# Scenario A

Rate the Scenario ☆☆☆☆☆

## Description

**Scenario A maintains the current trend** of investments for all modes, existing levels of transportation demand management programming, and anticipates a small impact from autonomous and connected vehicles.

This scenario results in a subtle mode shift, meaning we can expect slightly lower levels of single occupancy vehicle trips and slightly higher rates of combined bicycle, walking and transit trips.

Even with a slight mode shift, growth in the total number of single occupant vehicle trips grows due to population growth.

## Ingredients

| | |
|---|---|
| Roadway | **Regional roadway projects funded by CAMPO, TXDOT, and CTRMA**<br>**Over 300-miles of roadway capacity improvements and over 500 intersection capacity improvements**<br>(identified in the Street Impact Fee study) |
| Transit | **Basic Connections 2025 plan**<br>(Buses with new frequencies and routes running in mixed traffic) |
| Bicycles | **Over 200-miles of the All Ages and Abilities Bicycle Network in the Bicycle Plan** |
| Sidewalks | **Over 700 miles of highest priority sidewalks near bus stops and schools**<br>(High and very high priority absent and existing sidewalks, as identified by the Sidewalk Plan) |
| Urban Trails | **Over 100-miles of Tier I trails from the Urban Trails Plan** |
| Transportation Demand Management | Current TDM programming to promote Telecommuting, flexible schedules and use of sustainable modes of transportation, such as Smart Trips and Movability Austin |
| ITS/Operations | Citywide traffic cameras, dynamic message signs (DMS), vehicle sensors, signal retiming to improve vehicular travel speeds on key corridors, and transit signal priority on select corridors |
| Innovative Mobility Strategies | In-house mobility initiatives, including pilot projects and education, and continued collaboration with leading research institutions |

## Outcomes

| | |
|---|---|
| Commuter Delay | Scenario A has the highest amount of roadway capacity improvements but the most vehicle miles traveled and vehicle hours traveled. It also has the lowest amount of investment in dedicated transit facilities resulting in the highest amount of vehicle trips generated. |
| Travel Choice | Scenario A provides the least amount of access to travel choices and the lowest number of schools, medical facilities, and grocery stores within ¼ mile of premium bicycle facilities and high-capacity transit. 1% of the population is within ¼ mile of high-capacity transit stops and 61% is within ¼ mile of the premium bicycle network. |
| Affordability | Scenario A has the lowest number of existing affordable units within ¼ mile of premium bicycle facilities and high-capacity transit. 53% of existing affordable units are within ¼ mile of premium bicycle facilities and 1% of affordable units are within ¼ mile of high-capacity transit stops. |
| Economic Prosperity | In Scenario A, 48% of the premium bicycle network is in areas of low/very low opportunity and 46% of the roadway capacity improvements are in areas of low/very low opportunity. |
| Placemaking | Scenario A has the lowest percentage of projects along Imagine Austin Activity Corridors and the fewest number of parks and community centers within ¼ mile of premium bicycle facilities. In Scenario A, 17% of Activity Corridors have premium bicycle facilities. |
| Health & Safety | Scenario A has the fewest miles of walking/biking trails and premium bicycle facilities along high crash and high risk corridors. It also has the highest number of roadway and intersection capacity projects along high crash and high risk corridors and intersections in the Top 200 Safety Intersections list. Scenario A maintains current efforts to reduce emissions. |
| Sustainability | Scenario A continues the trend in making progress toward sustainable design and reducing impacts to the environment but builds more miles of roadways than Scenario B and C contributing to higher fuel consumption levels due to having higher vehicles miles traveled. |
| Innovation | Scenario A maintains the current effectiveness of Transportation Demand Management through voluntary programs and application of Transportation System Management through Intelligent Transportation Systems (ITS) and operational improvements. |

# Scenario B

Rate the Scenario ☆☆☆☆☆

## Description

**Scenario B partially modifies** transportation programming, investment, and policy in Austin.

This scenario increases the distribution of support for roadway, public transit, bicycle, and pedestrians along Imagine Austin Activity Corridors and within Activity Centers. The scenario assumes higher levels of transportation demand management programming and a modest impact from autonomous and connected vehicles.

This scenario results in a further mode shift away from single occupancy vehicles trips and higher rates of combined bicycle, walking and transit trips.

## Ingredients

| | |
|---|---|
| Roadway | **Regional roadway projects funded by CAMPO, TXDOT, and CTRMA**<br>**Over 80-miles of roadway capacity improvements and over 200 intersection capacity improvements**<br>(identified in the Street Impact Fee study) |
| Transit | **Connections 2025 plan with selected enhancements and one High-Capacity Transit corridor with dedicated space** |
| Bicycles | **300-miles of the All Ages and Abilities Bicycle Network in the Bicycle Plan and premium bicycle facilities on select corridors** |
| Sidewalks | **Over 1,000 miles of highest priority sidewalks**<br>(High and very high priority absent and existing sidewalks, as identified by the Sidewalk Plan) |
| Urban Trails | **150-miles of Tier I trails from the Urban Trails Plan**<br>(integrated with the All Ages & Abilities Bicycle Network) |
| Transportation Demand Management | Updated land use to support transit-oriented developments and increase transit ridership. Establishing public-private partnerships to incentivize off-peak travel, carpooling, transit, and active transportation modes. Managing parking supply and demand, especially in the downtown area. |
| ITS/Operations | Enhancements to the citywide traffic cameras, dynamic message signs (DMS), vehicle sensors, signal retiming to improve vehicular travel speeds on key corridors, and transit signal priority on select corridors |
| Innovative Mobility Strategies | Creating public-private partnerships with transportation network companies to provide strategic last-mile connections for transit users. Standardizing performance measures and data collection processes across agencies so that strides in mobility can be assessed and fine-tuned. |

## Outcomes

| | |
|---|---|
| Commuter Delay | Scenario B has fewer roadway capacity improvements, vehicle miles traveled and vehicle hours traveled than Scenario A. There is an increase in investment in dedicated transit facilities, accounting for fewer vehicle trips than Scenario A. |
| Travel Choice | Scenario B provides more people with access to travel choices and has a higher number of schools, medical facilities, and grocery stores within ¼ mile of premium bicycle facilities and high-capacity transit. 7% of the population is within ¼ mile of high-capacity transit stops and 73% is within ¼ mile of the premium bicycle network. |
| Affordability | Scenario B has a higher number of existing affordable units within ¼ mile to premium bicycle facilities and high-capacity transit than Scenario A. 63% of existing affordable units are within ¼ mile of premium bicycle facilities and 8% of affordable units are within ¼ mile of high-capacity transit stops. |
| Economic Prosperity | In Scenario B, 45% of the premium bicycle network is in areas of low/very low opportunity and 68% of the roadway capacity improvements are in areas of low/very low opportunity. |
| Placemaking | Scenario B has a higher percentage of projects along Imagine Austin Activity Corridors and more parks and community centers within ¼ mile to premium bicycle facilities than Scenario A. In Scenario B, 30% of Activity Corridors have premium bicycle facilities. |
| Health & Safety | Scenario B has more miles of walking/biking trails and premium bicycle facilities along high crash and high risk corridors than Scenario A. It also has fewer roadway and intersection capacity projects along high crash and high risk corridors and intersections in the Top 200 Safety Intersections list than Scenario A. Scenario B experiences an improvement in air quality compared with Scenario A based on fewer vehicle miles traveled. |
| Sustainability | Scenario B makes more progress towards sustainable design and reducing impacts to the environment by building fewer roadways than Scenario A and focusing more on sustainable modes of transportation such as walking, bicycling, and using transit. |
| Innovation | Scenario B increases the effectiveness of Transportation Demand Management through incentive programs and sees increased improvements in Transportation System Management through new technology. |

# Scenario C

Rate the Scenario ☆☆☆☆☆

## Description

**Scenario C significantly modifies** transportation programming, investment, and policy in Austin.

This scenario includes the highest degree of distribution amongst roadway, public transit, bicycle, and pedestrians along Imagine Austin Activity Corridors and within Activity Centers. The scenario assumes the highest level of transportation demand management programming and the highest impact of autonomous and connected vehicles on public transit, ridesharing and freight.

This scenario results in the largest mode shift away from single-occupancy vehicle trips and the highest rates of combined bicycle, walking and transit trips.

## Ingredients

| | |
|---|---|
| Roadway | **Regional roadway projects funded by CAMPO, TXDOT, and CTRMA**<br>**Over 50-miles of roadway capacity improvements and over 150 intersection capacity improvements**<br>(identified in the Street Impact Fee study) |
| Transit | **Full Connections 2025 plan with all enhancements and seven High-Capacity Transit corridors with dedicated space** |
| Bicycles | **Over 400-miles of the All Ages and Abilities Bicycle Network in the Bicycle Plan and premium bicycle facilities on Imagine Austin corridors** |
| Sidewalks | **Over 2,000 miles of medium, high, and very high priority sidewalks**<br>(Medium, high and very high priority absent and existing sidewalks, as identified by the Sidewalk Plan) |
| Urban Trails | **300-miles of Tier I and Tier II trails from the Urban Trails Plan**<br>(integrated with the All Ages & Abilities Bicycle Network and identified in Imagine Austin) |
| Transportation Demand Management | Updated land use to support transit-oriented developments, increase transit ridership; establish public-private partnerships to incentivize off-peak travel, carpooling, transit, active modes; implement high-occupancy toll or vehicle lanes to promote carpooling; use policy to require employer commute programs |
| ITS/Operations | Expanded network of dynamic message signs to communicate traveler information; implement transit signal priority on a wide array of transit corridors; retime signals to more closely align w/pedestrian and bicycle travel speeds; Increase implementation of leading pedestrian interval at crosswalk signals |
| Innovative Mobility Strategies | Equip traffic signals with vehicle-to-infrastructure connected vehicle technology that improves safety and increases travel efficiency; test and implement Mobility-as-a-Service mobile applications; increase installation of electric vehicle charging stations throughout the City |

## Outcomes

| | |
|---|---|
| Commuter Delay | Scenario C has the lowest amount of roadway capacity improvements, vehicle miles traveled and total delay. It also has the highest amount of investment in dedicated transit facilities, resulting in the lowest amount of vehicle trips generated. |
| Travel Choice | Scenario C provides the highest level of access to travel choices and the highest number of schools, medical facilities, and grocery stores within ¼ mile to premium bicycle facilities and high-capacity transit. 13% of the population is within ¼ mile of high-capacity transit stops and 81% is within ¼ mile of the premium bicycle network. |
| Affordability | Scenario C has the highest number of existing affordable units within ¼ mile of premium bicycle facilities and high-capacity transit. 79% of existing affordable units are within ¼ mile of premium bicycle facilities and 18% of units are within ¼ mile of high-capacity transit stops. |
| Economic Prosperity | In Scenario C, 48% of the premium bicycle network is in areas of low/very low opportunity and 64% of the roadway capacity improvements are in areas of low/very low opportunity. |
| Placemaking | Scenario C has the highest percentage of projects along Imagine Austin Activity Corridors and the highest number of parks and community centers within ¼ mile of premium bicycle facilities. In Scenario C, 93% of Activity Corridors have premium bicycle facilities. |
| Health & Safety | Scenario C has the most miles of walking/biking trails and premium bicycle facilities along high crash and high risk corridors. It also has the fewest roadway and intersection capacity projects along high crash and high risk corridors and intersections in the Top 200 Safety Intersections list. Scenario C experiences an improvement in air quality beyond that seen in Scenario B based on further reductions in vehicle miles traveled. |
| Sustainability | Scenario C builds the fewest miles of roadways and incorporates sustainable design into every project, focusing mostly on sustainable modes of transportation such as walking, bicycling, and using transit. |
| Innovation | Scenario C experiences the highest effectiveness of Transportation Demand Management through required programs and enhanced levels of Transportation System Management for high-capacity modes of transportation. |