DEPARTMENT OF TRANSPORTATION SERVICES CITY AND COUNTY OF HONOLULU

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SUBJECT: Complete Streets Design Manual Update Section 5.3.1. Controlled Intersections

In September of 2016, the City and County of Honolulu (City) published the Honolulu Complete Streets Design Manual (Manual) to provide guidelines for designing Honolulu's streets to serve the transportation needs of all users, whether traveling by foot, bike, public transit, or private vehicle. The Manual was developed, and continues to be used, by a wide array of stakeholders both within and external to the City, so periodic updates to the document are critical for consistency in roadway design and keeping up with industry best practice.

The City has developed new guidelines on where to mark stop-controlled crosswalks for projects impacting multiple intersections, such as the Rehabilitation of Streets. The new policy prioritizes pedestrian infrastructure based on the Pedestrian Priority Network prepared for the Oahu Pedestrian Plan, as well as other locations where pedestrian traffic is anticipated or observed. The Pedestrian Priority Network is based on factors that include roadway classification, the presence of transit, and proximity to pedestrian-oriented land uses such as schools and business districts. This approach is consistent with the Manual on Uniform Traffic Control Devices and eliminates the need to do a labor-intensive engineering study and pedestrian counts at every marked crosswalk, as may still be done on a case-by-case basis in accordance with Figure 5-3. This policy will result in more consistent marking of crosswalks, improved ability to respond to community concerns, and efficient use of public funds.

The Honolulu Complete Streets Manual Section 5.3.1. (2016, page 116) will henceforth be replaced by the attached Section 5.3.1. Controlled Intersections (January 2021, page 116). This revision replaces the interim procedure approved by the Department of Transportation Services on April 28, 2020, and will be a stand-alone addendum until the City revises the Manual in its entirety at a future date.

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5.3.1. Controlled Intersections

Marked crosswalks should be provided on all intersection legs controlled by traffic signals, unless substantial safety concerns exist for all users. Marked crosswalks should be provided at stop sign-controlled intersection approaches where consistent pedestrian activity is reasonably expected or observed. In addition to the guideline in Figure 5-3, crosswalks may be marked at stop-controlled intersections on the Oahu Pedestrian Plan Pedestrian Priority Network (except at intersecting low-volume access roads or alleys) and locations such as school zones and high-density areas.

5.3.2. Pedestrian Signals

Standard pedestrian signal timing principles included in the *MUTCD* (FHWA, 2009) should be combined with innovative pedestrian signal timing techniques, where possible, to enhance pedestrian safety and convenience.

5.3.2.1. Walk Interval

The WALK interval should be a minimum of 5 to 7 seconds. However, to provide more time for pedestrian travel, and possibly more safety due to better pedestrian behavior, the WALK interval should be maximized using the following techniques:

- The WALK interval should be increased in areas with high numbers of people on foot, elderly, children, or disabled users. This can be done as a feature of selected intersection crossings, or with special useractivated technology.
- Maximize the WALK interval within the available green interval.
- Pedestrian (WALK) intervals should be set on "recall" except where pedestrian volumes are relatively low. This means that the WALK indication will automatically appear regardless of pedestrian presence or activation through pushing a button. Pedestrian push-buttons should be removed where the pedestrian phase is set to recall.
- Where a major street intersects a minor side street, the WALK interval for crossing the minor street can be set on recall, concurrent with the green interval for the parallel through vehicle movement, which is typically set to recall as well. This minimizes pedestrian delay along the major street with no impact to motor vehicle capacity.



Dole Street. Credit: Stephanie Nagai (SSFM International)