

CITY OF SANTA ROSA  
BICYCLE AND PEDESTRIAN ADVISORY BOARD  
STAFF REPORT  
March 15, 2018

**SUBJECT**

*Bicycle and Pedestrian Master Plan  
Update 2018 - Existing Conditions  
Memo and Level of Traffic Stress*

**ISSUE**

Discuss the Existing Conditions Memo for the Bicycle & Pedestrian Master Plan Update 2018.

**STAFF PRESENTER**

*Jeff Knowles, Alta Planning + Design*

**RECOMMENDATION**

No action is required. The Board may provide input on the draft Existing Conditions Memo and Bicycle Level of Traffic Stress for the Plan Update 2018.

**BACKGROUND**

The Consultant (Alta Planning + Design), based on their scope of work, has developed a memo presenting data and analysis related to the existing walking and bicycling environment in Santa Rosa. This item is being developed as part of the Santa Rosa Bicycle & Pedestrian Master Plan Update 2018, and will help identify and prioritize recommendations for infrastructure, programs, and policies in the community.

**ANALYSIS**

Alta has conducted a review of available data on existing bicycling and walking facilities and programs in Santa Rosa, along with available data on the community related to walking and bicycling. This information is presented in a Draft Existing Conditions Memo that will become a chapter of the Bicycle & Pedestrian Master Plan Update 2018. The memo includes the following sections:

Local Context: Includes discussion of land use, major destinations, Citywide demographics, and transit connections

Equity: Includes discussion of income, access to vehicles, Metropolitan Transportation Commission (MTC) communities of concern, and environmental equity

Biking and Walking Today: Includes discussion of existing bicycling and walking networks, mode share, and programs related to bicycling and walking

Safety: Includes discussion of bicycle and pedestrian involved collisions, including demographics, locations, and behaviors that were commonly reported

User Experience and Perceived Comfort: Includes description and results of the Bicyclist Level of Traffic Stress analysis

To better meet the needs of the “Interested, But Concerned” cyclist, planners developed the Bicycle Level of Traffic Stress (Bicycle LTS) analysis as an objective, data-driven evaluation model to help identify streets with high levels of traffic stress. The analysis uses roadway network data (i.e. posted speed limit, street width, number of travel lanes, intersection conditions, presence and character of bikeway facilities, and land use context) to determine bicyclist comfort level.

The combination of these criteria creates four levels of traffic stress for the existing roadway network. The lower the number, the lower the stress and the higher the level of comfort for people on bicycles:

**Level 1: All Ages and Abilities**

Level 1 includes low-stress roadways suitable for all ages and abilities, as well as paved shared use paths.

**Level 2: Average Adult**

Level 2 includes roadways that are comfortable enough that the mainstream adult population would ride a bicycle on them.

**Level 3: Confident Adult**

Level 3 includes roadways that are probably only comfortable for an experienced, confident bicyclist.

**Level 4: Fearless Adult**

Level 4 includes roadways ridden only by strong or fearless bicyclists.

The existing conditions memo includes a Bicycle Level of Traffic Stress analysis mapped on Santa Rosa’s existing roadway network.

Alta is seeking feedback from the Board on this memo, including:

1. Does the memo accurately reflect the existing walking and bicycling environment in Santa Rosa?
2. Is there additional information that would be helpful to explain the Bicycle Level of Traffic Stress analysis and results to the general public?
3. Is there additional information that may help identify bicycling and walking needs in Santa Rosa?

**RECOMMENDATION**

No action required. The Board may provide input on the draft Existing Conditions Memo and Bicycle Level of Traffic Stress for the Plan Update 2018.

Attachment: Draft Existing Conditions Memo