



## Four Basic Scenarios

- **Base-Year 2050 Trend.** This scenario uses the population, employment, and land-use forecasts that are incorporated in CDTC’s travel demand model, which was used in the LRTP update. In this scenario, the gradual adoption of CAV technologies would not change trend land use and development patterns. Mobility as a Service would increase without dramatically changing travel behavior. Adoption of electric vehicles would continue through 2050 at the trend pace predicted by national forecasts.
- **Sprawl Development.** This scenario assumes that adoption of CAV technologies will encourage development further from urbanized areas. Some commentators suggest this will be the case, as people traveling in CAVs will view commuting travel time as potentially productive. Private ownership of vehicles would remain similar to current ownership rates, and Mobility as a Service would be limited and concentrated in cities. The result would be increased sprawl development patterns beyond trend. This land-use pattern would run counter to the New Visions Plan goals. Provision of transit service would become more challenging. Adoption of electric vehicles would continue through 2050 at the trend pace predicted by national forecasts.
- **Urban Development.** This scenario assumes that urban living will be made more attractive through new transportation options like Mobility-as-a-Service (MaaS) and CAV technologies. In addition, this scenario assumed a high level of urban reinvestment and transit investments that encourage construction of transit-oriented development in the region’s urbanized areas. New paradigms would increase the importance and success of transit. Success of Mobility as a Service and CAV technologies could lead to reduced private ownership of vehicles. This land-use pattern furthers the New Visions Plan development goals. Adoption of electric vehicles would continue through 2050 at the trend pace predicted by national forecasts.
- **Urban Development with Pricing.** This scenario uses the land-use assumptions from the Urban Development Scenario to explore the impacts of increasing household transportation costs. This could result from instituting several pricing options, including a carbon tax, a VMT tax or fee structures to encourage ridesharing in MaaS. Many commentators predict that without the support of fee structures to encourage ridesharing with MaaS, congestion could increase because of increased vehicle miles of travel. Adoption of electric vehicles would continue through 2050 at the trend pace predicted by national forecasts.

## Two Overlay Scenarios which could happen in combination with any of the Four Basic Scenarios

- A. **Optimistic EV.** This scenario assumes a high level of EVs in the light-vehicle fleet resulting from policies and incentives from CDTC, the State, and the federal government, as well as market-driven consumer choice. This level of fleet penetration exceeds that in the trend scenario and is consistent with existing New York State Energy Plan goals. The recently passed Climate Leadership and Community Protection Act has stronger goals that will be incorporated into the New Visions 2050 Plan.
- B. **Pessimistic EV.** This scenario assumes the level of EV penetration in the fleet to be less than the trend scenario. This may be a result of market resistance or uncertain government policy support.