



LINCOLN INSTITUTE
OF LAND POLICY

Regional Scenario Planning Tools Consortium

September 20, 2016

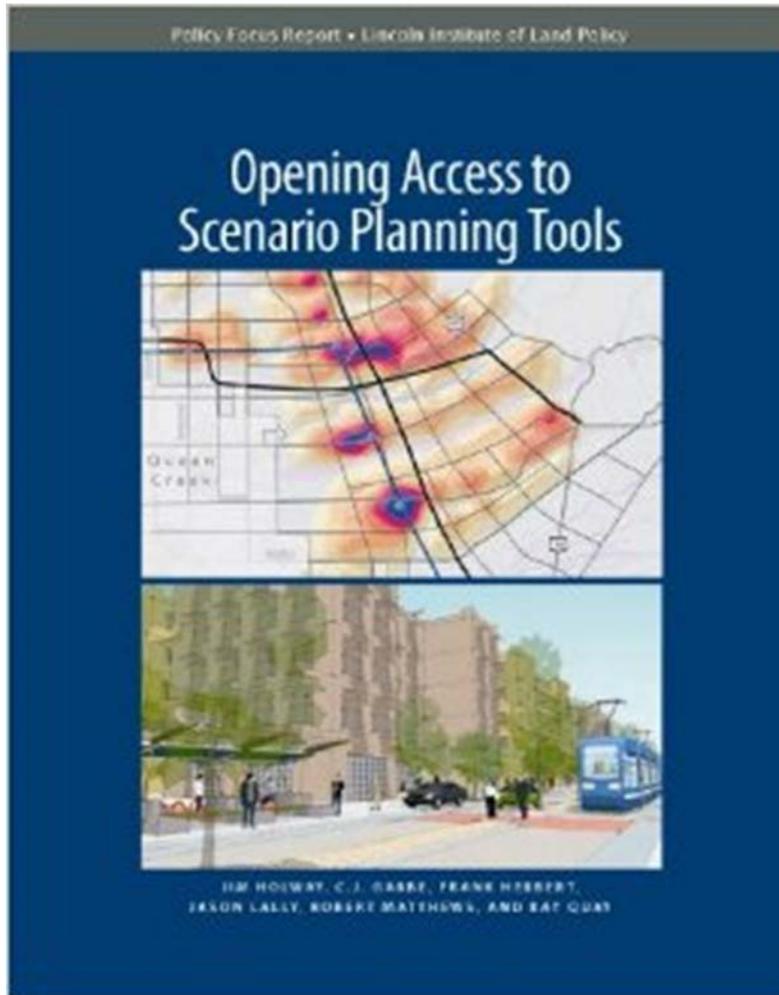
NARC Executive Directors Conference

Amy Cotter, Lincoln Institute of Land Policy

Mike McKeever, Sacramento Area Council of Governments

David Warm, Mid-America Regional Council

Andrew Gruber, Wasatch Front Regional Council



Scenario Planning Applications Network

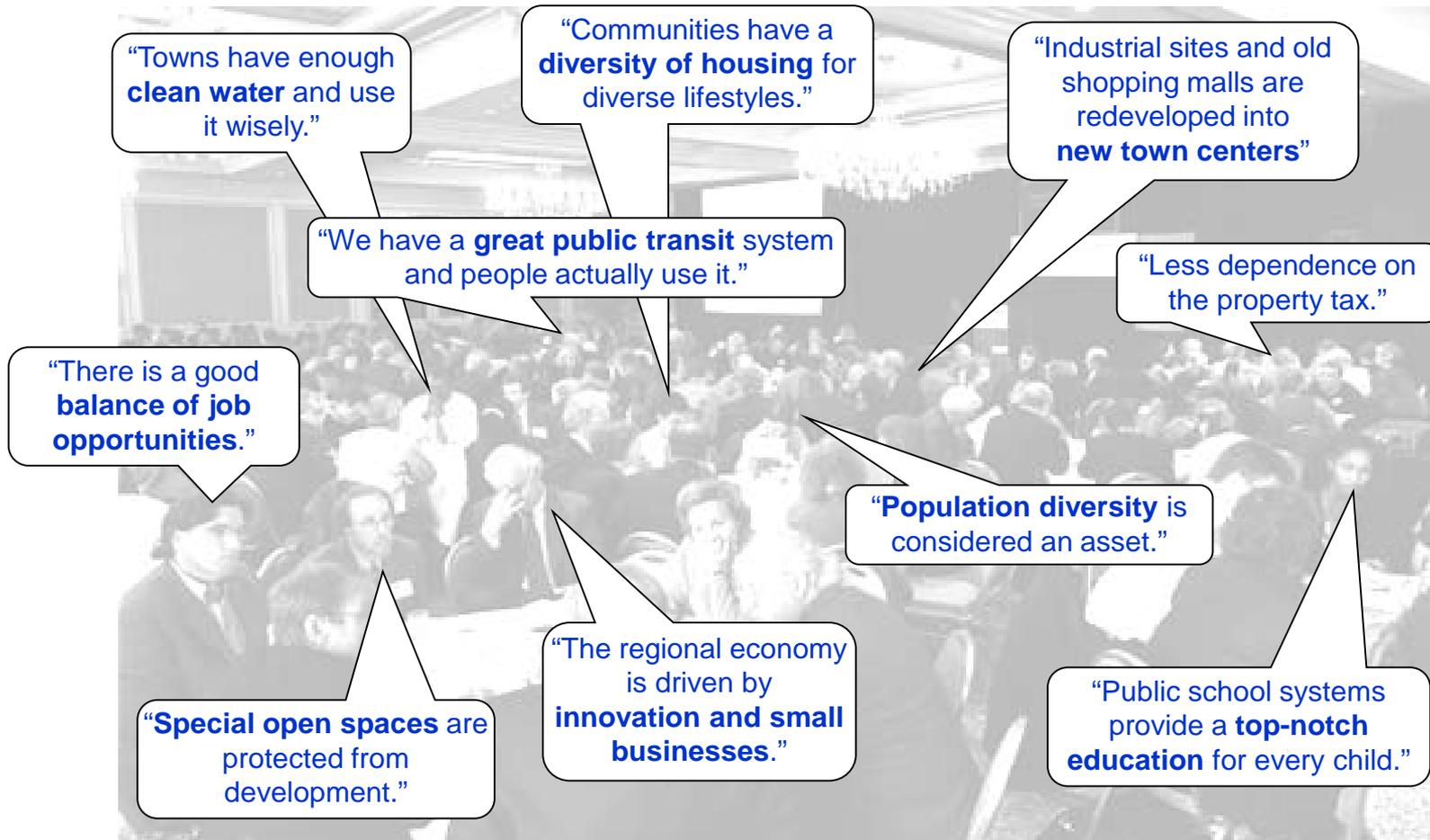


Scenarioplanning.io

MetroFuture: Metro Boston's Regional Plan



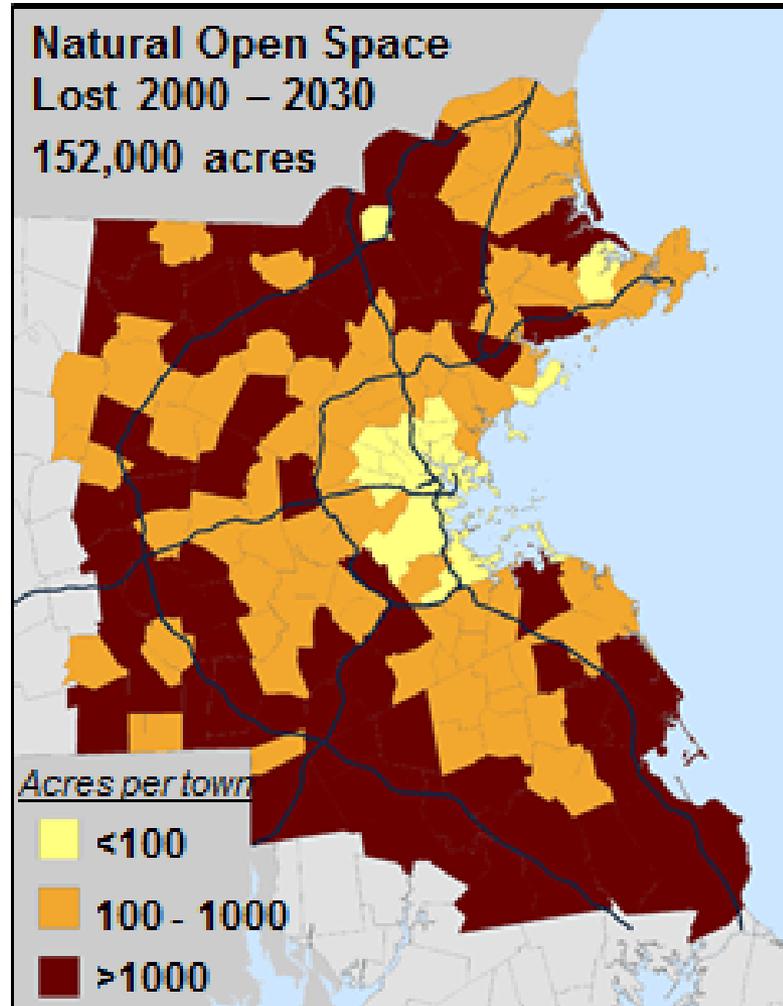
What's Your Vision for the Future of the Boston Region?





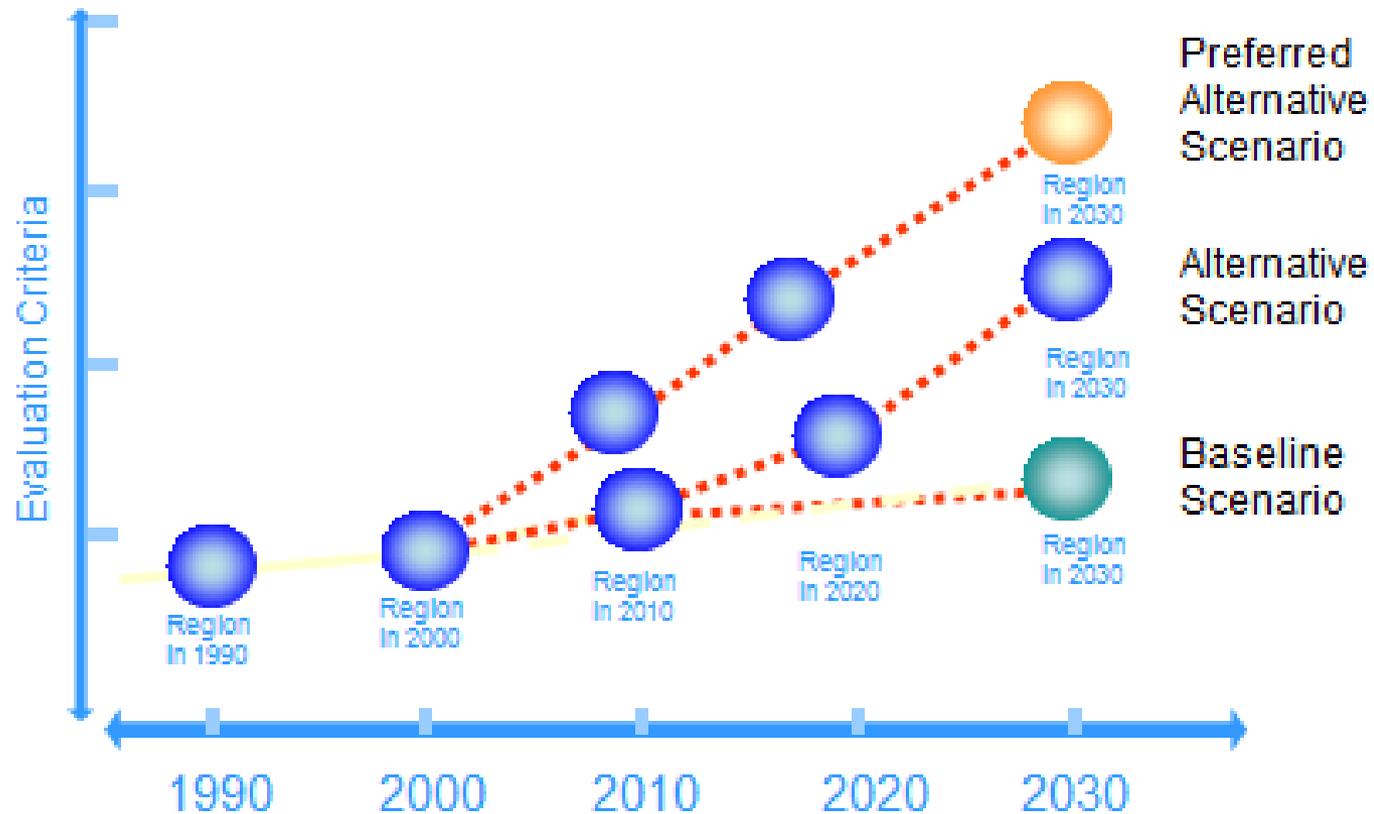
If current trends continue....

**Lot Sizes
Suburban Homes
2000 - 2030**

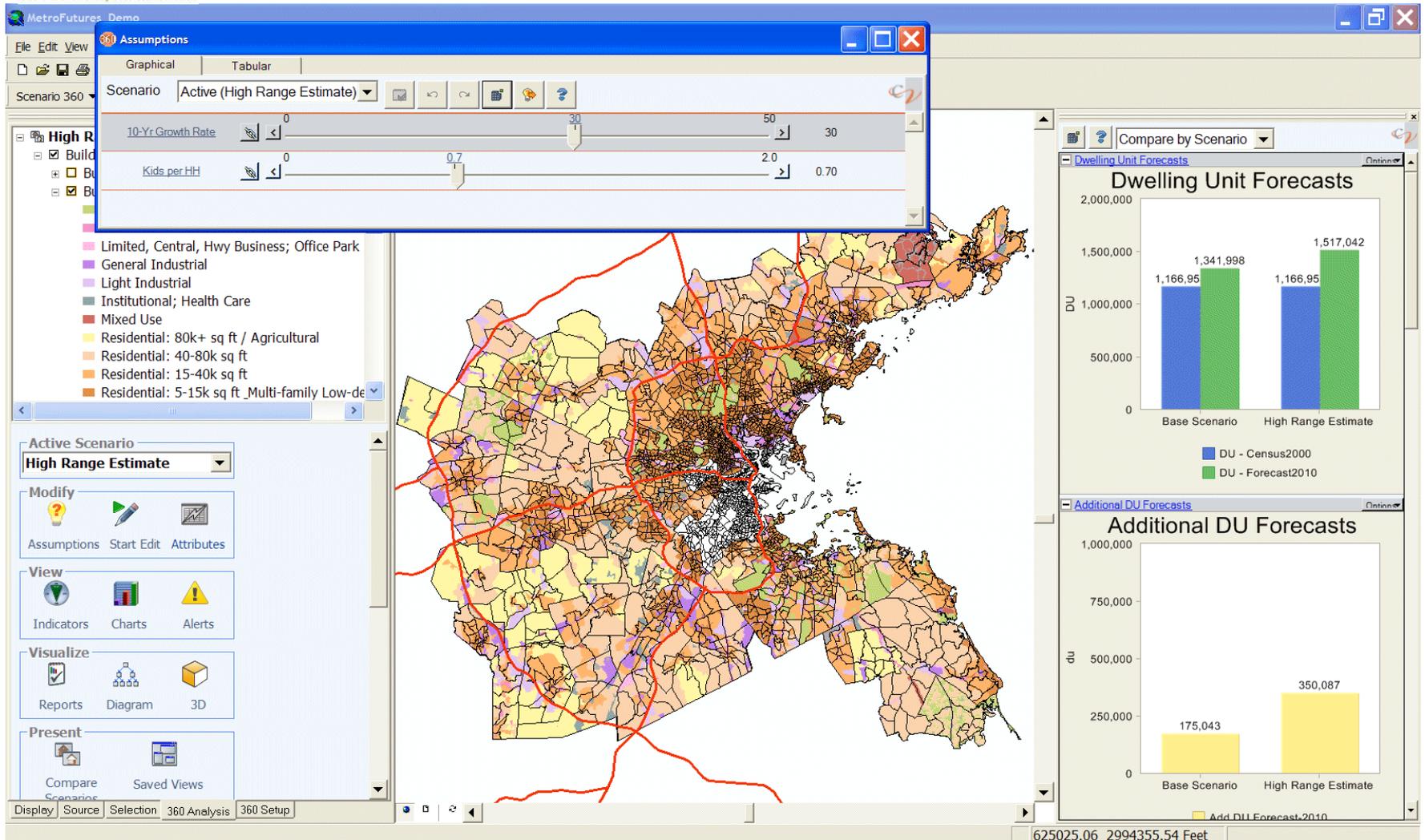




MetroFuture Scenarios



Impact Analysis/GIS Modeling



625025.06 2994355.54 Feet

Why a Scenario Planning Tools Consortium? Challenges in the Field

- Decades of use have created a robust ecosystem of tools and practitioners
- BUT....
- There still are numerous barriers to organizations thinking of using scenario planning tools – or wanting to use existing tools more effectively
 - A limited number of tools are offered, each with strengths and weaknesses
 - Tools can be costly and staff- or consultant-heavy to operate, particularly for the first time
 - Tools are complex and opaque, and do not talk to each other effectively

Why a Scenario Planning Tools Consortium? Opportunities for Collective Action

- Regional Planning Commissions, Councils of Government, and Metropolitan Planning Organizations collectively have a great deal of experience with scenario planning
- These “Regional Planning Organizations” are well situated to identify key opportunities to build on existing modeling tools and data
- Collectively, we can:
 - leverage programs and resources to decrease barriers to use
 - normalize metrics and data needs
 - improve user support resources, and
 - encourage the adoption of scenario planning tools in local and regional planning and decision-making

Synthesis Report

Background

- Prepared by Place/Matters for NARC and the Federal Highways Administration and completed in August 2016
- Report was commissioned to study “how planning organizations are using scenario planning, what encourages them to adopt or increase their use, and how we might overcome barriers to entry,” in order to increase the use and effectiveness of the tools
- Inputs include research, interviews with practitioners from 24 planning agencies, and a convening of a dozen agencies

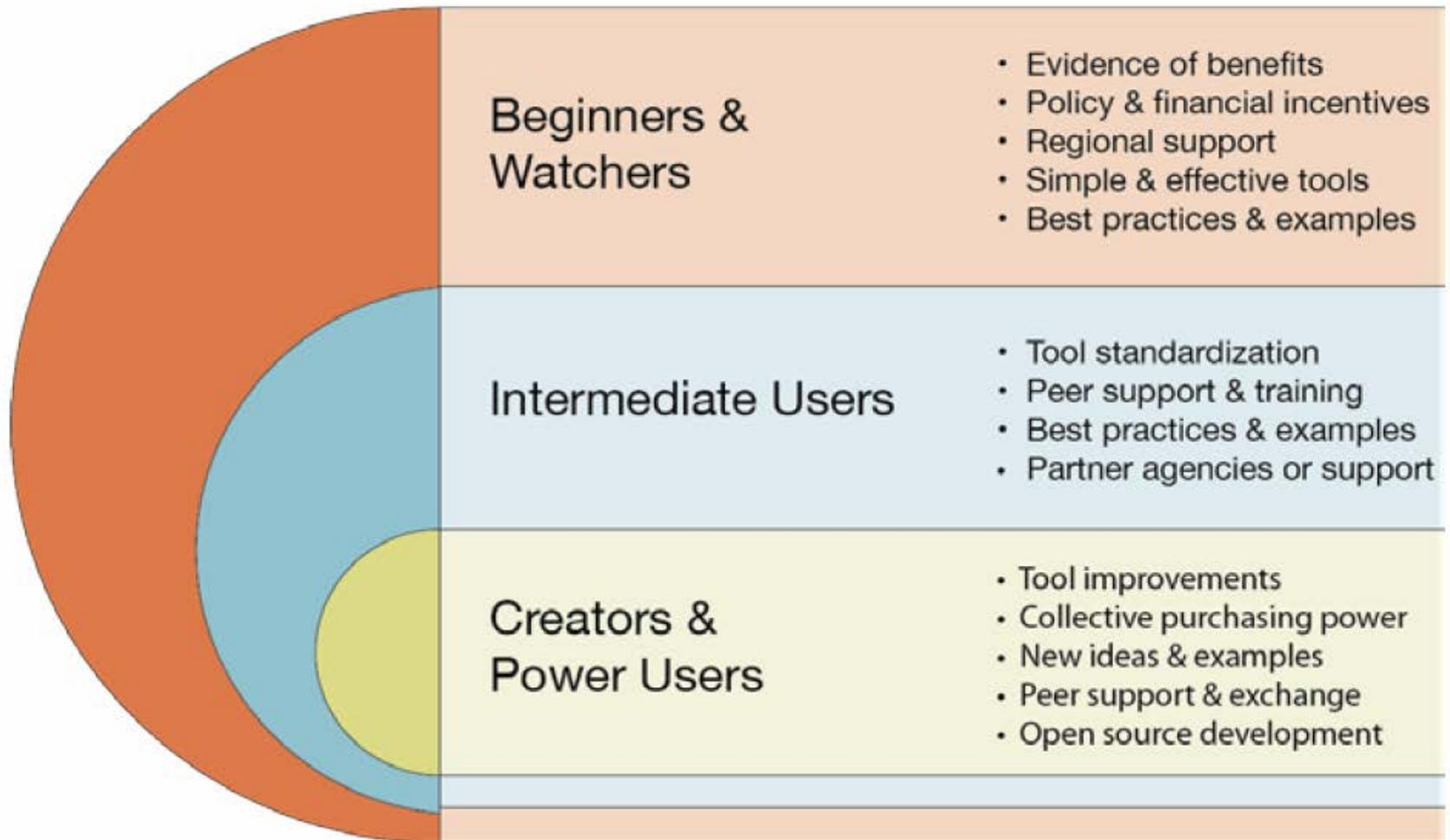
Synthesis Report

Key Findings

- Four platforms were most commonly used by agencies for GIS-based scenario planning:
 - CommunityViz
 - Envision Tomorrow
 - Urban Footprint
 - UrbanSim
- A limited number of the regional agencies using scenario planning tools could be considered “power users” with in-house expertise applied to a range of issues.
- Most agencies have very limited capacity for scenario planning, and rely heavily on assistance from consultants or other agencies.

Synthesis Report

Key Findings



Synthesis Report

Key Findings

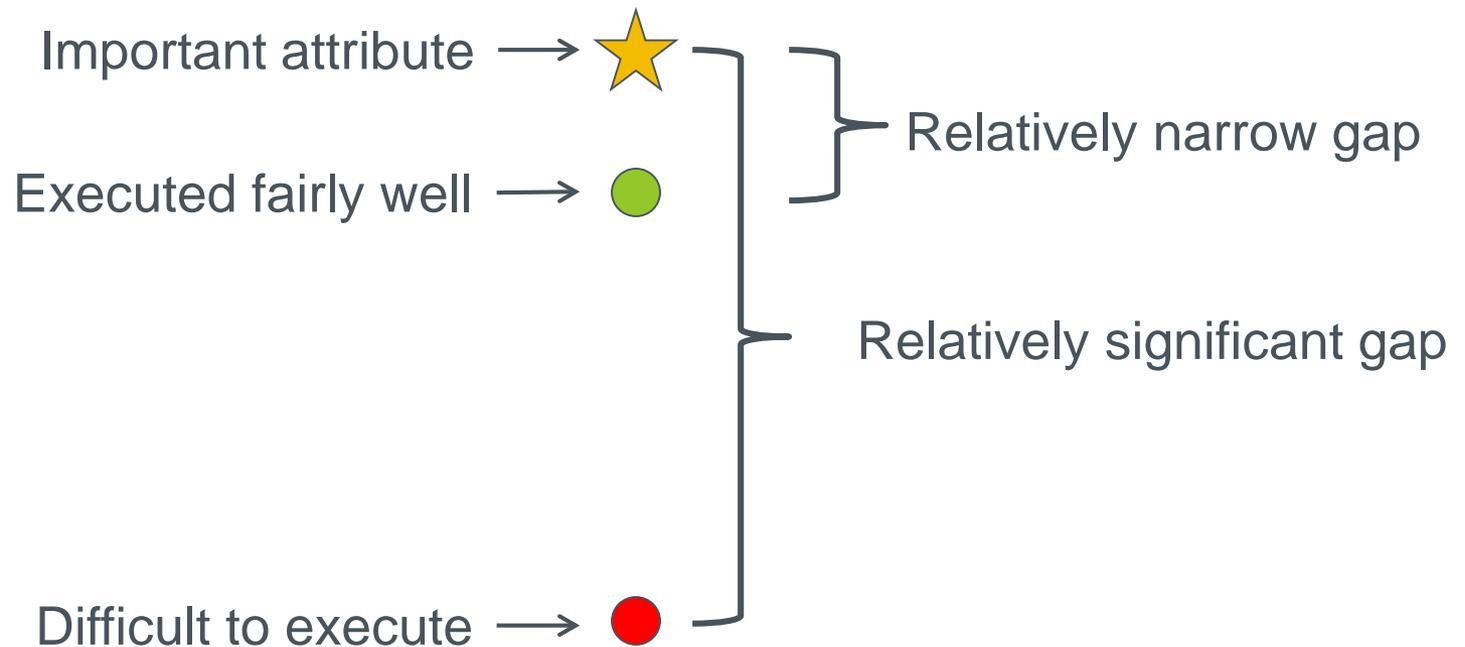
- Barriers and limitations to scenario planning identified by participants include:
 - Staff capacity (time and training)
 - Duration and time commitment
 - Funding
 - Data
 - Tools and platforms
 - Awareness and education
 - Authority
 - Political will

Tools Survey Background

- Conducted by MARC and completed in September 2016.
- Goal: uncover opportunities where agencies could to join together to drive more rapid evolution of scenario planning tools
- Looked at attributes of planning tools across three dimensions:
 - How **well** the attribute produces the desired information
 - How **easy** in terms of costs and time the attribute is to use
 - How **important** the attribute is to the agency
- Focus: gaps between performance and/or ease of use, and importance

Tools Survey

Importance vs. well and/or easily executed



Tools Survey

Key Findings – Average across all responses

- Five attributes were ranked as much more **important** than how **well** they were executed
 - Formulas transparent, editable
 - Affordability of Housing
 - Analysis and Metrics at Different Scales
 - Access to Retail Diversity
 - Green Infrastructure
- Five attributes were ranked as much more **important** than how **easy** they were to execute
 - High degree of Customization
 - Accurate Predictions
 - Degree to Which Investments Benefit Environmental Justice Areas
 - Ability to Tailor Info
 - Access to Jobs by Transit

Tools Survey

Key Findings – Comparing tool-specific averages

- *Addressing common frustrations provides one basis for working together:*
 - Formulas transparent and editable
 - Estimating infill development
 - Affordable housing
- *Where one tool performs well but the others don't, there is an opportunity to work together to transfer the technology and raise all tools to the higher level:*
 - Access to transit
 - Land consumption overall
 - Standard way to interact with outside software
 - Employment by industry
 - Walkability

Tools Survey

Key Findings

Gaps are generally much bigger regarding ease of use than performance. Many important attributes are considered to be done fairly well, not many important attributes are easy to execute

Ability to tailor or customize information appears to be an important attribute that could be improved for all tools

Developing, managing and updating data is a key element that contributes to what makes using the tools difficult

Prospective Consortium Goals

Primary:

- Drive change in technology to **create better tools and technical processes** so that they have greater utility and return on investment

Derivative:

- **Increase the number of regional agencies** using scenario planning technology and techniques
- Expand the understanding and appreciation of scenario planning among elected and appointed public officials, advocates, and partners in the **private and non-profit sectors**
- Generate **more resources and partner support** for engaging in scenario planning using fact-based tools

Prospective Consortium Agenda

Key approaches to achieving the Consortium goals

Technological improvements

- Drive data and tool improvement by user group
- Move toward a new scenario planning tool platform that enables modularized tool improvements to plug and play together seamlessly.

Network development:

- Communication and information exchange among tool users
- Build capacity to use scenario planning tools
- Form relationships with tool developers, academics, the federal government and other key organizations and collaboratives

Thank you!

Amy Cotter: acotter@lincolninst.edu

Mike McKeever: MMcKeever@sacog.org

David Warm: DWarm@marc.org

Andrew Gruber: agruber@wfrf.org



113 BRATTLE STREET

CAMBRIDGE MA 02138

LINCOLNINST.EDU

[@LANDPOLICY](https://twitter.com/LANDPOLICY)