# Script for PLAN 2040 Presentation: Land Use/Transportation Scenarios: How will we grow?

**Slide 1:** Hi, my name is Mike Alexander. I'm the Research Division Chief at the Atlanta Regional Commission. Today I'm going to talk to you about land use and transportation scenarios asking the question: "How will we Grow?" Scenario planning has been part of business planning for almost 50 years now. At the ARC, it is very valuable for us to analyze the relationship of land use and transportation. What kind of impact does land use have on our transportation network and vice versa.

**Slide 2:** To do that we tested multiple scenarios as a combination of differing land use patterns with our transportation network now and in 2040. Each of these scenarios represents a different potential future. Some of them are very exaggerated and seek to test the outward bounds of the potential change that we might expect from now until 2040 in our land use pattern.

As you see listed on this slide, ARC developed and evaluated eight potential futures for our region. Today we are going to focus on four:

The Base Case, our Needs Assessment Forecast, our best guess of what the future will look like right now

A Concentrated Growth Scenario which means only new household and employment growth inside the core of our region, roughly the area that's bounded by I-285.

A Sprawl Scenario in which we evaluated a potential future that means that only new households would be built in undeveloped areas of the region.

And finally, the Local Policy Scenario which is a reflection of our Unified Growth Policy Map and Livable Centers Initiative area planning work. The local policy scenario reflects the best planning work from our local governments with respect to the futures that they believe their own local governments will have in the year 2040. In the Local Policy scenario, we sought to optimize the relationship of households and jobs. To do that, we've targeted core regional centers throughout the region where we already have substantial amounts of jobs with addition of new households so that people will be able to live closer to work reducing their overall travel needs.

**Slide 3:** To explain the consequences of these scenarios, we developed travel shed maps of each of the major activity centers for our region. All of this information can be found in detail on our website in the "What's Next" document in additional supporting PDF's.

Here you see 4 different travel shed maps.  The colors represent the travel times that it will take you to travel from Towne Center in Cobb County to other places within our region.  They represent the maximum distances you can travel in those time periods.  Blue is good, red is bad but the bigger the area, the better the performance for the scenario.  In theory, we want people to have the most mobility possible so if we can provide that through our land use patterns and transportation network, we maximize our economic future for our region.

 As you see on this slide, the Sprawl scenario has worst performance of any of the scenarios and the Concentrated Growth has the best but this is the consequence of the different household patterns in these potential futures.  No growth in rural areas means Concentrated Growth performs well with all of new growth in undeveloped areas of our region, the Sprawl scenario performs very poorly.  As a contrast, the Local Policy scenario performs well, better than our base case, but also includes new household growth in key centers and corridors.

**Slide 4 (Land Conserved):**  So given that these potential futures have very dramatic differences in the mobility for individual persons, what's the regional context of difference between these scenarios?  What are the facts of these scenarios?  As you can see on this slide, comparing the four scenarios, Concentrated Growth with all new households in developed areas of the region will preserve the most land.

**Slide 5 (Vehicles Miles Traveled in 2040):**  Concentrated Growth also has the lowest Vehicle Miles Traveled; the total amount of travel for the region in a day in 2040.

**Slide 6 (Total Transit Trips):**  The total transit trips in Concentrated Growth is also the highest but this comes as a consequence.  Like the VMT slide, the Concentrated Growth has the lowest VMT because congestion is so bad in 2040 that people avoid driving altogether.  Transit trips go up because of this avoidance not as a matter of choice or because the transit system is providing optimum transit service to the people in 2040.

**Slide 7(Annual Delay):**  Yet on Annual Delay, a real measure of system performance for the individual, Concentrated Growth does not perform well and neither does Sprawl.  Annual Delay literally means how much time you spend in your car stuck in traffic.  By this measure the Local Policy scenario performs the best of all the scenarios that we analyzed.  This real fact associated with these scenarios shows that a balanced land use pattern as described by the Local Policy scenario, where we target our core region's centers and corridors for new households and new jobs will provide us the best overall mobility.

**Slide 8 (Total Annual Congestion Cost in 2040)**: This is further evidenced by the next slide, the Total Annual Congestion Costs.  How does traveling impact your pocketbook?  Among these different scenarios, that cost can differ dramatically.  Again, like the previous slide, Sprawl and Concentrated Growth perform very poorly.  Local Policy again performs best; providing us with the best regional mobility and the best potential economic future.

What will we do with these scenarios?  As we move forward to develop the regional transportation plan, these scenarios will help us to determine which regional transportation projects will best provide us with regional mobility long term.  And it will help inform us about the best land use pattern to match with that transportation infrastructure.