Corridor Concepts Update
Presentation to Community Advisory Committee
April 29, 2019

Options for Focused Growth and Mobility
INFORMATION ONLY – NO ACTION NEEDED
Insight2050 is a public-private partnership to help Central Ohio better plan for growth over the next 30 years. The insight2050 Corridor Concepts study explores more walkable/compact environments and high capacity transit along five representative routes to help communities make informed decisions about housing, transportation, and economic development. The process will be replicable so similar analysis can be conducted on different corridors in the future.

**WHAT**

- Smaller Household Sizes: Over 80% of growth by 2050 will be 1-2 persons, with no children
- More Transit Moves More People: 40 People = 40 cars, 40 People = 1 Bus
- Strong & Steady Population Growth: Central Ohio is expected to be a region of nearly 3 million people by 2050
PROJECT DELIVERABLES

• Study Report – UrbanFootprint (FKA Calthorpe Analytics)
  • Status: Complete

• Guidance for Implementation – IceMiller
  • Status: Complete

• Technical Memos
  • Transportation Analysis Methods – Fehr & Peers
  • Fiscal & Property Valuation Analysis – Strategic Economics
  • Status: Complete

• Communications Products – Engage Public Affairs
  • Status: In Progress
TWO REGIONAL SCENARIOS

CURRENT TRAJECTORY
• Based on current plans
• Suburban development patterns
• Without dedicated ROW transit or new mobility options, the amount and density of new compact development is limited

FOCUSED CORRIDOR CONCEPT
• Vision focuses compact development and enhanced mobility around the five corridors
• Assumes dedicated ROW
• Assumes nodal development patterns (key points along the corridors)
OVERVIEW

Regional Scenarios

The Corridor Concepts regional scenarios represent two distinct growth patterns for the region. Both scenarios accommodate the same amount of housing and job growth in Central Ohio to the year 2050 or beyond, but vary in where and how they are located across the region. They also vary in their mixes of housing types, and the extent to which they can meet the demands of Central Ohio's current and future residents.

Current Trajectory

This scenario casts forward from existing plans and largely suburban development trends to meet the study projection. Some growth continues in Downtown Columbus and as compact, mixed use development, but without high-capacity transit – bus rapid transit (BRT), light rail transit (LRT), autonomous rapid transit (ART), or other system that can quickly and reliably move large numbers of people – to structure and serve growth, most occurs in low density, auto-oriented development patterns.

Reflecting relatively recent trends, new housing growth occurs as 41% single family and 59% townhome and multifamily. Much of the townhome and multifamily growth occurs within suburban areas. New employment growth also occurs at lower densities than in the Focused Corridor Concept, with most located in suburban office parks and commercial centers.

Focused Corridor Concept

This scenario locates the majority of the region’s projected growth — 55% of homes and 60% of jobs — along the five study corridors and in Downtown Columbus. New growth occurs primarily as compact, walkable, mixed use development, with moderate to high densities along the corridors. At key nodes building height can vary up to 12 stories (or higher in or near Downtown Columbus), between buildings range from three to six stories.

New housing growth occurs as 20% single family and 80% townhome and multifamily. Townhome and multifamily growth takes place in mixed use centers and neighborhoods along the corridors and throughout the region, answering to market demand for smaller homes with walkable access to amenities. New employment growth is focused in mixed use centers along the corridors, and in infill and redevelopment locations in and around existing cities and towns.

Place Type Proportions

- Within corridors: Suburban 73%, Compact 20%, Urban 7%
- Outside corridors: Suburban 55%, Compact 45%

Housing Concentration

- Within corridors: Within: 18% homes, 40% jobs, Outside: 82% homes, 60% jobs
- Outside corridors: Within: 55% homes, 60% jobs, Outside: 45% homes, 40% jobs

Housing Unit Mix

- 2018: Single-Family Attached 22%, Smaller Lot (<2,000 sq ft) 13%, Larger Lot (2,000 sq ft) 8%
- 2050: 2018 New Growth: 22%, Smaller Lot (2,000 sq ft) 13%, Larger Lot (5,000 sq ft) 8%

For more details, see Appendix A.
### Regional Scenario Metrics

The comparative scenario metrics summarized here include projected annual results in 2050, and cumulative results from 2018-2050. For clarity, values are rounded. All costs are expressed in year-2018 dollars.

The metrics are described in further detail on pages 30 to 40 of the report.

#### Current Trajectory

Follows the trajectory of existing plans and mostly suburban development trends to meet a high regional growth projection. Lacks new high-capacity transit to structure growth.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Land Consumption</th>
<th>Local Infrastructure &amp; Services</th>
<th>Local Tax Revenues</th>
<th>Transportation: Accessibility</th>
<th>Transportation: Mode Shares</th>
<th>Transportation: VMT</th>
<th>Greenhouse Gas Emissions</th>
<th>Household Auto and Utility Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount of all previously undeveloped land that is newly developed from 2018-2050. See page 31 for more.</td>
<td>Capital and operations and maintenance (O&amp;M) costs for new local roads, sewer, water, wastewater, and emergency services (2018-2050). See page 32 for more.</td>
<td>Local tax revenues associated with new development, including income, property, and sales taxes (2018-2050). See page 33 for more.</td>
<td>Regional jobs accessible within 45 minutes by walk and transit, in 2050. See page 34 for more.</td>
<td>Share of household transportation trips by mode: transit, auto, and walk or bike, in 2050. See page 35 for more.</td>
<td>Vehicle miles traveled (VMT) in passenger vehicles, cumulative (2018-2050) and annually per household. See page 36 for more.</td>
<td>Annual CO₂ emissions from passenger vehicles and residential and commercial buildings, in 2050. See page 40 for more.</td>
<td>Annual automobile transportation (fuel, insurance, ownership, and maintenance) and home energy and water costs, in 2050. See page 40 for more.</td>
</tr>
<tr>
<td></td>
<td>135 sq mi</td>
<td>$30.1 BIL cumulative total, 2018-2050</td>
<td>$21.3 BIL cumulative total, 2018-2050</td>
<td>4%</td>
<td>1.5%</td>
<td>489 BIL cumulative miles</td>
<td>29.4 MMT** annual</td>
<td>$20.3 BIL annual</td>
</tr>
<tr>
<td></td>
<td>1.8 mi</td>
<td>$941 MIL average annual costs</td>
<td>$14,000 annual per acre</td>
<td>cumulative total, 2018-2050</td>
<td>cumulative total, 2018-2050</td>
<td>489 BIL cumulative miles</td>
<td>29.4 MMT** annual</td>
<td>$20.3 BIL annual</td>
</tr>
<tr>
<td></td>
<td>7.3</td>
<td>7.3</td>
<td>140</td>
<td>1.5%</td>
<td>4%</td>
<td>16%</td>
<td>17.1 MT annual</td>
<td>$18,600 annual per household</td>
</tr>
<tr>
<td></td>
<td>Residential</td>
<td>Commercial</td>
<td>125,000 Average number of jobs accessible by walk/transit</td>
<td>74,000 Average number of jobs accessible by walk/transit</td>
<td>16%</td>
<td>20%</td>
<td>441 BIL cumulative miles</td>
<td>27.4 MMT annual</td>
</tr>
<tr>
<td></td>
<td>23 sq mi</td>
<td>$19.3 BIL cumulative total, 2018-2050</td>
<td>$22.3 BIL cumulative total, 2018-2050</td>
<td>Share of homes with access to 25% of regional jobs with in 45 min by walk/transit</td>
<td>Share of homes with access to 25% of regional jobs with in 45 min by walk/transit</td>
<td>441 BIL cumulative miles</td>
<td>27.4 MMT annual</td>
<td>$17.4 BIL annual</td>
</tr>
<tr>
<td></td>
<td>9.1</td>
<td>9.1</td>
<td>15.8</td>
<td>3.2%</td>
<td>11%</td>
<td>20%</td>
<td>14,200 annual per household</td>
<td>15.8 MT annual</td>
</tr>
<tr>
<td></td>
<td>Residential</td>
<td>Commercial</td>
<td>29%</td>
<td>29%</td>
<td>29%</td>
<td>29%</td>
<td>29%</td>
<td>29%</td>
</tr>
<tr>
<td></td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
<td>11.9 MT annual</td>
<td>11.9 MT annual</td>
<td>11.9 MT annual</td>
<td>11.9 MT annual</td>
</tr>
<tr>
<td></td>
<td>Commercial</td>
<td>Commercial</td>
<td>annual per household</td>
<td>annual per household</td>
<td>annual per household</td>
<td>annual per household</td>
<td>annual per household</td>
<td>annual per household</td>
</tr>
</tbody>
</table>

*Component figures may not add up to totals due to rounding **MMT = million metric tons, MT = metric tons

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For comparison, results are shown for metrics that can be expressed as averages (e.g., per acre or per household).

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Corridor Area Average

The “corridor area” of the Focused Corridor Concept is defined as all area within half a mile of the corridors. It includes new development as well as existing neighborhoods and preserved areas.

For comparison, results are shown for metrics that can be expressed as averages (e.g., per acre or per household).

14 | Insight2050 Corridor Concepts Study Report

15 | Insight2050 Corridor Concepts Study Report
### Focused Corridor Concept Metrics

The varied amounts of growth and development characteristics along the study corridors lead to different outcomes for transportation, fiscal, and environmental impacts. Metros are also shown for Downtown Columbus, which is the hub for all corridors and considered apart from the corridor areas to isolate the impacts for each. Refer to Appendix A for base-year metrics.

#### Current Trajectory Regional Average Metrics (for comparison)

<table>
<thead>
<tr>
<th></th>
<th>Downtown</th>
<th>East Main</th>
<th>Northeast</th>
<th>Northwest</th>
<th>Southeast</th>
<th>West Broad</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>jobs</td>
<td>jobs</td>
<td>jobs</td>
<td>jobs</td>
<td>jobs</td>
</tr>
<tr>
<td>Walk and Transit Accessibility</td>
<td>1,540,000</td>
<td>74,000</td>
<td>528,000</td>
<td>253,000</td>
<td>218,000</td>
<td>189,000</td>
</tr>
<tr>
<td>Transit &amp; Active Mode Share</td>
<td>1.5%</td>
<td>16%</td>
<td>24%</td>
<td>51%</td>
<td>24%</td>
<td>24%</td>
</tr>
<tr>
<td>Vehicle Miles Traveled</td>
<td>16,800 mi</td>
<td>6,200 mi</td>
<td>9,100 mi</td>
<td>9,000 mi</td>
<td>8,800 mi</td>
<td>9,200 mi</td>
</tr>
<tr>
<td>Greenhouse Gas Emissions</td>
<td>17.1 MT</td>
<td>10.3 MT</td>
<td>12.5 MT</td>
<td>12.2 MT</td>
<td>11.9 MT</td>
<td>12.6 MT</td>
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<tr>
<td>Infrastructure Costs per Acre</td>
<td>$249,000</td>
<td>$690,000</td>
<td>$460,000</td>
<td>$499,000</td>
<td>$466,000</td>
<td>$331,000</td>
</tr>
<tr>
<td>Tax Revenues per Acre</td>
<td>$14,000</td>
<td>$422,000</td>
<td>$162,000</td>
<td>$117,000</td>
<td>$158,000</td>
<td>$61,000</td>
</tr>
<tr>
<td>Household Costs</td>
<td>$18,600</td>
<td>$7,700</td>
<td>$10,700</td>
<td>$10,500</td>
<td>$10,300</td>
<td>$10,800</td>
</tr>
</tbody>
</table>

*Acres ready = net parcelage developed as infill or redevelopment to accommodate new growth*
INFRASTRUCTURE COSTS

Infrastructure and Service Costs

The costs of local infrastructure and emergency services to serve new development vary substantially according to the extent and location of new growth. Capital costs for roads, sewers, and stormwater infrastructure increase proportionally with new land developed, as do the ongoing costs to operate and maintain them. The costs for new fire stations and ongoing costs to provide emergency services also vary with the reach of new growth. Note that the analysis accounts for these components of local infrastructure and services only; costs for transit, local fiber provision, and regional roadways are not included.

The Focused Corridor Concept, which includes more infill development and less new land consumption, saves $10 billion in cumulative costs for infrastructure capital, operations, and maintenance to 2050 as compared to the Current Trajectory scenario. Capital and operations costs for emergency services over the same timeframe are lower by $500 million in the Focused Corridor Concept. Combined capital costs for infrastructure and emergency services are lower by $9.4 billion for the Focused Corridor Concept, while those for combined operations and maintenance are lower by $1.1 billion.

Localized cost assumptions were developed to estimate the relative cost impacts of the scenarios. While maintenance costs for new growth and infill growth are similar, infill growth does not incur capital costs for new infrastructure. However, infill is not cost-free — significant increases in density increase the use of existing infrastructure. This in turn shortens its effective lifetime, demanding reconstruction sooner than would have been required if there were little to no increase in density. Reconstruction, which entails the replacement of road, water, and sewer infrastructure, can cost upwards of 60% of the costs of initial construction.
CONCEPT AND METRICS SUMMARY

West Broad Street Corridor

Prioritizes growth in higher density infill approaching downtown, in Franklinton, and on the Scioto Peninsula. Also locates development at moderate densities in large-scale mixed-use areas, including major growth at the former Westland Mall site.

Transportation - Walk and Transit Accessibility
Average number of regional jobs accessible within 45 minutes by walking and transit

312,000

Compared to Current Inventory regional average

9.1% 32% + 500%

Transportation - Transit & Active Mode Share
Share of all household trips taken by transit, walk, or bike

Transportation - Vehicle Miles Traveled
Annual vehicle miles traveled (VMT) per household

7,800 mi

- 54%

Greenhouse Gas Emissions
Annual (GHG) emissions from passenger vehicle travel and residential energy use per household

11.6 MT

- 19%

Infrastructure Costs per Acre
Average costs per acre of new development to build, operate, and maintain local roads, water, wastewater, and sewer infrastructure.

$364,000

+ 47%

Tax Revenues per Acre
Average annual revenues from local income taxes, property taxes, and sales taxes per acre of new development

$124,000

+ 790%

Household Costs
Annual auto and utility costs per household

$9,400

savings of $9,200

Note: Large parcels depicted with new development may involve redevelopment and/or accommodate infill that maintains existing buildings or open space.
GUIDANCE FOR IMPLEMENTATION

Report will include a menu of options for collaboration

- Focus on collaborative spirit – “The Columbus Way”
- A cohesive and consistent approach to next steps

Considerations for

- Development & land use
- Workforce & market rate housing
- Smart mobility
- Budgets & incentives
FINDINGS RELEASE EVENTS

Options for Focused Growth and Mobility
Join us on April 30th to learn more about the insight2050 Corridor Concepts study findings.

For the past year, this public-private partnership looked at representative thoroughfares in Central Ohio to gain a deeper understanding of the impacts of various development patterns and related transportation options. You'll hear from the team about what we learned and the tools available to help communities make informed decisions about future housing, mobility, and economic development.

Event Agenda:

- **11:30 AM - 12:00 PM** Registration and Networking
- **12:00 PM - 12:05 PM** Welcome by insight2050 Corridor Concepts Co-chairs, Council President Hardin and Yoramie Steiner
- **12:05 PM - 12:40 PM** Keynote Presentation by Peter Calithorpe and Joe DiStefano
- **12:40 PM - 1:25 PM** Panel Discussion with Peter Calithorpe, Joanna Pinkerton, and Mark Wagenbrenner
- **1:25 PM - 1:30 PM** What's Next by William Murdock

**April 30, 2019**

11:30 AM - 1:30 PM

The Boat House
679 W Spring St
Columbus, OH 43215

Register online at: [columbus.uitl.org](http://columbus.uitl.org)
NEXT STEPS
NEXT STEPS

• Report and full findings available April 30th on MORPC website
• Outreach & Engagement
• Demonstration Projects
• Technical Assistance
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