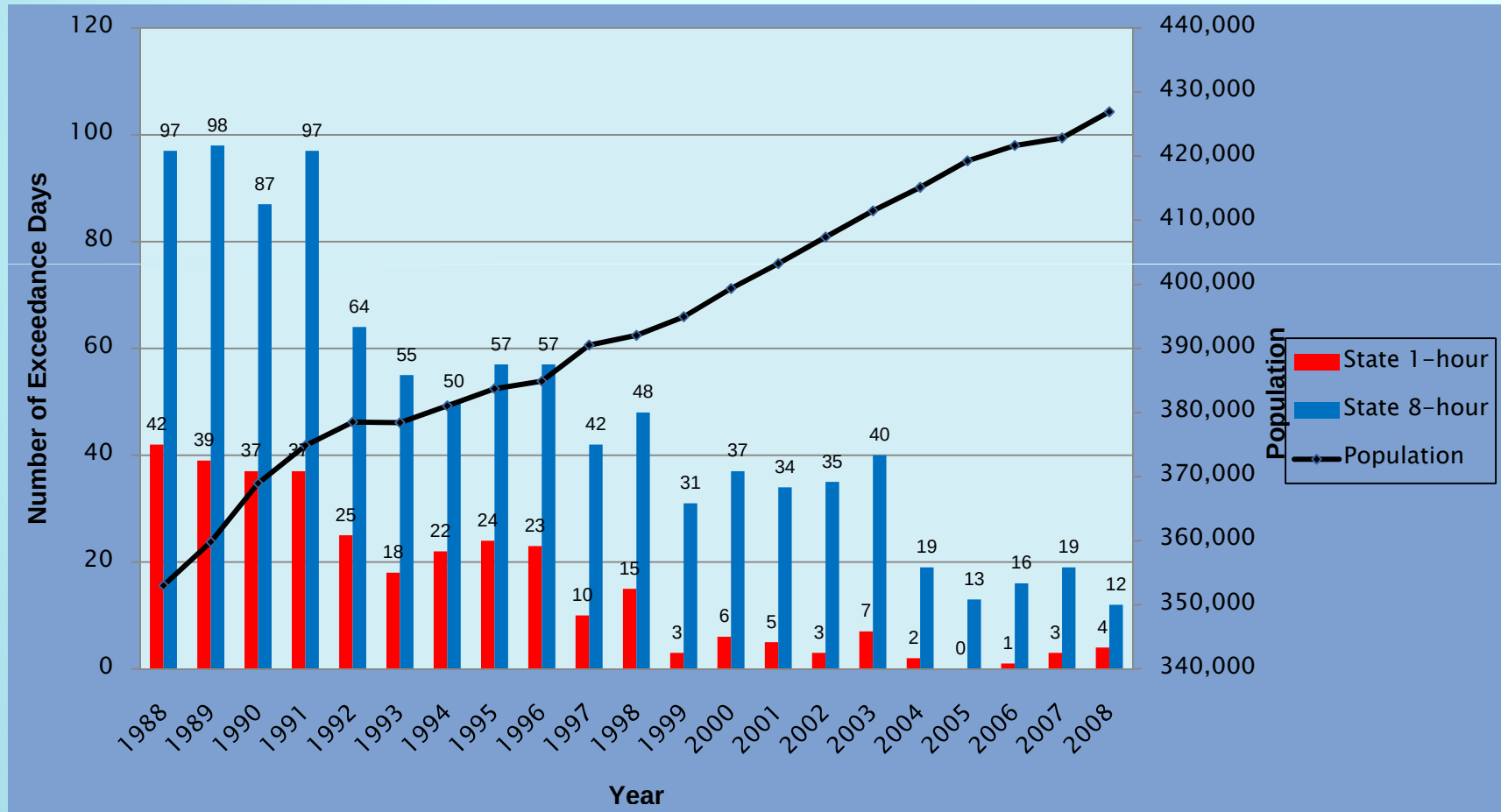
Topics

- ▶ Exceedance vs. Violation
- ▶ County Ozone Exceedance Trends
- ▶ State Air Quality Indicator Data
- ▶ State Designation Values

Exceedance vs. Violation

- ▶ **Exceedance** is any concentration $>$ standard
- ▶ State 1-Hour Ozone Standard = 0.09 ppm
- ▶ State 8-Hour Ozone Standard = 0.070 ppm
- ▶ **Violation** is based on State designation value
 - Determines Attainment Status

Countywide Ozone Exceedances



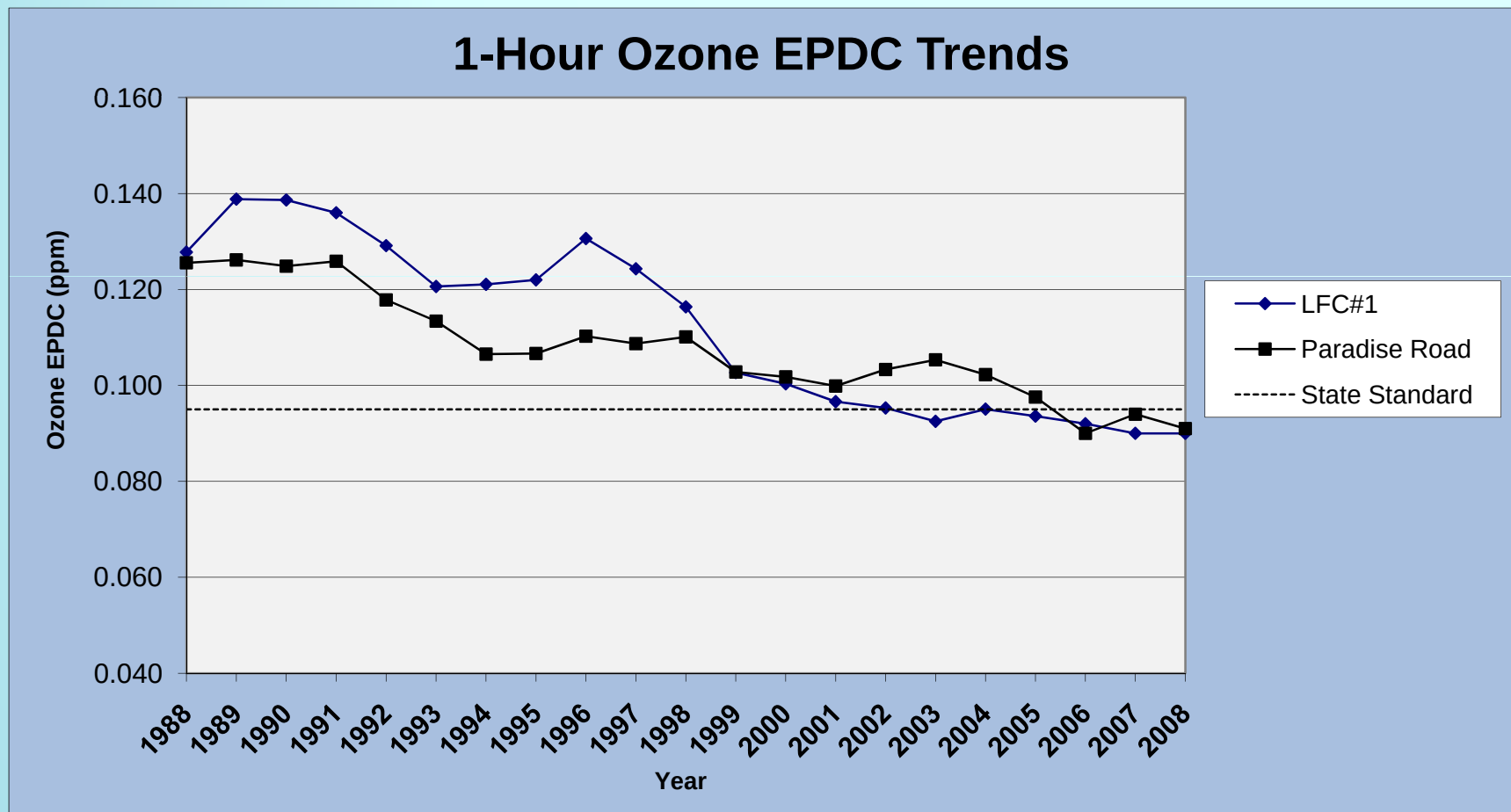
State Air Quality Indicators

- ▶ Required by ARB to track progress
- ▶ Progress based on Control Programs and Emission Reductions
- ▶ Peak “Hot Spot” Indicator
 - Assessed in Terms of Expected Peak Day Concentration
 - Used to Determine State Designation Value
- ▶ Mean of Highest 30 Concentrations
 - Replaces Area- and Population-Weighted Exposure Indicators

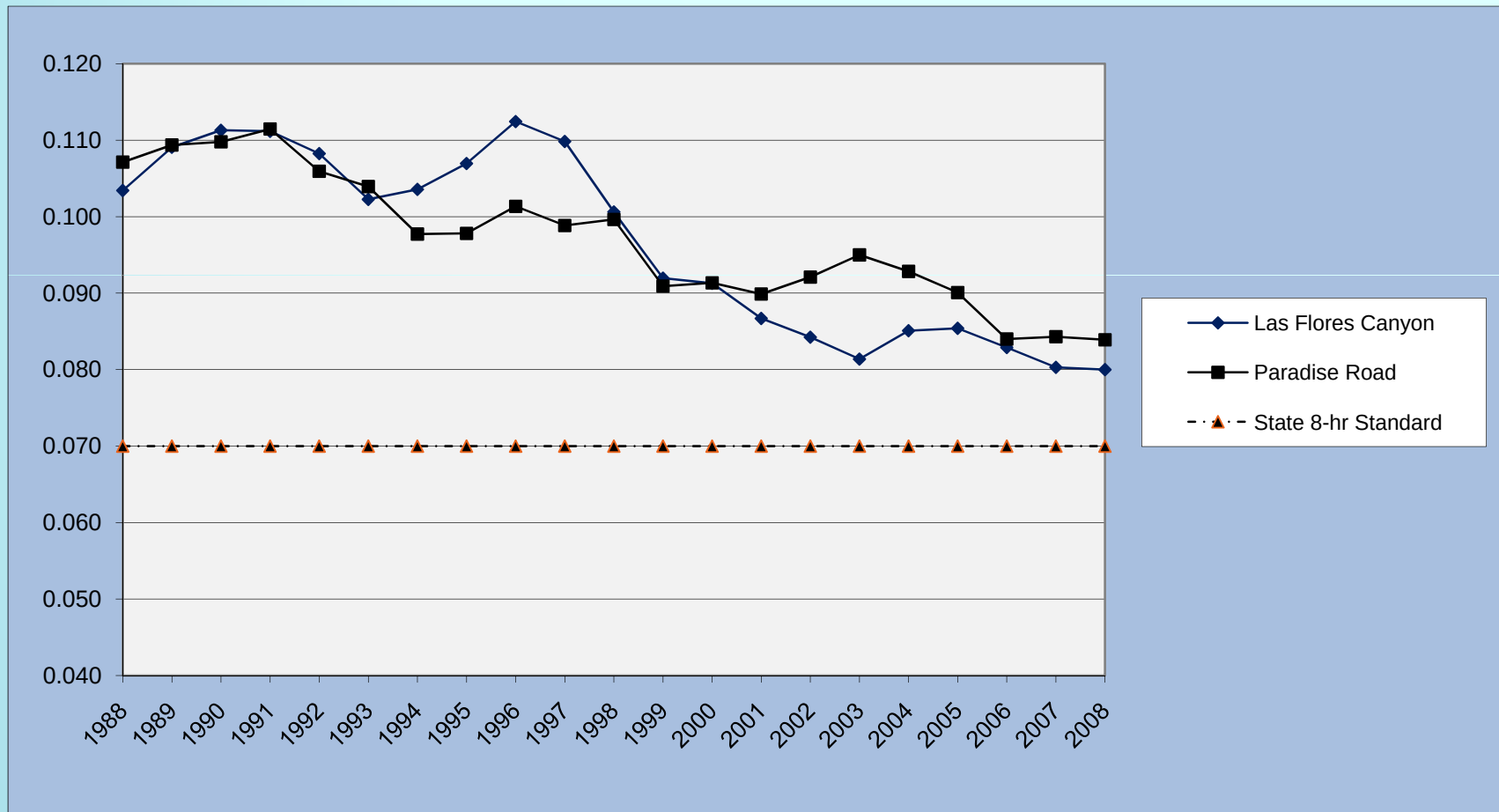
Expected Peak Day Concentration

- ▶ Highest Ozone Concentration Expected to Occur Once per Year
- ▶ Calculated Using Three Years of Data (2008 = 2006/2007/2008)
- ▶ Concentrations > EPDC Considered Extreme
- ▶ Progress: Improvements Due to Emission Reductions Rather than Weather Variability
- ▶ Also Used to Determine Designation Value

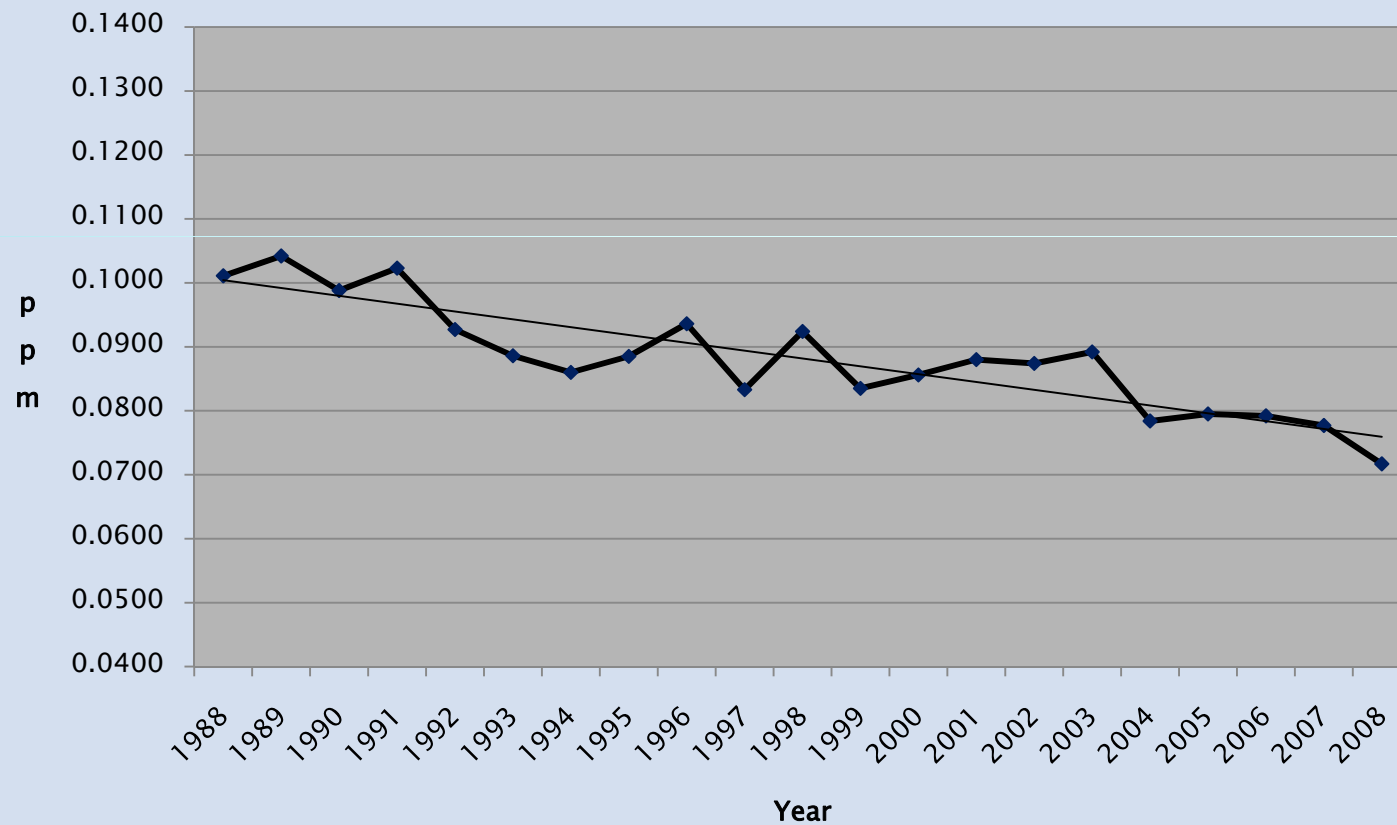
1-Hour EPDC Trends



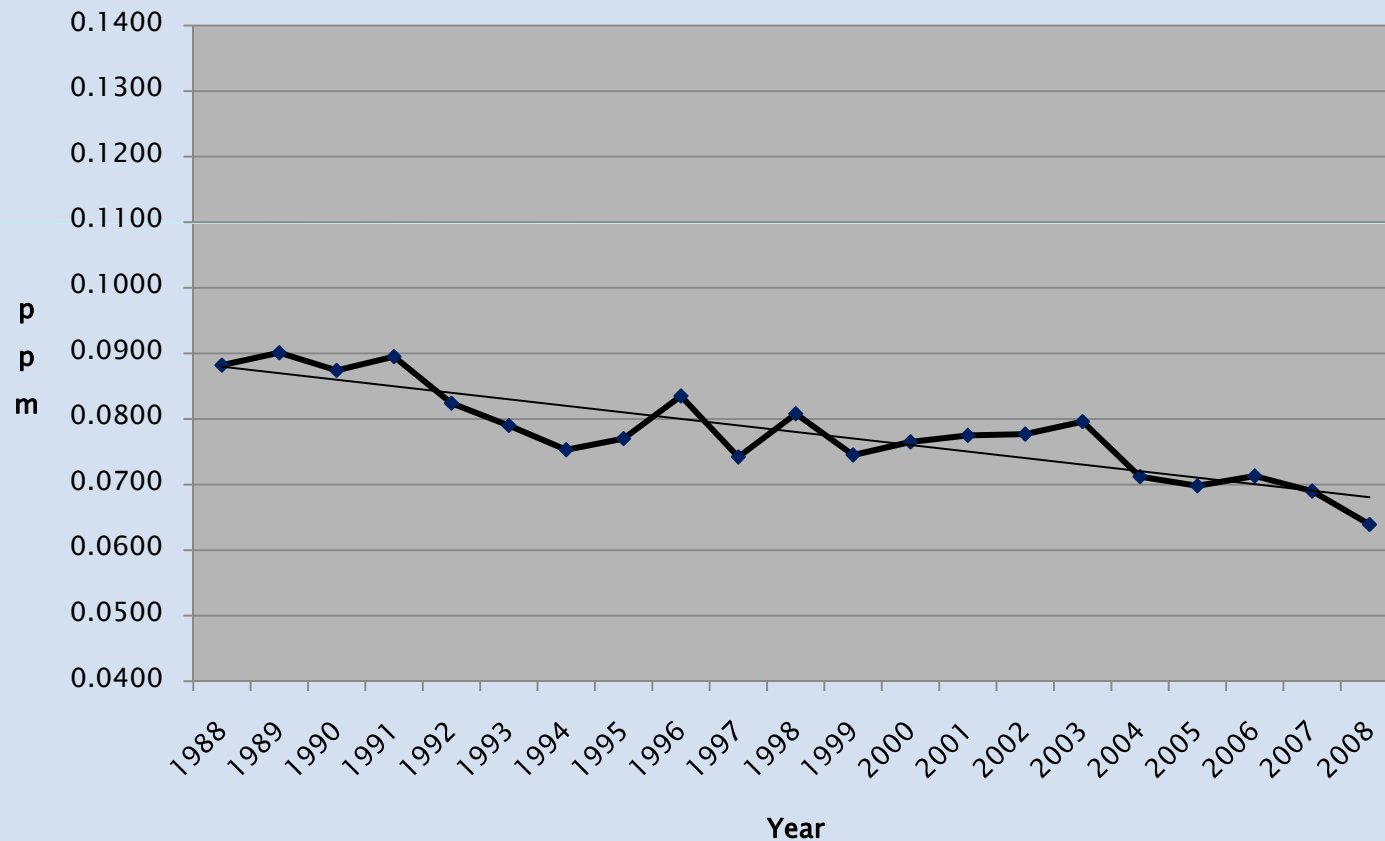
8-Hour EPDC Trends



Mean of Highest Thirty 1-Hour Concentrations – Paradise Road



Mean of Highest Thirty 8-Hour Concentrations – Paradise Road



State Designation Value

- ▶ Highest Concentration Less than or Equal to EPDC
- ▶ DV greater than standard at any site => Nonattainment (both 1-hour and 8-hour)
- ▶ 2008 1-Hour DV = 0.09 ppm at Paradise Road and LFC
- ▶ 2008 8-Hour DV = 0.083 ppm PRoad
 - (SY, Carp and LFC also > 0.070 ppm)

Summary

- ▶ Significant Improvement in Air Quality Over Time
- ▶ In Attainment for State 1-Hour Ozone Standard
- ▶ Nonattainment of 8-Hour Standard