



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 7a
TAC Meeting
September 5, 2024

DATE: August 27, 2024
TO: Technical Advisory Committee (TAC)
FROM: Oona Smith, Senior Regional Planner
SUBJECT: **Second draft methodology for the Level of Traffic Stress (LTS) assessment for local streets and roads**

STAFF REPORT

Contents:

- Staff Summary
- “Proposed Methodology for Calculating & Mapping Bicycle and Pedestrian Levels of Traffic Stress (LTS) in the Greater Humboldt Bay Area” version 7/31/24 by Coalition for Responsible Transportation Priorities (CRTP) (enclosure)

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 TAC, at the June meeting, reviewed and discussed the first draft methodology (May 9 version) with which to assess level-of-traffic-stress (LTS) for Humboldt. The SSTAC (Social Services Transportation Advisory Commission) reviewed this draft at their August 7th meeting.

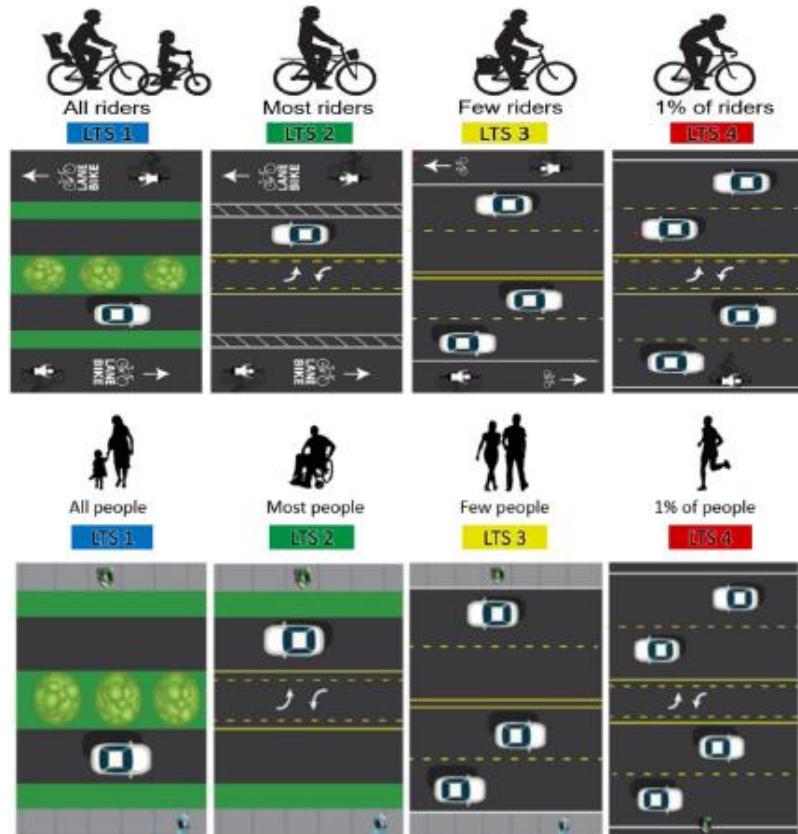
The LTS assessment is part of the “Humboldt Multimodal and Vibrant Neighborhoods Planning,” funded by a Caltrans Sustainable Transportation Planning Grant and matching contributions from TAC member agencies and other partners. With this project, we will assess roads and streets in the greater Humboldt Bay/Wigi Area.¹ We will assess other areas in a second phase, after phase one is accomplished and lessons learned.

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.

To recap, from the presentation in June, 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.

Arguably, the biggest barrier to assessing LTS is the magnitude of data needed, especially for pedestrian LTS. Colin Fiske, of CRTP, has prepared a methodology to meet the project objectives, while avoiding infeasible hours of data collection and input. Recall that we have proposed to use the Oregon Department of Transportation’s established pedestrian LTS criteria for street or road segments.

To manage the dearth of sidewalk data, we propose a four-step protocol that can draw on reasonable assumptions in the absence of data. Draft 2 of the methodology has revised assumptions regarding sidewalk widths. The underlined text, below, highlights the revised approach.



Example from Washington State DOT

The pedestrian LTS rating in Table 8 mirrors the 4-tier rating system of Furth’s bicycle LTS scheme, keeping consistency between the bicycle and pedestrian LTS criteria.

| Table 8: Pedestrian LTS based on sidewalk conditions | | | | | | |
|--|---------|--------------------|-------|-------|-----------|-------------|
| Actual/effective sidewalk width (ft) | | Sidewalk condition | | | | |
| | | Good | Fair | Poor | Very Poor | No Sidewalk |
| Actual | <4 | High | High | High | High | High |
| | 4 to <5 | High | High | High | High | High |
| | 5 to <6 | LTS 2 | LTS 2 | High | High | High |
| Effective | ≥6 feet | LTS 1 | LTS 1 | LTS 2 | High | High |

Source: Oregon Department of Transportation, Exhibit 14-21

To reduce data collection, we propose the following protocol:

1. Request estimates from local agencies of sidewalk width in specific neighborhoods or on specific facility types within their jurisdiction.
2. In the absence of agency estimates, assess sidewalks widths on arterial and major collector streets. On all other facilities, assume that sidewalks are at least 6 feet wide in downtown and neighborhood business district land use areas, and are 4-feet wide everywhere else. Since these width assumptions are meant to account for sidewalk obstructions, assume that the actual width is the same as the effective width.
3. Assume that sidewalks less than 5-feet wide are in “poor” condition in terms of low-stress access; that sidewalks 5-6 feet wide are in “fair” condition; and that sidewalks 6 feet or wider are in “good” condition for mobility.

At the SSTAC’s suggestion, HCAOG will add images to the methodology to better convey some of the instructions, such as an example of lanes that are tangential to a roundabout.

We are asking the TAC to discuss and provide guidance on any recommended changes to the revised draft. With concurrence from the TAC, data analysis using the methodology will commence.