

# Greater Philadelphia Future Forces

TRB Scenario Planning Conference | 08.15.16

# FUTURE

Greater Philadelphia

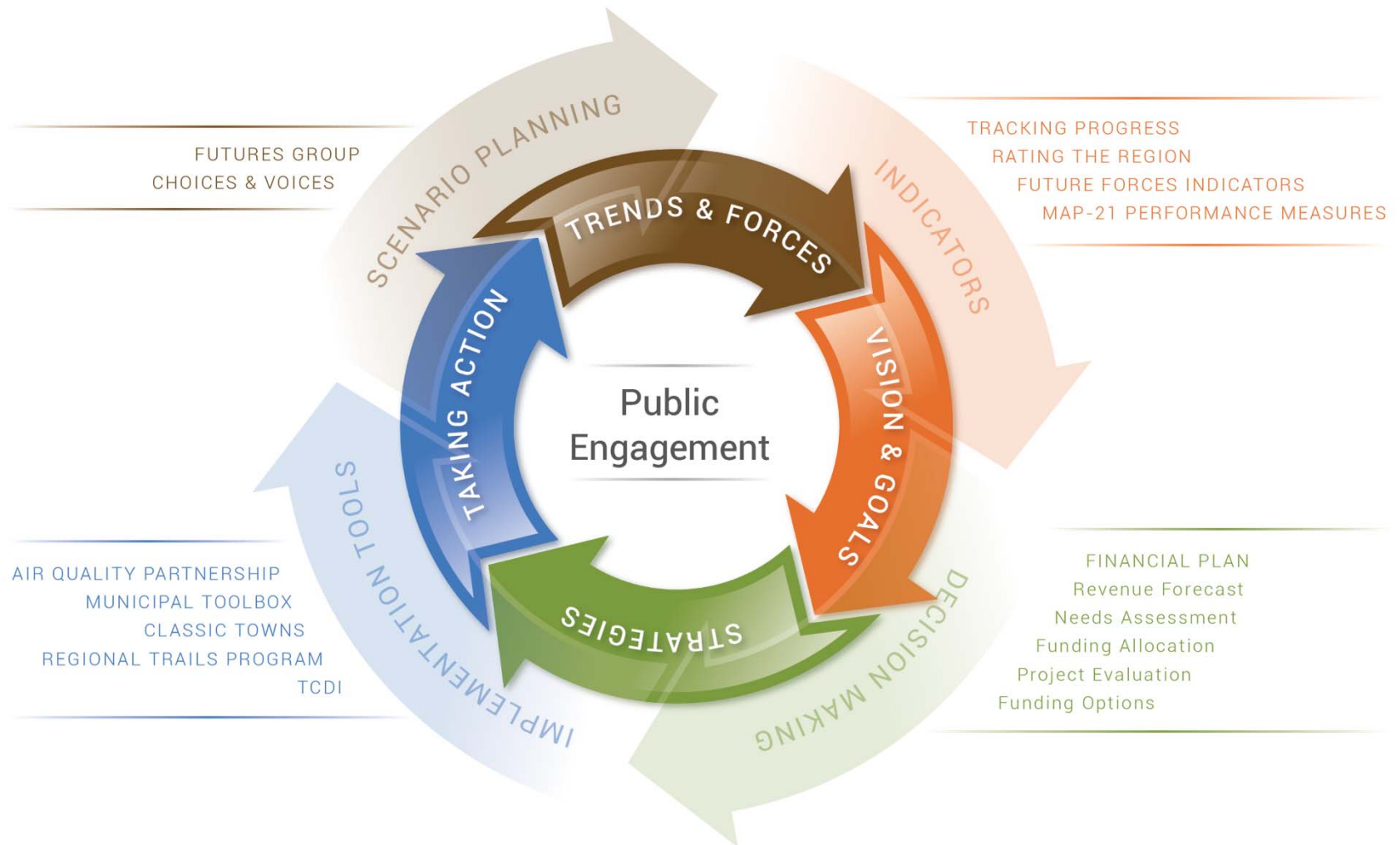
# FUTURE

# FORCES

# FORCES



# DVRPC Long-Range Planning



# Research Question

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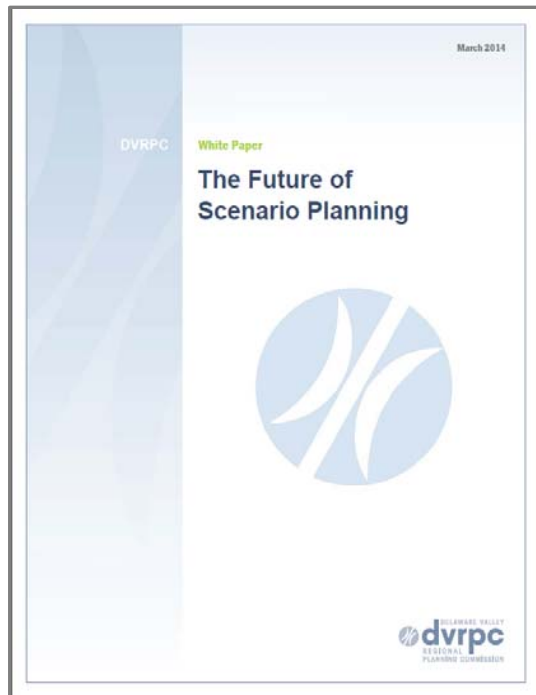
*How will emerging trends and technologies reshape Greater Philadelphia over the next 30 years?*

# Greater Philadelphia's Futures Group



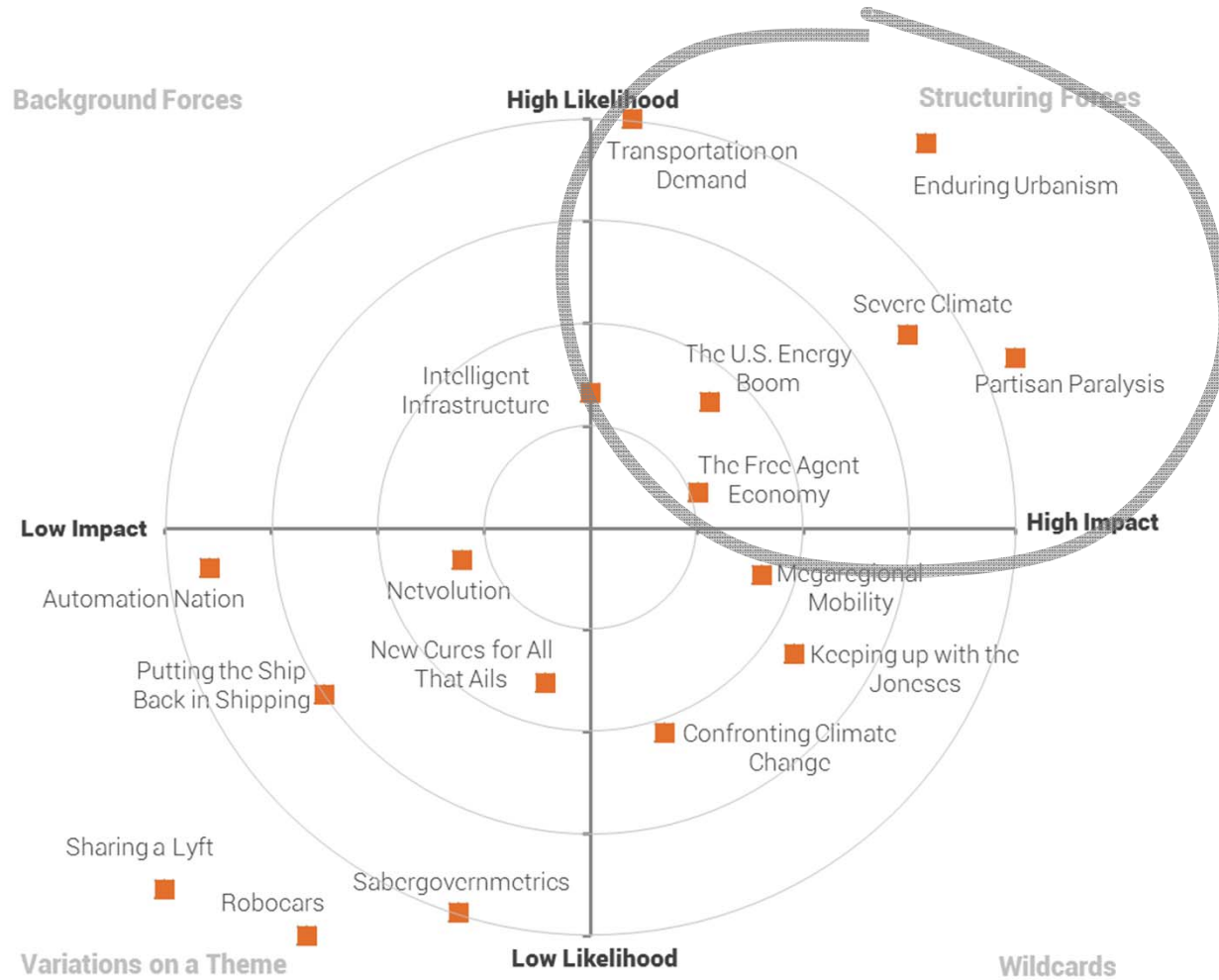
# Futures Group Tasks

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1. Brainstorm Future Forces of change
2. Vote on their impact and likelihood
3. Use Forces to create 4-5 highly differentiated What-If Scenarios
  - a. Create robust visions of the future
  - b. Analyze probable implications
4. Identify universal actions and contingent actions
5. Determine leading indicators for each Force
6. Create a short, graphic publication, and incorporate into Choices & Voices

# Impact-Likelihood Voting Results



# Forces the Futures Group Identified



People and jobs moving to walkable communities is the start of a long-term trend.



Increased outsourcing and automation means individuals must create their own economic opportunities.



Continued rise in atmospheric carbon levels lead to significant disruptions from climate change.



Smartphones, apps, and real-time info help people get around using new and existing transportation modes.



An abundance of domestically produced oil and natural gas keeps the cost of energy low.

# Background Forces

Partisan Paralysis

Intelligent Infrastructure (Internet of Things)

Connected Vehicles

Technology Enhanced Health / Chronic Health Conditions

Aging Population

Sharing Economy

Panama Canal Widening

Demand for Same-Day Delivery

Improving Freight Logistics

School Quality Driving Family Location

More Immigration

Declining Water Quality (Suburban)

Some Degree of Climate Change

Flat/Declining Transportation Funding

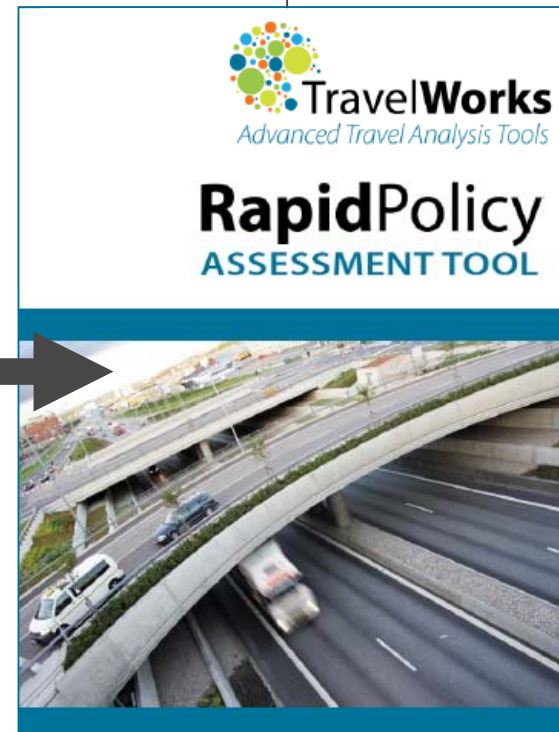
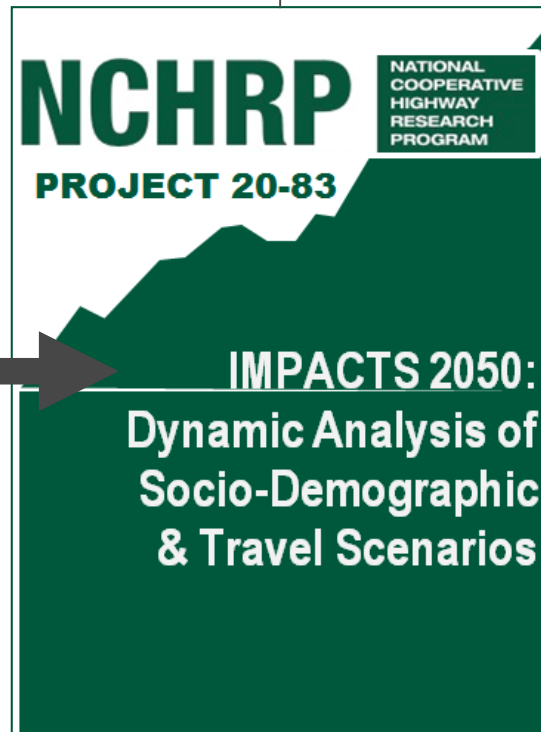
Worsening Infrastructure Conditions



# Models

Experts/Stakeholders

Strategic Analysis Tools



“The only relevant discussions about the future are those where we succeed in shifting the question from whether something will happen to what would we do if it happened”

Arie de Geus  
Shell International Petroleum Company



# What-If Scenario

Photo: Benjamin's Desk



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Careers → Jobs → Gigs



# What-If Scenario

Rendering: Toll Brothers



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People Move About More Often



# What-If Scenario



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## Universities are Economic Growth Engines



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# Contingent Actions



Source: PennConnects

- Expand business incubators / accelerators
- Simplify business tax collection, licensing, and permitting
- Zoning for shared / co-working office space
- More off-peak and intra-suburban transit service
- Build more middle-class housing

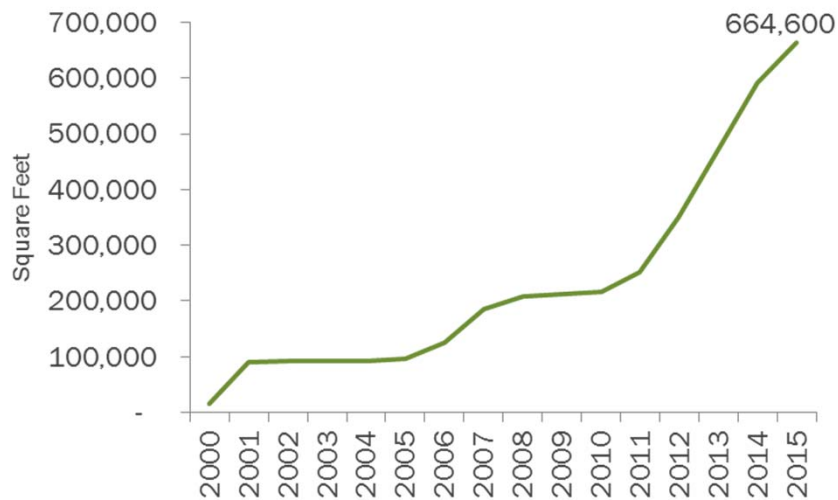


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# THE FREE AGENT ECONOMY

# Leading Indicators

## Shared and Co-Working Office Space



+200,000 Sq. Ft. Early 2016

## Self-Employed Workers



Sources LEFT: Jones Lang LaSalle and Costar, 2000-2015.

RIGHT: U.S. Census 2000, American Community Survey 2005 (1-year estimate), 2010-2014 (5-year estimates); Bureau of Labor Statistics, 2000-2014.

# Universal Actions

Build lifelong communities

Data-driven governance

Develop the impact economy

Enhance freight and goods movement

Expand broadband infrastructure

Green infrastructure and stream buffer ordinances

Increase regional transportation funding

Infrastructure resiliency

Immigrant-friendly policies

Megaregional collaboration and cooperation

Mixed-use infill development

Modern, multimodal transportation system

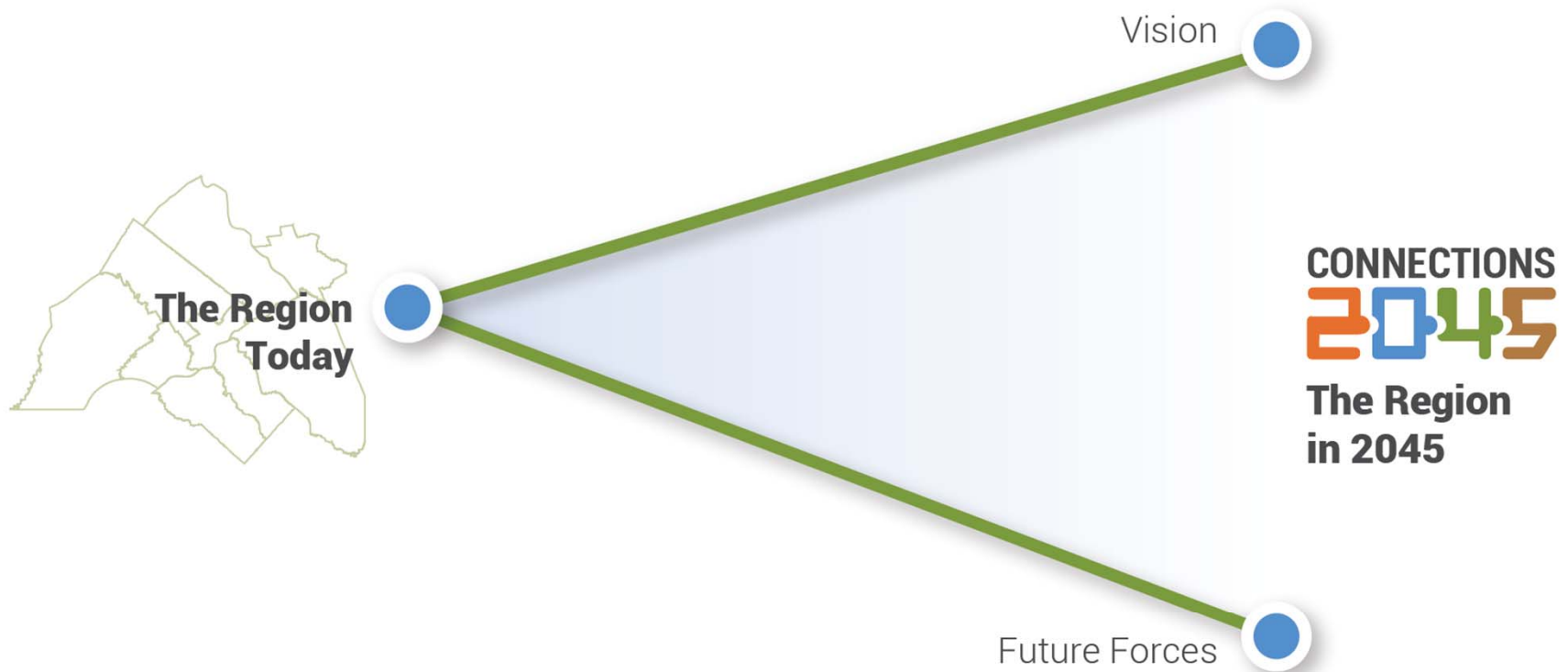
Universal pre-kindergarten and other k-12 programs

Vision Zero



# Future Force vs. Vision

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# More Understanding Needed

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1. Full impacts of the “Digital Revolution”
2. On-demand outsourcing vs. automation
3. Abundant, low-cost energy future
4. Reconstruct, modernize, and make infrastructure more resilient within current funding constraint
5. Interplay between the forces
6. Recent past no longer a useful guide for the future
7. Public / stakeholder familiarity with scenario planning

# Questions?

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[www.dvrpc.org/connections2045](http://www.dvrpc.org/connections2045)

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