

*Mobility. Environment. Community. Economy. Technology*



I-710 Corridor Project EIR/EIS

*metro.net*

# I-710

## Environmental Subject Working Group

### Environmental Justice Methodology

July 15, 2009



**Metro**

# Overview of Presentation

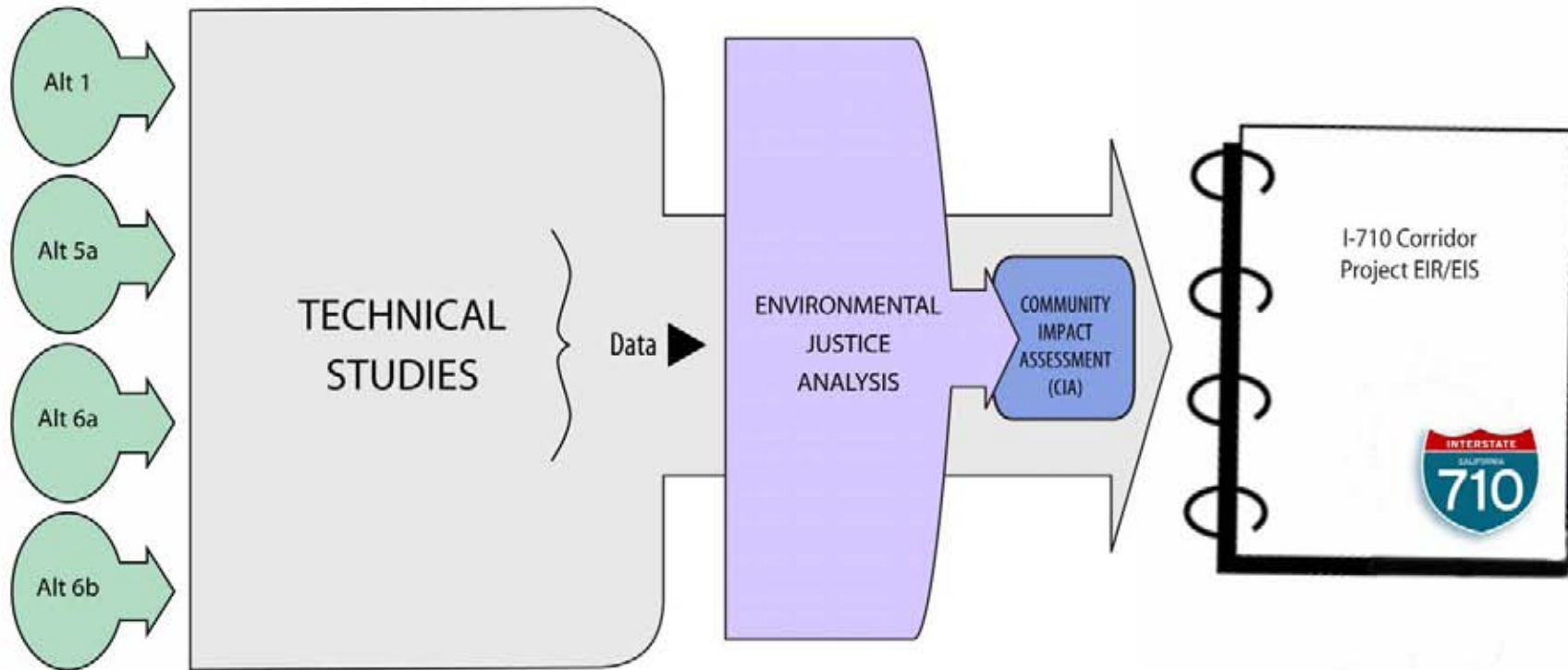
- Purpose & role of analysis
- Overview of demographic data and terminology
- Overview of planned methodology
  - Quantitative
  - Qualitative
- Summary

# Environmental Justice Analysis

## Purpose:

- To identify *disproportionate* adverse impacts on *minority* and *low-income* populations
- To add to the pool of information available to the public and decision makers

# Role of Environmental Justice Analysis



# EJ Requirements

*Federal Executive Order 12898 (1994)*

*U.S. DOT Order (1997)*

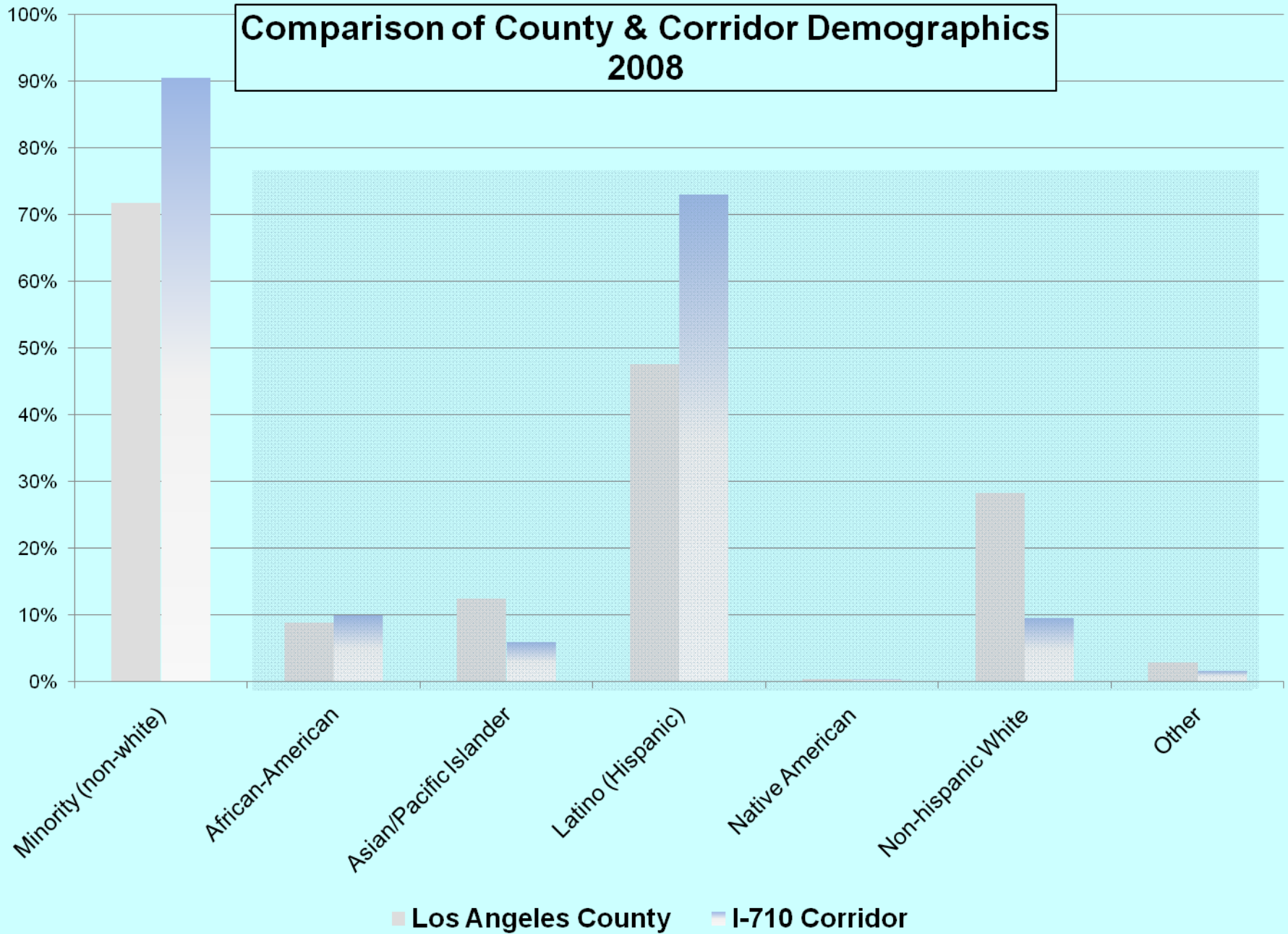
*Federal Highway Administration Order (1998)*

- Methodology developed based on this guidance
- More quantitative approach than typical

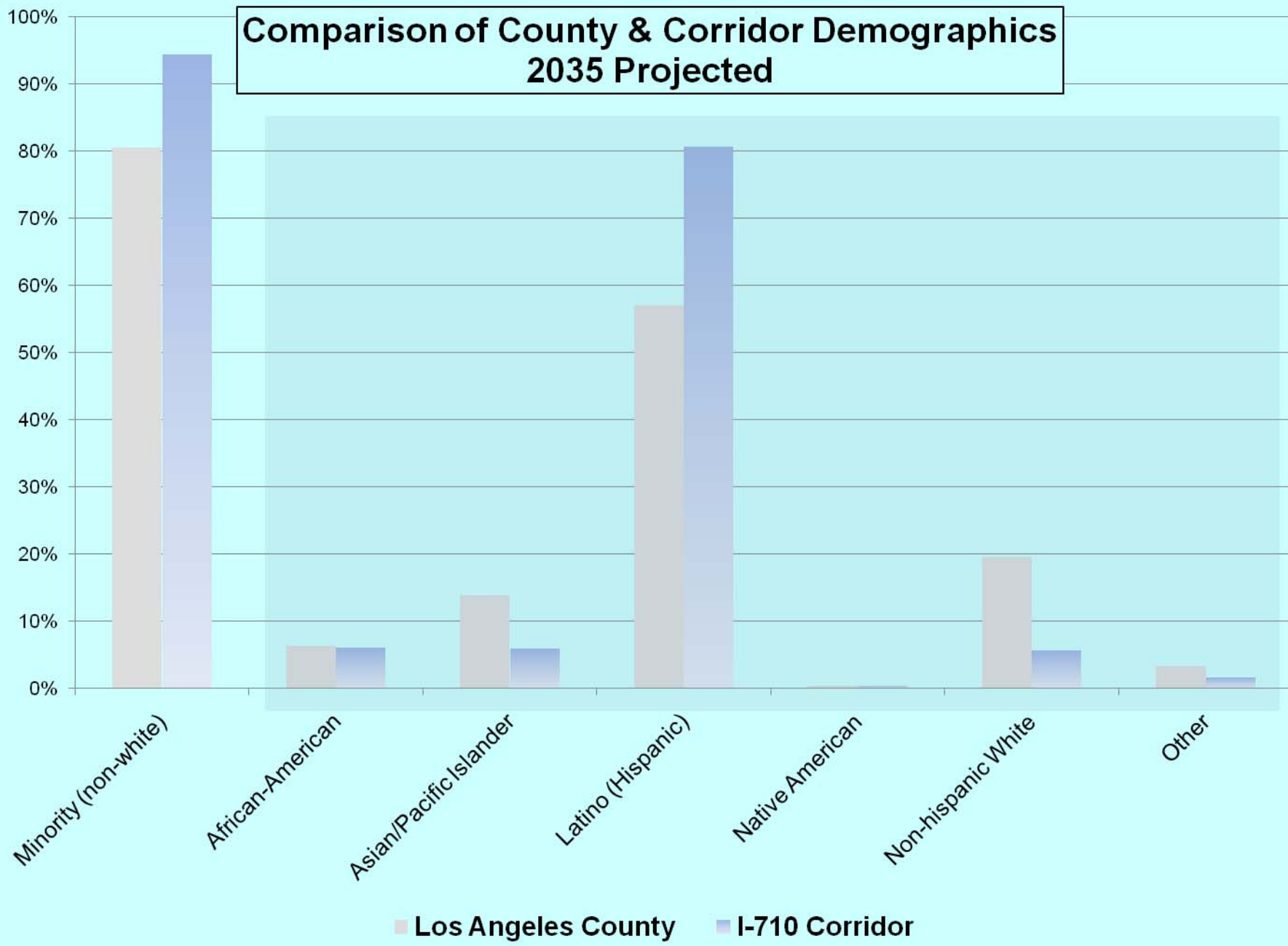
# Terminology

- *Disproportionate* = higher than expected given the prevalence in the population
- *Minority* = non-white
- *Low-income* =
  - Up to 200% of federal poverty threshold
  - In lower income quintiles
- *Quintile* = 1/5 of the household income distribution

# Comparison of County & Corridor Demographics 2008



## Comparison of County & Corridor Demographics 2035 Projected

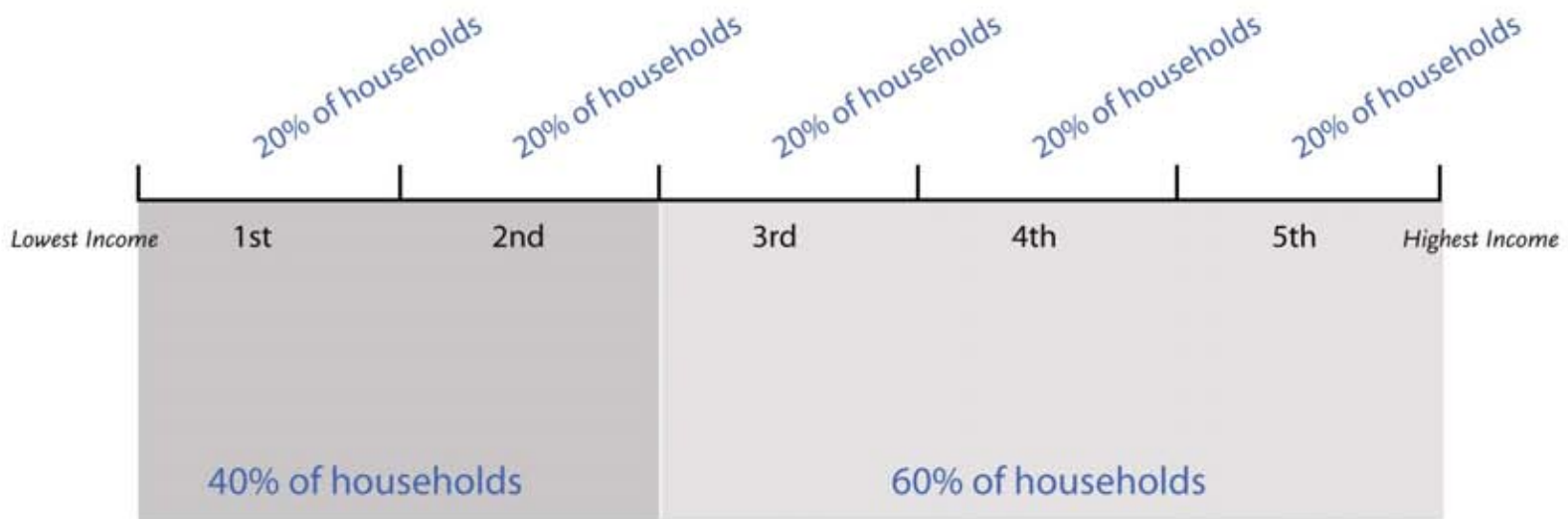




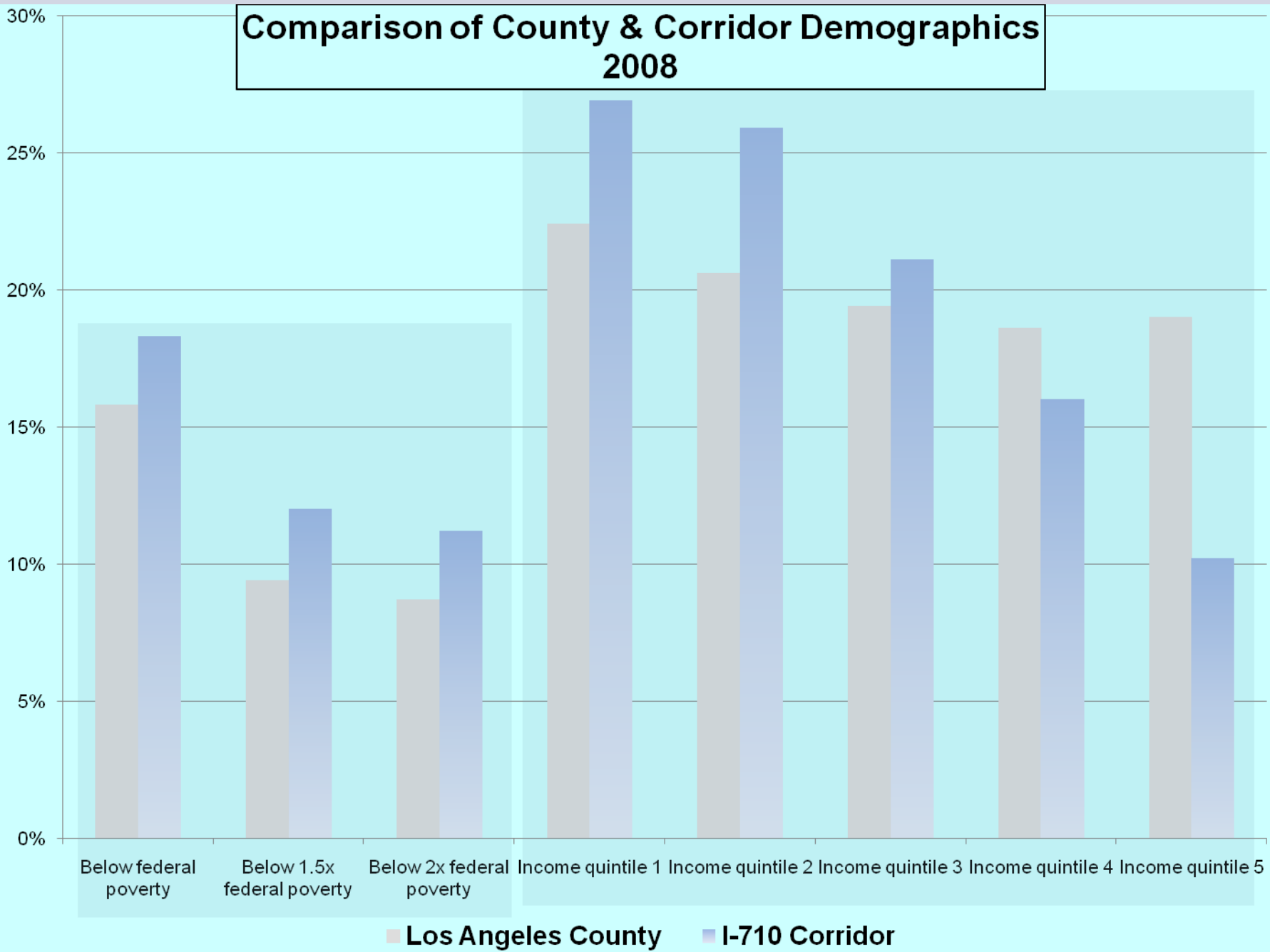
# Income Quintiles

In the proposed environmental justice quantitative analysis approach, the study population is divided into two groups:

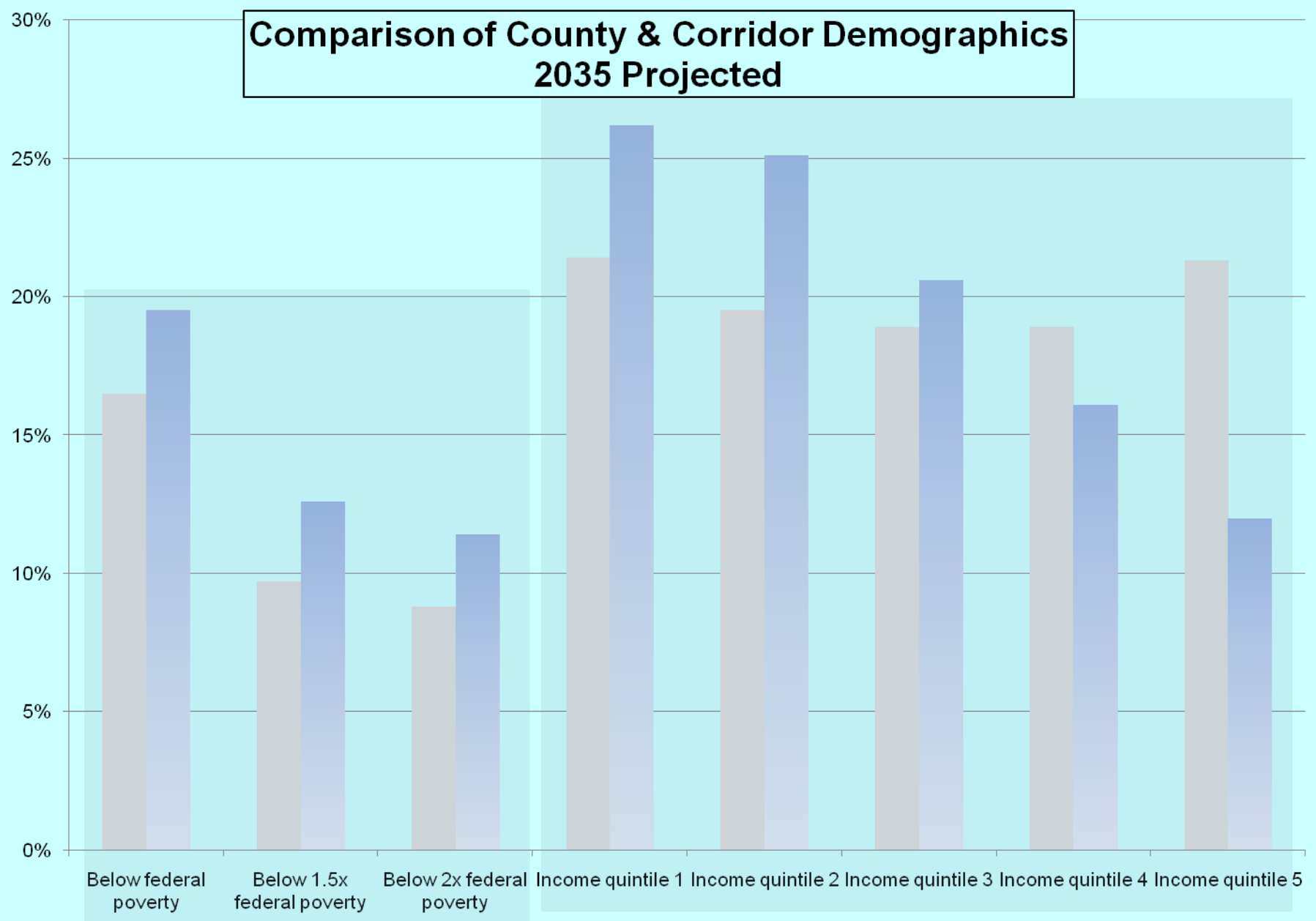
- The 2 lowest income quintiles (40% of total households)
- The 3 highest income quintiles (60% of total households)



# Comparison of County & Corridor Demographics 2008



# Comparison of County & Corridor Demographics 2035 Projected



Los Angeles County I-710 Corridor

# Scope of EJ Analysis

## Planned Quantitative Analyses

- Air quality/health risk assessment
- Economic impacts/benefits
- Noise
- Traffic impacts (also qualitative)

# Scope of EJ Analysis (cont'd)

## Planned Qualitative Analyses (GIS-based)

- Community aesthetic enhancement
- Cultural resources
- Emergency/community services
- Hazardous materials/waste
- Relocation impacts
- Safety
- Visual impacts
- Water quality/stormwater runoff

# Air Quality Assessment

- Air Quality
  - Emissions changes (better off/worse off)
  - Concentration changes (better off/worse off)
- Health risk changes (better off/worse off)
- Disproportion:
  - Lower 2 quintiles (should be 40%) vs. higher 3 quintiles (should be 60%)
  - Non-white (should be 80.5%) vs. white (should be 19.5%) – LA County proportion

# Economic Impacts/Benefits

- Analysis will identify city
  - Sales tax revenue changes
  - Property tax revenue changes
  - Job opportunity changes
- Compare with city income levels  
(percentage residents in 2 lowest quintiles)

# Noise

1. Calculate net noise exposure for all demographic groups
2. Map noise increase areas with demographic data



# Traffic Congestion

1. Calculate travel time savings for all demographic groups
2. Map transit service enhancements with demographic data
3. Map intersection level-of-service results with demographic data
4. Map freeway access and arterial parking changes with demographic data

# Qualitative (GIS-based) Analyses

- **Map the following with demographic data:**
  - Locations of planned aesthetic enhancements
  - Locations of affected cultural resources
  - Locations of affected emergency/community services
  - Locations of hazardous material or hazardous waste sites
  - Planned business/residence relocation areas
  - Arterial accident/incident rates
  - Locations of visual impacts
  - Locations of stormwater management structures

# Summary

- Detailed demographic data for county and study corridor (2008 and 2035)
- County population used as reference
- Impacts assessed for all groups
- Combination of quantitative and qualitative analyses (incl. GIS)