HUMBOLDT COUNTY ASSOCIATION OF GOVERNMENTS
Regional Transportation Planning Agency
Humboldt County Local Transportation Authority
Service Authority for Freeway Emergencies

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AGENDA ITEM 5b
SSTAC Meeting
August 6, 2025

DATE: ~~July 30~~August 1, 2025 {Revised}
TO: Social Services Transportation Advisory Council (SSTAC)
FROM: Oona Smith, Senior Regional Planner
SUBJECT: **Results of Bike and Pedestrian Level of Traffic Stress (LTS) Assessment**

STAFF REPORT

Contents:

- Staff Summary
- "Methodology for Calculating & Mapping Bicycle and Pedestrian Levels of Traffic Stress (LTS) in the Greater Humboldt Bay Area," amended July 18, 2025
  Bicycle and Pedestrian LTS mapping (online interactive application) Click here:
- https://experience.arcgis.com/experience/29aded4d95ee445c901178002e576357 .

Discussion Item

1. Introduce the item as a discussion item.
2. Allow staff to present the item.
3. Receive public comment.
4. Discuss item.

Staff Summary:

The Level of Traffic Stress (LTS) assessment is part of the "Humboldt Multimodal and Vibrant Neighborhoods Planning" project, funded by a Caltrans Sustainable Transportation Planning Grant and local matching funds from TAC member agencies and other partners.

The LTS scores will be presented for your information, review, and comments. The LTS scores are displayed on an ArcGIS Online application, which supports an interactive map [Click here: Hum LTS link] The application is open for public viewing.

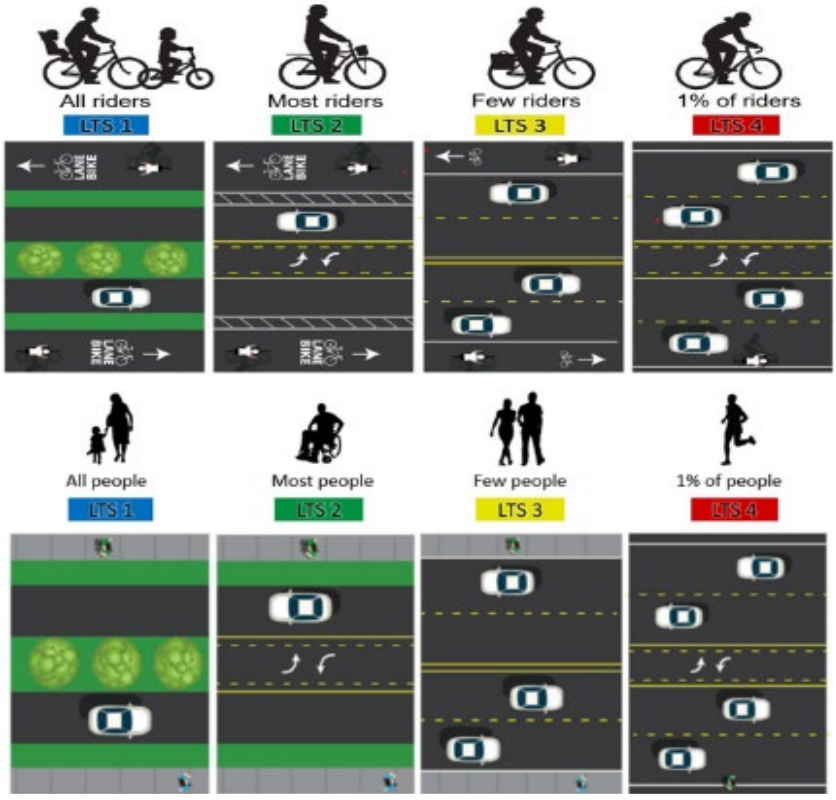
The current review and comment period will continue through August; staff will do more outreach and publicity throughout the month In addition to commenting at the SSTAC (and TAC) meeting, people can submit comments to HCAOG by phone, post, and email (info@hcaog.net). Submit comments by September 1, 2025.

This project assesses roads and streets in the greater Humboldt Bay/*Wigi** Area.[1] We will assess other areas in a second phase, after phase one is accomplished and lessons learned.

Below is a short refresher on *"What is Level of Traffic Stress?*

LTS is a metric for assessing the level of comfort or stress that people would feel when they are bicycling and/or walking on streets/roads. LTS categorizes travel facilities by the level of discomfort or stress different kinds of users will, or will not, tolerate.

Typically, LTS ratings use a scale of 1 to 4, where LTS 1 "is meant to be a level that most children can tolerate," LTS 2 can be "tolerated by the mainstream adult population," and LTS 3 and 4 represent levels of stress that a minority of users will tolerate.



Example from Washington State DOT

The HCAOG LTS assessment was accomplished by completing the following tasks:

- HCAOG staff requested existing data from HCAOG's Technical Advisory Committee (TAC) member jurisdictions within the project area.[1] Based on data received from jurisdictions, the project team refined what data we could collect, and what assumptions would need to be applied.
- CRTP developed the Methodology, which was reviewed by the SSTAC and TAC. At the SSTAC meeting (July 31, 2024), members discussed which assumptions were reasonable and where data collection efforts should be focused.
- GHD consultants (primarily Zach Porteous, Location Intelligence Analyst) created the geospatial tool (ArcGIS Platform) for calculating pedestrian and bicycle LTS scores based on Methodology assumptions and collected data.
- HCAOG and CRTP staff collected and entered data, foremost for arterial and collector roadways (segments and intersections). We mostly used satellite imagery (Google Maps' Streetview) to assess conditions, and actually measured streets in some instances. We measured bikeways and sidewalks on arterials and collectors. Per the Methodology, the

[1] Eureka (*Jaroujiji**), Arcata (*Goudi'ni**), Bayside, McKinleyville (*Dalhagali'**), Fortuna (*Vutsuwitk Da'l**), Manila, Samoa, Fairhaven, Cutten, King Salmon, and Loleta (*Guduwalha't**) including the Wiyot Tribe Table Bluff Reservation (*Rraloughugu'w**). *Place name in Wiyot language, Soulatluk.

lane and sidewalk widths are defined by the narrowest section of the facility. For example, sidewalk width may reflect where there is a tree well or fire hydrant. Or, bike lane width may reflect where there is a gutter grate within the designated lane.

- The project team problem-solved where LTS scores seemed to not fit known conditions. In a few instances, the original assumptions were skewing LTS results. Therefore, we modified the assumptions related to crossing one-way versus two-way streets. Additionally, we recommend amending the assumption for prevailing speeds to being 5 miles over posted speeds instead of the current 10% above posted speeds. (This recommended change has not been applied.) Assumptions apply only when actual data is not available.

To briefly recap the Methodology, the following summarizes the existing conditions that determine the "level of stress":

Bicycle LTS:

- Whether bicycling where there is/is not a bike-only facility;
- Whether the existing bike lane is adjacent to a parking lane;
- Whether the crossing (intersection) has a traffic signal, stop sign, or roundabout;
- Traffic speeds and volumes of motorized vehicles.

Pedestrian LTS:

- Sidewalk conditions such as width, curb ramps, physical buffers, and number of adjacent traffic lanes;
- General land use;
- Whether the crossing (intersection) has a traffic signal, stop sign, or roundabout;
- Whether the crossing has painted crosswalks, a median refuge, or other crosswalk enhancements;
- Traffic speeds and volumes of motorized vehicles.

Refer to the Methodology (attached) for the details on assumptions and the basis of scores.