US EPA ARCHIVE DOCUMENT

Arlington's Community Energy Plan

Ensuring a Competitive and Sustainable Community

EPA Webcast
May 16, 2012

Presentation Outline

- **Brief background**
  - ***Establishing relationships with stakeholders in all sectors***

- **Crystal City Integrated Energy Master Plan (CC IEMP)**

Arlington's Energy Journey – Creating & Implementing a Vision

"Smart Growth"
(1960s)

Green Building
(1999)

Trips to Germany
(2000s)

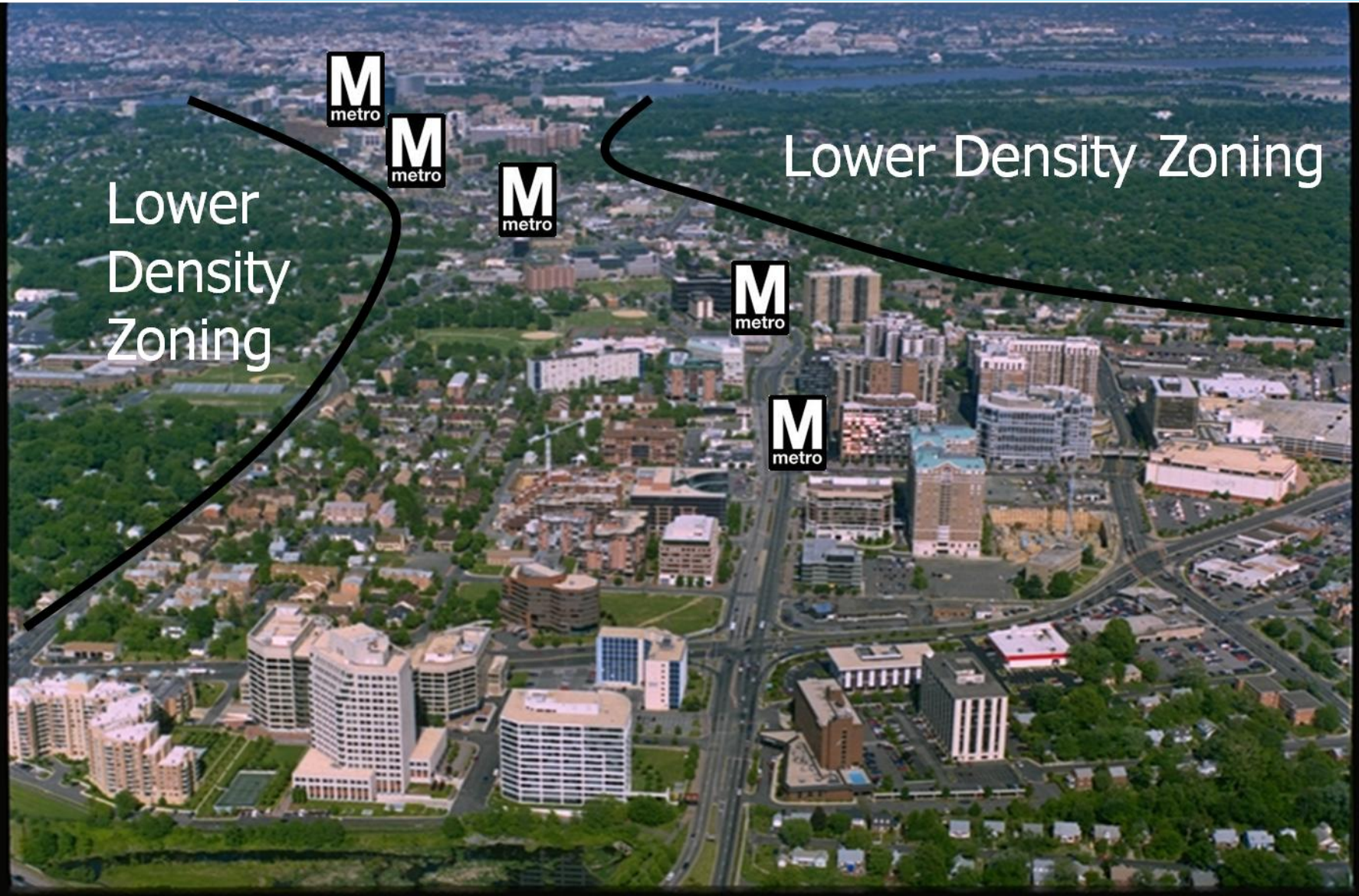
AIRE

(2007)

Community Energy Plan

(2013)

Smart Growth



Arlington's Current Comprehensive Plan Elements

- *Chesapeake Bay Preservation*
- *Historic Preservation*
- *Land Use*
- *Natural Resources Mgmt*
- *Open Space/Public Spaces*
- *Public Art*
- *Recycling*
- *Sanitary Sewer*
- *Stormwater Management*
- *Transportation*

  Streets, Transit, Biking, Parking, Curbside Mgmt, Pedestrian)
- *Urban Forest*
- *Water Distribution System*

Energy?????

Community Energy Plan: Background

Competitiveness

- Energy cost
- Employment
- Investment

Security

- Supply security
- Supply quality
- Flexibility

Environment

- Greenhouse Gas Reduction

Three Groups of Benefits

Arlington Community Energy Framework

- *Energy efficiency –* ***If you don't need it - don't use it***
- *Heat Recovery –* ***If it's already there – use it***
- *Renewable energy –* ***If it makes sense, go carbon free***
- *Energy distribution –* ***Invest where it makes sense***

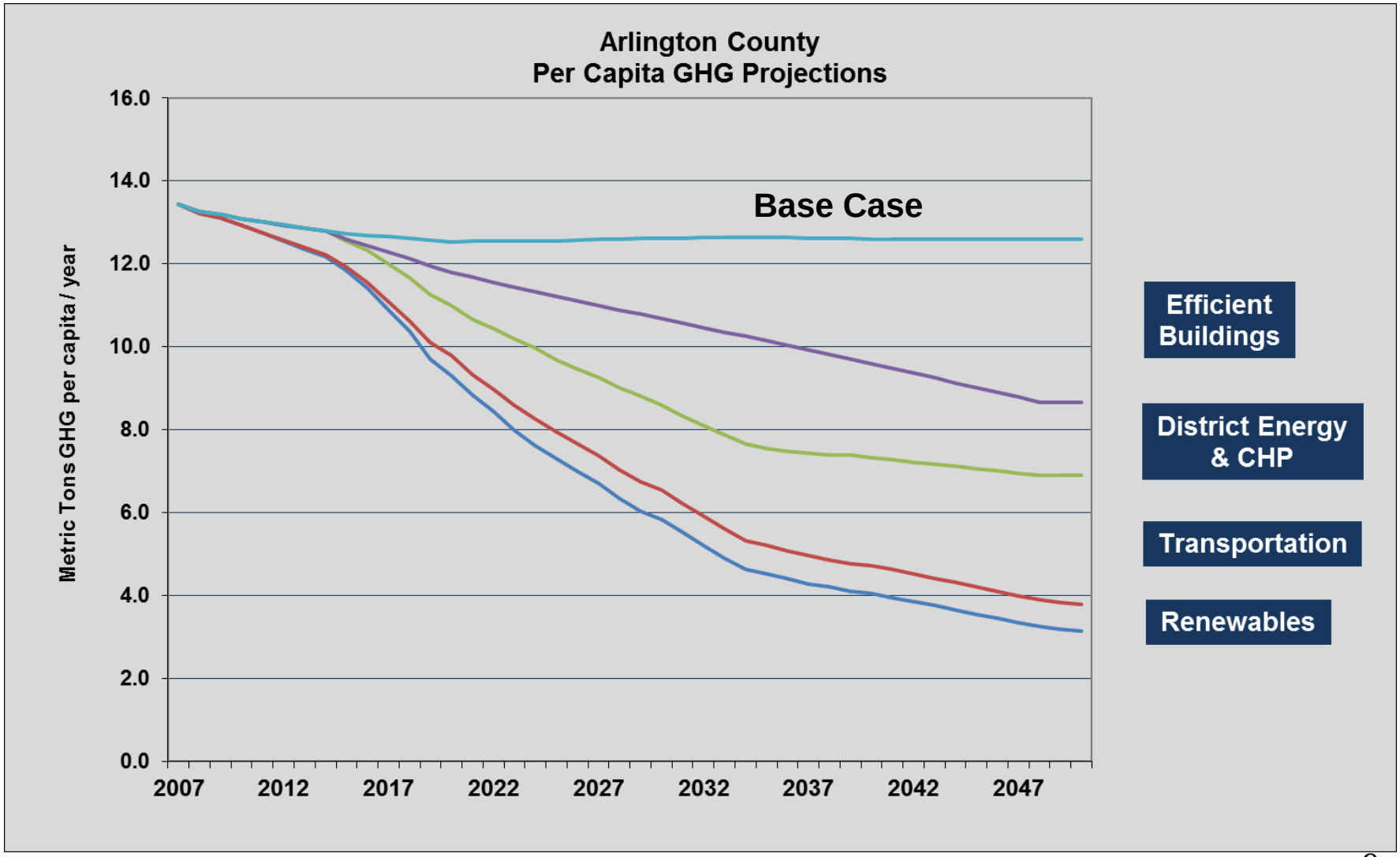
Integrated Solution – Tailored for County!

Headline Target: 2050 Greenhouse Gas Emissions

- **Task Force recommends a GHG emissions target of 3 metric tons (mt) CO_2e/capita/year by 2050**.
- In 2007, Arlington produced 13.4 mt CO_2e/capita/year
- Task Force also recommended Arlington's target for 2050 be 2.2 mt CO_2e/capita/year if regional energy plan established.

Per Capita GHG Emissions

Impacts of Key Energy Policy Recommendations



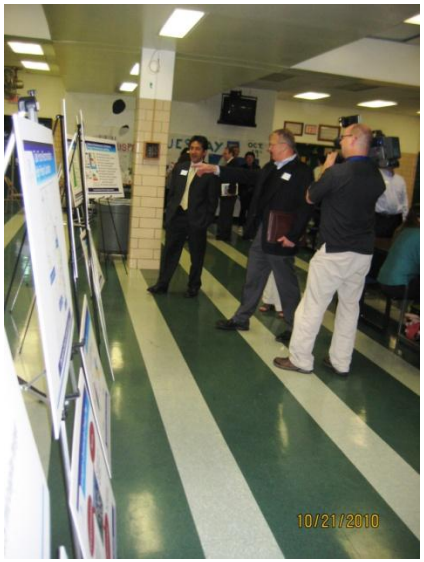
Community Energy and Sustainability (CES) Task Force

CES Task Force (29 members)

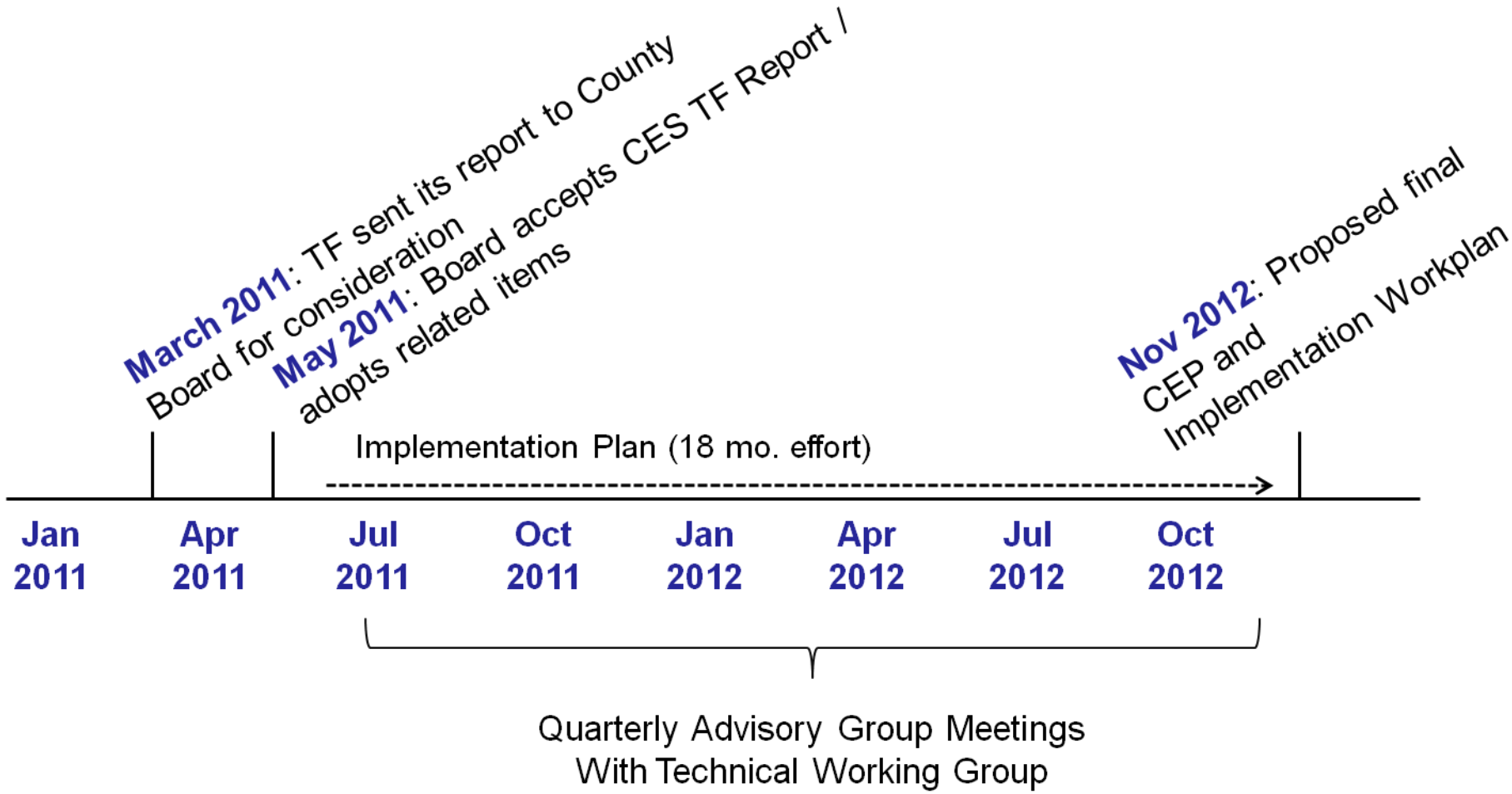
- Businesses (8)
  - *JBG*
  - *Little Diversified Architectural Consulting*
  - *Lockheed Martin*
  - *Marriott International*
  - *SRA International*
  - *Turner Construction*
  - *VA Hospital Center*
  - *Vornado*
- Citizens (4)
  - *Arlington Civic Federation*
  - *Commissions*
- Educational Institutions (2)
  - *Arlington Public Schools*
  - *Virginia Tech*
- Energy & Energy Tech Industry (3)
  - *Dominion Virginia Power*
  - *United Solar Ovonic (Uni-Solar)*
  - *Washington Gas*
- Local, State and Federal Gov'ts (5)
  - *The Pentagon*
  - *US EPA*
  - *Commonwealth of Virginia Senate*
- Nonprofits/Associations (5)
  - *Apartment and Office Building Association*
  - *Arlington Chamber of Commerce*
  - *Arlington Partnership for Affordable Housing*
  - *Arlingtonians for a Clean Environment*
  - *Pew Center on Global Climate*
- Regional Transportation Authorities (2)
  - *Metro Washington Airports Authority*
  - *Metro Washington Area Transit Authority*

Technical Work Group (TWG)

- **Five Transformation Groups:**
  - *Buildings*
  - *District Energy / Renewable Energy*
  - *Transportation*
  - *Education & Outreach*
  - *Finance*



Timeline


March 2011: TF sent its report to County Board for consideration
May 2011: Board accepts CES TF Report / adopts related items
Nov 2012: Proposed final CEP and Implementation Workplan
Implementation Plan (18 mo. effort)
Jan 2011
Apr 2011
Jul 2011
Oct 2011
Jan 2012
Apr 2012
Jul 2012
Oct 2012
Quarterly Advisory Group Meetings
With Technical Working Group

Crystal City IEMP

- 391 acres
- Developer, Utility and County Government funded/partnered on the initiative
- Began December 2011 – report due late summer 2012

Proposed Surface Transitway (Streetcar)

Land Use Mix

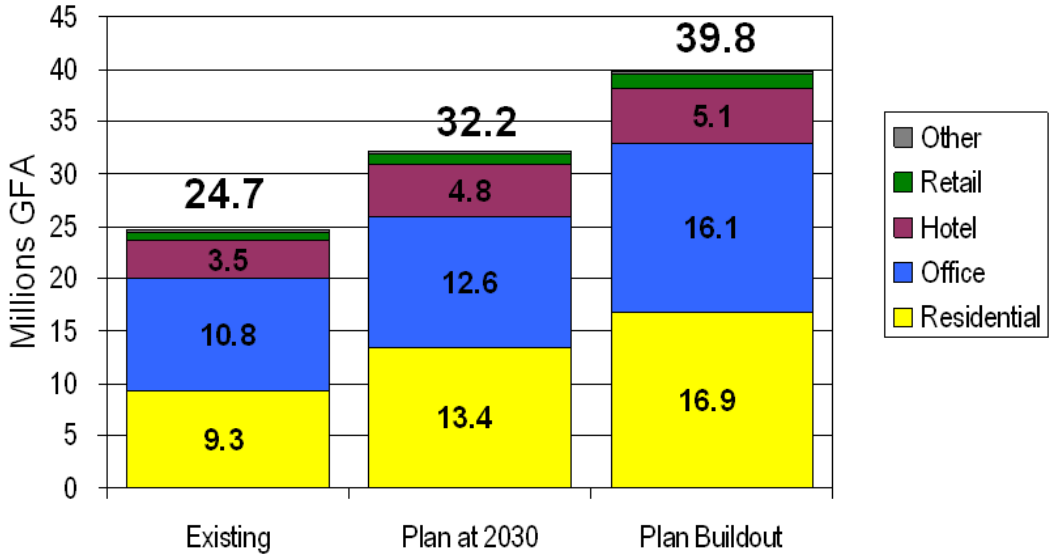
ARLINGTON VIRGINIA

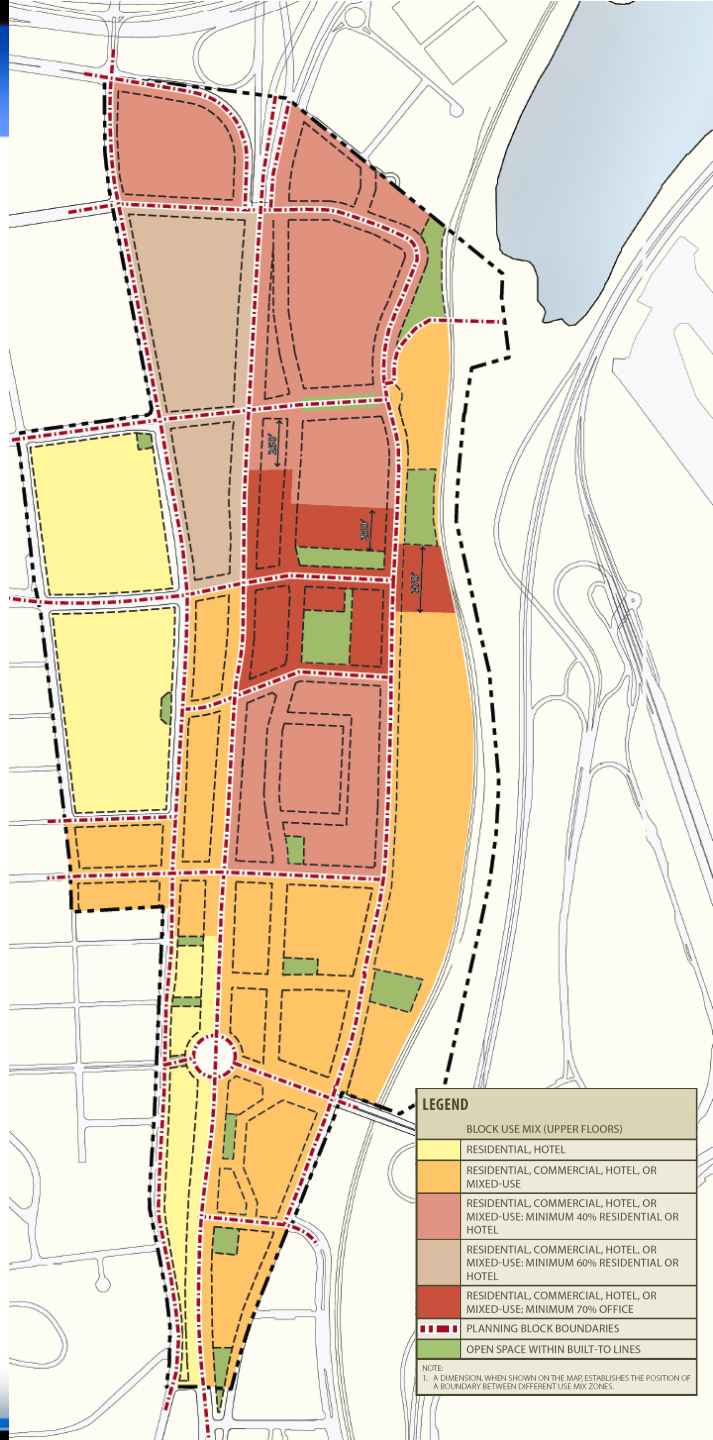
GOAL: Provide a mix of uses

Achieve a better balance of office and residential uses, and daytime and evening populations

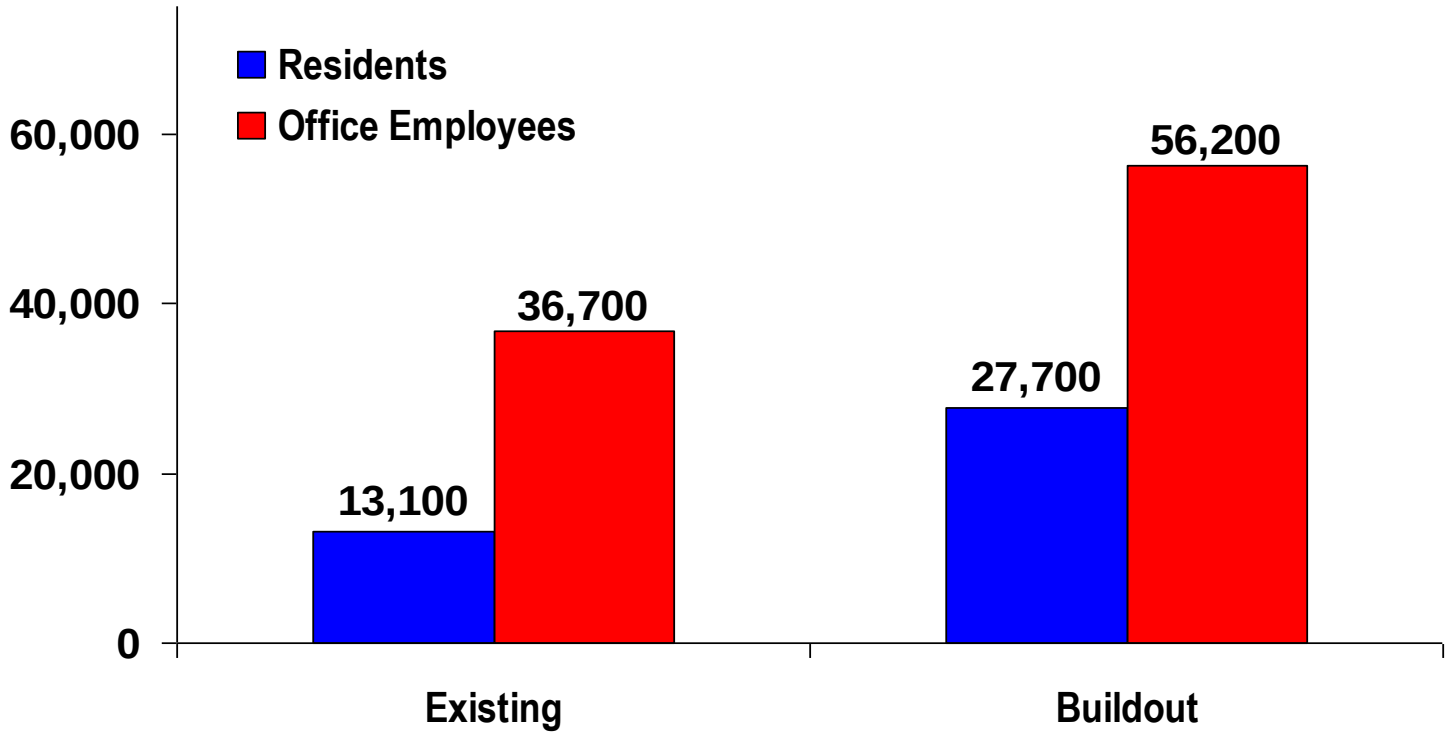
Create a thriving "Class A" office environment

Provide a mix of housing options





Proposed Plan – Demographic Forecast



SOURCE: AED, PRAT

Recommendations

- **What can other communities do to get CEP, IEMP funded?**
  - **Make explicit connections between energy projects and 1) economics, 2) energy security, 3) environment**
  - **Gain support from respected community leaders – they can carry the message through their networks**
  - **Highlight success stories**
    - **Pilot projects**