Appendix G
Street Plan

Streetplan Analysis

A critical component of the bike lane analysis was the use of Alta Planning + Design's 'StreetPlan' model. StreetPlan is an analysis tool that excels at quickly identifying corridors with the greatest potential for striping bike lanes. It does not make recommendations for other commonly utilized bikeway treatments such as shared lane markings, bicycle boulevards, or signed bike routes. Assuming acceptable minimum widths for each roadway element, the model analyzes a number of roadway characteristics to retrofit bike lanes on each surveyed roadway segment. Factors used in this analysis include:

- Current roadway width
- Raised or painted median
- Number and width of travel lanes
- Presence and number of turn lanes and medians
- Location and utilization of on-street parking
- Presence of roadway shoulder

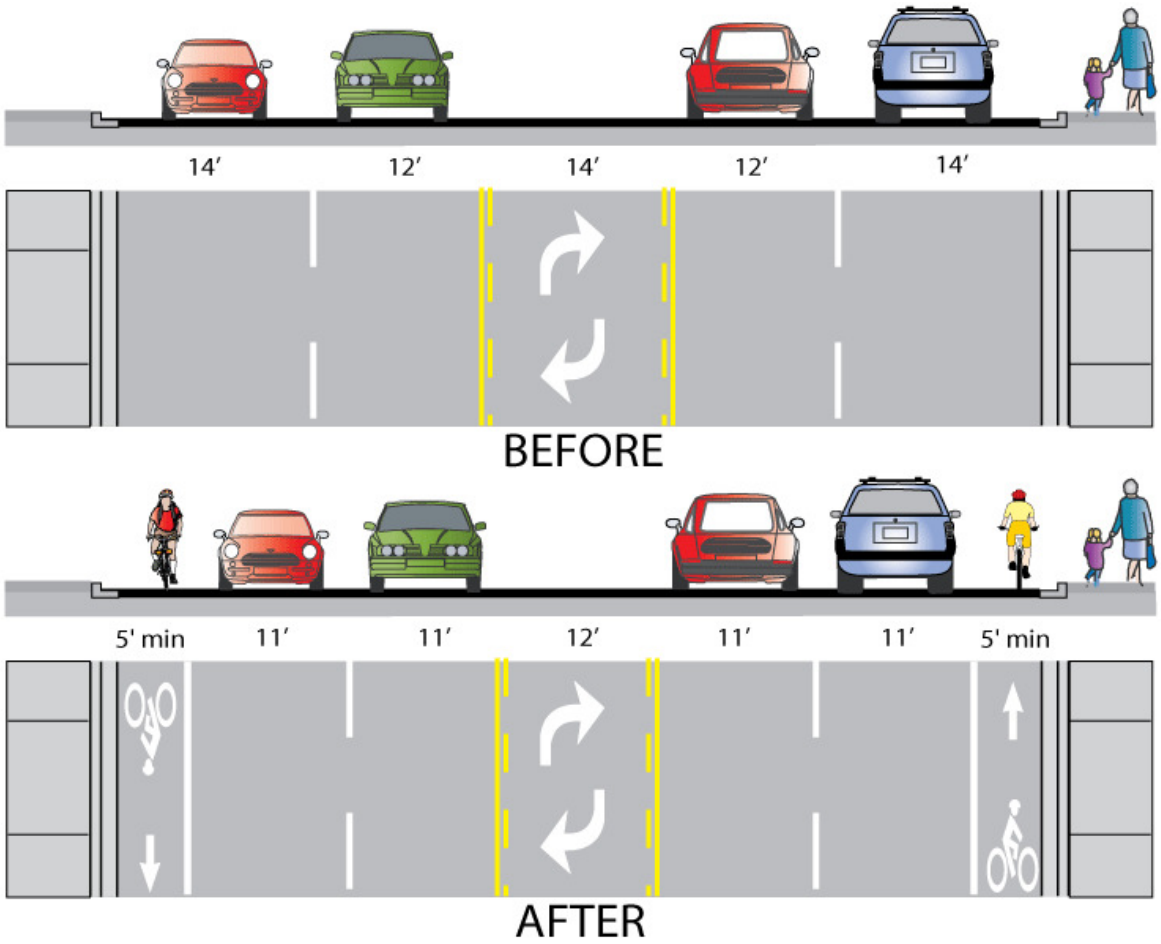
In some cases, the retrofit is simple and only requires the addition of a bike lane in readily available roadway space. Other corridors may be more challenging and require a tradeoff to stripe bike lanes. Though the model makes recommendations for bike lanes, its outcomes should not be considered a replacement for a striping plan. The model is useful in its ability to clearly illustrate locations where projects can be completed easily and locations where adding bike lanes may be more difficult. The decision to narrow or eliminate a travel lane, or remove on-street parking should be considered in conjunction with engineering judgment and traffic impact studies. However, if there is a need for bicycle lanes on a corridor, the difficulty of implementation should not preclude development. It may simply indicate the need to explore alternative options, such as a parallel bicycle boulevard, or the need to prioritize bicycle and pedestrian travel in a corridor and consider alteration of existing motor vehicle prioritization. The City of Albuquerque will need identify the impacts of altering the roadway's existing condition and, as with any roadway retrofit, conduct careful field analyses and detailed engineering studies prior to striping bike lanes.
Retaining a uniform roadway configuration throughout a corridor can simplify travel for motorists and cyclists alike, creating a safer and more comfortable experience for all users. It is recognized that acceptable lane widths vary by functional classification, for example 10 foot travel lanes may be acceptable for a local street, but higher speed arterials may require 11 feet as the minimum lane width. For the purposes of the model, acceptable minimum roadway dimensions were set at the following:

- Travel lane width: 11 feet
- Right turn lane width: 10 feet
- Left or Center Turn Lane width: 10 feet
- Parking lane width: 7.5 feet

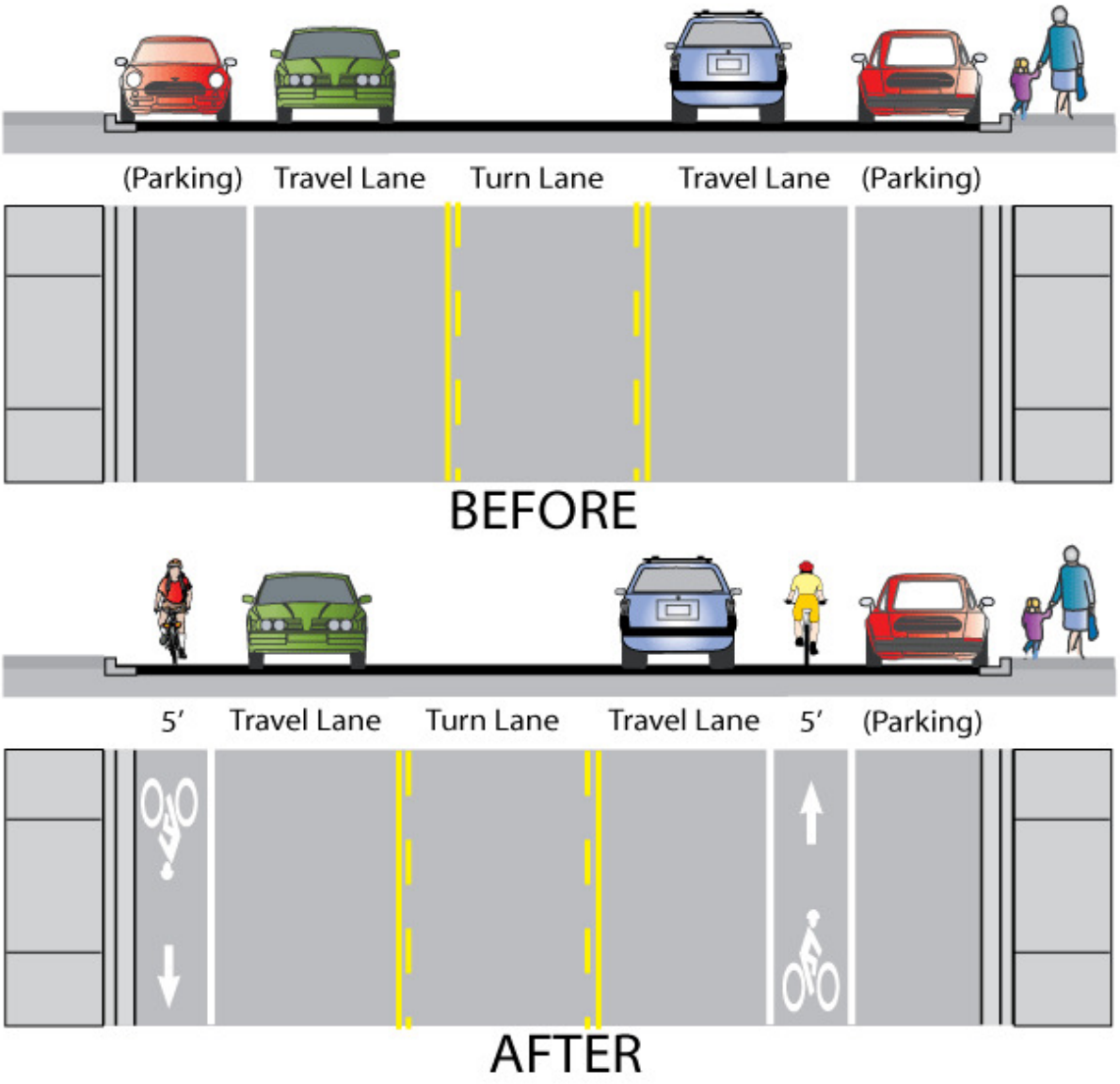
StreetPlan Outcomes

Analysis corridors were developed based on previously proposed facilities, a review of existing conditions, field work and discussions with city staff. Street plan results were used in combination with existing conditions analysis, speed and volume information, public feedback, stakeholder interviews, and conversations with city staff to develop the proposed citywide bikeway network. In many instances the StreetPlan model recommends multiple treatments for a given roadway segment. To determine the appropriate treatment, the model organizes its recommendations in order of the *most preferred* facility type. The order uses the first strategy (below) for a given segment of roadway and is given priority over succeeding strategies. Not all of the below options were possible strategies for all segments, but on many segments multiple strategies could be used to implement bike lanes. Each of the specific treatment recommendations is defined in detail below.

Bike Lanes Fit With Existing Roadway Configuration – In this option, enough surplus road space exists to simply add the bike lane stripes and stencils without impacting the number of lanes or configuration of the roadway. This is by far the most desirable and easily implemented option available.



Reconfigure Travel Lanes and/or Parking Lanes – In this option, bike lanes can be added by simply adjusting wide travel lanes or parking lanes within the established minimums presented above. No reduction to the number of travel lanes is needed.
Remove Underused Parking – In this option, underused on-street parking on one side of the street is removed to create space for bike lanes. Acceptable situations for this scenario include collector or arterial roadways that pass by back fences of homes rather than the front sides, or areas that have large surface parking lots adjacent to existing on-street parking. A parking utilization study



should be conducted prior to removal of on-street parking.

Consider '4 to 3' Road Diet – In this option, a reconfiguration of the existing travel lanes may be necessary. In areas with two travel lanes in either direction, it may make sense to remove two travel lanes and use the spare roadway width to stripe a center turn lane and two 5' bike lanes. This treatment may not be appropriate on roads with high ADT.

Add Additional Pavement Width and Stripe Bike Lanes – In this option, it was determined that additional right-of-way was available along the corridor. Where no curbs exist along the segment it may be possible to pave a new roadway shoulder and stripe bike lanes
Remove On-Street Parking – In this option, on-street parking may be removed on one side of the road. However this on-street parking configuration may currently be utilized in residential or commercial areas. This option is seen as a less desirable option and may only be considered as a last resort in short sections to maintain bike lane continuity. A full parking study should be conducted to determine if excess parking capacity exists before making changes to the roadway configuration.
Bike Lanes Will Not Fit – In this last case, the existing roadway geometry will not allow for the addition of bike lanes. Either a bike route or major reconstruction of the roadway may be necessary for bikeway continuity.

General Outcomes

Northwest

The NW quadrant of Albuquerque shows a fairly extensive network of existing bike lanes. Bike lane facilities exist on many of the collector and arterial roadways. Some significant do gaps exist however. For bicyclists traveling east to west, Paseo Del Norte presents a challenge, as does Coors Blvd and Golf Course Rd for northbound and southbound bicyclists. StreetPlan indicates that there is existing roadway width for striping bike lanes, but that some reorganization of travel and parking lanes may be necessary.

Southwest

In the SW quadrant there are similar existing conditions to that of the NW quadrant. A network of bike lanes provides access to many local parks and schools, with few major gaps in the network. Of those portions requiring closer examination, Bridge Blvd west of Coors Blvd is the most obvious. r.

Southeast

The SE quadrant poses some more serious constraints for the development of bike lanes. Existing conditions along Zuni Rd, a principal east/west arterial, are a challenge for implementing bike lanes. Recommendations for this segment includes a 4 to 3 road diet with a more complicated engineering solution needed in some areas. Roadways that can more easily accommodate bike lane facilities include some portions of 5th St and 6th St, and the entirety of Lomas Blvd west of 6th St.

Northeast

The more grid-oriented urban form in much of the NE quadrant, combined with the existing bike lane network, makes this area quite bike accessible. The few treatment recommendations are primarily located west of I-25 and east of the Rio Grande River Osuna Rd/NW 2nd St should both be analyzed to determine if a reconfiguration of travel and parking lanes can be accomplished to stripe bike lanes. Doing so would help to connect communities west and east of I-25.