

Arlington's Community Energy Plan

Ensuring a Competitive and Sustainable Community



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)

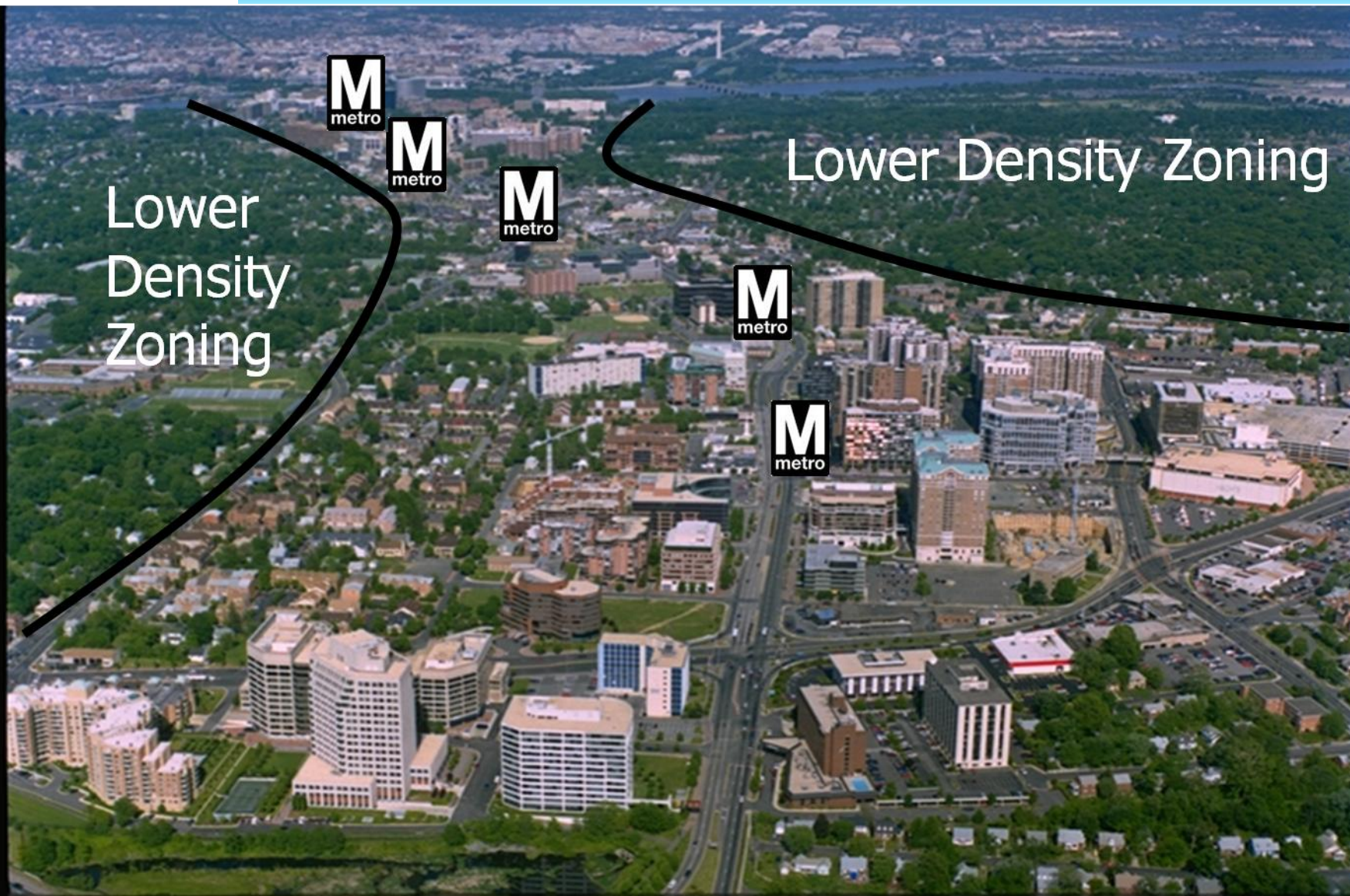
*Trips to
Germany*
(2000s)

AIRE
(2007)

*Community
Energy Plan*
(2013)



Smart Growth

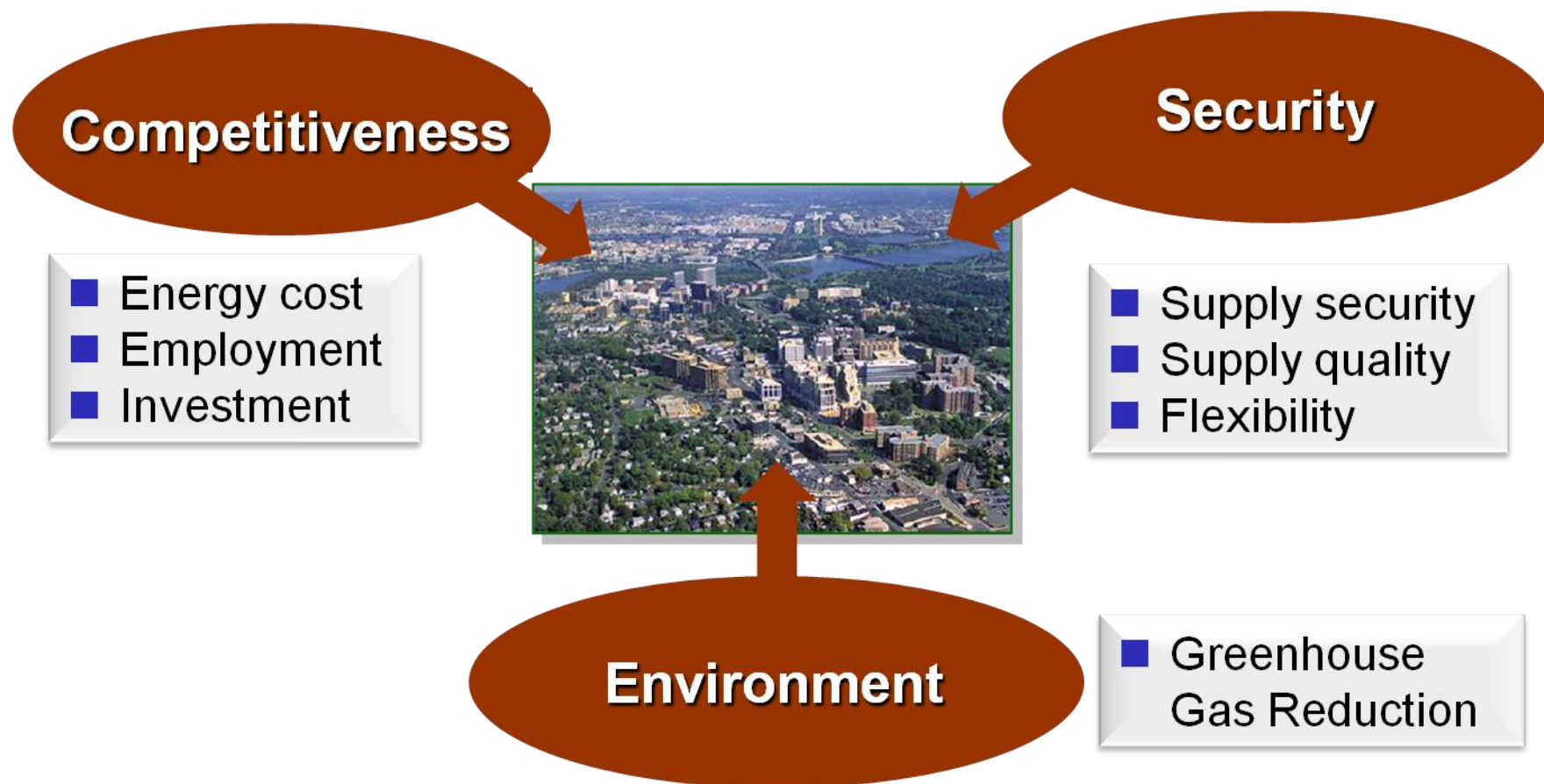


Arlington's Current Comprehensive Plan Elements

- *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



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*

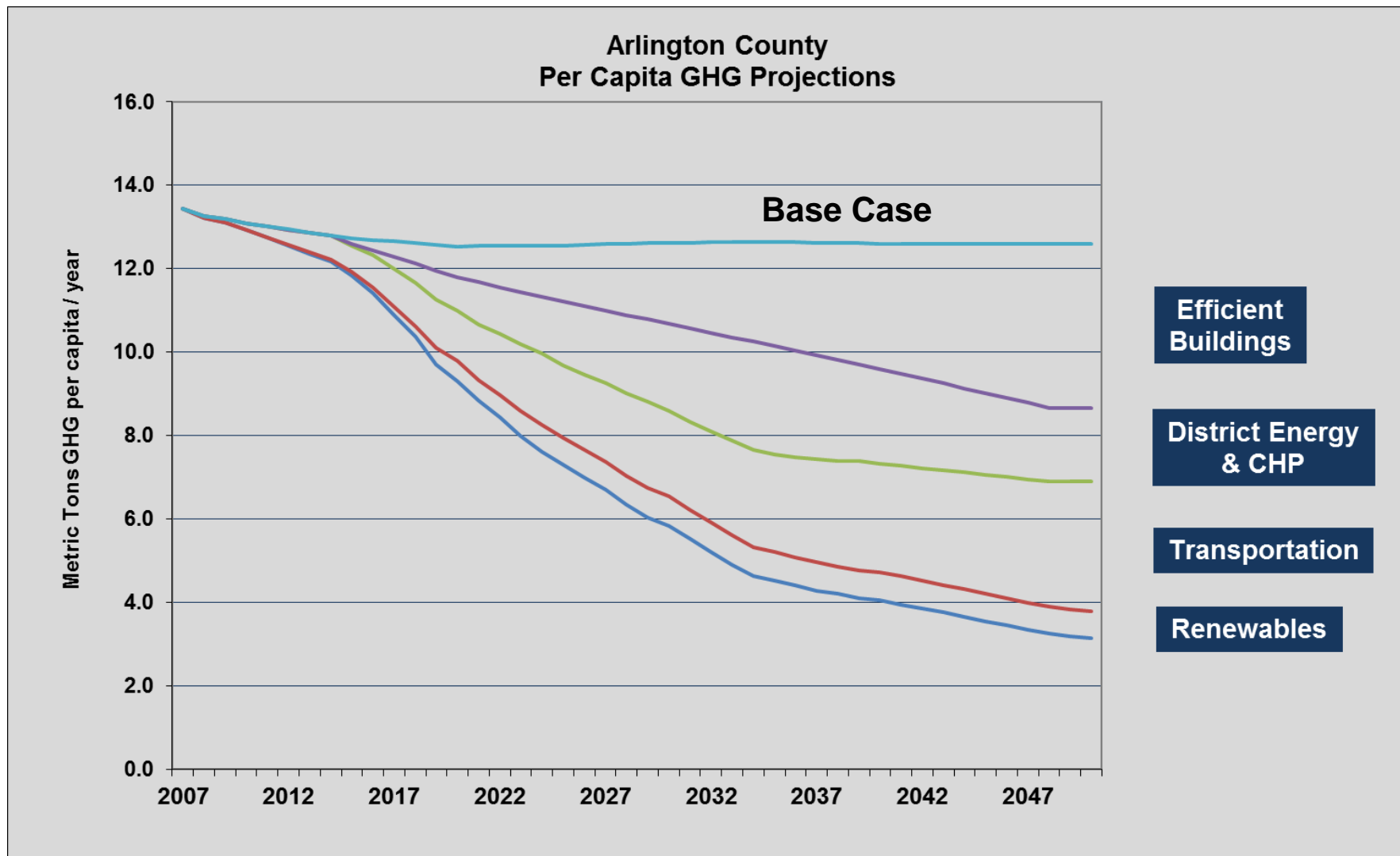
Integrated Solution – Tailored for County!

Headline Target: 2050 Greenhouse Gas Emissions

- **Task Force recommends a GHG emissions target of 3 metric tons (mt) CO₂e/capita/year by 2050.**
- In 2007, Arlington produced 13.4 mt CO₂e/capita/year
- Task Force also recommended Arlington's target for 2050 be 2.2 mt CO₂e/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*

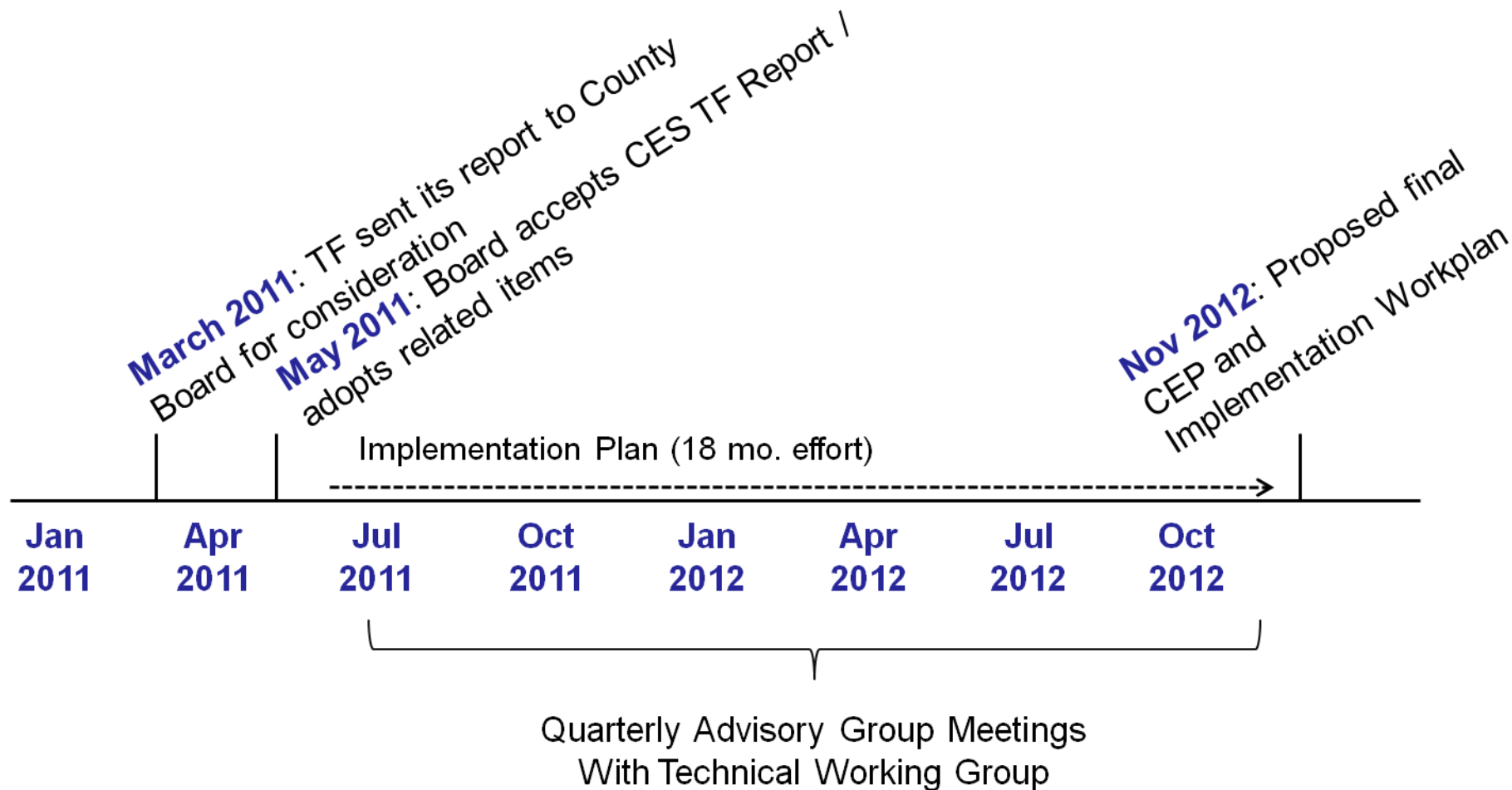
Technical Work Group (TWG)

■ Five Transformation Groups:

- *Buildings*
- *District Energy / Renewable Energy*
- *Transportation*
- *Education & Outreach*
- *Finance*



Timeline

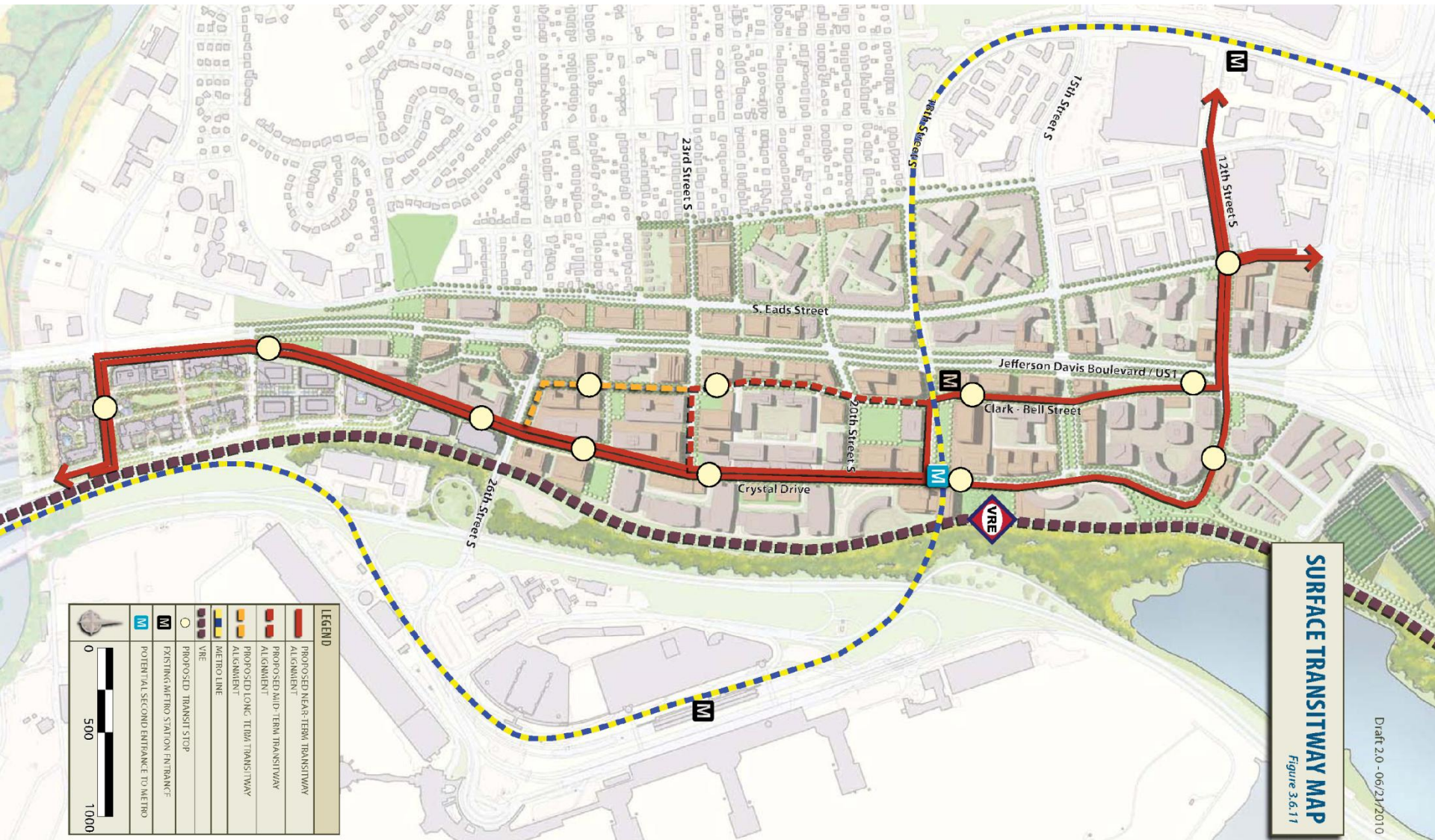


Crystal City IEMP

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



Proposed Surface Transitway (Streetcar)



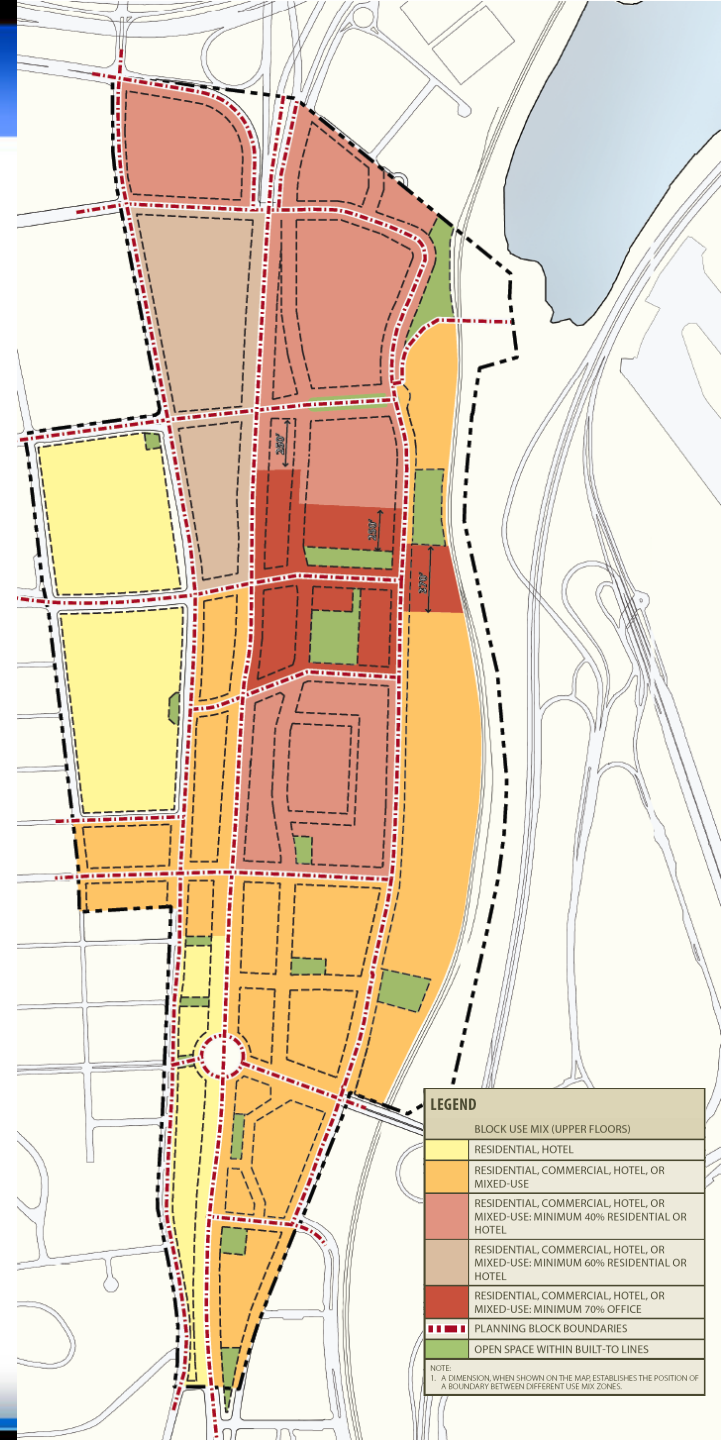
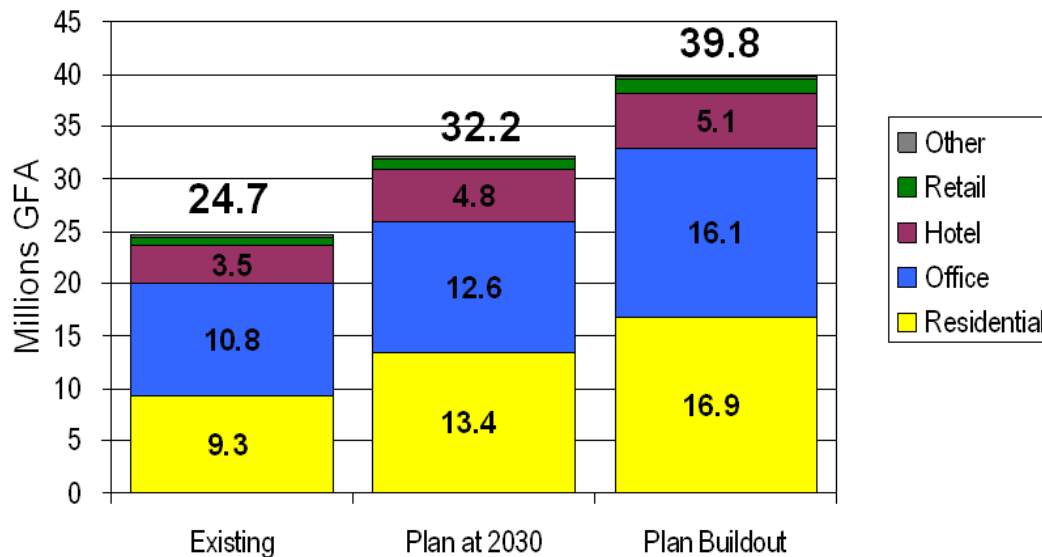
Land Use Mix

GOAL: Provide a mix of uses

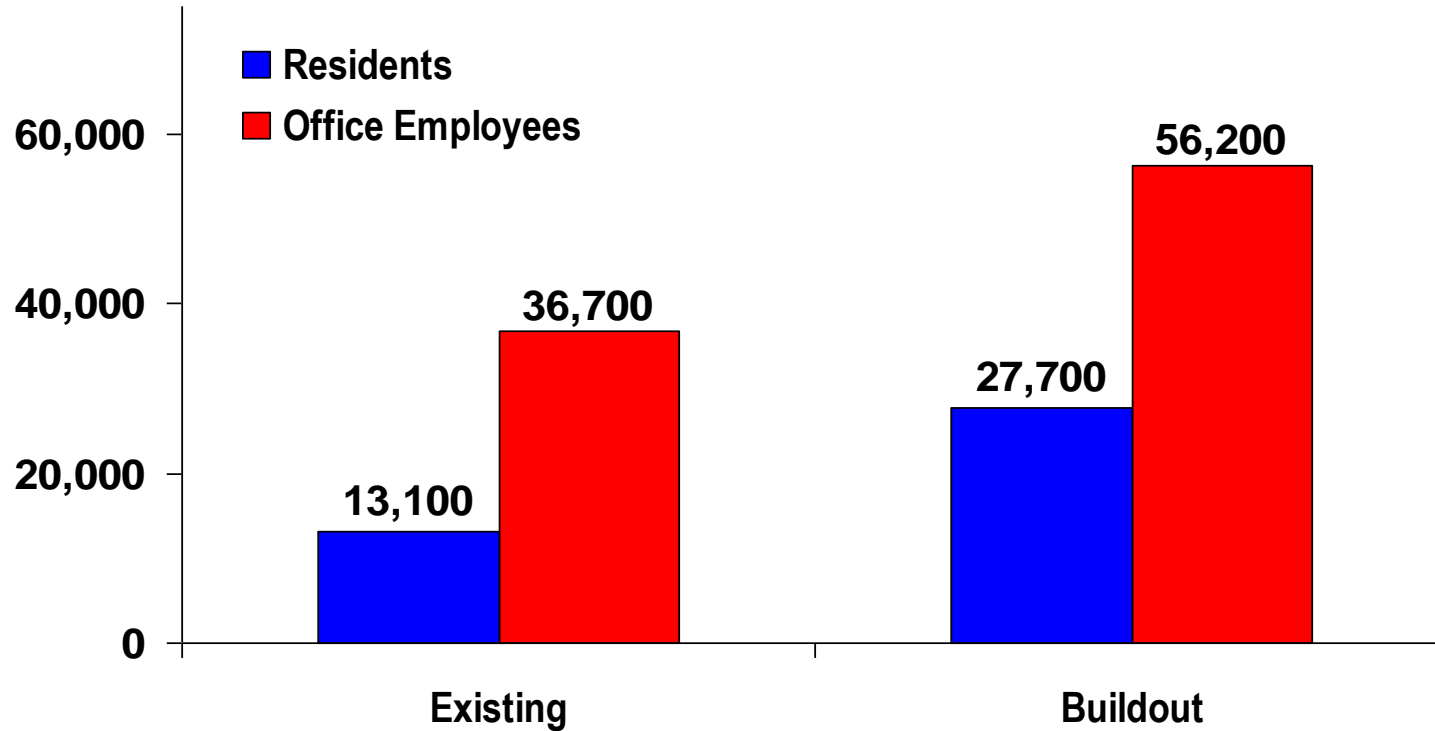
Achieve a better balance of office and residential uses, and daytime and evening populations

Create a thriving “Class A” office environment

Provide a mix of housing options



Proposed Plan – Demographic Forecast



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**