ALTERNATIVE SCENARIOS
WHERE COULD OUR REGION GO?
WHAT ARE OUR OPTIONS, CHOICES,
AND KEY TRADEOFFS?
INTRODUCING THE ALTERNATIVE SCENARIOS

The scenarios show a range of plausible futures for the region, which helps us understand key choices, trade-offs, and outcomes. The purposes of the scenarios are to learn about the range of options and spark reflection and discussion. Feedback and lessons learned from the alternatives directly shaped the Regional Vision.

The Project Team modeled the following alternative scenarios:

**GROW THE SAME**: How would NEO’s future be different if population and jobs in NEO grew at the same rate as the rest of the country from 2013-2040?

The Grow the Same Scenario tests the impacts of additional population and employment growth in the region without changes in policies or funding priorities. Since policies and funding priorities are the same as the Trend Scenario, the additional homes and businesses are predominately in the form of dispersed development in emerging communities.

**DO THINGS DIFFERENTLY**: How would NEO’s future be different if we pursued the different policies and funding priorities that Vibrant NEO 2040 participants identified at the Trend Scenario Workshops?

The Do Things Differently Scenario tests the impacts of changing policies and priorities from the Trend Scenario. These include:

- Focusing on reinvestment in established communities
- Limiting development in environmentally sensitive areas
- Using existing infrastructure wherever possible
- Increasing the proportion of mixed-use, walkable development
- Expanding public transportation and bicycle/pedestrian trail networks
- Prioritizing growth near established communities

Regional population and employment growth remains virtually flat in this scenario (same as the Trend Scenario), but the emphasis on reinvestment significantly reduces abandonment relative to the Trend Scenario. Open space conservation is highest in this scenario.

**GROW DIFFERENTLY**: How would NEO’s future be different if population and jobs in NEO grew from 2013-2040 at the same rate as the rest of the country and we pursued the different policies and funding priorities that Vibrant NEO 2040 participants identified at the Trend Scenario Workshops?

The Grow Differently Scenario tests the impacts of combining growth with different policy and funding priorities identified in the Trend Scenario Workshops. This scenario sees the same number of new residents and jobs as Grow the Same, but redevelopment, infill, and compact development are emphasized (as they are in Do Things Differently).

**SCENARIO LOGIC**

The Project Team structured the scenarios this way because it enables meaningful comparison between and among scenarios. It allows for testing the independent benefits of policy and priority change and different levels of growth. Some of the questions that these scenarios address include the following:

- Can the challenges raised by the Trend Scenario be solved simply by adding more jobs and households?
- If, on the other hand, job and household growth remains stagnant, how well could the region perform with good policies and governance alone?
- Do policies and priorities that are effective in a low growth scenario continue to perform well in a high growth scenario?
**Alternative Growth Forecast: Maintaining a Constant Share of National Growth**

The Trend and Do Things Different Scenarios project current growth rates to 2040 to calculate future population and employment. Grow the Same and Grow Differently follow a different method to calculate 2040 population and employment. Rather than basing future growth on current trends, the two growth scenarios assume Northeast Ohio maintains its current share of national growth.

Northeast Ohio is currently home to 3.8 million residents, or 1.2% of the nation’s population. The alternative growth forecast assumes that Northeast Ohio captures 1.2% of projected national growth through 2040. As a result, population increases by 875,000 new residents in the growth scenarios (compared with only 93,000 in the low growth scenarios). Average annual population growth measures 0.8% in the higher growth scenarios.

Employment follows the same logic, adding 501,000 jobs by 2040 in the higher growth scenarios (compared with 108,000 in the low growth scenarios).

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**Employment and Population Projections**

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**NEO’s “Constant Share” Approach vs. RECS’s Forecasts: Two Projection Methods, Similar Outcomes**

Northeast Ohio’s Regional Economic Competitiveness Strategy (RECS) is an ongoing economic development planning process for an 18 county area of Northeast Ohio that is led by Team NEO, a collaboration of the region’s chambers of commerce and The Fund For Our Economic Future, a collaboration of the region’s philanthropic organizations. The process was initiated in 2011 and involved over 150 private sector business leaders. The project began with a deep analysis of the region’s existing competitive strengths and an assessment of the drivers of the region’s economy.

Additionally, the region’s cyclical performance over time was examined. As part of this assessment, two employment scenarios were generated. The first scenario was based on an extrapolation of the performance of the economy in terms of jobs, income, and gross product. The projections were expressed as a percentage difference from the nation’s average growth rate. The second scenario was more robust and was based on a number of assumptions that would boost the region’s rate of growth for these three variables up to the nation’s average growth rates.

The employment projections for 2040 generated through the RECS’s more robust scenario are very similar to the employment projections that the Project Team created with the “constant share” approach. In 2040, RECS saw 2.25 million jobs as an optimistic, yet achievable target; in comparison, the “constant share” approach yields 2.23 million jobs. The similarity of these numbers supports their use in the scenario planning process as an optimistic, yet feasible, outcome in the high-growth scenarios.

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**Alternative Employment Projections**

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**RECS Aspirational: Midpoint of US and Northeast Ohio growth rates for the first 5 years, US growth rate for the second 5 years, and 10% above US growth rate 2022 and afterward**

**Constant Share: Assumes future employment growth will track with national employment growth**
NEO 2040: DO THINGS DIFFERENTLY SCENARIO

- Mixed-use
- Commercial
- Industrial
- Residential: Urban or Multifamily
- Residential: Suburban
- Residential: Rural
- Agriculture
- Parks and Conservation
- Abandoned Parcels
- Other Unbuilt
- Other Built
- Water
NEO 2040: GROW DIFFERENTLY SCENARIO

- Mixed-use
- Commercial
- Industrial
- Residential: Urban or Multifamily
- Residential: Suburban
- Residential: Rural
- Agriculture
- Parks and Conservation
- Abandoned Parcels
- Other Unbuilt
- Other Built
- Water
**NEO 2040: GROW THE SAME SCENARIO**

**WHAT MIGHT THE REGION BE LIKE IN 2040 IF THERE ARE SIGNIFICANTLY MORE PEOPLE AND JOBS, BUT CURRENT DEVELOPMENT PATTERNS AND POLICIES CONTINUE?**

- **Inputs Summary:**
  - POPULATION 2040: 4,696,400 RESIDENTS
  - EMPLOYMENT 2040: 2,232,700 JOBS
  - 875,200 residents (0.8% annual growth rate)
  - 501,000 jobs (1.0% annual growth rate)
  - 546,000 new homes built
  - 121,500 new acres of parks and conservation land

- **Outputs Summary:**
  - 93,100 new abandoned homes
  - 546,000 new homes built

**Outcomes:**
- Significantly more dispersed development than the Trend Scenario. New development is highest in growing communities, especially in Medina, Lake, Lorain, and southwestern Summit counties.
- Abandonment, while less than the Trend Scenario, is still increasing. The cities of Cleveland, Elyria, Lorain, and Warren see the greatest decreases in abandonment relative to the Trend Scenario.
- Even though one-quarter of new homes are urban or multi-family, the overall percentage of these units drops by about 19% from 2010 to 2040 due to abandonment (decreasing housing choice in region).

**Land Use**

<table>
<thead>
<tr>
<th></th>
<th>Current</th>
<th>Grow the Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>unknown</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>abandoned</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>built other</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>mixed use</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>industrial</td>
<td>9%</td>
<td>8%</td>
</tr>
<tr>
<td>commercial</td>
<td>14%</td>
<td>8%</td>
</tr>
<tr>
<td>residential: urban</td>
<td>8%</td>
<td>17%</td>
</tr>
<tr>
<td>residential: suburb</td>
<td>17%</td>
<td>38%</td>
</tr>
<tr>
<td>residential: rural</td>
<td>38%</td>
<td>0%</td>
</tr>
<tr>
<td>parks and conservation</td>
<td>6%</td>
<td>41%</td>
</tr>
<tr>
<td>unbuilt other</td>
<td>0%</td>
<td>4%</td>
</tr>
<tr>
<td>agriculture</td>
<td>41%</td>
<td>26%</td>
</tr>
</tbody>
</table>

**New Development Mix (acres)**

<table>
<thead>
<tr>
<th>Land Use</th>
<th>New Housing Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>3%</td>
</tr>
<tr>
<td>Industrial</td>
<td>14%</td>
</tr>
<tr>
<td>Residential: Urban/Multi</td>
<td>14%</td>
</tr>
<tr>
<td>Residential: Suburban</td>
<td>34%</td>
</tr>
<tr>
<td>Residential: Rural</td>
<td>34%</td>
</tr>
<tr>
<td>Parks and Conservation</td>
<td>26%</td>
</tr>
<tr>
<td>Unbuilt Other</td>
<td>6%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Transportation Investment**

- auto-oriented development
- walk, bike, transit investments
- buildings outward
- buildings inward

**Investment in Communities**

- supporting走-oriented communities
- existing communities

- community character
- dispersed development
- compact development
**NEO 2040: Do Things Differently Scenario**

**What might the region might look like in 2040 if growth remains flat but policies and development patterns change?**

### Inputs Summary:

- **POPULATION 2040:** 3,914,800 residents  
  (0.1% annual growth rate)
- **EMPLOYMENT 2040:** 1,839,800 jobs

### Transportation Investment

<table>
<thead>
<tr>
<th>Type</th>
<th>DO THINGS DIFFERENTLY</th>
<th>TREND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-oriented infrastructure</td>
<td>3%</td>
<td>5%</td>
</tr>
<tr>
<td>Walk, bike, transit, infrastructure</td>
<td>12%</td>
<td>16%</td>
</tr>
</tbody>
</table>

### Investment in Communities

<table>
<thead>
<tr>
<th>Type</th>
<th>DO THINGS DIFFERENTLY</th>
<th>TREND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building green space</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>Building urban</td>
<td>29%</td>
<td>45%</td>
</tr>
<tr>
<td>Building rural</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>Building mixed</td>
<td>66%</td>
<td>17%</td>
</tr>
</tbody>
</table>

### Outputs Summary:

- **New Development Mix (acres):** 20,500 acres developed total

<table>
<thead>
<tr>
<th>Land Use</th>
<th>DO THINGS DIFFERENTLY</th>
<th>TREND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>3%</td>
<td>6%</td>
</tr>
<tr>
<td>Industrial</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>Residential: Urban or Multifamily</td>
<td>14%</td>
<td>15%</td>
</tr>
<tr>
<td>Residential: Suburban</td>
<td>10%</td>
<td>33%</td>
</tr>
<tr>
<td>Residential: Rural</td>
<td>38%</td>
<td>27%</td>
</tr>
<tr>
<td>Parks and Conservation</td>
<td>12%</td>
<td>13%</td>
</tr>
<tr>
<td>Abandoned Parcels</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td>Other Unbuilt</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Other Built</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>Water</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

### Land Use

<table>
<thead>
<tr>
<th>Current</th>
<th>DO THINGS DIFFERENTLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential: Urban or Multifamily</td>
<td>15%</td>
</tr>
<tr>
<td>Residential: Suburban</td>
<td>16%</td>
</tr>
<tr>
<td>Residential: Rural</td>
<td>15%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>15%</td>
</tr>
<tr>
<td>Parks and Conservation</td>
<td>15%</td>
</tr>
<tr>
<td>Abandoned Parcels</td>
<td>5%</td>
</tr>
<tr>
<td>Other Unbuilt</td>
<td>3%</td>
</tr>
<tr>
<td>Other Built</td>
<td>3%</td>
</tr>
<tr>
<td>Water</td>
<td>3%</td>
</tr>
</tbody>
</table>

### Outcomes:

- Different policies help reduce oversupply of housing and resulting regional churn (development without growth). There is a lower volume of new housing construction in Do Things Differently, even though it had the same number of people as Trend. As a result, abandonment is significantly less in this scenario.
- Highest amount of new open space conservation (doubled from 2010), a result of policies that reduce growth pressures in undeveloped areas.
- Compact-lot single-family and multi-family apartments account for majority of new housing units.
- Fewest new developed acres; more acres of farmland and forests remain.
NEO 2040: GROW DIFFERENTLY SCENARIO
WHAT MIGHT THE REGION BE LIKE IN 2040 IF THERE ARE SIGNIFICANTLY MORE PEOPLE AND JOBS AND IF CURRENT DEVELOPMENT PATTERNS AND POLICIES CHANGE?

Outcomes:
- Roughly same percentage of suburban housing as the other scenarios, but a smaller number of new rural homes.
- Natural areas conservation is less than Do Things Differently, but more than Trend and Grow the Same.
- Lowest abandonment of all scenarios.
- Roughly the same number of acres developed as Trend even though there are significantly more people and jobs.

Inputs Summary:
- 875,200 residents (0.8% annual growth rate)
- 501,000 jobs (1% annual growth rate)
- 205,600 new acres of parks and conservation land

Outputs Summary:
- 459,000 new homes built
- 2,400 new abandoned homes
- Commuter Rail—157 new miles
- Bus Rapid Transit—34 new miles
- Express Bus—245 new miles

New Development Mix (acres)
- 80,300 acres developed total

New Housing Units
- 44%
- 16%
- 8%
- 5%
- 5%
- 5%
- 3%
- 2%
- 1%

Land Use
- Current
- Grow Differently

Transportation Investment
- Land Development
- Community Character

Investment in Communities
- Mixed Use
- Commercial
- Industrial
- Residential: Urban or Multifamily
- Residential: Suburban
- Residential: Rural
- Agriculture
- Parks and Conservation
- Abandoned Parcels
- Other Unbuilt
- Other Built
- Water
# Scenario Summary

## Trend
- **Population 2040**: 3,914,600 residents
- **Employment 2040**: 1,839,800 jobs
- **Population Growth 2010–2040**: 93,430 new residents
- **Employment Growth 2010–2040**: 108,100 new jobs
- **New Parks and Conservation Land**: 121,500 new acres of parks and conserved land
- **New Homes (# and Type)**: 276,800 new housing units, 174,900 new abandoned housing units
- **New Abandoned Homes**: 23,400 acres consumed by outward migration
- **Acres of Outward Migration**: 23,400
- **Lane Miles of New Roads**: 3,100

## Grow the Same
- **Population 2040**: 4,696,400 residents
- **Employment 2040**: 2,232,700 jobs
- **Population Growth 2010–2040**: 875,000 new residents
- **Employment Growth 2010–2040**: 501,000 new jobs
- **New Parks and Conservation Land**: 121,500 new acres of parks and conserved land
- **New Homes (# and Type)**: 546,000 new housing units, 93,100 new abandoned housing units
- **New Abandoned Homes**: 48,400 acres consumed by outward migration
- **Acres of Outward Migration**: 48,400
- **Lane Miles of New Roads**: 6,000

## Do Things Differently
- **Population 2040**: 3,914,600 residents
- **Employment 2040**: 1,839,800 jobs
- **Population Growth 2010–2040**: 93,430 new residents
- **Employment Growth 2010–2040**: 108,100 new jobs
- **New Parks and Conservation Land**: 288,500 new acres of parks and conserved land
- **New Homes (# and Type)**: 120,000 new housing units, 19,800 new abandoned housing units
- **New Abandoned Homes**: 4,100 acres consumed by outward migration
- **Acres of Outward Migration**: 4,100
- **Lane Miles of New Roads**: 700

## Grow Differently
- **Population 2040**: 4,696,400 residents
- **Employment 2040**: 2,232,700 jobs
- **Population Growth 2010–2040**: 875,000 new residents
- **Employment Growth 2010–2040**: 501,000 new jobs
- **New Parks and Conservation Land**: 205,600 new acres of parks and conserved land
- **New Homes (# and Type)**: 459,000 new housing units, 2,400 new abandoned housing units
- **New Abandoned Homes**: 29,800 acres consumed by outward migration
- **Acres of Outward Migration**: 29,800
- **Lane Miles of New Roads**: 2,400

### Types of Housing
- Urban Home or Multifamily Apartment
- Suburban Home
- Rural Home
- Other

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52 Vibrant NEO 2040
### Scenarios: Lessons Learned

**Small changes can have big impacts:** The new development highlighted on the land use change maps may just look like small specks, but what looks small in terms of overall development has significant impacts on local communities, their budgets, the environment, and quality of life. The scenario model outputs show major differences between the scenarios.

**Northeast Ohio cannot grow its way out of its challenges:** More of the same kind of growth (Grow the Same Scenario) has significant negative impacts on many of the issues residents have told us they care about. Grow the Same results in negative environmental impacts, increased traffic and transportation costs, the disappearance of rural communities, loss of farmland, and increased local taxes to support the growing construction and maintenance costs of infrastructure. Furthermore, growth alone does not solve the abandonment problem (although it does cut abandonment in half relative to the Trend Scenario). Do Things Differently is more effective at reducing abandonment than Grow the Same, demonstrating the higher impact that changing policies and funding priorities have when compared with pure growth. Not only is growing our way out expensive, in some places it is not possible with current development trends. Cuyahoga County, for instance, does not have enough land capacity to accommodate growth in Grow the Same based on trend styles of development. This means that if growth continues to occur in the outer-ring suburbs of Cuyahoga County, it will eventually spill into the prime agricultural land of Geauga, Lake, Lorain, and Medina counties.

**Rural and lightly developed areas may face difficult decisions in a high growth scenario:** In terms of fiscal impacts, the counties that fared the worst in high growth scenarios are those that currently spend the least on local services. This suggests that some places across the region will soon face a major tipping point where they will have to decide whether they want to collect more taxes for the same level of service or actively manage growth to maintain their rural character.

**Northeast Ohio can significantly improve performance, even without experiencing major growth:** Several of the scenario model outputs summarized previously had better outcomes in Do Things Differently than in Grow the Same, particularly as related to the environment.

**The region is over-retailed:** Retail targets were easily accommodated in each scenario and it became apparent very quickly that the region has a surplus of land zoned for retail development. Outcomes of this surplus capacity include predatory development practices that move retail activity to even newer centers leaving behind vacant malls and retail grayfields.

### Table: Land Use Change Scenarios

<table>
<thead>
<tr>
<th>Acres of Prime Agricultural Land Lost</th>
<th>Acres of Land of High Ecological Value Lost</th>
<th>Acres of New Impervious Cover</th>
<th>Daily Vehicle Miles Traveled per Household</th>
<th>% of Jobs Near Transit</th>
<th>% of Residents Near Transit</th>
<th>Cost to Revenue Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>18,800</td>
<td>3,300</td>
<td>30,600</td>
<td>22.0</td>
<td>53%</td>
<td>34%</td>
<td>-33.7%</td>
</tr>
<tr>
<td>4,700</td>
<td>500</td>
<td>8,100</td>
<td>22.5</td>
<td>50%</td>
<td>35%</td>
<td>-6.4%</td>
</tr>
<tr>
<td>60,000</td>
<td>12,000</td>
<td>55,100</td>
<td>25.4</td>
<td>39%</td>
<td>25%</td>
<td>+10.4%</td>
</tr>
<tr>
<td>31,100 acres of prime farmland lost</td>
<td>6,300 acres of high ecological land lost</td>
<td>28,300 acres of new impervious surface</td>
<td>23.7 Vehicle miles traveled a day per household</td>
<td>41% of jobs near transit</td>
<td>25% of residents near transit</td>
<td>-33.7%</td>
</tr>
<tr>
<td>x x x</td>
<td>x x x</td>
<td>x x x</td>
<td>x x x</td>
<td>x x x</td>
<td>x x x</td>
<td>x x x</td>
</tr>
</tbody>
</table>

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**Source:** Alternative Scenarios 53
The different scenarios show that Northeast Ohio has multiple choices to make about its future, and its decisions will significantly impact quality of life, fiscal health, neighborhood character, and environmental quality over the long-run.

A series of Open Houses held across the region gave participants the opportunity to express their feedback about these key choices. Boards organized around a series of themes presented major questions facing the region and explained potential outcomes of each option. The section presents the alternative scenarios through these themes:

- Theme 1: Outward Mitigation
- Theme 2: Place Types and Community Character
- Theme 3: Transportation
- Theme 4: Open Space—Environment and Agriculture
- Theme 5: Fiscal Health
- Overall Impressions

1. Welcome and Check-in: greeted participants to the open house and provided feedback materials
2. Introduction Boards: gave an introduction to the process and the NEOSCC organization.
3. Video: recapped the Trend Scenario and presented the basic framework of the alternative scenarios
4. Scenario Overview: described the scenario inputs and outputs
5. Theme Stations: summarized natural areas, transportation, outward migration, community character, and fiscal impacts across the scenarios
6. Scenario Summary: summarized differences between the four scenarios
7. ImagineMyNEO Station: gave participants the opportunity to play ImagineMyNEO using iPads that were set up at a table

To see all the boards presented at the Open Houses, please visit http://vibrantneo.org.
Feedback opportunities were distributed throughout the room, including a final overall survey at the end. Questions were designed to elicit reactions and preferences in light of the scenario findings. The goal was not to ask the public to vote for their favorite scenario, but rather to learn which aspects of each scenario were preferred or disliked. Attendees were asked about their desired balance between:

- Inward versus outward development
- Auto-oriented investment versus alternative transportation options
- Allowing development anywhere versus protecting environmentally sensitive areas
- A variety of different built neighborhood characteristics

Snapshots of the Open Houses
THEME 1: OUTWARD MIGRATION

A significant difference between the scenarios is the location of new development. Like the Trend Scenario, Grow the Same continues the region’s current pattern of putting new development on previously undeveloped farmland or in natural areas at the edges of established communities. Grow Differently and Do Things Differently emphasize reinvestment and infill in established communities. The overall magnitude of new development is greater in the growth scenarios (seen in the following maps as more yellows and oranges).

These differences lead to dramatically different outcomes. Abandonment varies significantly across the scenarios, from a high of 175,000 new abandoned units in Trend to a low of 2,400 abandoned homes in Grow Differently. Higher growth alleviates abandonment, but a policy approach that emphasizes reinvestment reduces abandonment even more.

POPULATION SHIFTS

Heat maps depict where people are moving to and from in the four scenarios. Blue areas are experiencing net abandonment; yellow and orange areas are growing with new households.

Trend has a nearly stable population but sizable growth away from existing communities. As a result, abandonment is highest.

Grow the Same has the same emphasis on outward development as Trend, but higher growth in this scenario reduces the amount of abandonment in existing communities.

Grow Differently has the same increase in population and jobs as Grow the Same and the same focus on reinvestment as Do Things Differently. As a result, abandonment is the lowest.

Do Things Differently focuses new development in and near existing areas. Abandonment is significantly lower than Trend even though there is no additional population growth because there are fewer “extra” housing units constructed.
A second key outcome is the fiscal impact of development. The Grow the Same Scenario includes significant new development outside of established communities and, as a result, has the greatest increase in infrastructure costs. The increases in capital, operating, and maintenance costs have the greatest impacts on counties experiencing the most growth. Do Things Differently and Grow Differently focus on reusing existing infrastructure, resulting in cost savings for communities. While new development does generate additional tax revenue, the dispersed development patterns found in the Trend and Grow the Same Scenarios generate less revenue on a per-acre basis than the mixed-use and compact development patterns found in the Do Things Differently and Grow Differently scenarios. Outward migration is also a key driver of the abandonment in legacy cities, 1st ring suburbs, and established cities and towns that creates significant financial hardships for these communities.

The majority of new development in Trend/Grow the Same is more than 500’ away from existing development. In contrast, the majority of new development in Do Things Differently/Grow Differently is redevelopment or adjacent to existing development.
Outward migration requires new infrastructure and results in abandonment. Inward investment reuses existing infrastructure and reduces abandonment.

**what if we BUILD OUTWARD?**

2013 → 2040

Outward = New development away from already established communities

- **Creates homes with large lots**: Outward development creates a supply of suburban and rural houses with large lots.
- **Provides opportunities for non-urban lifestyle**: The new communities created offer opportunities for a “fresh start” away from the denser urban areas.
- **Requires investment in new infrastructure**: New construction outside of established communities requires building and maintaining new infrastructure—roads, sewers, and utilities.
- **Presents abandonment risk**: As residents leave old communities for new ones, if no one moves in to take their place, vacancy and abandonment occur.
- **Impacts rural character and agriculture land**: Outward migration puts increased development pressures on agricultural land and environmentally sensitive areas.

**what if we BUILD INWARD?**

2013 → 2040

Inward = New development in already established communities

- **Reuses existing infrastructure**: Inward growth can take advantage of existing utilities, sewers, and transportation networks to save tax payers money.
- **Reverses abandonment**: New construction and rehabs within established communities reverses abandonment and stabilizes neighborhoods.
- **Protects rural land**: Farms, open space, and small towns see less development pressure if development is focused in existing, more urban communities.
- **Increases populations in urban areas**: Land values rise with inward growth, making it more expensive to afford large lots and yards. There would be more people living near each other.
SHOULD WE DEVELOP INWARD OR OUTWARD?
PUBLIC INPUT

At the Open Houses, participants were asked to what extent future development should be outward-focused versus inward-focused. The scenarios show some of the impacts and trade-offs of this decision. Another board presented the pros and cons of each viewpoint. Attendees were asked to sketch on a dial to show how they think the region should develop.

The results were overwhelmingly in favor of an approach that prioritizes inward development. The average response was that inward development should be slightly more of a priority than it had been in Do Things Differently and Grow Differently. Summaries of feedback are shown below. For more details about the feedback, visit http://vibrantneo.org/.

How to read the dials:
The dials represent a spectrum of positions on a certain topic. The ends of the dials represent the extremes. The dials on this page deal with the topic of building outward versus inward. An arrow on the left side means that all new construction happens on previously undeveloped land, while an arrow on the right side means that all new construction happens within areas that are currently developed. Dials on later pages focus on different topics.

The dashed lines on the dials show where the four scenarios fall along the spectrum of positions. Trend and Grow the Same share the same position, since they have the same policies, and likewise for Do Things Differently and Grow Differently. Open house attendees were asked to draw their own arrows on the cards to reflect their personal view about the topic. The heavy arrow shows the average regional response. In this case, the average attendee preferred building inward at a slightly higher level than Do Things Differently and Grow Differently, and at a much higher level than Trend and Grow the Same. The pie slice around the thick arrow shows the range of average responses by location.

Sample Comments
“Building outward and/or inward should be up to the free marketplace”
“I think we can grow differently and build outward”
“Both are needed, but rebuilding our core needs to be done first”
“People may think that a pro-urban perspective and pro-rural/agriculture perspective are different, but the same policies that are good for one are also good for the other and vice versa”
“Focus on what we have, don’t spread outward”
“Since Cleveland’s infrastructure is built for over a million people, reusing existing infrastructure makes financial and environmental sense”
THEME 2: PLACE TYPES AND COMMUNITY CHARACTER

Development styles have shifted in the region away from smaller lot, compact, mixed-use urban neighborhoods to more dispersed, auto-oriented subdivisions, separated from office parks and shopping centers. The character of communities has a significant impact on quality of life for residents. The scenarios demonstrate a range of alternatives for how future development could look. Should the predominant style of development continue the dispersed pattern of recent decades (like Trend and Grow the Same)? Or should new development include a higher percentage of compact options and focus on reinvesting in established communities (like Do Things Differently and Grow Differently)?

Place types and community character vary across the four scenarios. In the Trend and Grow the Same scenarios, dispersed development predominates. The Grow Differently and Do Things Differently scenarios have a higher proportion of compact development; the balance of Development Types shifts among the scenarios.

The Community Character and Place Types station at the Open Houses featured two ways to provide input—one focused on Place Types, and the other focused on community descriptions.

Gathering feedback on these topics enabled the Project Team to understand questions like:

- If everyone lived in their ideal community, how much of the region would be compact versus dispersed? What percentages of neighborhoods are preferred to be walkable and bikeable?
- How does this compare with the region today or the alternative scenarios?
- What kinds of new development are needed to get the region to the Vision?

PLACE TYPE PREFERENCES: PUBLIC INPUT

The Project Team categorized the communities of Northeast Ohio according to six Place Types:

- Legacy Cities
- 1st Ring Suburbs
- 2nd Ring Suburbs
- Outer Ring Suburbs
- Established Cities and Towns
- Rural Townships

These Place Types let us see how similar communities face in the scenarios and provide a framework for implementation.

Boards presented images of the six Place Types and asked participants to identify which Place Types they use, value, and enjoy, and which Place Types the region should invest in. The top three Place Types in which the participating public felt the region should invest were legacy cities, 1st ring suburbs, and established cities and towns. These preferences are consistent with desires for investing in established communities expressed by participants during the Trend Scenario Workshops.

3 For more information about these categories, see the Technical Appendix online.
Open House participants expressed a strong desire for investment in legacy cities, 1st ring suburbs, and established cities and towns.

- Legacy Cities (Pre 1910) - City Architecture
  - 95%
- 1st Ring Suburbs (1910–1959) - City Architecture
  - 86%
- 2nd Ring Suburbs (1950–1969) - City Architecture
  - 91%
- Outer Ring Suburbs (1970–present) - City Architecture
  -
- Established Cities and Towns (varies)
  - Sasaki Associates
  - 95%
- Rural Townships (varies)
  - http://www.flickr.com/photos/kenlund/7984528214/
  - 91%

A significant drop-off was observed from the top 3 to the next highest selection, which was Rural Townships with 59%. A complete set of public feedback is available online at http://vibrantneo.org/
**DISPERSED PATTERN?**

- Homes tend to be single-family with large lots
- Destinations have ample parking
- Separation of land uses: retail, commercial, and housing are all located away from each other
- It is necessary to own a car to get around
- Homes are often far away from work and shopping, which sometimes causes long commutes
- A sprawl development pattern cannot support public transportation
- The separation of uses, larger lots, wider roads, and large parking lots of dispersed growth require a greater number of acres per household than compact development.
- From a public perspective, infrastructure costs are high and per-acre tax revenues are low.

**COMPACT PATTERN?**

- Destinations are nearby, with shopping and work potentially within walking or biking distance
- Mix of land uses: retail, commercial, and residential within the same neighborhood
- Mix of housing: single family homes, townhouses, and apartment buildings
- Compact development patterns provide the density necessary to support public transportation
- From a public perspective, infrastructure costs are lower and per-acre tax revenues are higher.
- The same amount of money will buy less land in a compact vs dispersed community

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**Dispersed development offers more space, separates land uses, and focuses on the car; compact development is closer together, has a greater mix land uses and is more conducive to walking, biking, or taking public transportation.**
What is Your Ideal Community?

Public Input:

Using another set of feedback dials, the Project Team asked attendees to describe three aspects of their ideal community along the following spectra:

- Separate uses versus mixed-use?
- Dispersed development versus compact development?
- Car-oriented versus walking and bicycling?

The results show overwhelming support for compact, mixed-use communities that are designed to encourage walking and bicycling. These results align with the place type results that showed strongest interest in investing in legacy cities, 1st ring suburbs, and established cities and towns. These kinds of places are most like the ideal compact communities described by participants in their sketches and comments.

Sample Comments

- “My ideal community is where I live. If we all live where we want to then together we will have the NEO that we want.”
- “The reason I picked the middle road is that change comes slowly with people. Though I am for the different results we must change slowly!”
- “Remake our idea of cities. 20th Century model does not work well.”
- “Intersperse the quiet, leafy communities with much improved mixed-use communities. Add lots more green infrastructure and open space into run-down commercial zones.”
- “It’s all a balancing act.”
- “Vibrant urban. Livable, walkable, healthy community with naturalized green space, permaculture, urban food forests, artists!”
- “Community, community, community. We need to bring people back together.”
- “City life is fun, but I will eventually want my own space/house. Walkability is critical.”
- “Think eco-friendly and density.”
- “Walkable communities are healthier.”
- “Is this a new community? Or are we looking to retrofit our current communities? The reality is that there are so many communities that were not designed for what we all think is ideal.”
THEME 3: TRANSPORTATION

The scenarios test two different transportation approaches: one that emphasizes auto-oriented investment, and a second that emphasizes transportation choice, balancing cars with walkability and public transportation. These approaches affect more than just the ways that people move around: transportation is a major factor that influences and responds to the look and feel of a place, its land uses, and the kinds of development that take place.

The strategy behind the transportation network in the Trend and Grow the Same Scenarios is a continuation of current transit service and an investment in new roads, road expansions, and new interchanges to service the development at the edges of today’s urbanized area. These investment priorities are consistent with the dispersed, auto-oriented development found in the Trend and Grow the Same scenarios. Prioritizing road infrastructure and dispersed development has the impact of increasing car reliance. Without density, transit service is not viable in new neighborhoods. Destinations generally become more spread apart. In these scenarios, residents spend more time in their cars getting between destinations.

The Do Things Differently and Grow Differently Scenarios represent significant additional investment in public transportation and pedestrian and bicycle infrastructure. Commuter rail connects communities along Lake Erie and south from Cleveland down to Canton. Express bus and bus rapid transit connect many of the smaller communities around the Cleveland, Akron, and Canton metro areas and a commuter bus line extends from Akron to Youngstown and Warren. These routes connect current job and population centers and serve as anchors for future compact, transit oriented development in the Do Things Differently and Grow Differently scenarios. In these scenarios, a greater percentage of homes and jobs are within a 5 or 10 minute walk of frequent public transit service. This gives more residents the option to get around the region if they cannot or choose not to drive for some of their trips.

The emphasis on compact development in and near established communities and job centers means that destinations are generally closer together. In compact, mixed-use neighborhoods, residents can walk or bicycle to nearby restaurants and shops. In addition to the expanded public transit options, developing additional greenway links will create a connected regional greenway network (see the next section, Theme 4: Open Space, for a network map). These greenways provide trail access for bicyclists and pedestrians between neighborhoods, Lake Erie, and other parks, conservation areas, and public open spaces.

### PUBLIC TRANSIT ACCESS

<table>
<thead>
<tr>
<th></th>
<th>CURRENT CONDITIONS</th>
<th>TREND</th>
<th>GROW THE SAME</th>
<th>DO THINGS DIFFERENTLY</th>
<th>GROW DIFFERENTLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Population with frequent transit access</td>
<td>32.5%</td>
<td>25.5%</td>
<td>25.2%</td>
<td>35.1%</td>
<td>34.3%</td>
</tr>
<tr>
<td>Percent Jobs with frequent transit access</td>
<td>49.8%</td>
<td>40.8%</td>
<td>39.4%</td>
<td>50.0%</td>
<td>52.9%</td>
</tr>
</tbody>
</table>

Data Source: Sasaki Associates, Fregonese Associates, Nelson\Nygaard; current data from ODOT and region MPOs

Bikes and walking aren’t just recreational; they can also be viable means of commuting.

Public transit is not the only alternative to commuting with a car. Bicycling and walking offer active options for getting to work. Currently, less than 3% of NEO residents commute by bicycle or on foot. This number could grow significantly as expanded trails, bicycle lanes, and sidewalks improve safety for bicyclists and pedestrians. Walking and bicycling offers health benefits, reduces air pollution, and costs significantly less than driving.

Grow Differently and Do Things Differently help expand opportunities for bicyclists and pedestrians by increasing compact, mixed-use development (putting more homes and destinations within convenient walking or bicycling distance) and expanding the walking and bicycling trail network.

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1. Includes bus routes with 15 minutes or less between buses; express bus stops; BRT stations; and commuter rail stations
2. ACS 2011, 5 year estimates
TREND AND GROWN THE SAME: PUBLIC TRANSPORTATION NETWORK

- Existing rail or bus rapid transit*
- Existing bus
- Existing interstate or major highway
- Metropolitan areas (no proposed new public transit)

* A high-speed bus with its own dedicated lane or roadway that makes limited stops.
DO THINGS DIFFERENTLY AND GROW DIFFERENTLY: PUBLIC TRANSPORTATION NETWORK

- Proposed new rail
- Proposed new bus rapid transit*
- Proposed new express bus
- Existing rail or bus rapid transit*
- Existing bus
- Existing interstate or major highway
- Metropolitan areas

* a high speed bus with its own dedicated lane or roadway that makes limited stops
* a commuter bus with limited stops that drives in normal traffic
What are the outcomes of different development patterns and transportation networks from a household or regional perspective? While the differences in vehicle miles traveled (VMT) between the scenarios might seem minimal, in fact, to the average household it’s actually quite substantial. The difference between Grow the Same (25.4) and Grow Differently (22.0) is 3.4 miles per household per day. Over a year, this translates to an additional 1,241 miles per household. According to USDOT, the average annual miles per vehicle is 12,334, so the way we grow translates into 10% of our annual driving. Reducing the amount of time in a car by 10% means that an individual has more spare time to do other things. Helping households save money, fewer miles each day on a car also can help extend the life of a car by reducing general wear and tear. Also, according to Consumer Reports, the average life expectancy of a new vehicle is around 8 years (96 months). For those whose new car fits this average, the difference in mileage would mean getting almost an extra year of use out of a new car.

From a regional perspective, these few extra miles by each household each day add up to a significant total across the region. More miles driven directly relates to the air emissions and quality of roads.

<table>
<thead>
<tr>
<th>AVERAGE DAILY HOUSEHOLD VEHICLE MILES TRAVELED (VMT)</th>
<th>TREND</th>
<th>GROW THE SAME</th>
<th>DO THINGS DIFFERENTLY</th>
<th>GROW DIFFERENTLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily vehicle miles traveled per household</td>
<td>23.7</td>
<td>25.4</td>
<td>22.5</td>
<td>22.0</td>
</tr>
<tr>
<td>Total daily regional household vehicle miles traveled</td>
<td>59.1 mil</td>
<td>50.3 mil</td>
<td>37.1 mil</td>
<td>43.6 mil</td>
</tr>
</tbody>
</table>

Data source: Fregonese Associates

Public Transit Costs and Benefits: Cleveland HealthLine Case Study

Expanding public transit does require significant capital investment; however, the potential advantages of a well-planned project are often greater than the costs. Public transit benefits include:

- Connecting people and jobs
- Improving mobility for people of all ages
- Stimulating and focusing new development on sites near transit
- Creating and supporting jobs by providing a reliable alternative to driving
- Moving more people in the same amount of road space
- Improving air quality and reducing greenhouse gas emissions
- Reducing household transportation costs

Cleveland’s HealthLine, a Bus Rapid Transit system between downtown Cleveland and University Circle, provides an example of capital costs compared with economic returns. The 9.38 miles long system includes 36 stations. Ridership has increased steadily since the system opened in 2008. 48.2 million passenger trips were taken in 2012, a 5% increase over 2011.

- Capital Costs: $200 million total ($168.4 million for the transit component and $31.6 million for non-transit improvements, including sidewalks, utilities, and public art)
- Economic Benefits: Since the HealthLine opened in 2008, the corridor has attracted $5.8 billion in investment ($3.3 billion for new construction and $2.5 billion for building rehabilitation), generated $62 million in local taxes, and created 13,000 jobs.

Bibliography:
RTA HealthLine Fact Sheet (http://www.rtahealthline.com/projectoverview.asp)
GCRTA
“Transit as Transformation: The Euclid Corridor in Cleveland” (http://ntl.bts.gov/lib/45000/45700/45740/Cleveland-euclidcorridor.pdf)
“Healthline Drives Growth in Cleveland” by Jason Hellendrung (http://urbanland.uli.org/Articles/2012/July/HellendrungHealthLine)
HOW SHOULD THE REGION INVEST IN TRANSPORTATION IN THE FUTURE?
PUBLIC INPUT:

Should the region continue to prioritize auto-oriented infrastructure, or should it expand transportation options for multiple modes? We asked participants at the Open Houses these questions. Participants were asked to sketch on a dial to show their transportation investment preference: more auto-oriented focus versus multiple modes of transportation including walking, bicycling, and public transit. The results overall tended toward expanding transportation options to include alternative modes, but the comments were nuanced.

Some participants felt that public transit may not be appropriate everywhere in the region and noted that rural areas would be less likely to have frequent transit service. Many comments emphasized the importance of distinguishing between investments needed to maintain existing road infrastructure and those needed to add new road infrastructure. Comments showed strong support for maintaining existing roads (and bridges) and less support for roadway infrastructure expansion. Comments reflected the participating public’s desires for a balanced approach to transportation that expands options for public transit, walking, and bicycling while maintaining existing roadway infrastructure.

Sample Comments

“We already spend far too much on roads and far too little on transit. I would like a real choice when it comes to living without a car.”

“Transit infrastructure is critical to economic development. Not everyone can afford a car. Most people have to work.”

“We need all types of transportation.”

“Our auto-oriented infrastructure is deeply engrained in NEO. That won’t change quickly. Any growth we have requires upgrades to our abysmal roads/bridges - not necessarily new miles but “new” (revamped) miles.”

“I like the idea of getting somewhere on my own.”

“Put the $ in - Urban: bus, Rural: Car”
Scenarios resulted in land being conserved but also land being developed. As a result of the efforts of groups like Western Reserve Land Conservancy, Trust for Public Land, the American Farmland Trust and the Nature Conservancy, land conservation has been increasing in the region. At the same time, development continues to adversely impact rural and agricultural landscapes that are valued by Northeast Ohio residents. Natural areas conservation and environmental impacts from development are factors that vary across the scenarios.

**All scenarios see significant increases in conservation relative to today.** Currently 7–8% of the region is conserved; in the scenarios, by 2040, the amount of the region conserved varies from 10% (Trend and Grow the Same) to 15% (Do Things Differently).

The quantity of new urbanized land also varies across the scenarios. Grow the Same, with its focus on outward development, results in roughly twice as many new urbanized acres as the Trend Scenario. Do Things Differently’s focus on infill and reinvestment results in essentially no additional outward spread of urbanization.\(^\text{10}\) Grow Differently has the same population increase as Grow the Same, but it results in roughly half as many new urbanized acres as Grow the Same.

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**Parks & Conservation Land**

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\(^{10}\) The slight dip in urbanized land of Do Things Differently relative to current conditions is a result of conservation that includes some abandoned land. This conservation results in a reclassification of previously urbanized land into “Parks and Conservation.”

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**Changes in open space and urbanized land across the scenarios**

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Existing Conditions: 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>19.3% 13.7% 8.4% 17.1% 38.4%</td>
</tr>
<tr>
<td>“Trend” Scenario</td>
<td>21.5% 15.3% 11.6% 14.3% 34.1%</td>
</tr>
<tr>
<td>“Grow the Same” Scenario</td>
<td>18.9% 12.5% 15.9% 14.8% 34.7%</td>
</tr>
<tr>
<td>“Do Things Differently” Scenario</td>
<td>20.4% 12.8% 13.9% 14.5% 36.2%</td>
</tr>
<tr>
<td>“Grow Differently” Scenario</td>
<td>177,000 acres 276,000 acres 398,700 acres 564,600 acres 618,600 acres</td>
</tr>
</tbody>
</table>

Developing an additional 1% of the region may not seem like a big deal, but in a 12 county region, 1% is a lot of land (38,400 acres). 1% is a little larger than Cuyahoga Valley National Park (33,000 acres).
EXPANDED CONSERVATION, PARKS, AND GREENWAY NETWORKS

The additional funding and the political will assumed in Do Things Differently and Grow Differently enable a more holistic approach to conservation than Trend and Grow the Same. This approach prioritizes:

- River and stream corridors and other water bodies
- Large patches of land that are suitable for protecting wildlife
- Linkages between existing parks and protected areas, especially between Lake Erie and areas further south

Do Things Differently and Grow Differently also have a significantly expanded greenway network, which includes trails for walking and bicycling. The greenway network is based in part upon sketches from the mapping exercise made during Trend Scenario Workshops. This network builds upon national, state, and regional trails and joins them into a connected system.

CONSERVATION, PARKS, AND GREENWAY NETWORKS IN THE SCENARIOS

Grow the Same

- Parks and Conservation
- Agriculture
- Other Undeveloped
- Water Bodies
- Greenways
- Development

Grow the Same has the same emphasis on outward development as Trend, but higher growth in this scenario reduces the amount of abandonment in existing communities.

Trend

- Parks and Conservation
- Agriculture
- Other Undeveloped
- Water Bodies
- Greenways
- Development

Trend has a nearly stable population but sizable growth away from existing communities. As a result, abandonment is highest.

Grow Differently

- Parks and Conservation
- Agriculture
- Other Undeveloped
- Water Bodies
- Greenways
- Development

Grow Differently has the same increase in population and jobs as Grow the Same and the same focus on reinvestment as Do Things Differently. As a result, abandonment is the lowest.

Do Things Differently

- Parks and Conservation
- Agriculture
- Other Undeveloped
- Water Bodies
- Greenways
- Development

Do Things Differently focuses new development in and near existing areas. Abandonment is significantly lower than “Trend” even though there is no additional population growth because there are fewer “extra” housing units constructed.
GREENWAYS IN DO THINGS DIFFERENTLY AND GROW DIFFERENTLY

- Lakes and Ponds
- Rivers
- Parks and Conservation Land
- Metropolitan areas

Greenways Status:
- Unknown
- Planned, Conceptual, or Under Development
- Existing
- Project Team Proposed
**ENVIRONMENTAL IMPACTS OF DEVELOPMENT**

Each new house or other building constructed has some impact on the regional environment. Homes and their residents generate energy, produce greenhouse gases, and generate transportation trips. The quantity of these impacts depends on the type of construction. **On average, compact development has a lower environmental footprint per capita than dispersed development. The impact also increases as more homes, shops, restaurants, and office structures are built.**

The character and quantity of development varies across the four scenarios, and as a result, so does the environmental impact. The Grow the Same Scenario has the highest energy use and greenhouse gas emissions of the scenarios (highest amount of construction total and high percentage of dispersed development); the Do Things Differently Scenario has the least (lowest amount of new construction and high percentage of compact development).

The type and extent of development also affects water quality, wildlife, and farmland. When homes are built away from established communities, they typically replace farms or natural areas. This creates a shift in land cover, from a soft, absorptive landscape to one with a higher percentage of hard, impervious surfaces like roofs and driveways. If the new house is built where a forest or meadow previously existed, the change also reduces the amount of habitat available for local wildlife and migrating species. As more development occurs in a somewhat scattered pattern, fragmentation and shrinking of habitat increase. These impacts are not just issues in rural areas. In developed areas as well, new construction changes land cover and can have some of these same impacts.

Beyond economic and environmental considerations, farmland and natural areas are valued by residents for their natural beauty and visual significance as part of the landscape. For this reason, development is also a cultural phenomenon. Grow the Same, for instance, results in the loss of 60,000 acres of prime farmland in the region, nearly twice the size of Cuyahoga Valley National Park (33,000 acres).

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**Scenario impacts on energy use and greenhouse gas emissions:**

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Energy Use from new development (BTU / year)</th>
<th>Carbon Emissions from new development (Tons CO₂ / year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Trend”</td>
<td>29.3 billion (average 98,700 per housing unit and 16,000 per job annually)</td>
<td>2.7 mil (average 9.3 per housing unit and 1.5 per job annually)</td>
</tr>
<tr>
<td>“Grow the Same”</td>
<td>62.8 bil (average 99,300 per housing unit and 17,200 per job annually)</td>
<td>5.9 mil (average 9.3 per housing unit and 1.6 per job annually)</td>
</tr>
<tr>
<td>“Do Things Differently”</td>
<td>11.0 bil (average 75,400 per housing unit and 17,700 per job annually)</td>
<td>1.0 mil (average 7.0 per housing unit and 1.7 per job annually)</td>
</tr>
<tr>
<td>“Grow Differently”</td>
<td>46.8 bil (average 81,500 per housing unit and 18,700 per job annually)</td>
<td>4.4 mil (average 7.6 per housing unit and 1.7 per job annually)</td>
</tr>
</tbody>
</table>

11 “Pervious” landscapes like meadows and forests act like sponges and absorb stormwater when it rains. In contrast, “impervious” surfaces like driveways and roads do not absorb stormwater. Increased stormwater runoff can cause erosion, increase the risk of flooding, and lower water quality.
Waterbodies are impacted by new development. Waterfront development presents a competing set of tradeoffs. While sites adjacent to lakes, rivers, and streams are often favored for their scenic views, developing in them can expose structures and their occupants to flooding risk, impair water quality, and impact other ecological functions. The scenarios provide alternative options for development in relation to the region’s water bodies. Development regulations are unchanged from 2013 in the Trend and Grow the Same scenarios, but are tightened in sensitive areas immediately adjacent to water bodies in Do Things Differently and Grow Differently.

12 For example, the land and vegetation next to water bodies: 1) are an important part of the habitat (home area) for turtles and other animals; 2) filter excess nutrients like nitrogen and phosphorous from stormwater, which helps keeps water quality high and reduces algae; 3) trap erosion and keep sediment from reducing water clarity; and 4) shade waterbodies, which helps maintain water temperature.

**ENVIRONMENTAL AND LANDSCAPE IMPACTS IN THE SCENARIOS**

**New impervious land cover**

**Loss of prime agricultural land**

**River corridors and water bodies impacted**

The Do Things Differently and Grow Differently scenarios do not allow development too close to waterbodies.
Discussions about development regulations are often contentious, so the Project Team sought public input to guide the eventual Recommendations in the Vision. Northeast Ohio has a sufficient supply of developable land that is already served by infrastructure to accommodate the regional growth anticipated in any of the four scenarios without impacting sensitive ecological land or high value farmland. We asked open house attendees how they felt about this question: “Should we relax or strengthen environmental regulations on development?” The results at all Open Houses were overwhelmingly in favor of protecting sensitive environmental areas by limiting development in them.

Comments by participants that voted in favor of no development regulations cited private property concerns and a view that regulation is not the best way to achieve environmental goals. Participants that voted in favor of a middle-approach felt that location is not the only factor that matters for environmental impacts and that there should be a balance. Participants who voted in favor of restricting development in environmentally sensitive areas gave a variety of reasons: to mitigate flooding and flood damage, improve environmental health, protect watersheds, and conserve open space and agricultural land. Citing the available land available in established communities, comments also touched on the link between inward/outward development and environmental resources.
Sample Comments

“We have wasted prime agricultural lands. Ohio is blessed with fertile soils when compared to the rest of the world and they should be protected. We are also wasting our historic built environment which is an underused asset that can be leveraged for population growth.”

“We have lots of land to use. We need to protect our environmentally sensitive areas!”

“I’m not a tree hugger but you have to take care of the environment and use good judgment.”

“Housing typology needs to change not necessarily where we build.”

“Extreme government regulation is almost never the best way. Building first class educational, amenity, and infrastructure (and transit) in areas of desired growth is a better choice. Preserve liberty.”
THEME 5: FISCAL HEALTH

The different development patterns and infrastructure investments shown in the four scenarios produce significantly different outcomes for public budgets and ultimately the taxpayers. Key driving factors for fiscal impacts are abandonment, infrastructure costs (capital expenditures and operations/maintenance spending), and tax revenue.

What do these graphs mean?

Green = Fiscally Strong
- Values greater than 0 mean that the government is bringing in more revenue than it is spending
- These budget surpluses indicate more money is available to finance new infrastructure projects, fund school systems, and maintain existing infrastructure

Red = Fiscally Weak
- Values less than 0 mean that the government is spending more money than it is bringing in
- These budget deficits could mean higher taxes or decreased levels of service

TREND (RECAP)

To review from the previous section, the Trend Scenario results in negative fiscal impacts across the region. All counties experience declining revenues compared with costs, and the most fiscally strong county in 2040 is weaker than the weakest county today. These changes are driven by a stagnant regional economy, high infrastructure costs, and high abandonment rates.
Grow the Same, with its increase in people and jobs, brings financial benefits when compared to the Trend Scenario. This change, however, does not solve all of the region’s fiscal challenges: most counties are still operating under higher deficits than they are today. There is still an increased disparity between fiscally strong and fiscally weak counties relative to today’s distribution. While some counties do very well, others do very poorly.

It might be surprising that the counties that generally benefit from the growth scenario are the places that are not growing. Counties that saw high levels of abandonment in the Trend Scenario perform better in the Grow the Same Scenario because abandonment is cut in half.

Growth, over the long-term, tends to challenge budgets most in counties that are growing. Some of the additional residential growth, particularly in the form of dispersed, auto-oriented development, creates long-term costs that outweigh the revenues generated. Many of the counties that are likely to be “in the red” tomorrow are relatively rural today. In the Grow the Same Scenario, they are projected to experience an influx of people by 2040. Building and maintaining infrastructure is expensive. In order to pay for the infrastructure and services required to support the new population, these counties face the challenge of either increasing their tax rates or changing their land use policies and development patterns.

Do Things Differently shows how the region could improve fiscally, even if growth remains relatively flat (as it does in the Trend Scenario). The focus on reinvestment in this scenario helps the region perform better overall financially than it does in either Trend or Grow the Same scenarios. This scenario also has the least variation between the fiscally strongest and weakest counties. The improvements associated with the new policies and investments incorporated in the Do Things Differently Scenario have nearly twice the magnitude of those created simply by adding more people and jobs (as seen in the Grow the Same Scenario). Almost every county improves compared to today as well.

This scenario performs well from a fiscal perspective because it:

• Takes advantage of infrastructure that has already been built and capitalizes on legacy industrial sites as unique assets for future industry job growth
• Expands compact development with improved transit access; for this kind of development, revenue typically exceeds costs
• Includes only a minimal increase in new abandonment and focuses on redeveloping current abandoned parcels

14 The two counties that do not improve relative to today only marginally decrease (no more than 1 percentage point change from today). Compared to the Trend Scenario, however, these counties improve significantly (at least 9 percentage point increase)
Grow Differently combines the higher employment and population totals of Grow the Same with the different set of policy priorities of Do Things Differently. This scenario results in the highest revenues relative to costs for the region overall, although the improvement over Do Things Differently is slight. The distribution of outcomes at the county level is more uneven than Do Things Differently but less extreme than Grow the Same.

What is driving these changes? This scenario takes advantage of the same system efficiencies as Do Things Differently, but to a higher degree. After a certain point, the gains created from this approach level off, as seen in the small jump between Do Things Differently and Grow Differently. Even though this scenario has the best overall fiscal outcome, some counties remain “in the red” in 2040 (worse than they were in the Do Things Differently Scenario). These tend to be counties that are rural today but are growing rapidly relative to their existing population. For those communities, this scenario does not mean that a balanced budget is out of reach: it means that it will be difficult for them to add population and maintain the same tax structures, land use policies and development patterns as today, and still balance their budgets.
OVERALL PUBLIC FEEDBACK

The different theme-based stations at the Open Houses enabled the Project Team to gather independent public feedback on the separate inputs that influenced the scenarios. In reality, however, these inputs do not operate completely independently; instead, many aspects are linked. For instance, it would be very difficult to expand public transit if all new development were dispersed. For this reason, gauging overall reactions to the scenarios was critical. The idea was not to ask a people to "vote" on their favorite scenario, but to understand better which aspects of each scenario aligned well or poorly with an individual’s vision for Northeast Ohio. The Project Team sought to learn which aspects of the scenarios were most important to individuals, and how they decided among trade-offs.

The results of this concluding survey revealed strong interest in a “different” course of action. Do Things Differently and Grow Differently aligned well with the majority of participants’ vision for the region (82% and 62% gave these respective scenarios at least a 4 on the overall summary card). Attitudes about growth were more divided. Grow the Same aligned with the fewest percent of participants (only 7% gave this scenario a 4 or more). Some comments questioned whether the region really needed more people; others asked whether expecting growth was realistic. Other participants felt that growth was important to bring new people, jobs, and ideas to the region.

Overall open house feedback and comments indicate that the top priorities for participants were:
• Reinvesting and reusing existing land and infrastructure
• Creating opportunities for increased public transit, but still providing sufficient investment to maintain existing road infrastructure
• Preserving natural areas and farmland
• Creating a diversity of communities, with a special emphasis on ones that offer a mix of uses in a compact, walkable, and bikeable setting

Overall Scenario Feedback Card

1. On a scale of 1-5, how well does each scenario align with YOUR VISION for the future of Northeast Ohio?
   "Grow the Same" Scenario
   Why?
   "Grow Differently" Scenario
   Why?

2. In your evaluation of the scenarios, which element(s) matter the most?
   • 79 total cards were submitted

WHICH THEMES MATTERED MOST TO PARTICIPANTS AS THEY FILLED OUT THEIR SURVEYS?

<table>
<thead>
<tr>
<th>% RESPONDENTS WHO SELECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jobs and Fiscal Health</td>
</tr>
<tr>
<td>Development and Community</td>
</tr>
<tr>
<td>Transportation</td>
</tr>
<tr>
<td>Open Space and Environment</td>
</tr>
<tr>
<td>Outward Migration</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

Alternative Scenarios 79
**ALIGNMENT BETWEEN THE SCENARIOS AND THE ATTENDEES’ VISIONS FOR NORTHEAST OHIO**

### TREND

#### WHY DID ATTENDEES THINK THIS SCENARIO ALIGNED...

**WELL**
- "Freedom to move where we want to."
- "Not my preferred, but this will be what happens if we do not break the cycles of cynicism, apathy and insular non-cooperation."

**NEUTRAL**
- "Reality if we do nothing."
- "Good things are happening, but I would like things to be more progressive."

**POORLY**
- "Enormous problems in all areas covered — transportation, housing, environment, etc."
- "Destroys excellent assets we already have."
- "It does not appear though good things will come out of staying on the same path."
- "It’s not working now. Why would it in 2040?"
- "Challenges remain unsolved, the burden that outward migration places on creating new, expanded infrastructure concerns me."
- "I don’t want to live next to even more vacancy and blight."

### GROW THE SAME

#### WHY DID ATTENDEES THINK THIS SCENARIO ALIGNED...

**WELL**
- "Not my preferred, but this will be what happens if we do not break the cycles of cynicism, apathy and insular non-cooperation."
- "Maximum freedom."
- "Free market is the American way."
- "That is what made this country great."

**NEUTRAL**
- "Better than trend. But not good enough."
- "Growth fixes/masks a lot of problems. Not ideal, but unplanned growth is better than planned decline."

**POORLY**
- "Too much outdated infrastructure, agricultural and natural areas cost, too much driving miles and new roads. Challenges in NEO remain unsolved and perhaps intensify."
- "I can’t see anything on the horizon that leads me to believe that we are going to experience significant growth."
- "It exacerbates income inequality—products of affluence verses pockets of non-affluence."
- "Extremely fiscally and environmentally irresponsible."
- "Continuing what we have done for much of the 20th century makes no sense. Look what “grow the same” has brought us."

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15 LCCC = Lorain County Community College; Ashtabula-KSU = Kent State University Ashtabula Campus; Cleveland PL = Cleveland Public Library; Portage KSU = Kent State University Main Campus in Kent, OH
DO THINGS DIFFERENTLY

WHY DID ATTENDEES THINK THIS SCENARIO ALIGNED...

WELL

- “Greater conservation and improved fiscal performance (cost to revenue).”
- “Best result—not perfect for jobs and home abandonment, but the most sustainable option.”
- “Almost equal fiscal impacts with much less environmental/resource/land use impact.”
- “Maximizes existing resources.”
- “This is the best option. It minimizes sprawl more than any of the others.”
- “I’d like to think that if we do the right thing we’ll have greater population growth. Plus, we already have the infrastructure for a larger population.”

NEUTRAL

- “Growth brings innovative new ideas that would further help the region.”
- “Improvement without growth is still an improvement.”
- “Ho hum. We could be more intentional and visionary.”
- “Doing things differently is great, but without the growth it won’t mean as much.”

POORLY

- “Too environmental.”
- “Bureaucratic.”
- “This is the one I would love to see, but would be the hardest to achieve.”

GROW DIFFERENTLY

WHY DID ATTENDEES THINK THIS SCENARIO ALIGNED...

WELL

- “I am interested in growing our urban centers and preserving open space.”
- “I like the growth and doing it compactly. I don’t know if we can expect or need to strive for national population and job growth.”
- “Mostly good. Smart growth. Not sure I’d want us to grow as much as the predictions in this scenario, but the policies it envisions are good.”
- “Not optimistic enough.”
- “Improves transportation and saves green spaces while maintaining suburbs.”
- “I feel this scenario makes the most out of what already exists.”

NEUTRAL

- “It would be nice if we experienced significant growth, but it seems unlikely.”
- “We don’t really need more people. I like mid-sized.”
- “OK, but too much emphasis on growth alone.”

POORLY

- “Adaptive re-use of what we have makes more sense.”
- “I do not believe that more lands needs to go to parks.”
- “Bureaucratic.”
- “No point in adding more space when we haven’t managed what we have well.”

SCENARIO REACTIONS BY LOCATION

Open House Location

- Cleveland Zoo
- LCCC
- Wilkowick
- Akron-Urban
- Youngstown
- Canton
- Portage-KSU

Regional Median Response (4.1)
CROWDSOURCED PRIORITIES: IMAGINEMYNEO

As another way to explore the topics and trade-offs discussed at the Open Houses, the Project Team created an online platform called ImagineMyNEO. The tool was designed to elicit priorities, communicate the impacts of policies and investments on those priorities, and to gather feedback about preferred future directions for the region. The tool debuted for public use in June 2013, and the Project Team presented the initial results at the Open Houses. These results included 1,458 unique respondents, 1,365 of which were Northeast Ohio residents at the time of completion.

HOW DOES IMAGINE MY NEO WORK? STEP 1: PRIORITIZATION OF VALUES

ImagineMyNEO first asked users to identify their priorities for the future. Priorities were described in the form of a list of present-tense statements describing attributes of a community. This enabled users to consider each statement from the perspective of either wishing to preserve a current attribute of the community/region, or to describe an ideal future condition of the community. Users gave anywhere from zero to five stars to the priorities they value most. A dynamic display of icons shifted with the user’s scoring of each statement, yielding a composite, icon-based visualization of their individual priorities.

ImagineMyNEO Priorities Screen
The results from the priorities section of ImagineMyNEO were consistent with the feedback received from other public engagement sessions, with a notable emphasis on environmental themes such as preserving and enhancing the quality of the Northeast Ohio’s air, water, and land resources. This theme was the top priority for 10 of the 12 counties in the region. Economic prosperity was the second highest priority. Rounding out the top priorities were the following: community character, access to arts and entertainment, and quality public parks and infrastructure.

Regional Priorities
HOW DOES IMAGINE MY NEO WORK?

STEP 2: EXPLORING IMPACTS

After staring priorities, users could then learn how different planning policies and projects impact each of their priorities. “Policies” were actions taken by local governments to shape outcomes in the built environment, whereas “projects” were direct actions with a specific, material outcome. The color of icons shifted as users clicked on policies, with the intensity of color indicating a positive, neutral, or negative impact of a project or policy on the full set of “priorities.” Clicking on the priority icon revealed a written explanation of how the project or policy impacts that specific priority, providing an opportunity for the user to learn about the consequence of a choice to “invest” in a particular policy or project.

STEP 3: PUT YOUR MONEY WHERE YOUR MOUSE IS

In the final stage of the tool, users chose specific projects and policies in a budget-constrained environment. Similar to the second screen, the color of the priority icons changed to reflect their relationships with the selected project or policy. Once complete, users could share their selections via social media and compare their answers with other residents of the region using a map viewer.
The top project choice was cleaning up vacant and abandoned properties, which mirrored the region’s prioritization of clean air, water, and land. Investment in public spaces, job training, alternative transportation, and job creation rounded out the top five project choices, echoing the region’s overall priorities with respect to equitable distribution of access to resources and opportunities, as well as maintaining and enhancing community character.

The top policy choices reflected a strong desire to see more balanced growth and mixed-use development, creating districts and neighborhoods that are served well by transit. Notably, regionalization or intergovernmental provision of public services also ranked highly, reinforcing a trend already seen in Northeast Ohio toward sharing services and capital assets to maximize efficiency and reduce taxpayer liability.
Feedback from the Open Houses and ImagineMyNEO was used as the basis for creating the Vision, beginning with the overall scenario evaluations. If the thematic dials and online responses had averaged somewhere between Trend/Grow the Same and Do Things Different/Grow Differently, the Vision would have represented a hybrid between the two different priorities embodied by those scenario pairs. Instead, since preferences converged on the “differently” scenarios—Do Things Differently and Grow Differently—the Vision became an elaboration on the policies and priorities they represented.

Beyond providing big-picture definition, the Open House and ImagineMyNEO feedback also shaped many fine grained elements of the Vision. These include:

- Locations of strategic investment nodes and corridors
- Pathways to implementation
- Indicator targets
- Transit connections
- Local land use priorities