

2008 Ozone National Ambient Air Quality Standards

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Briefing Topics

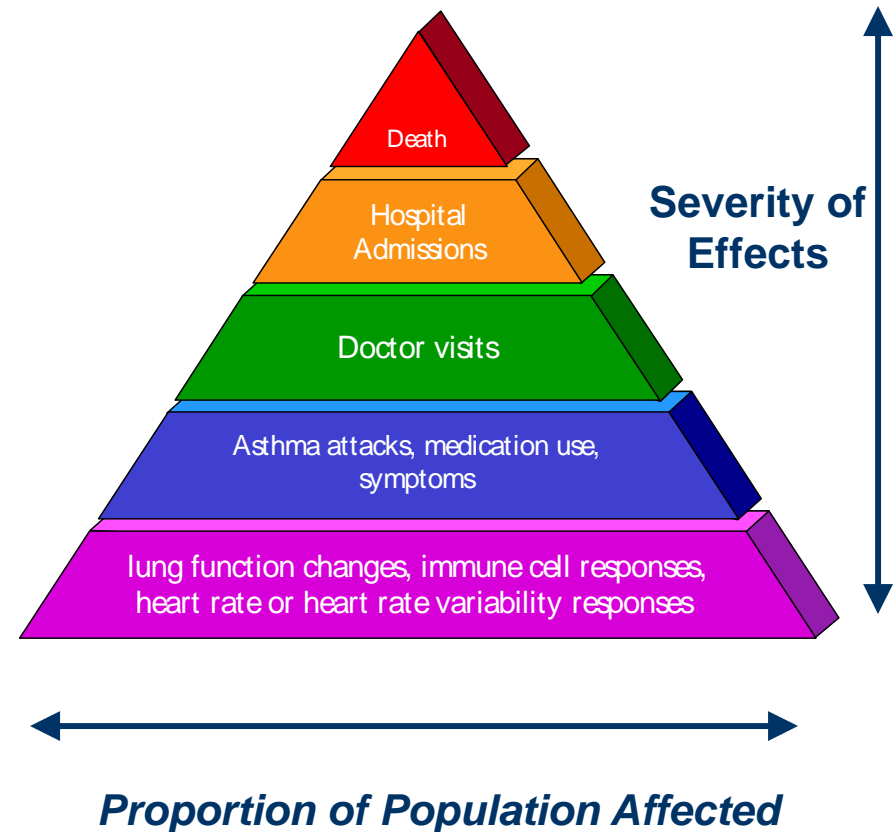
- What is Ozone?
- The New Standard
- Current Air Quality
- Timelines for Planning

What is Ozone?

- Formation: VOC + NO_x +  = Ozone
- Mainly a summertime pollutant
- Lung irritant: primary component of smog
- Ozone penetrates deeply into lungs:
 - Affects breathing, irritates airways, increases asthma attacks
 - May inflame and damage lung linings
 - Increases susceptibility to respiratory infections
 - Aggravates chronic lung diseases such as asthma, emphysema, and bronchitis
- Repeated episodes of inflammation may permanently harm lungs

Ozone Impacts: Vulnerable Groups

- Asthmatics
- Children
- Older adults
- People with other lung diseases
- Higher exposures, such as outdoor workers



Ozone Plant Effects

- Interferes with a plant's ability to produce and store food
- Disease, insect, weather, and competition susceptibility
- Injures appearance of vegetation



Ozone Standard

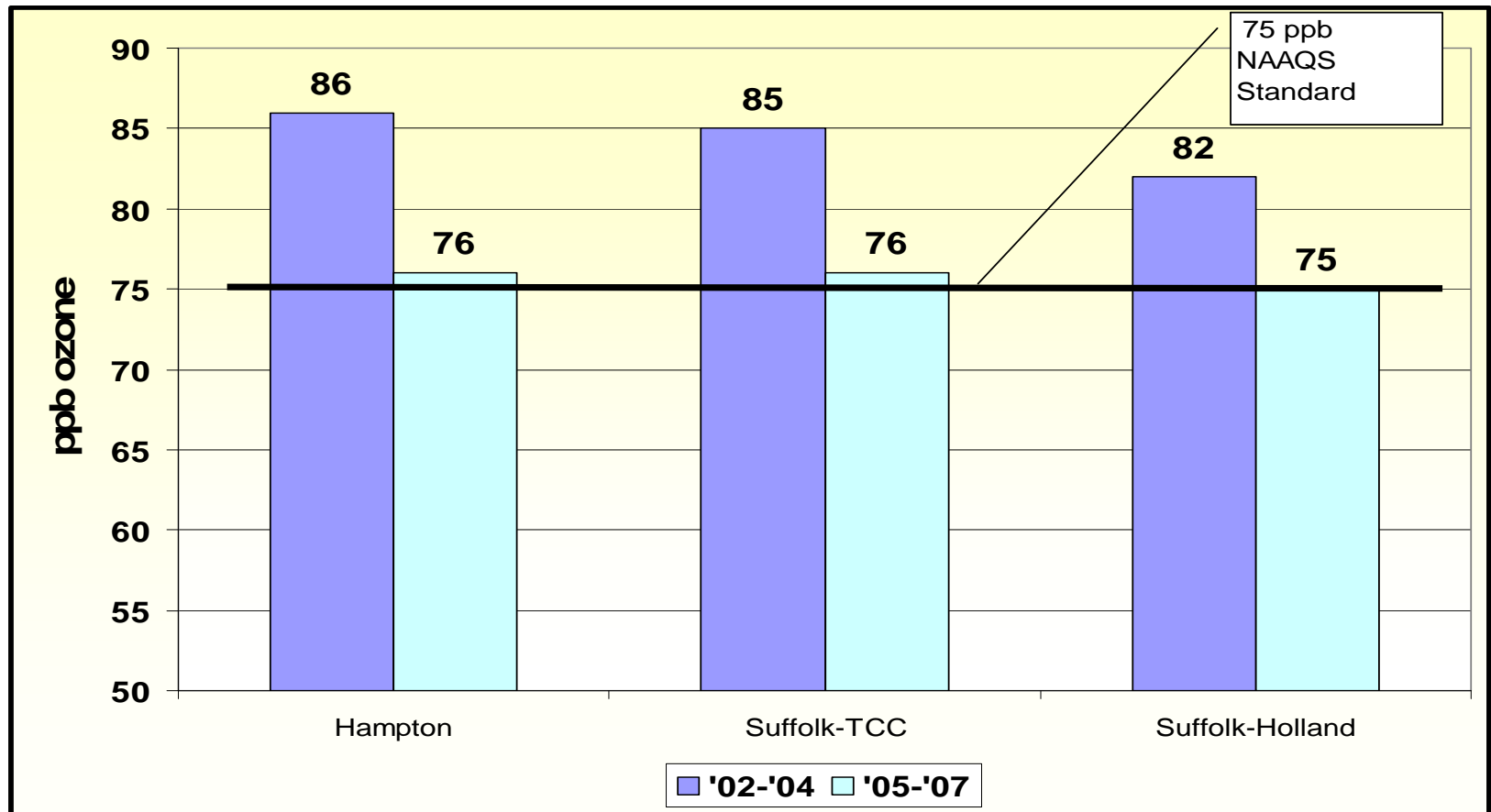
- 1997 Ozone Standard
 - 0.08 parts per million ozone on an 8 hour average
 - Hampton Roads originally classified “marginal”; redesignated “attainment” in 2007
- 2008 Ozone Standard
 - 0.075 parts per million ozone on an 8 hour average
 - Standard revised March 12, 2008

Hampton Roads Air Quality: Ozone Monitoring Locations

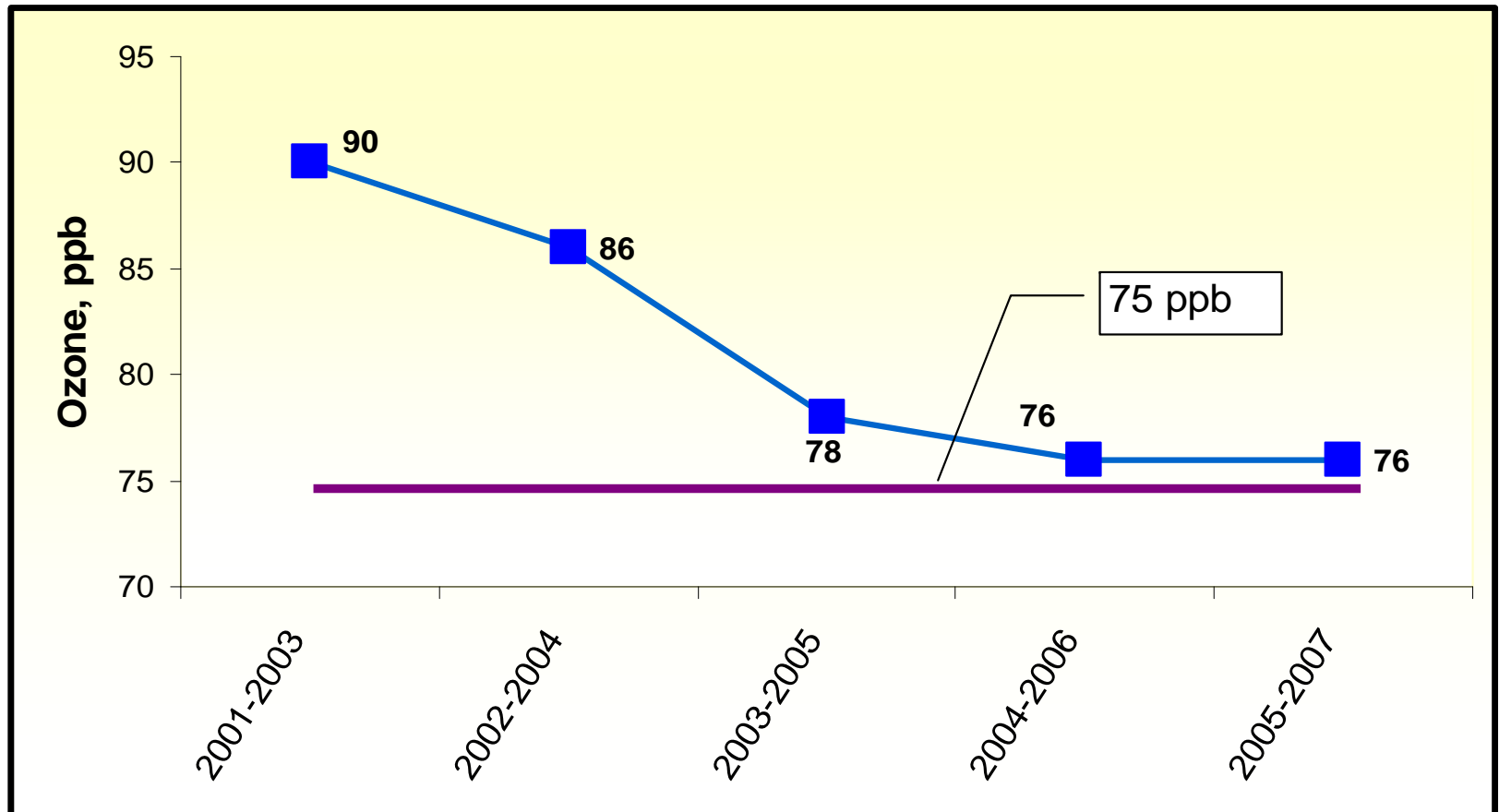
- Hampton
- Suffolk-Tidewater CC
- Suffolk-Holland



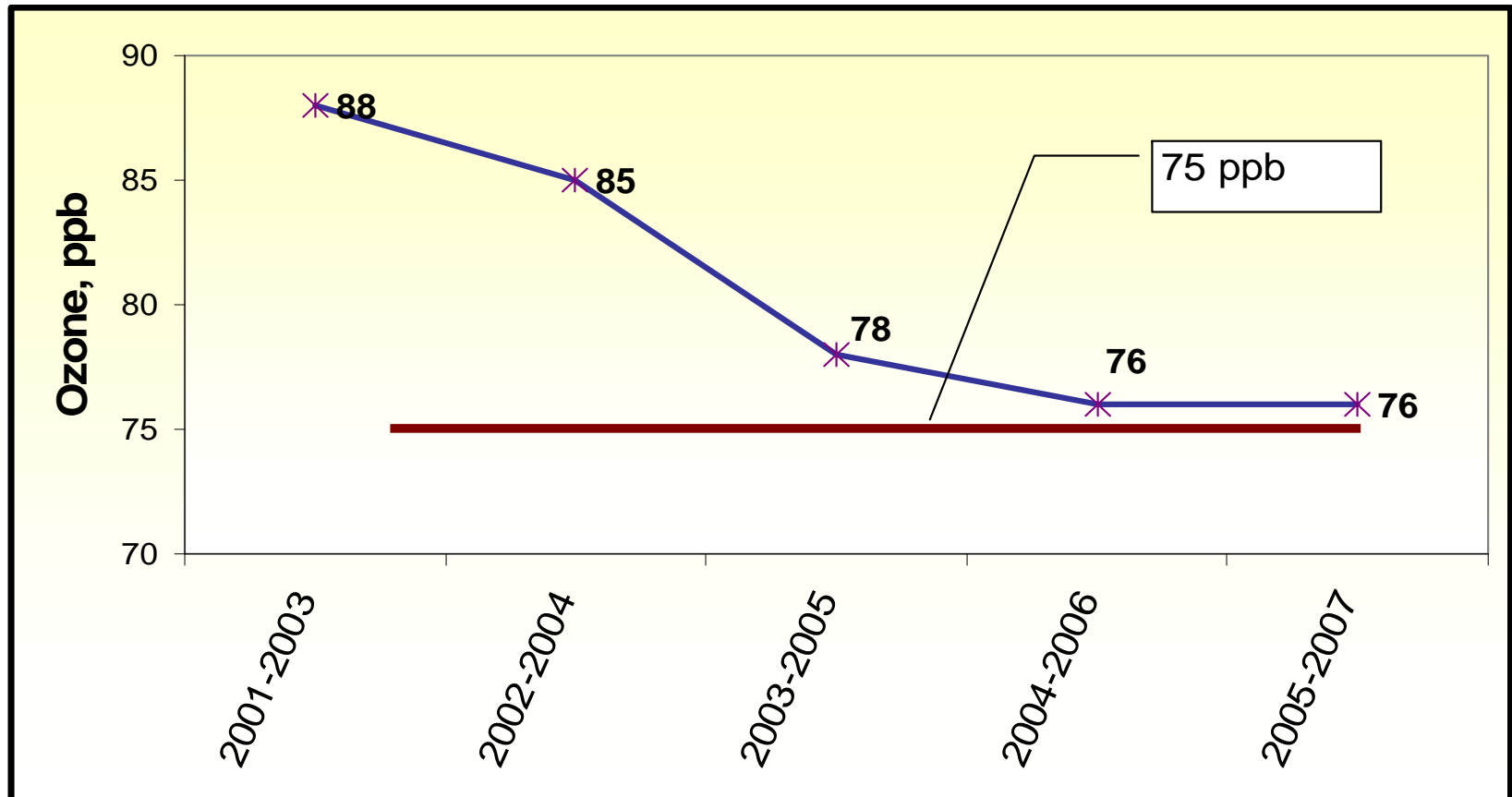
Hampton Roads Air Quality



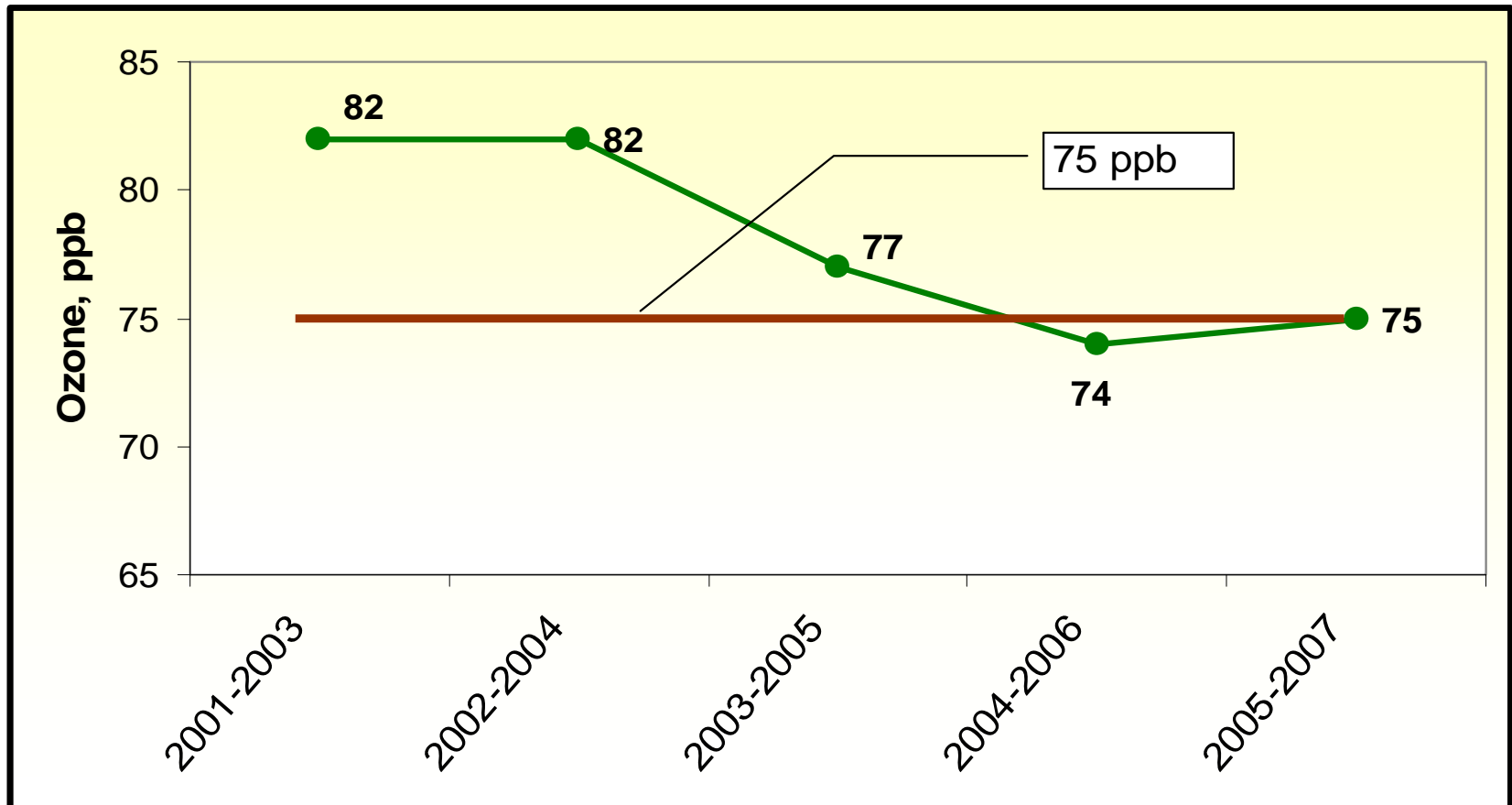
Ozone Air Quality Trends: Hampton



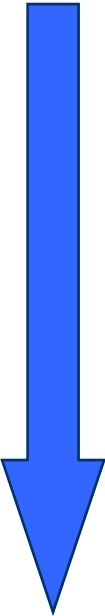
Ozone Air Quality Trends: Suffolk-TCC



Ozone Air Quality Trends: Suffolk-Holland



2008 Ozone Standard Planning Timeline

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- **March 12, 2008: 2008 ozone standard signed**
 - **March 12, 2009: Governor's recommendations regarding designations and classifications due to EPA Administrator**
 - **March 12, 2010: EPA publishes area designations and classifications (may be delayed to March 12, 2011 if additional data is needed)**
 - **March 12, 2013: For areas not attaining the 2008 standard, attainment plans are due to EPA**
 - **2016-2033: Attainment dates, depending on the severity of the air quality problems**

Questions?



Frequently Used Acronyms

- BACT - Best available control technology
- IM - Vehicle inspection & maintenance
- LAER - Lowest achievable emission rate
- NO_x - Oxides of nitrogen (ozone precursor)
- PPB - Parts per billion (pollution measure)
- RACT - Reasonably available control technology
- RFG - Reformulated gasoline
- Stage II - Gasoline vapor recovery at the pump
- VOC - Volatile organic compounds (ozone precursor)
- OTC - Ozone Transport Commission
- CAAA - Clean Air Act Amendments of 1990
- HRAQC - Hampton Roads Air Quality Committee

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