

Getting Real with Scenarios

2021 SE Data Development Pilot Project Update

CommunityViz Workgroup
July 30, 2021



We Grow Matters

The Piedmont Triad region is undergoing significant growth. By 2040 the Piedmont Triad region is projected to grow by 27% - from 1.6 to 2 million people. In the coming quarter century on average, we will need 400,000 new homes and 400,000 new jobs. The choices we make today will shape tomorrow's communities great and small, work and play. It's up to us to ensure that our region preserves and enhances the quality of life in our communities for our economic well-being and the resources we value most.

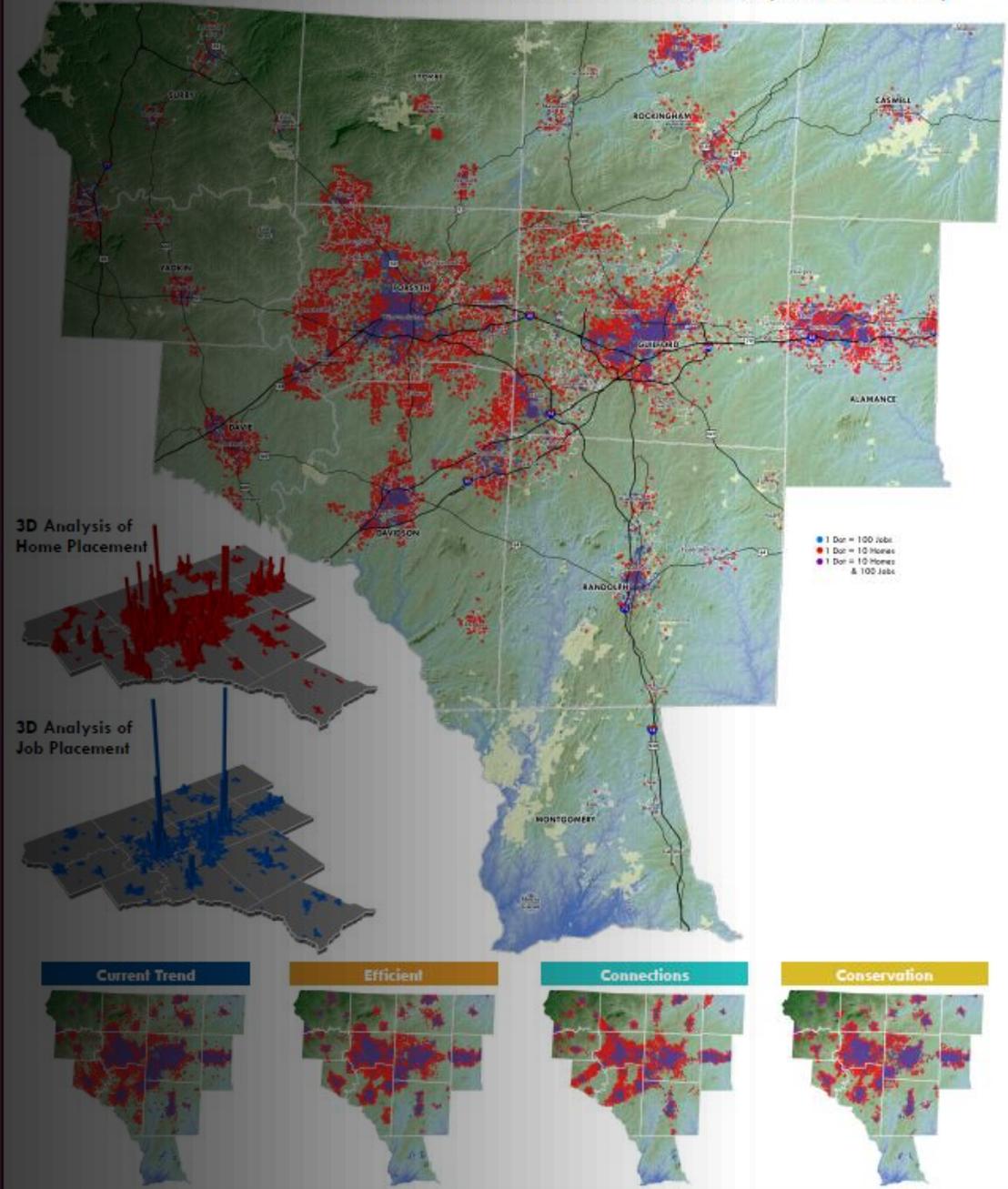
Scenario Modeling

To understand how different development patterns will affect our future, Piedmont Triad CommunityViz software to show how homes and jobs might go based on different scenarios. This allows us to compare alternatives to our current way of doing things. Each scenario was the same 2040 population and jobs per county. The scenarios are based on the assumptions assumed in each alternative. The scenarios are: Current Trend, Efficient, Connections, and Conservation. The Current Trend scenario illustrates the likely location of homes and jobs between 2020 and 2040. A performance indicator score was developed to compare each scenario.

Hybrid Scenario

The Hybrid Growth Scenario is a balance of positive economic, environmental and social outcomes for the Piedmont Triad toward a better future. The Hybrid Growth Scenario is a balance of positive economic, environmental and social outcomes for the Piedmont Triad toward a better future.

Future Growth Placement of New Homes & Jobs (2010 - 2040)



Key In

1. Utilize Existing Service Areas & Revitalize
2. Expand Transportation Options & Connections
3. Protect Our Natural Habitats
4. Increase Mixed-use & High Density Development

Land Suitabil

Suitability Characteristic	Weight
Natural Heritage Areas	-10
PART Stops	+10
Transit Centers	+10
Redevelopment Opportunity Areas	+10
Critical Water Supply Watersheds	-9
Town Centers	+9
Transit Corridors & Street Cars	+9
Local Bus Routes	+9
Streams & Wetlands	-8

The land suitability analysis measures the future growth based on these unique weights. Higher potential for future development is shown in red. Jobs are more often than less suitable areas. Suitability characteristics and weights were chosen and provided by each project workgroup.

Key Out

- More homes are located near job opportunities.
- Job training is well-connected & carefully matched to employer needs.
- Downtowns & old shopping centers are cleaned up & repurposed.
- Land is used more efficiently for all types of development.

Comparison

Performance Measure

- Housing & Jobs**
- Greater Jobs-Housing Balance - An increased number of jobs located in close proximity to new jobs.
 - More Growth in Existing Service Areas - An increased number of homes & jobs located in existing municipal boundaries. Lower overall population density.
 - More Compact Communities - An increase in mixed-use development with higher population density.
 - Higher Growth Capacity - Ability to accommodate more future growth.
- Transportation**
- More Growth in Transit Opportunity Areas - Greater use of transit with a variety of transportation options and services.
 - Reduced Transportation Cost - An increase in population growth with currently a low to moderate housing and transportation cost.
- Health**
- Greater Access to Health Care - An increase in population growth within a 10 minute drive time to a major hospital or urgent care center.
 - Greater Access to Fresh, Healthy Foods - An increase in population growth in low food access areas, as determined by the USDA, with higher marketability to attract more healthy food options.
 - Greater Access to Trails - An increase in population growth within a half-mile of a trail.
 - More Cleanup and Redevelopment of Brownfield Sites - An increase in population growth within a half-mile radius of brownfield sites, as designated by US EPA, brings in greater investment to clean up and reuse sites and to attract more housing and jobs.
- Places & Spaces**
- Smaller Development Footprint - Area outside of new growth with areas of existing growth.
 - Higher Average Tax Value Per Acre - An increase in residential tax value within town centers that reduce the largest tax value.
 - Greater Protection of Prime Farmland Soils - Low growth with prime farmland soils, as designated by USDA.
 - Greater Preservation of Critical WWS - Low growth in or near half-mile of water supply intakes.

Today's Discussion



Review Project Targets



July 2021 Parcel Updates

Parcel Joining and Tagging
Setting the 2025 Vision



Preparing the Scenarios

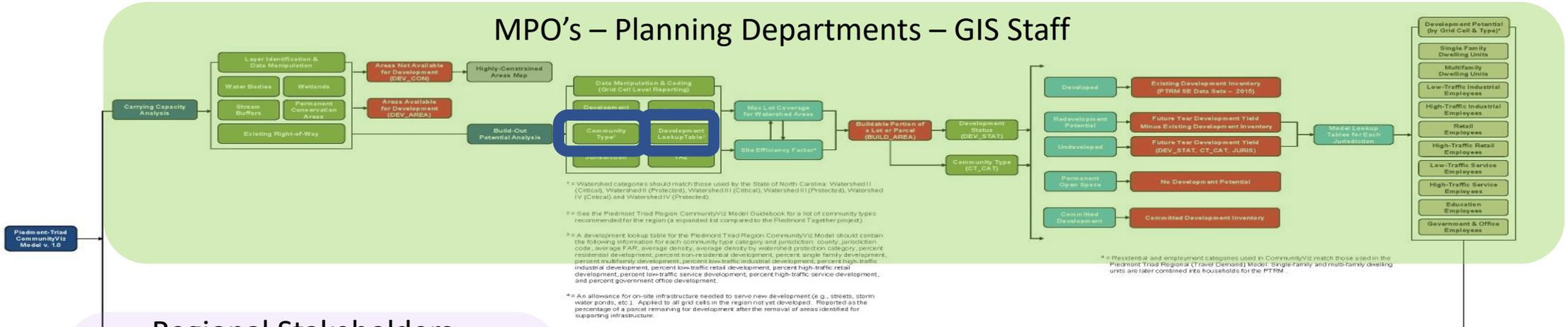
Defining Scenarios
Defining Evaluation Criteria
Setting Control Totals
Verifying Suitability Factors



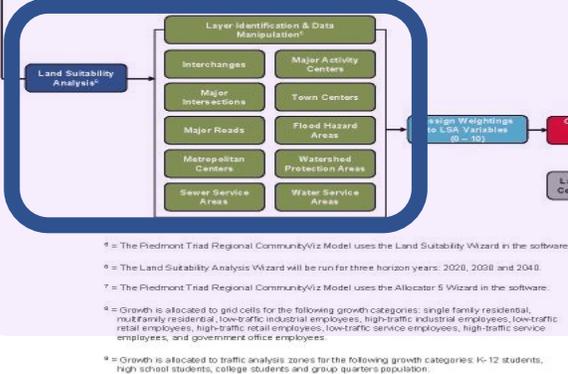
How do we accomplish this work?

Piedmont Triad Model Architecture and Workflow

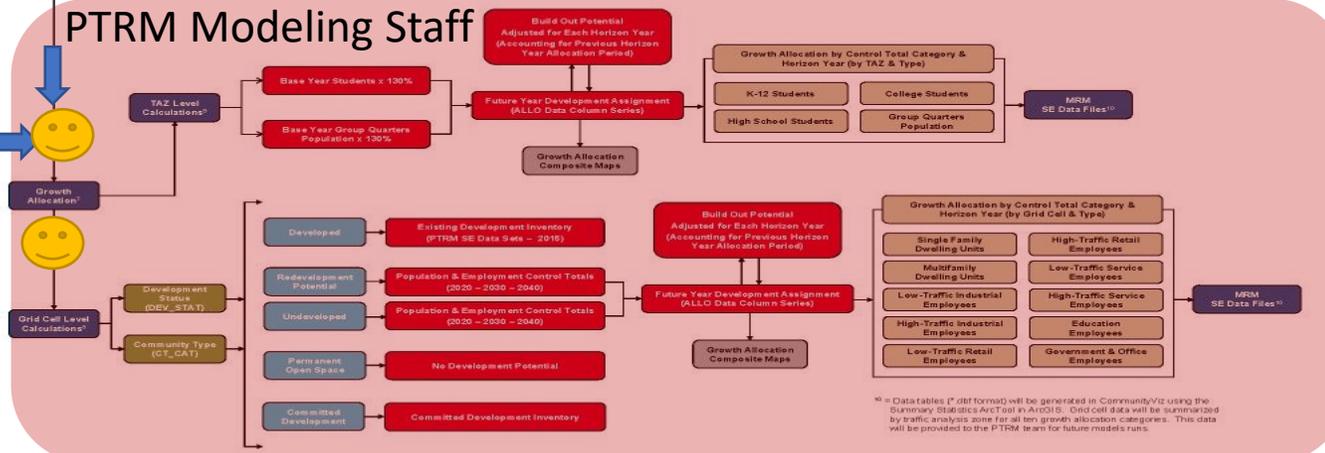
MPO's – Planning Departments – GIS Staff



Regional Stakeholders



PTRM Modeling Staff



Legend

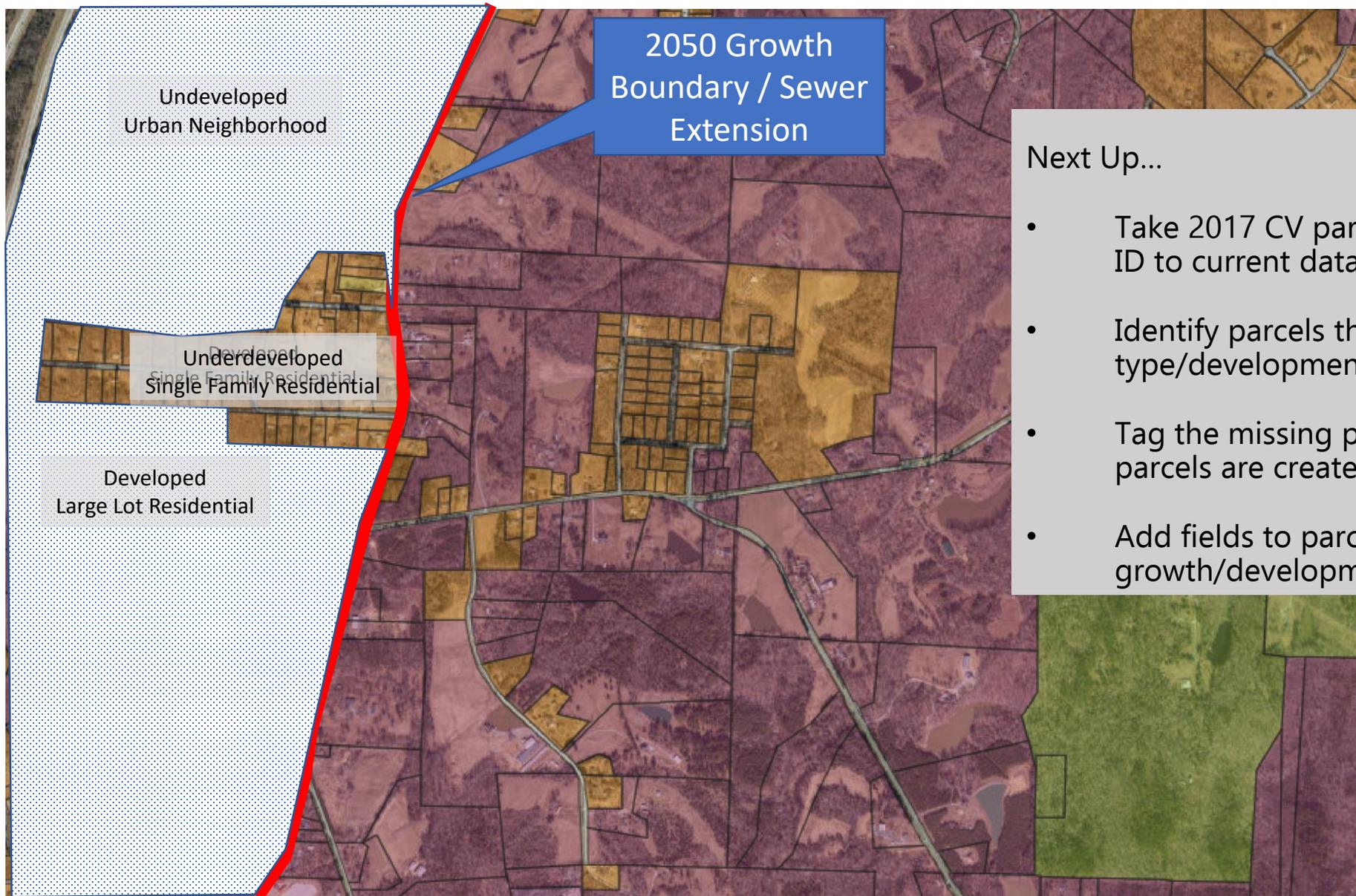


July 2021 SE Parcel Data Set Development - TEST Project

Responsible Party	Task	Start	End	2021											
				May	June	July	August	September	October	November	December				
Jurisdictions	Complete Customized DLUT	5/1/2021	6/30/2021												
MPO	Join 2017 Parcel Data to Current Parcel Line Layer	7/1/2021	7/9/2021												
MPO	Tag July 2021 Parcels to reflect current status (place type and development status)	7/12/2021	7/30/2021												
MPO	Submit July 2021 Parcel Data to PART	8/2/2021	8/6/2021												
PART	Update Parcel Viewer to new parcel data	8/9/2021	8/13/2021												
Jurisdictions	Review Parcel Tags in Parcel Viewer	8/16/2021	8/27/2021												
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PART	Download July 2021 SE Parcel Data Set from Parcel Viewer	9/16/2021	9/17/2021												
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Region	Evaluate Scenario Results	10/25/2021	11/15/2021
Region	Adjust	11/16/2021	12/7/2021
Region	Evaluate Scenario Results	12/8/2021	12/17/2021
Model Team	CV: Complete 2022 SE Forecast by creating, evaluating, and adopting Scenarios	4/1/2022	12/31/2022



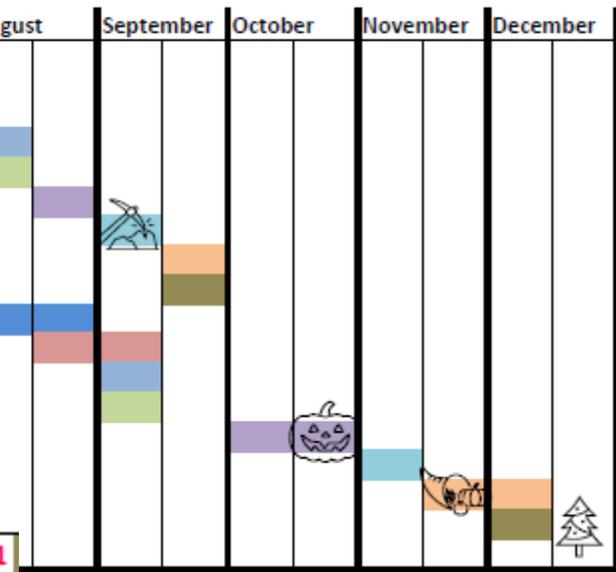
- Next Up...
- Take 2017 CV parcel data and join by parcel ID to current data
 - Identify parcels that do not have a place type/development status
 - Tag the missing parcels and maintain as new parcels are created
 - Add fields to parcels to reflect 2050 future growth/development

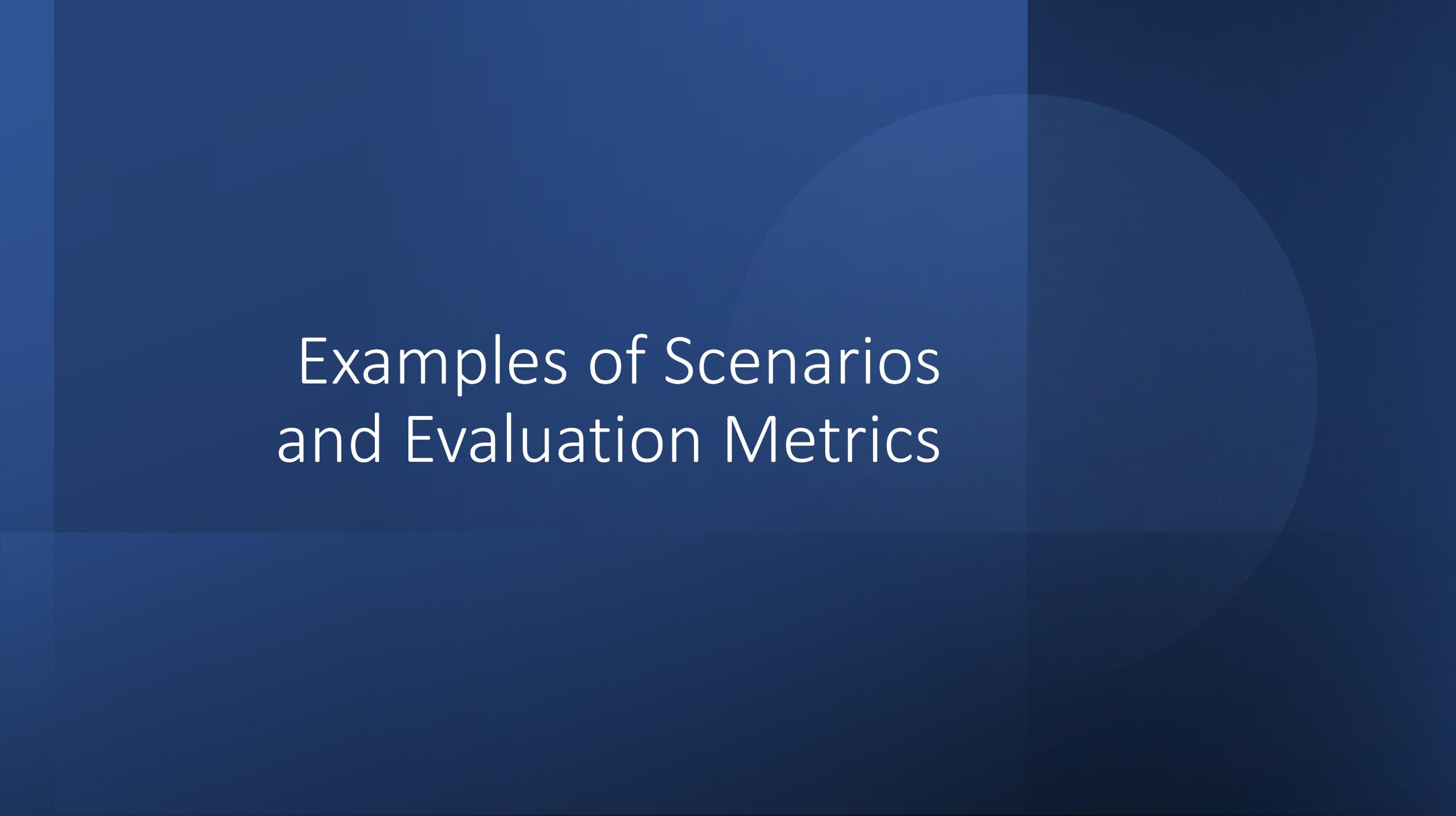
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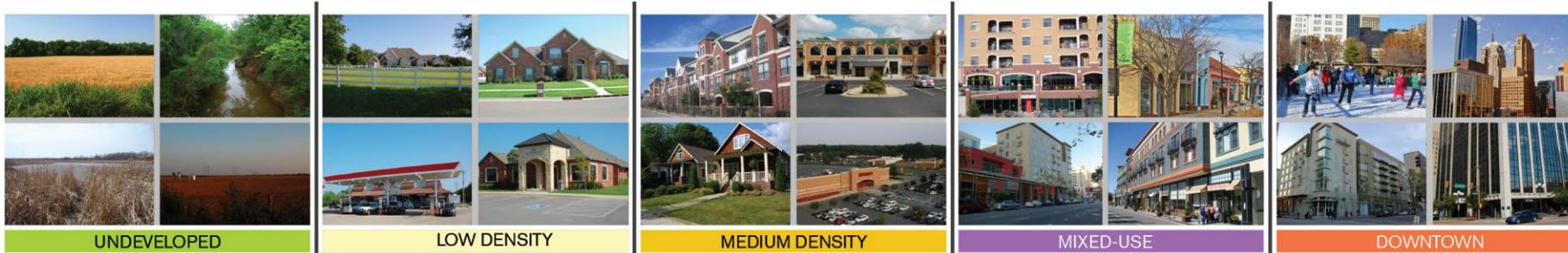
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Examples of Scenarios and Evaluation Metrics

DEVELOPMENT CHARACTER



DEVELOPMENT PATTERNS



SCENARIO A



SCENARIO B



SCENARIO C

WHAT WOULD BE NECESSARY TO MAKE EACH SCENARIO A REALITY?

SCENARIO A SCENARIO B SCENARIO C

Allocation of Resources & Taxation Levels

Gradually increase taxes or decrease levels of service.	✓		
Need continued Federal and State subsidy for road infrastructure.	✓+	✓	
Budget surplus available for reinvestment.		✓	✓+
Invest more into existing neighborhoods to incent infill and revitalization. Investments include: -New streets and streetscapes -Bike lanes, trails -Upgraded parks and recreation facilities -Increased police presence and crime prevention efforts		✓	✓+
Increase number of buses, bus routes and other public transit options.		✓	✓+
Invest more on maintaining and improving existing streets as opposed to building and widening new streets in developing peripheral areas.		✓	✓+

City Actions (regulations, policies, incentives):

Encourage development of underrepresented housing types such as town homes, condos, and urban style single family homes.		✓	✓+
Promote more compact and contiguous development.		✓	✓+
Increase land use diversity to allow people to live, shop, and work in the same area.		✓	✓+
Ensure uses are compatible so neighborhoods remain attractive and viable.	✓	✓+	✓++
Preserve rural land for future development.		✓	✓+
Charge higher fees for infrastructure in areas that are more difficult and expensive to serve.		✓	✓+
Facilitate infill development and reduce the number of vacant and abandoned buildings.		✓	✓+
Create more route options by increasing the number of street connections.		✓	✓+

SCENARIO PERFORMANCE

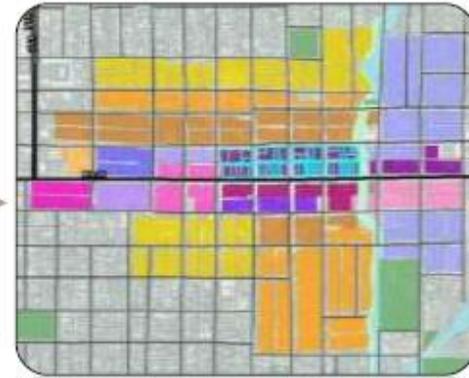
	A	B	C
 CITY SERVICES AND INFRASTRUCTURE (ANNUAL IN MILLIONS)	353	305	271
 MORE/LESS AUTOMOBILE EXPENSE (PER HOUSEHOLD PER MONTH)	+36	6	-53
 MORE/LESS TIME SPENT IN VEHICLE (HOURS PER PERSON PER MONTH)	+.75	-2	-5.5
 NEW DEVELOPED SQUARE MILES	195	139	76
 % OF NEW HOMES THAT ARE SINGLE-FAMILY	78	70	67
 NEW ROADS BUILT (THOUSANDS OF LANE MILES)	4	3	2
 NEW (INFILL) HOMES IN EXISTING NEIGHBORHOODS (THOUSANDS)	15	31	64
 INCREASE IN ABANDONED HOMES (THOUSANDS)	8.9	3.9	0
 PERCENT CHANGE IN DAILY PHYSICAL ACTIVITY (AS PART OF DAILY ROUTINE)	-9	60	139
 WALKING, BICYCLING, OR TRANSIT USAGE (PERCENT CHANGE FROM 2010)	3	5.5	8
 WATER USE FOR LANDSCAPING (GAL/DAY PER HOUSEHOLD)	348	178	158
 PERCENT INCREASE IN CARBON EMISSIONS (OVER TODAY)	57	46	34



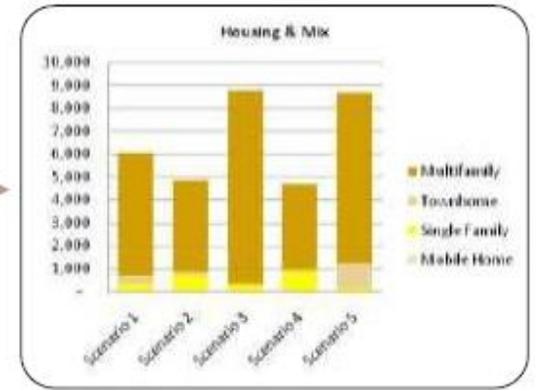
Building Types



Development Types



Scenario Development



Evaluation

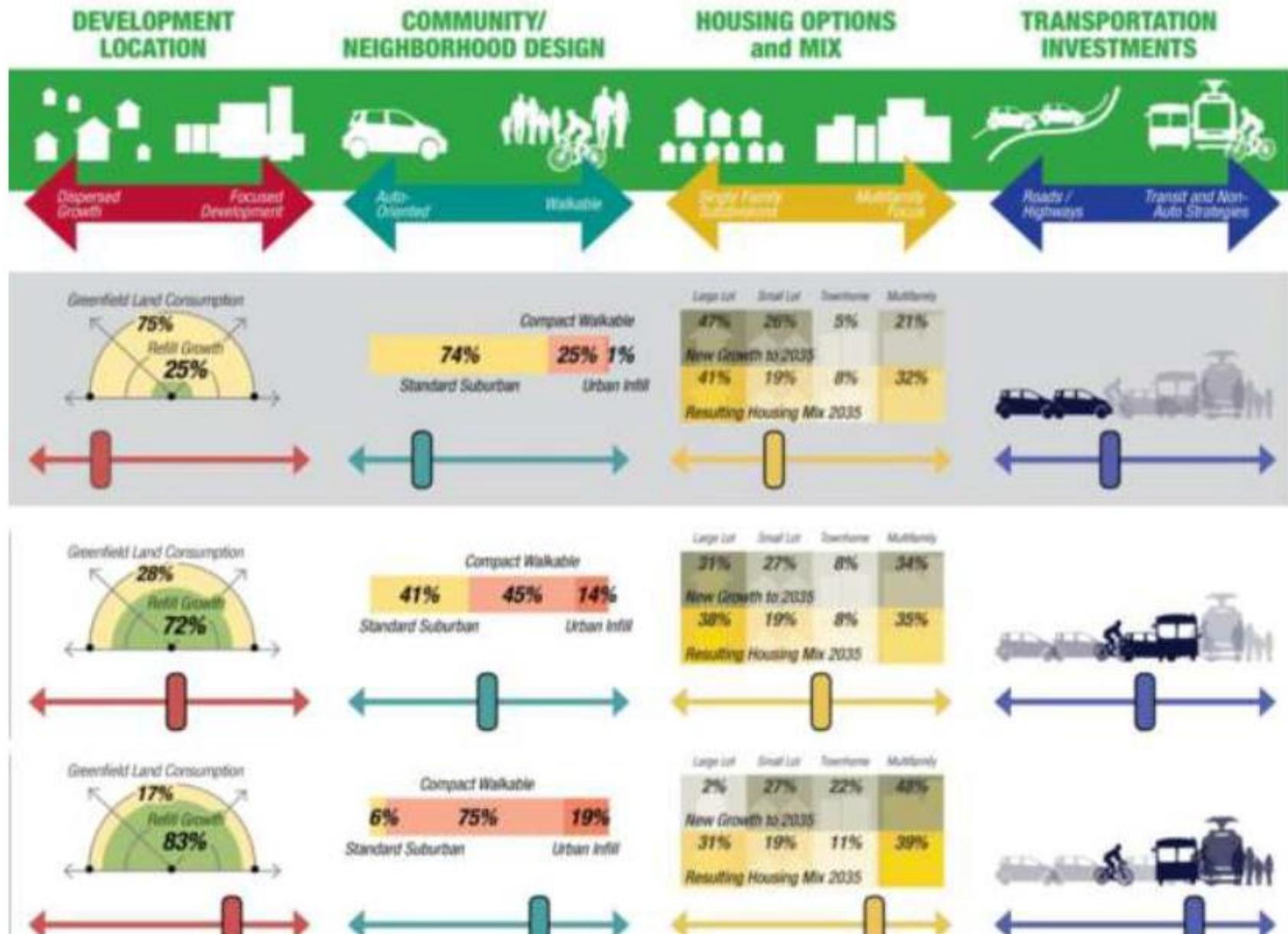


Scenario Snapshot

BAU

1

2



Fresno COG's Sustainable Communities Strategy Scenario Performance Indicator Comparisons

Performance Measure/Indicator	Definition	Scenario A	Scenario B	Scenario C	Scenario D	Status Quo
Greenhouse Gas emission reduction	Percentage of per person greenhouse gas reduction against 2005.	2020: -8.15% 2035: -11.85% 2040: -12.55%	2020: -7.86% 2035: -11.32% 2040: -11.91%	2020: -8.36% 2035: -12.40% 2040: -13.15%	2020: -7.7% 2035: -11.4% 2040: -12%	2020: -6.59% 2035: -7.97% 2040: -8.56%
Housing	Percent of housing by types	Single Family: 44.1% Town Homes: 9.0% Multi-Family: 46.9%	Single Family: 53.1% Town Homes: 9.1% Multi-Family: 37.8%	Single Family: 45.1% Town Homes: 8.3% Multi-Family: 46.6%	Single Family: 36.6% Town Homes: 14.6% Multi-Family: 48.8%	Single Family: 77.7% Town Homes: 7.3% Multi-Family: 15.1%
Residential density	Average housing units per acre of <u>new growth</u>	8.3 Housing Units per acre	7.4 Housing Units per acre	8.5 Housing Units per acre	10.2 Housing Units per acre	4.6 Housing Units per acre
Compact development	Average number of people per acre	27.6 people per acre	21.1 people per acre	24.7 people per acre	31.1 people per acre	13.9 people per acre
Transit-oriented development	Share of the region's <u>growth</u> in households and employment within half-mile of Bus Rapid Transit (BRT)	Housing Units: 27,475 (28.0%) Employment: 35,805 (43.7%)	Housing Units: 20,389 (21.3%) Employment: 29,958 (36.6%)	Housing Units: 26,416 (27.1%) Employment: 34,646 (42.3%)	Housing Units: 33,415 (31.1%) Employment: 43,518 (53.1%)	Housing Units: 5,787 (6.4%) Employment: 9,969 (12.2%)
Land consumption	Acres of land consumed due to new development	11,226 acres	14,675 acres	12,542 acres	9,961 acres	22,308 acres
Important farmland consumed	Total acres of important farmland (prime, unique and state-wide importance) consumed due to new growth	90.6 acres	37.6 acres	27.4 acres	21.3 acres	352 acres
Vehicle Miles Traveled (VMT)	Total Vehicle Miles Traveled (VMT) on a typical day in 2035	Total VMT: 19,789,601 miles Per capita VMT: 15.2 miles Per capita reduction: -11.1%	Total VMT: 19,924,347 miles Per capita VMT: 15.3 miles Per capita reduction: -10.5%	Total VMT: 19,638,153 miles Per capita VMT: 15.1 miles Per capita reduction: -11.8%	Total VMT: 19,878,208 miles Per capita VMT: 15.3 miles Per capita reduction: -10.7%	Total VMT: 20,743,263 miles Per capita VMT: 15.9 miles Per capita reduction: -6.8%
Criteria pollutants emissions	Tons of pollutants released per a typical day in 2035: Carbon Monoxide, Reactive Organic Gases, Nitrogen Oxide, Particulate Matter 10, Particulate Matter 2.5	Carbon Monoxide: 40 tons Reactive Organic Gases: 4.6 tons Nitrogen Oxide: 11.3 tons Particulate Matter 10: 7.9 tons Particulate Matter 2.5: 1.0 tons <i>(All Pass Conformity)</i>	Carbon Monoxide: 40 tons Reactive Organic Gases: 4.6 tons Nitrogen Oxide: 11.4 tons Particulate Matter 10: 7.9 tons Particulate Matter 2.5: 1.0 tons <i>(All Pass Conformity)</i>	Carbon Monoxide: 40 tons Reactive Organic Gases: 4.6 tons Nitrogen Oxide: 11.3 tons Particulate Matter 10: 7.8 tons Particulate Matter 2.5: 1.0 tons <i>(All Pass Conformity)</i>	Carbon Monoxide: 40 tons Reactive Organic Gases: 4.6 tons Nitrogen Oxide: 11.4 tons Particulate Matter 10: 7.9 tons Particulate Matter 2.5: 1.0 tons <i>(All Pass Conformity)</i>	Carbon Monoxide: 41 tons Reactive Organic Gases: 4.8 tons Nitrogen Oxide: 11.6 tons Particulate Matter 10: 8.2 tons Particulate Matter 2.5: 1.0 tons <i>(All Pass Conformity)</i>
Active Transportation and transit travel	Weekday person trips by transit, walk and bike modes	Transit: 49,155 trips Walk: 180,009 trips Bike: 57,065 trips	Transit: 47,202 trips Walk: 175,316 trips Bike: 56,213 trips	Transit: 48,765 trips Walk: 177,172 trips Bike: 56,743 trips	Transit: 51,448 trips Walk: 186,909 trips Bike: 59,302 trips	Transit: 40,650 trips Walk: 138,033 trips Bike: 48,715 trips
Central Theme of Scenario - Proposed by...		Public Input from November 2012 Public Workshop	Current planning assumptions - member agencies	Foothill growth to City of Fresno - RTP Roundtable	Foothill growth to existing communities - Coalition of Community Organizations	



Scenarios Summary

Alternative growth scenarios (B, C, and D) use the themes identified from the maps created at public workshops in February and March. The themes represent ideas used and explored many times by workshop participants and have been combined in ways that may support each other. For example, compact growth tends to support public transportation improvements, and dispersed growth is more likely served by roadway improvements.

Scenario A: Baseline (A Projection of Recent Growth Patterns)

New Housing and Employment:

- Projects recent growth pattern
- Dispersed housing pattern
- Lot size like what's been built in last 10 years, most with large back yards
- Land uses separated—shopping and jobs are adjacent to or away from houses

New Transportation:

- Regional 2030 plan; roads are the priority—more cul-de-sacs, fewer grids (fewer connections, more privacy)
- Bus route similar to today
- Some walking/biking (housing further from goods, services, employment)

Land Conservation and Recreation:

- Water quality conservation
- Working farms impacted by extent of growth/fragmentation
- Communities grow together
- Recreation in back yards, trail loops/parks within brief drive

Scenario B: Eastside/Westside Benches

New Housing and Employment:

- Along the benches/transportation corridors
- Many lots typical in size to recent development trends
- Most land uses separated, some new neighborhood or town centers

New Transportation:

- Road network, bypass from Preston almost to Wellsville
- Busses about as frequent as today
- Some walking/biking (housing further from goods, services, employment)

Land Conservation and Recreation:

- Water quality conservation
- Farming impacted by extent of growth/fragmentation
- Most communities grow together
- Recreation in back yards, trail loops/parks within brief drive

Scenario C: Town Centers/Clustering

New Housing and Employment:

- Growth in existing communities across the valley—traditional towns/small cities
- Centers provide for day-to-day needs, some employment, range of housing choices (including living spaces above retail and commercial businesses)
- Houses closer together (like pre-1950 neighborhoods)

New Transportation:

- Partial bypass road west of Logan, enhanced east/west roadway connections
- Enhanced public transportation loops serve most communities (new peak hour vanpools, more bus routes)
- Bike routes along public transportation loops

Land Conservation and Recreation:

- Space between many communities
- Farmland mostly intact, impacted by growth at edges of existing towns
- Water quality conservation
- Local recreation (trail loops link parks/recreational facilities)

Scenario D: Urban Centers/Rural Edge Town

New Housing and Employment:

- Compact eastside growth, mostly within city limits, distinct city/town centers
- Mix of jobs, shopping, townhouses and condos in centers of larger cities and towns, single family housing nearby
- Some westside growth—centers with some services, more housing choices

New Transportation:

- Range of choices: walking, biking, public transportation, auto
- Dedicated public transportation corridor
- Walking/biking common (most live near shopping/work)

Land Conservation and Recreation:

- Development on minimal acreage
- Space between most communities
- Most farmland remains
- Water quality conservation
- Bonneville Shoreline Trail as a regional recreation corridor (most live near trail)

Regional Scenario Modeling In North Carolina's Piedmont Triad

HYBRID GROWTH SCENARIO

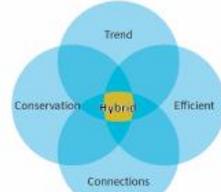


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Scenario Modeling

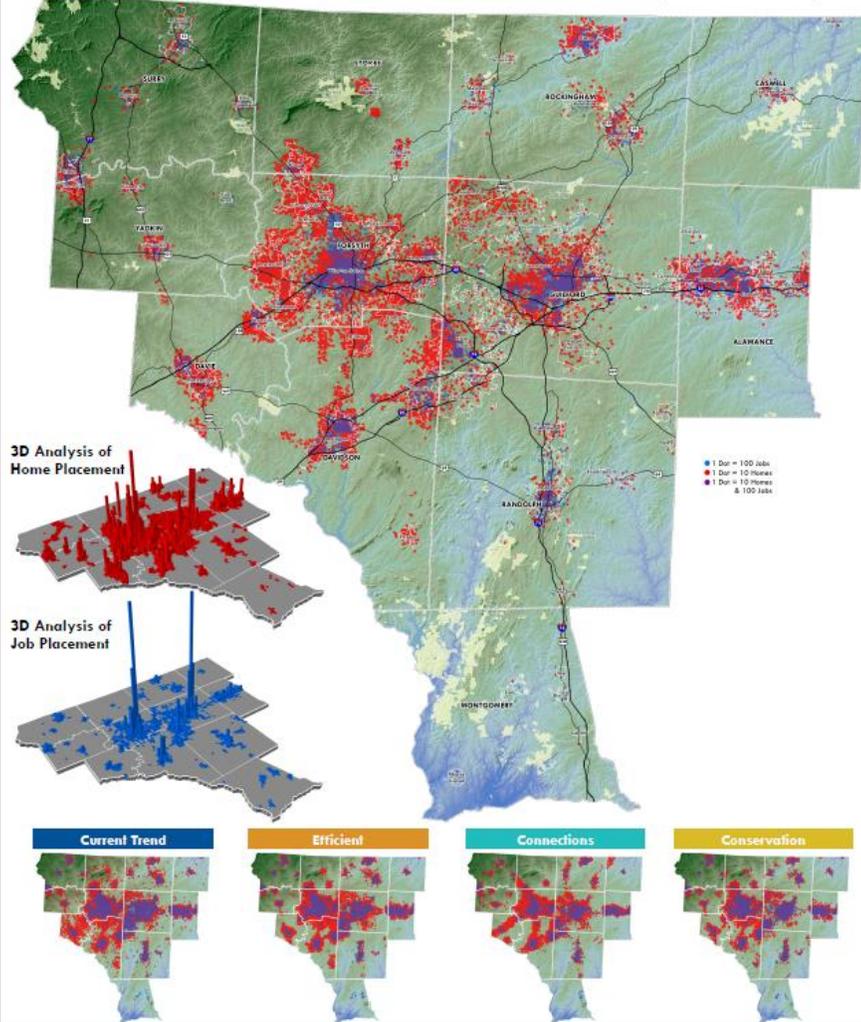
To understand how different development patterns will affect our future, Piedmont Together used **CommunityViz software** to show where new homes and jobs might go based on existing trends and then under several alternative growth scenarios. This allows us to compare alternatives to our current way of growing. Each scenario uses the same 2040 allocation of jobs and homes per county. Their distribution changes based on the goals and policies assumed in each alternative. Four alternative scenarios are provided in addition to the Current Trend to help illustrate possible future development patterns and to generate discussion of desired outcomes and growth management options available to communities throughout our region. Dot density maps were created for each scenario to illustrate the likely location of new homes and jobs between 2010 and 2040. A performance indicator score card was also developed to compare each scenario.



Hybrid Scenario

The three alternative growth scenarios (Efficient, Connections & Conservation) along with the Current Trend Scenario were presented to stakeholders at the 2nd Annual Livable Communities Summit in November 2013. Participants were invited to select top-ranking goals from each alternative growth scenario to develop an "Ideal" or Hybrid Scenario. The Hybrid Growth Scenario includes a balance of positive economic, environmental and social outcomes that point the Piedmont Triad toward a range of best practices to help all our communities grow, prosper and flourish together.

Future Growth Placement of New Homes & Jobs (2010 - 2040)



Key Inputs:

1. Utilize Existing Service Areas & Revitalize Downtowns
2. Expand Transportation Options & Connect Our Communities
3. Protect Our Natural Habitats
4. Increase Mixed-use & High Density Development

Land Suitability Analysis

Suitability Characteristic	Weight	Suitability Characteristic	Weight
Natural Heritage Areas	-10	Rail	+8
PART Stops	+10	Protected Water Supply Watersheds	-7
Transit Centers	+10	Steep Slopes	-7
Redevelopment Opportunity Areas	+10	Hydric/Erodible Soils	-7
Critical Water Supply Watersheds	-9	PART Park & Ride Lots	+7
Town Centers	+9	Service Areas	+7
Transit Corridors & Street Cars	+9	Interchanges	+7
Local Bus Routes	+9	Major Roads	+6
Streams & Wetlands	-8	Activity Centers	+6

The land suitability analysis measures the appropriateness of an area for future growth based on those unique weighted characteristics. Areas with a higher potential for future development receive new placement of homes and jobs more often than less suitable areas in the CommunityViz model. Suitability characteristics and weights were chosen based on feedback and goals provided by each project workgroup.

Key Outcomes:

- More homes are located near job opportunities.
- Greater & more affordable housing choices.
- Job training is well-connected & carefully matched to employer needs.
- Our region is a network of resilient & vibrant neighborhoods, towns & cities.
- Downtowns & old shopping centers are cleaned up & repurposed.
- Streets, sidewalks, bike lanes and transit connect neighborhoods & communities.
- Land is used more efficiently for all types of development.
- People drive less and spend less money on gas.

Comparison Score Card

Performance Measure	Current Trend	Efficient	Connections	Conservation	Hybrid
Housing & Jobs					
Greater Jobs-Housing Balance - An increased number of new homes located close proximity to new jobs.	✓	✓	✓	✓	✓
More Growth in Existing Service Areas - An increased number of new homes & jobs located in existing serviced downtowns & service areas.	✓	✓	✓	✓	✓
More Compact Communities - An increase in mixed-use development and population density.	✓	✓	✓	✓	✓
Higher Growth Capacity - Ability to accommodate more homes and jobs.	✓	✓	✓	✓	✓
Transportation					
More Growth in Transit Opportunity Areas - Greater access to a larger variety of transportation options and services.	✓	✓	✓	✓	✓
Reduced Transportation Cost - An increase in population growth in areas with access to low to moderate housing and transportation cost.	✓	✓	✓	✓	✓
Health					
Greater Access to Health Care - An increase in population growth in areas within a 10-minute drive time to a major hospital or urgent care facility.	✓	✓	✓	✓	✓
Greater Access to Fresh, Healthy Foods - An increase in population growth in low food access areas, as determined by the USDA, generates higher accessibility to afford more healthy food options.	✓	✓	✓	✓	✓
Greater Access to Trails - An increase in population growth within a 2-mile radius of a state trail.	✓	✓	✓	✓	✓
More Cleanup and Redevelopment of Brownfield Sites - An increase in population growth within a half-mile radius of brownfield sites, as designated by USEPA, creates a greater incentive to cleanup and redevelop these sites and to attract new home and jobs.	✓	✓	✓	✓	✓
Places & Spaces					
Smaller Development Footprint - Areas with a lower growth combined with areas of existing growth.	✓	✓	✓	✓	✓
Higher Average Tax Value Per Acre - An increase in residential and non-development value from areas that retain the highest tax value per acre.	✓	✓	✓	✓	✓
Greater Protection of Prime Farmland Soils - Less growth in areas with prime farmland soils, as designated by USDA.	✓	✓	✓	✓	✓
Greater Preservation of Critical WSWs - Less growth in areas within a half-mile of water supply intakes.	✓	✓	✓	✓	✓

Performance Measure	Current Trend	Efficient	Connections	Conservation	Hybrid
Housing & Jobs					
Greater Jobs-Housing Balance <i>An increased number of new homes located in close proximity to new jobs.</i>	✓	✓✓✓	✓✓✓✓	✓✓	✓✓✓
More Growth in Existing Service Areas <i>An increased number of new homes and jobs located in existing municipal boundaries and sewer service areas.</i>	✓✓✓	✓✓✓✓	✓✓	✓✓✓	✓✓✓✓
More Compact Communities <i>An increase in mixed-use development and population density.</i>	✓	✓✓✓	✓✓✓	✓✓✓✓	✓✓✓✓
Higher Growth Capacity <i>Ability to accommodate more homes and jobs.</i>	✓	✓✓✓	✓✓✓✓	✓✓✓	✓✓✓✓
Transportation					
More Growth in Transit Opportunity Areas <i>Greater access to a larger variety of transportation options and services.</i>	✓	✓✓✓	✓✓✓✓	✓✓✓	✓✓✓✓
Reduced Transportation Cost <i>An increase in population growth in areas with currently a low to moderate housing and transportation cost.</i>	✓✓	✓✓✓	✓✓	✓✓✓✓	✓✓
Healthy Communities					
Greater Access to Health Care <i>An increase in population growth in areas within a 10 minute drive time to a major hospital or urgent care facility.</i>	✓✓	✓✓	✓✓✓	✓✓✓✓	✓✓✓
Greater Access to Fresh, Healthy Foods <i>An increase in population growth in low food access areas, as determined by the USDA, generates a higher marketability to attract more healthy food options.</i>	✓✓✓	✓	✓✓✓	✓✓✓✓	✓✓
Greater Access to Trails <i>An increase in population growth within a 2-mile radius of a state trail.</i>	✓✓	✓✓	✓✓✓✓	✓	✓✓✓
More Cleanup and Redevelopment of Brownfield Sites <i>An increase in population growth within a half-mile radius of known brownfield sites, as designated by US EPA, brings a greater awareness to cleanup and redevelop these sites and to attract more homes and jobs.</i>	✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓✓
Places & Spaces					
Smaller Development Footprint <i>Area extent of new growth combined with areas of existing growth.</i>	✓	✓✓✓	✓✓✓	✓✓✓✓	✓✓✓✓
Higher Average Tax Value Per Acre <i>An increase in residential and non-residential development within town cores that return the largest tax value per acre.</i>	✓	✓✓✓	✓✓✓	✓✓	✓✓✓✓
Greater Protection of Prime Farmland Soils <i>Less growth in areas with prime farmland soils, as designated by USDA.</i>	✓	✓✓✓	✓✓✓	✓✓✓✓	✓✓✓✓
Greater Preservation of Critical WWSW <i>Less growth in areas within a half-mile of water supply intakes.</i>	✓	✓✓	✓✓✓	✓✓✓✓	✓✓✓

At the PARCEL LEVEL – Jurisdictional Control

Place Type

Development Status

*Parcel tagging to existing conditions is a continuous process. Tagging for future years will occur immediately prior a new model run.

At the DEVELOPMENT LOOKUP TABLE LEVEL – Set for the Region

Site Efficiency Factor

Density

Residential Use Percent

Single Family Use Percent

Multi Family Use Percent

Maximum Building Cover

Non-Residential Use Percent

Office Use Percent

Retail Other Use Percent

Retail Highway Use Percent

Industrial Use Percent

Service Use Percent

Education Use Percent

University Use Percent

Floors Per Building

* The Development Lookup Table can be configured at various levels meaning that there can be a table for each MPO, each county, or each jurisdiction. There will also be a regional table for those who choose not to develop their own table.

EMPLOYEE SPACE RATIO (Dr. Kim verified) – Set for the Region

Office Employee Space Ratio

Retail Other Employee Space Ratio

Retail Highway Employee Space Ratio

Industrial Employee Space Ratio

Service Employee Space Ratio

Education Employee Space Ratio

University Employee Space Ratio

* Each employee space ratio is one number throughout the entire model area.

SUITABILITY FACTORS – Set by the Region, maybe added to

Proximity to Community Activity Centers

Proximity to Regional Activity Centers

Proximity to Municipal Centers

Proximity to Interchanges

Proximity to Growth Corridors

Proximity to Transit Emphasis Corridors

Overlap with Critical Watershed

Overlap with 100-year Floodplain

Overlap with Urban Centers

Overlap with Sewer Service Area

Overlap with Water Service Area

* Each suitability factor has the option of not being used in the model meaning it can be turned on or off. Each factor has one weighting throughout the entire model area.

Customizable Features in CommunityViz

Piedmont Triad Regional CommunityViz Development Look Up Table

As of 4/25/2021

Place Type	Residential Density (DU's / acre)							Travel Demand Model Employment Categories						
		Residential	Non-residential	Total	Single-family	Multi-family	Total	Office	Service	Highway Retail	Retail - Other	Industrial	Education K-12	University
Preserved Open Space	0	0%	0%	0	0%	0%	0	0%	0%	0%	0%	0%	0%	0%
Recreational Open Space	0	0%	0%	0	0%	0%	0	0%	0%	0%	0%	0%	0%	0%
Working Farm	0.07	50%	50%	1	100%	0%	1	0%	10%	0%	10%	80%	0%	0%
Rural Living	0.2	80%	20%	1	100%	0%	1	0%	25%	50%	0%	25%	0%	0%
Large-lot Residential	0.5	100%	0%	1	100%	0%	1	0%	0%	0%	0%	0%	0%	0%
Single-family Neighborhood	1	90%	10%	1	100%	0%	1	0%	50%	0%	50%	0%	0%	0%
Mobile Home Neighborhood	6	100%	0%	1	100%	0%	1	0%	0%	0%	0%	0%	0%	0%
Townhome Community	9	100%	0%	1	0%	100%	1	0%	0%	0%	0%	0%	0%	0%
Multi-family Neighborhood	12	100%	0%	1	0%	100%	1	0%	0%	0%	0%	0%	0%	0%
Urban Neighborhood	6	100%	0%	1	50%	50%	1	0%	0%	0%	0%	0%	0%	0%
Walkable Neighborhood	10	75%	25%	1	50%	50%	1	25%	25%	15%	35%	0%	0%	0%
Walkable Activity Center	20	25%	75%	1	0%	100%	1	25%	25%	15%	35%	0%	0%	0%
Transit Activity Center	15	50%	50%	1	0%	100%	1	25%	25%	15%	35%	0%	0%	0%
Town Center	10	20%	80%	1	20%	80%	1	25%	25%	15%	35%	0%	0%	0%
Heavy Industrial	0	0%	100%	1	0%	0%	0	5%	0%	0%	0%	95%	0%	0%
Light Industrial	0	0%	100%	1	0%	0%	0	5%	5%	5%	0%	85%	0%	0%
Metropolitan Center	50	20%	80%	1	0%	100%	1	40%	20%	20%	20%	0%	0%	0%
Suburban Commercial Center	0	0%	100%	1	0%	0%	0	10%	20%	30%	40%	0%	0%	0%
Suburban Office Center	0	0%	100%	1	0%	0%	0	85%	10%	5%	0%	0%	0%	0%
Regional Employment Center	0	0%	100%	1	0%	0%	0	65%	5%	10%	0%	20%	0%	0%
Health Care Campus	0	0%	100%	1	0%	0%	0	20%	70%	5%	5%	0%	0%	0%
Educational Campus K-12	0	0%	100%	1	0%	0%	0	5%	1%	0%	0%	0%	94%	0%
University/College Dormitories	0	100%	0%	1	0%	100%	1	0%	0%	0%	0%	0%	0%	0%
University/College Campus	0	25%	75%	1	50%	50%	1	10%	5%	4%	1%	0%	0%	80%
Commercial Service Airport	0	0%	100%	1	0%	0%	0	5%	75%	5%	5%	10%	0%	0%
General Aviation Airport	0	0%	100%	1	0%	0%	0	5%	75%	0%	0%	20%	0%	0%
Civic and Institutional	0	0%	100%	1	0%	0%	0	28%	70%	1%	1%	0%	0%	0%

Regional Development Lookup Table

SUITABILITY FACTORS

- Proximity to Community Activity Centers
- Proximity to Regional Activity Centers
- Proximity to Municipal Centers
- Proximity to Interchanges
- Proximity to Growth Corridors
- Proximity to Transit Emphasis Corridors
- Overlap with Critical Watershed
- Overlap with 100-year Floodplain
- Overlap with Urban Centers
- Overlap with Sewer Service Area
- Overlap with Water Service Area

* Each suitability factor has the option of not being used in the model meaning it can be turned on or off. Each factor has one weighting throughout the entire model area.

County Control Totals

- Apply a growth factor to the 2017 Control Totals

Today's Discussion



Review Project Targets



July 2021 Parcel Updates

Parcel Joining and Tagging
Setting the 2025 Vision



Preparing the Scenarios

Defining Scenarios
Defining Evaluation Criteria
Setting Control Totals
Verifying Suitability Factors



How do we accomplish this work?

How do we accomplish this work?

- Decision was made through silent consensus.
- Schedule Virtual Workshops through August and September
- Workshops will last 2 to 2 ½ hours
- Broad participation will be needed
- Virtual Workshops will be interactive, requiring active participation
- Suggestions and apps to make the workshop interactive are welcomed
- Scheduled Dates August 13th, August 27th, September 10th



Until next time...