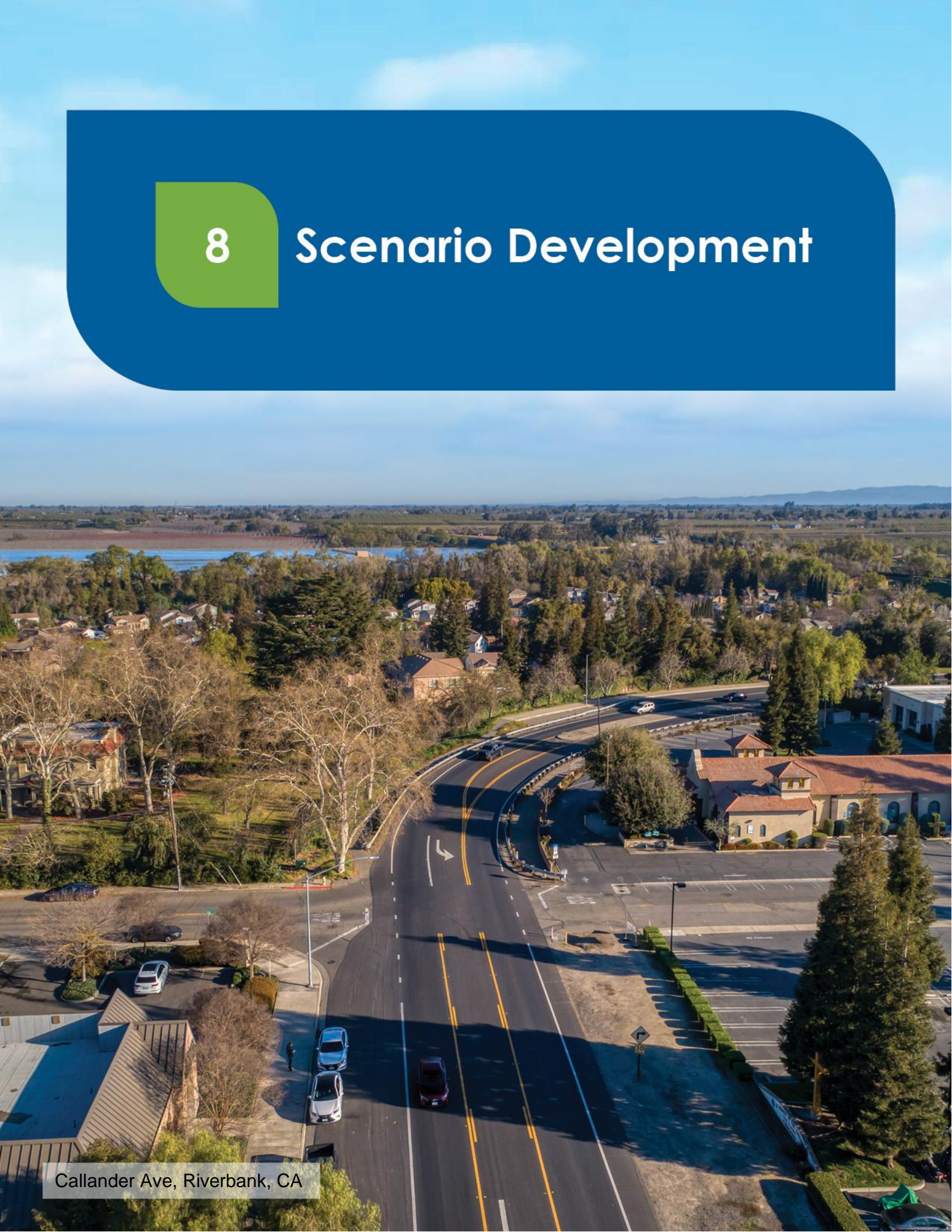


8

Scenario Development

Callander Ave, Riverbank, CA



8. SCENARIO DEVELOPMENT

Scenario planning is a method by which several scenarios are developed, studied for future impacts, and then evaluated against each other. In the context of the StanCOG 2022 RTP/SCS, scenario planning was used to study four different land use scenarios.

Each scenario represented a different set of land use patterns. The scenario evaluations showed how the different sets of investments and land uses could create different future outcomes, under future (2035) conditions.

While this chapter discusses the development of the four scenarios, Chapter 9 - Scenario Evaluations, presents the results of the scenario evaluations between the 2022 preferred scenario (Scenario D/Neighborhood Infill) and the 2018 preferred scenario (Scenario A/Stay the Course) based on the 2022 RTP/ SCS performance measures.

Linking Land Use and Transportation Planning

The integration of transportation investments with land use decisions, in terms of growth and housing, comes explicitly from SB 375. The intent of SB 375 is to require the regional transportation plan for regions of the state with a metropolitan planning organization to adopt a Sustainable Communities Strategy (SCS) as part of its regional transportation plan to achieve goals for the reduction of greenhouse gas emissions from automobiles and light trucks in a region. The Sustainable Communities Strategy identifies the general location of land uses, residential densities, and building intensities within the region and identifies areas within the region sufficient to house the population of the region over the course of the planning period of the regional transportation plan.

Developing possible scenarios of land use and transportation investments starts with demographic growth forecasts. The 2022 RTP/SCS relies on a regional forecast of future demographics that was prepared for Stanislaus County.

The forecasts were developed specifically for the preparation of the 2022 RTP/SCS per the Federal I/JA/BIL MPO Planning Regulations and SB 375. The forecasts were developed by the University of the Pacific Eberhart Center for Business and Policy Research and completed in 2021 and are presented in Chapter 4 - Future Conditions.

Based on the demographic projections, four land use scenarios and transportation investments were developed to accommodate region-wide growth.

Each scenario was developed according to a theme to help ensure that choices regarding land use and transportation investments were consistent with one another. Land use choices in each scenario included development patterns, such as where to locate new housing, new job centers, and new mixed-use areas relative to existing communities (e.g., infill vs. converted farmland or open space). They also considered the density of new development, which dictates the relative proportion of large-lot single-family housing to small-lot single-family housing and multifamily housing, and complementary uses, such as locating new housing near services and employment

centers. Transportation investment choices in a scenario included the decisions about spending levels on new roadway capacity, roadway maintenance, transit, and alternative modes of travel (e.g., bike and pedestrian).

The 2022 RTP/SCS Scenarios are discussed in the following page.

2022 RTP/SCS Scenarios:

Scenario A: Stay the Course

Scenario B: City Retrofit

Scenario C: Complete Communities

Scenario D: Preferred Scenario /
Neighborhood Infill

Scenario Development

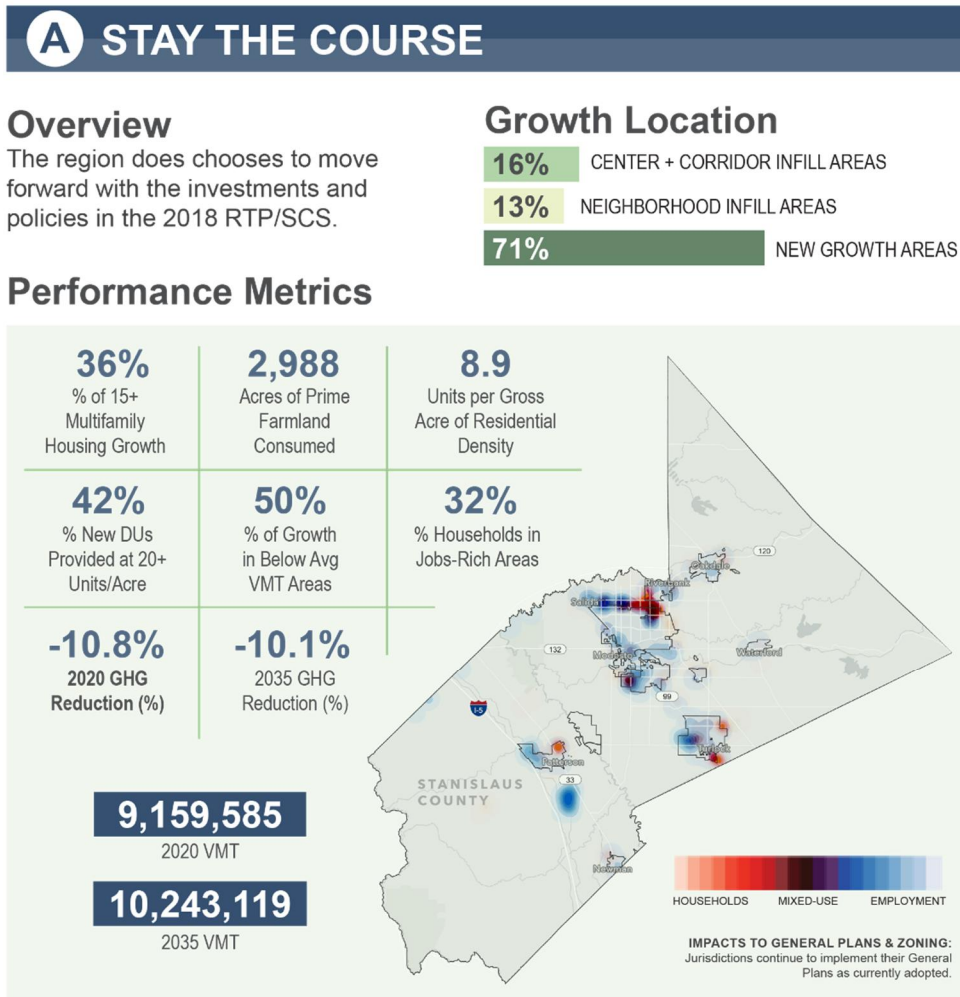
Scenario A. Stay the Course

Scenario A: Stay the Course is the trend scenario that models the region continuing to move forward with the investments and policies in the previous 2018 RTP/SCS. Scenario A used the 2018 Preferred Scenario (Scenario 2: Infill and Redevelopment) as the starting point and updated it to reflect more recent development trends, as discussed in interviews with local jurisdictions, and updated general plans and/or area plans prepared since 2018.

This trend scenario places the majority of future growth in new, undeveloped, greenfield areas.

While this scenario will keep future development roughly in the same pattern and using the same strategies that have been applied in the past, it was shown to not be sufficient in meeting increasingly ambitious state and federal air quality and greenhouse gas requirements during the 2022 RTP/SCS cycle.

Note that the VMT and GHG shown in the graphic below does not include CARB required determination for long-term induced VMT or the SCS strategies and are provided for the purpose of evaluating the scenarios against each other.

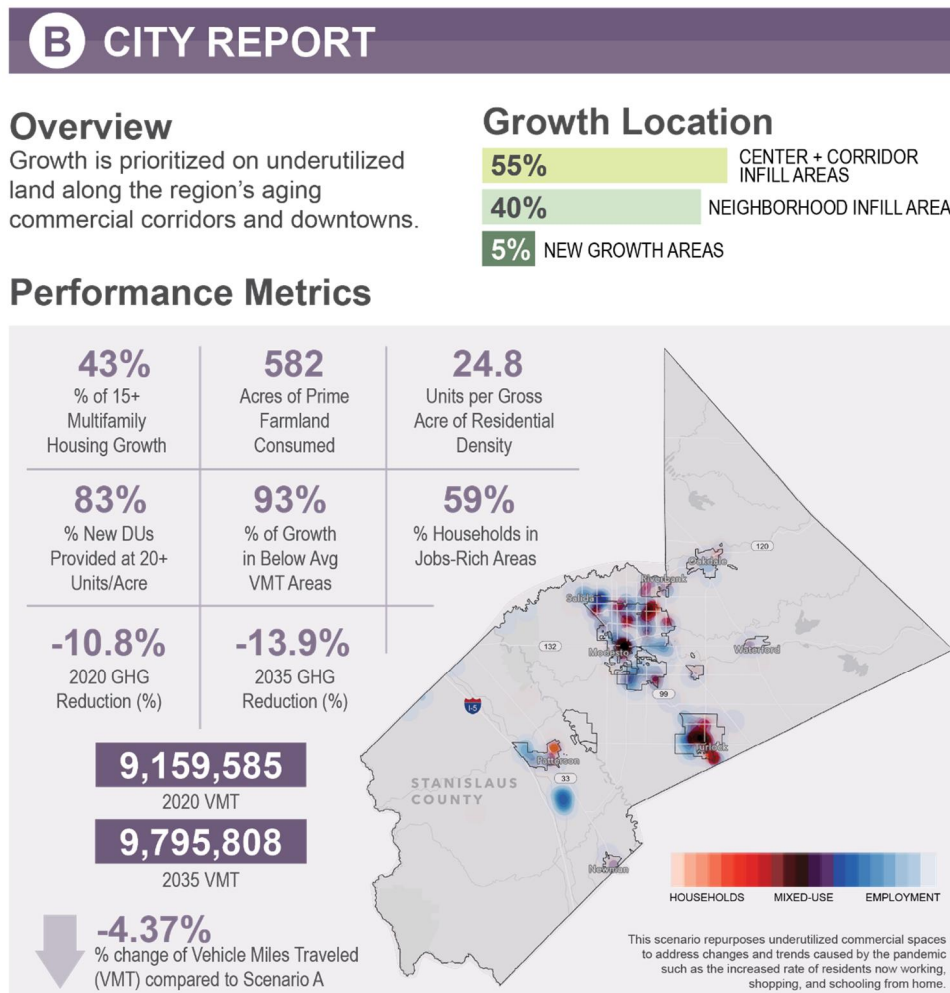


2022 Scenario B: City Retrofit

Scenario B: City Retrofit prioritizes growth on underutilized land along the region's aging commercial corridors and downtowns. It does this by placing over 90% of growth in existing, developed areas, placing new housing along commercial corridors (55%) and neighborhood infill areas (45%) close to existing and future jobs and amenities for daily living. This more compact development scenario reduces the need to have or use a personal vehicle to get around which means significantly less individual vehicle miles traveled.

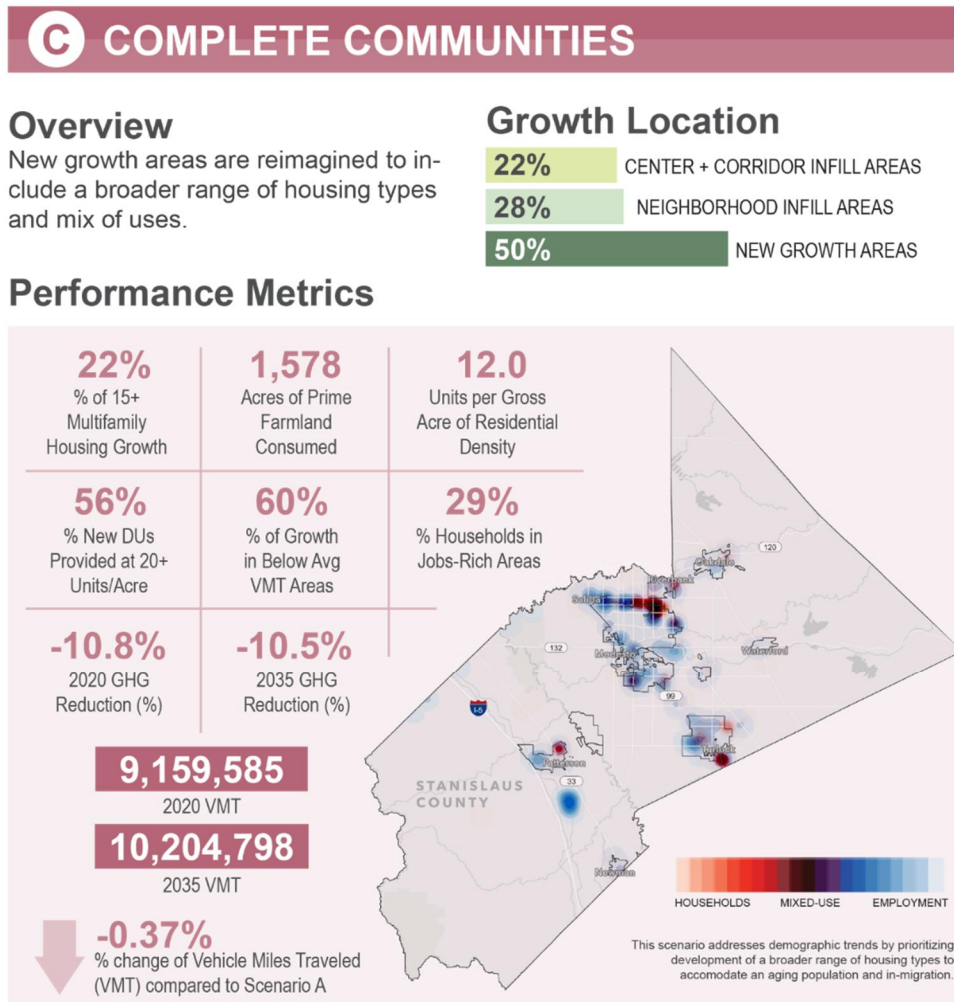
Scenario B is the most aggressive in terms of housing and employment density and would create more compact urban areas while minimizing the most farmland from being consumed by development. For these reasons, Scenario B does the best compared to all other scenarios in reducing greenhouse gas emissions.

Strategies to increase density along commercial corridors would likely include reducing parking minimums, creating incentives for building higher density housing or mixed-use buildings, or streamlining the permitting process. Note that the VMT and GHG shown in the graphic below does not include CARB required determination for long-term induced



VMT or the SCS strategies and are provided for the purpose of evaluating the scenarios against each other. .

Scenario C: Complete Communities



Scenario C: Complete Communities reimagines future development in new growth areas to include both a broader range of housing types and a mix of uses to build new communities that have amenities closer to housing, rather than following a housing subdivision pattern of growth. Scenario C is most similar to Scenario A in terms of the location where future growth happens (in new growth areas), however, growth is denser and there is much more middle housing (such as duplexes, triplexes, and quadplexes) that are built in these new growth areas. In addition, Scenario C consumes about half as much prime farmland compared to Scenario A. This scenario is only slightly better than Scenario A at reducing greenhouse gas emissions. Note that the VMT and GHG shown in the graphic above does not include CARB required determination for long-term induced VMT or the SCS strategies and are provided for the purpose of evaluating the scenarios against each other.

Scenario D: Neighborhood Infill / Preferred Scenario

Scenario D: Neighborhood Infill focuses future growth in established neighborhoods (52%) to transform them over time to accommodate a more diverse range of housing types. Just like Scenario C (Complete Communities), Scenario D relies on middle housing to increase density, but in smaller scale multifamily developments, such as duplex, triplexes, quadplexes, and accessory dwelling units (or ADUs) that can be built on single family lots to help increase density and add housing types in a neighborhood.

Scenario D shows how the region can achieve greater density without large scale apartment buildings. This scenario is closer to Scenario B (City Retrofit) in terms of future growth happening in low VMT areas, which means that housing is closer to jobs and other amenities. It also means shorter trips to get to work and run errands for daily living. Scenario D performs second best in reducing greenhouse gas emissions among the 2022 RTP/SCS scenarios. Note that the VMT and GHG shown in the graphic below does not include CARB required determination for long-term induced VMT or the SCS strategies and are provided for the purpose of evaluating the scenarios against each other.

