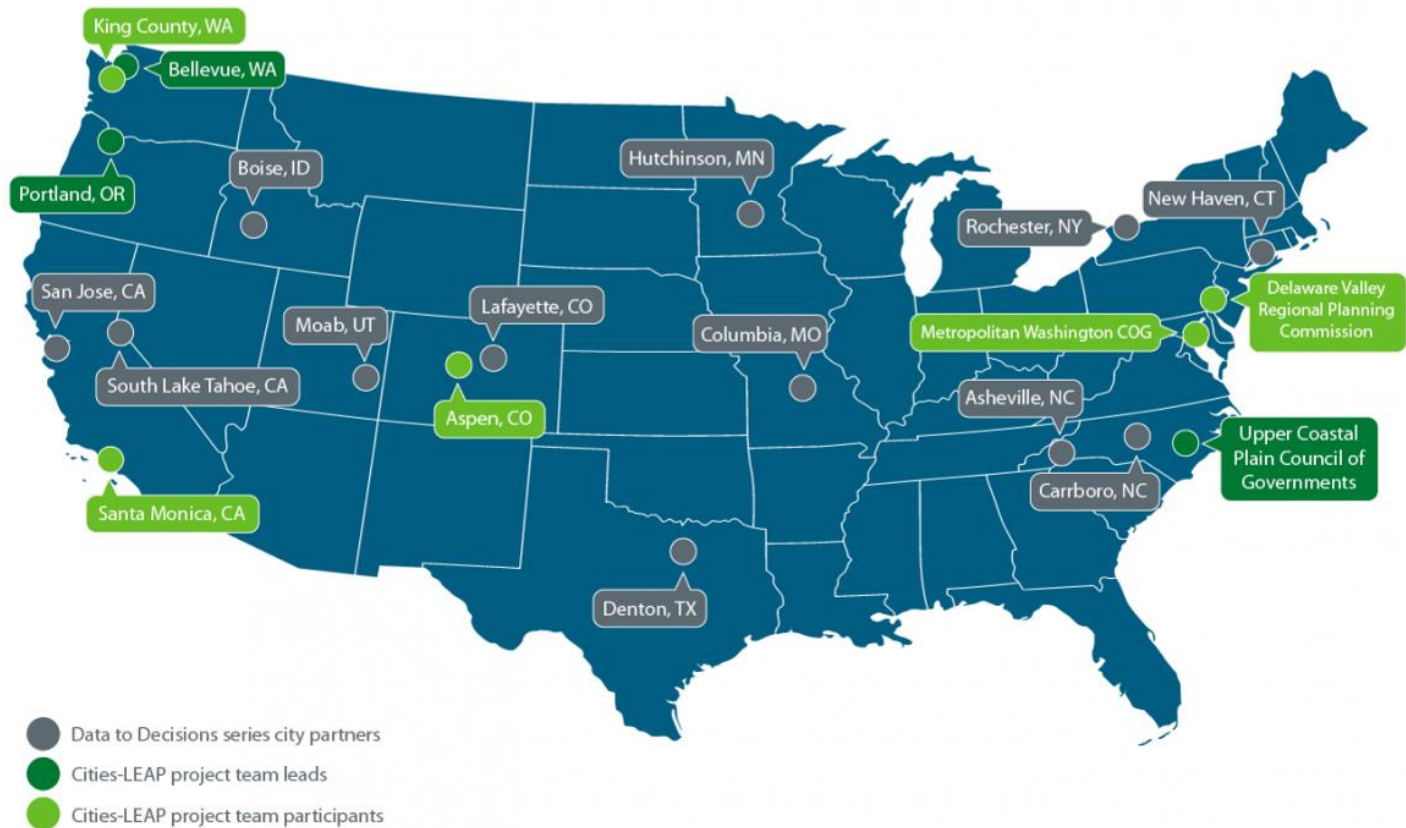# Contribution Analysis Toolkit

July 25th, 2018

Department of Energy Cities-LEAP

Cities Leading through Energy Analysis and Planning


Visit us at www.energy.gov/eere/cities   See your city energy profile at apps1.eere.energy.gov/sled/

History of City-Scale Emissions Management in the US

- ~ Mid 1990's – First attempts by cities to account for their emissions using national-scale methods
  - Era of spreadsheets and desktop tools (CACP)

- 2008 – Local Govt Operations Protocol

- 2011 – US Community Protocol

- 2013 – ClearPath Online Software

- 2014 – Global Protocol for Community Scale Emissions

·I·C·L·E·I· USA
Local Governments for Sustainability

Cities with Multiple Benchmarks

Cities with Multiple Inventories
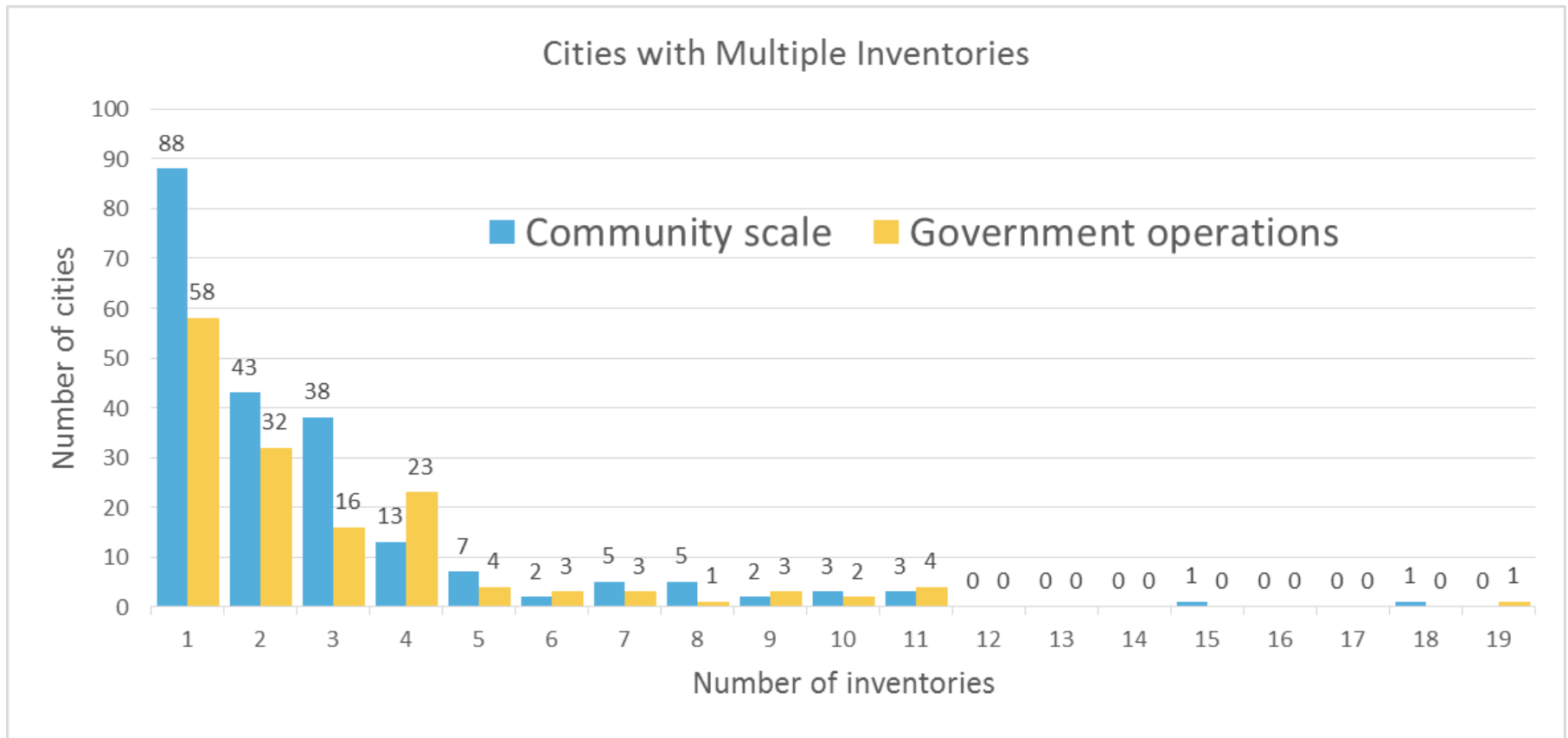
Are You *Fully* Committed?

Ever-Increasing Ambition

- Best source of data to inform projections of how we'll meet collectively meet global targets
  - Cities + Business → Regions → States → Nations

- Maintaining a Media Narrative & Orienting Partners

- These are critical functions to our collective goal

Fulfilling Ambition

- Progress is made at two scales

  - Incremental Projects:
    - one rooftop solar,
    - one bike lane,
    - one building code update at time.

  - Systems Change
    - Grid Carbon Intensity (through Policy + Purchasing)
    - Regional Transportation Demand Management
    - Market Transformation (through Disclosure)

  - Regional Coordination Creates Systems Change

  - How can we tell if we're making progress?

Contribution Analysis Accounts for:

- Change to Inventory Inputs
  - Separates the relative impact of Emissions Factor and Total Activity

- Change to Operating Conditions
  - Determine relationship between weather and city performance to account for change

- Change to what's in the Community
  - Simple "per-capita", "per-employment" differences

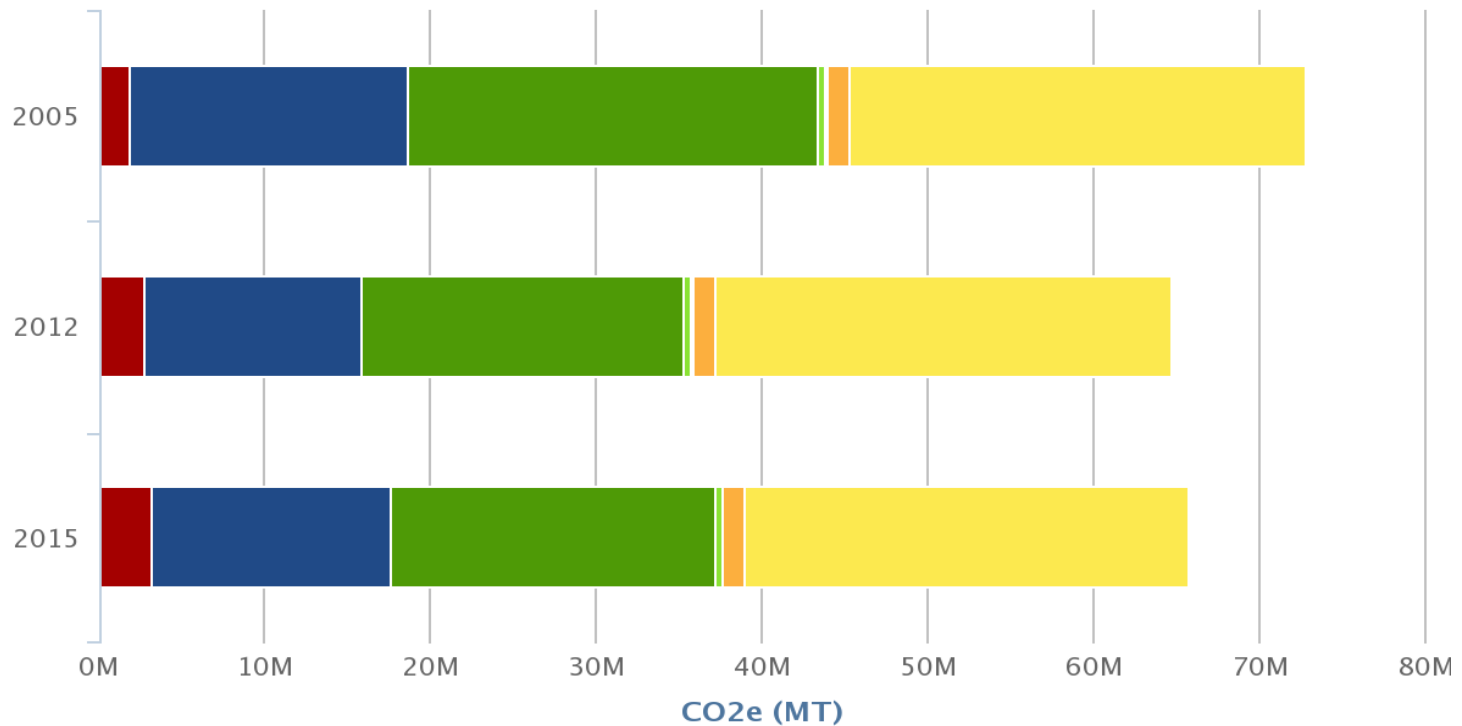- Local Action
  - Subtract the remainder

Summary of 14 Demonstration Cities

% Change in Total GHGs

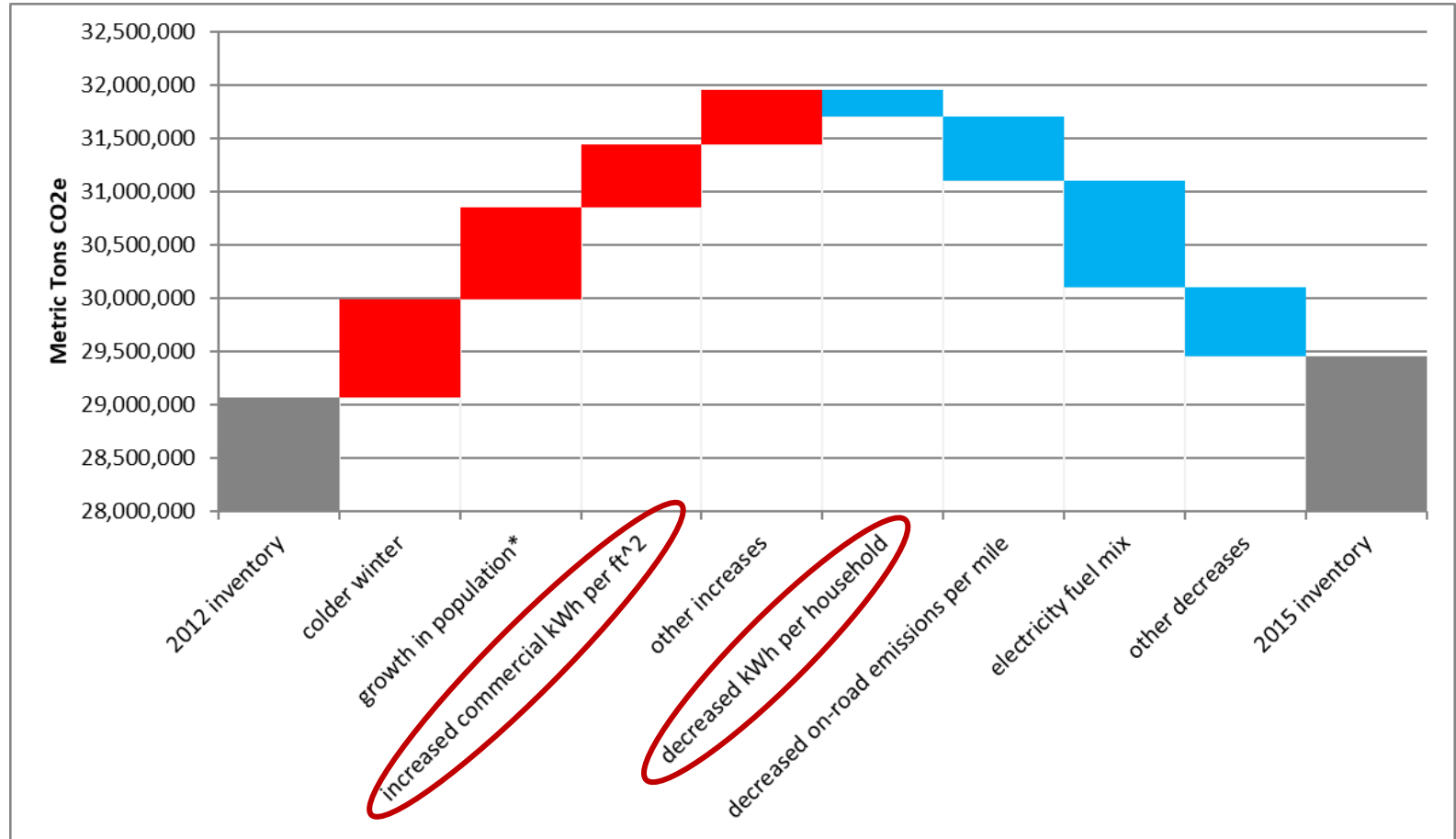# Metropolitan Washington GHG Trends

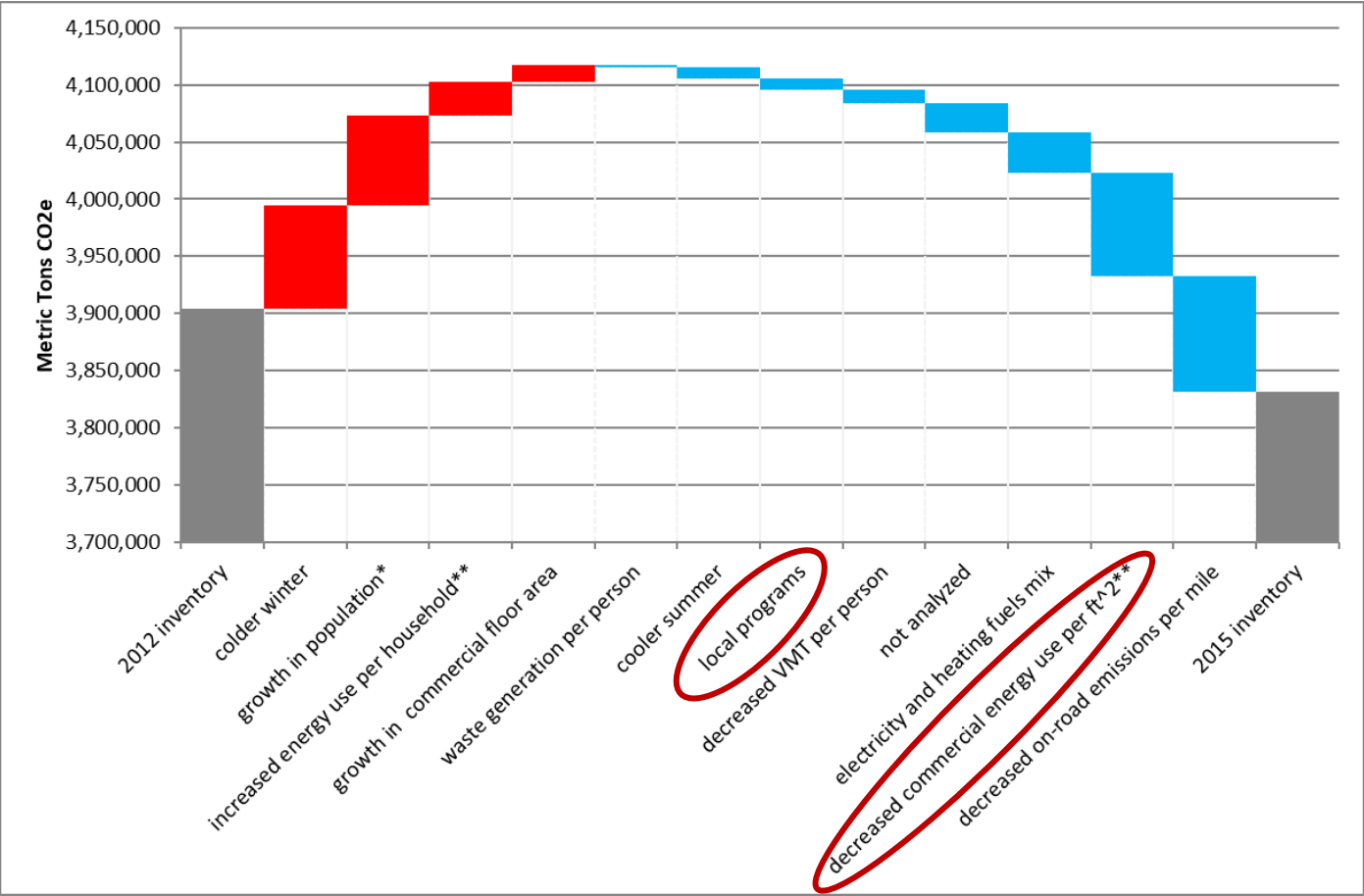## 10% reduction in GHG emissions, 2005 - 2015

Metro Washington Drivers of Change
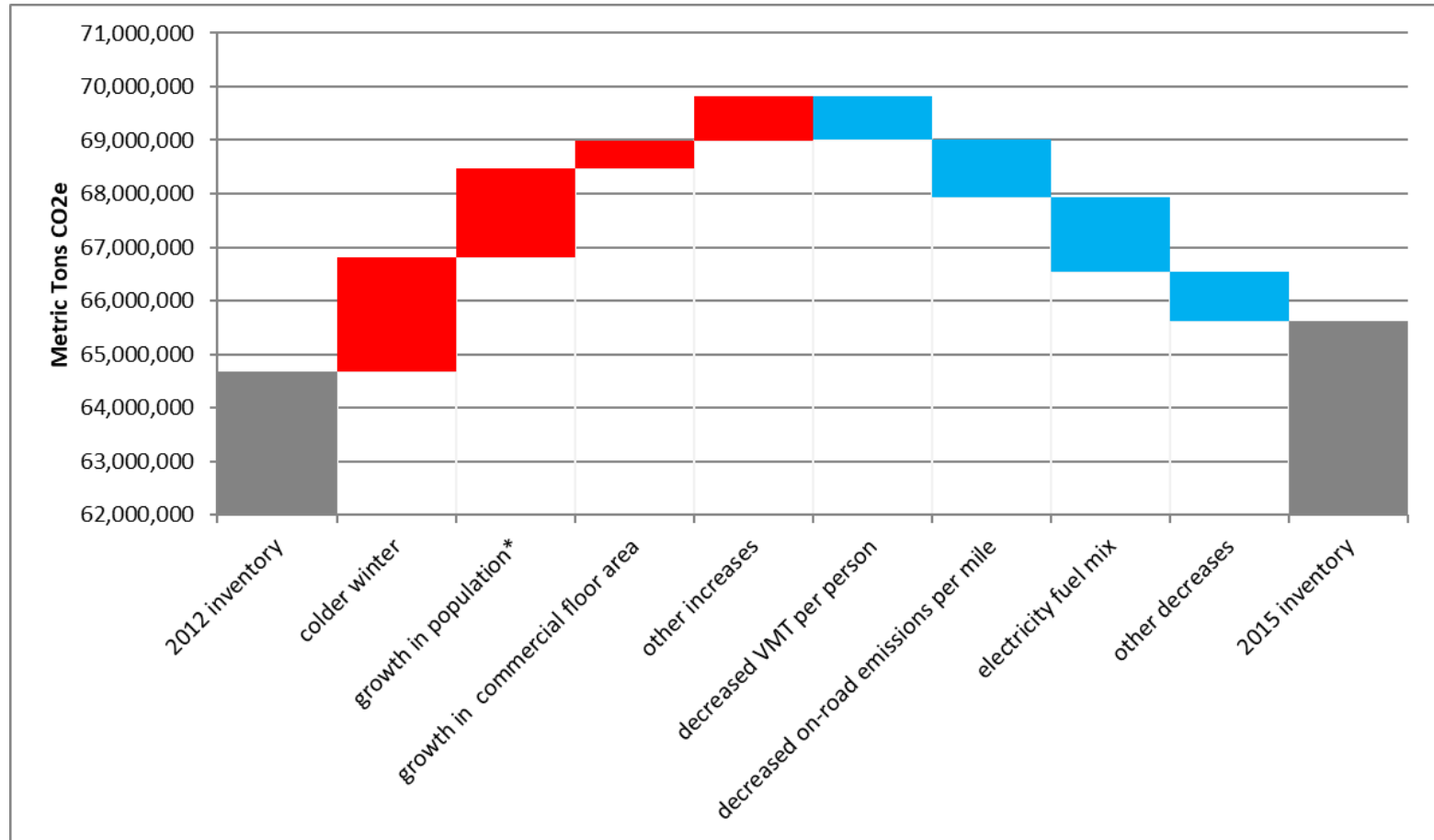
Sub-Region A Drivers of Change

Sub-Region B Drivers of Change

Compliment the Commitment Narrative

- ICLEI-USA is working to add your successes to the dialog

- Contribution Analysis is a powerful new tool to communicate progress

- Be Visible
  - Report / Share Successes
  - Use MWCOG and ICLEI to Amplify