Intergovernmental Green Building Group (IGBG)

### Green Building Summary Report

Metropolitan Washington Council of Governments COG Board of Directors December 12, 2007



#### COG Board Action on Green Building

#### o Nov. 2006 Resolution R55-06:

- Supports coordinated green building practices in the region
- Establishes Intergovernmental Green Building Group to prepare regional green building policy report
- o July 2007
  - Board receives draft report, transmits for 60 day comment period
- o Today
  - Consider revised final Green Building policy report



# Why Green Building?

- Buildings have major impact on the region's environment –
  - Energy
  - Water
  - Runoff/impervious surfaces
  - Solid waste



- Indoor Air Quality/Productive Work Environment
- Green Buildings provide a way to mitigate impacts of regional population and employment growth:
  - 1.6 million more people by 2030
  - 1.2 million more jobs by 2030
- Opportunity: 75% of building stock will be new or rebuilt by 2035.



# **Green Building Trends**

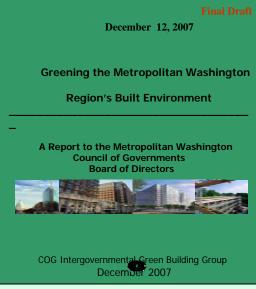


- Green Building practices being adopted nationwide by private and public leaders
- LEED is the preferred national standard
- Green building codes and reference standards under development
- More than 10 COG members have green programs in place or in development
- Washington region has most green buildings\*



## **COG Green Building Report**

- Examines green building issues
- Identifies current green building activity in region and best practices
- Provides overall summary of green building as a tool for protecting environment and improving region's building performance
- Two Reports
  - Summary Report
  - Technical Report





## Costs and Savings: Findings

#### Initial Capital Cost

- GSA: -0.4 to +8.1% premium depending upon options and LEED level
- Langdon and Kats: 2% cost premium for green bldg.

#### Cost savings on operations, energy, and water

- Energy -- use 30-50% less
- Water consume up to 40% less
- Runoff/impervious surfaces
- Solid waste produce up to 70 % less
- Improved productivity and wellbeing
- Potential savings on "externalized" costs for local government
  - Reduced stress on public infrastructure, public health, and local ecosystems.
  - Generates 40% fewer complains about respiratory problems and cold symptoms (Carnegie Mellon studies)





## Green Building Summary Report

# Key Recommendations



#### Recommendation 1: Preferred Green Building Rating Standard

# Establish LEED as the region's preferred green building rating system for New Construction\*

Four levels of LEED certification:

LEED Certified Silver Level Gold Level Platinum Level

26 - 32 points 33 - 38 points Gold 39 - 51 points 52+ points

(69 possible)





\* Initial application of LEED to government facilities, private sector commercial and high-rise residential buildings.

#### Recommendation 2: Government Lead by Example

Recommend that LEED Silver be the goal for all local government facilities constructed in the Washington metropolitan Region



#### Recommendation 3: COG Regional Green Standard for Private Commercial Development

#### COG Regional LEED Certified (26-32 points)

- Achieve LEED Certified and at least 4 of the following:
  - Additional Energy Optimization credits
  - Heat Island Mitigation roof and non-roof
  - On-site renewable energy generation
  - Purchase Green Power
  - 75%+ construction debris recycling
  - Stormwater Management quality and/or quantity

Review and revise no later than 2012 with goal of achieving LEED Silver



#### Recommendation 4: Education and Collaboration

#### o Collaborate and partner with

- private development community
- non profit organizations
- federal programs
- educational institutions
- financial institutions

 Maximize opportunities for education and innovation



#### Recommendation 5: Implementation Actions

- Use Summary Report and Technical Report as reference guide
- Work with USGBC to streamline LEED certification process
- o Training for local government staff
- Monitor and track progress
  - include in COG commercial construction report



#### Recommendations – Future – FY08 and Forward

#### Expand regional green building recommendations to include:

- Residential development
- Schools
- Existing Buildings

# • Track progress with green building codes

 Quantify regional benefits of green building implementation

- Energy
- Climate Change
- Stormwater runoff
- Impervious surface
- Linkage to Greater Washington 2050





## **Next Steps**

Approve Resolution R71-07
Intergovernmental Green Building Group leads implementation
Additional regional standards recommendation(s)
Workshops and training
Collaboration with private and non-profit sector

 Support to Greater Washington 2050, Climate Change initiatives



# Vision

The National Capital Region is a national leader in green building. The region's local governments will lead in innovation and stewardship of the environment through green building design and construction and support for innovation in the private sector.

